PRODUCTS
FOR SUSTAINABLE ELECTRONICS PROTECTION

Catalogue 2026










STEGO-GROUP.COM

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LOCATIONS

GLOBAL PRESENCE IN **ELECTRONICS PROTECTION**

This catalog presents the STEGO product range for protecting electronic components.

Discover why STEGO products are perfectly tailored to the needs of professional users – and how easily they can be sourced worldwide, wherever you operate.



CORPORATE INNOVATION
MADE BY STEGO

For more than 45 years, we have been developing and manufacturing innovative, sustainable and practical solutions for the protection of electronic components in Schwäbisch Hall, Germany. Our goal: combining technical excellence with responsibility – for our customers, our environment and long-term success.





A **structured inventive spirit** is the foundation of our culture of ideas. This is where inspiration meets the expertise of our employees and organization, turning knowledge into concrete solutions – driven by experience, openness and systematic development.

“Advanced engineering for a smart and sustainable future” is more than a slogan. It defines how we live innovation every day. Proven innovation processes give direction and structure to our inventive spirit. This is how ideas become market-ready products that use energy efficiently, conserve resources and operate reliably worldwide. What emerges carries a clear hallmark: **Made by STEGO** – technology shaped by intelligence, responsibility and a vision for the future.

RELIABLE **PROTECTION FOR ELECTRONICS**

STEGO stands for reliable electronics protection under all conditions. Our products are used wherever electronic components must be protected against humidity and environmental influences.

With heaters, controllers, filter fans, LED-lights, sensors and accessories, we ensure optimal operating conditions – worldwide and sustainably.



Perfect Electronics Protection

STEGO develops and manufactures solutions for the reliable protection of electronic components against temperature and humidity influences. All products follow a clear principle: creating stable climatic conditions – from cold outdoor installations to hot production environments. Advanced temperature and humidity control ensures long-term, reliable operation of electronic systems.

Innovation with a System

Quality and technical reliability define every product. Development and production in Schwäbisch Hall (Germany), combined with close cooperation with international customers and partners, result in practical and energy-efficient solutions. This direct exchange between application and engineering is at the core of our innovation – for products that perform reliably in all climate zones while conserving resources.

Global Network – Close and Reliable

STEGO solutions are used worldwide in more than 150 countries. With ten subsidiaries and a dense network of sales partners, we ensure short response times, technical support and product availability. Uniform quality standards in accordance with ISO 9001, 14001 and 45001 guarantee consistently high product quality – worldwide.

Product Safety

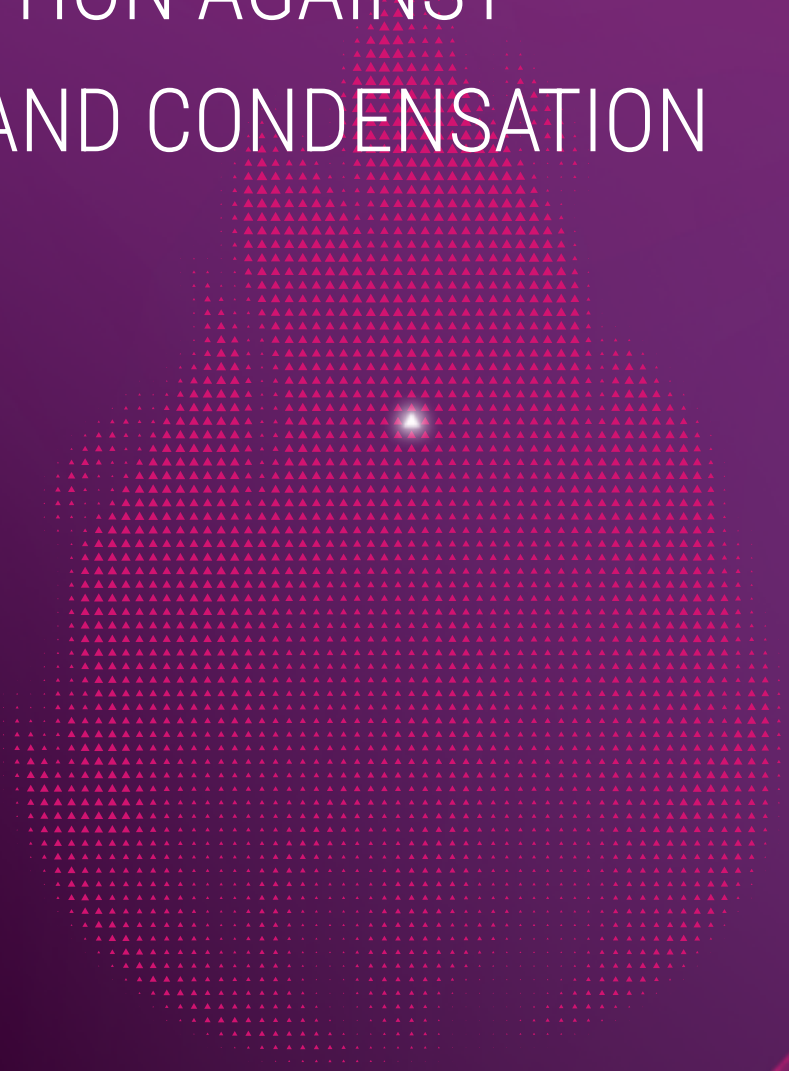
Safety and conformity are integral parts of our product development. Certifications such as VDE, UL, EAC, CCC, CE and UKCA confirm compliance with international standards. For hazardous area applications, we offer heaters and thermostats certified according to ATEX and IECEx. STEGO products are therefore reliable, tested and sustainably deployable worldwide.

ESG – Responsibility with Vision

Sustainable action is an integral part of our corporate strategy. STEGO aims to achieve a balanced CO_2 footprint by 2030. Efficient building technology, photovoltaic systems and resource-efficient processes measurably reduce energy consumption. Responsibility also guides our product development – through durable materials and applications in renewable energy systems. In this way, STEGO combines technology with environmental awareness – worldwide, every day.

HEATING

PROTECTION AGAINST FROST AND CONDENSATION



Temperature stability is crucial for the reliability of electrical installations. STEGO heaters and fan heaters prevent sub-zero temperatures and condensation in control cabinets and enclosures. They ensure uniform warm air distribution and protect electronic components from humidity, corrosion and failure.

NEW: ENCLOSURE HEATER WITH FAN PLUS

CS 032



CS 032 Plus - enclosure heater with fan and PTC heating element that reliably protects against frost and condensation. The CS 032 Plus fan heater is equipped with a user-friendly temperature selector wheel. Variable heating capacity is possible thanks to intelligent control behavior. The flexible mounting option (any) supports optimum air circulation.

- Variable heating capacity, depending on the set temperature
- Intelligent control behavior
- Powerful PTC heating elements in a compact casing
- Push-in terminals for quick and safe electrical contacting
- Mounting kit incl. screw fixing and clip fixing for 35 mm DIN rail

OVERVIEW TECHNICAL DATA

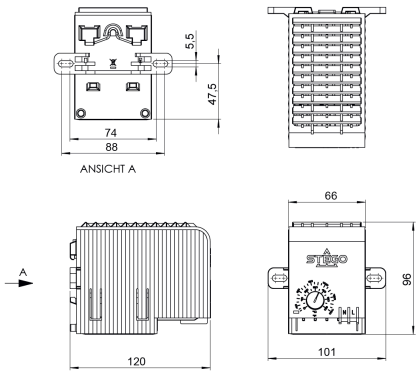
Electrical protection	Overvoltage protection
Temperature monitoring	Overheating protection in the event of fan failure (not reversible)
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Operating display	LED
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Inrush current duration	12 s
Frequency	50;60 Hz
Heating capacity	600 W - 1200 W
Axial fan	30 - 100 m³/h
Reaction time	5 s
Service life	>50000 h
Setting range	0 °C - 60 °C
Setting range 2	32 °F - 140 °F
Surface temperature	< + 80 °C
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal (push-in)
Connection	2 x stranded wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm²

Mounting	Clip for 35 mm DIN rail; screw flange
Installation position	any
Setup height	3000 m
Height	96 mm
Width	66 mm
Depth	120 mm
Weight	500 g

PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Nominal current
03233.9-00	100 V - 120 V	18 A	12 A
03233.0-00	220 V - 240 V	12 A	6 A

TECHNICAL DRAWINGS



NEW: ENCLOSURE HEATER WITH FAN BASIC

CS 032



Enclosure heater CS 032 Basic: Compact and equipped with a fan and PTC heating element, offers reliable protection against frost and condensation. A touch-safe plastic sheathing ensures safe working conditions, while push-in terminals make electrical contacting quick and stable. With heating capacities of 600, 800 and 1,000 W, the heating is versatile.

- Powerful PTC heating elements in a compact casing
- Push-in terminals for quick and safe electrical contacting
- Mounting kit incl. screw fixing and clip fixing for 35 mm DIN rail
- User safety: touch-safe

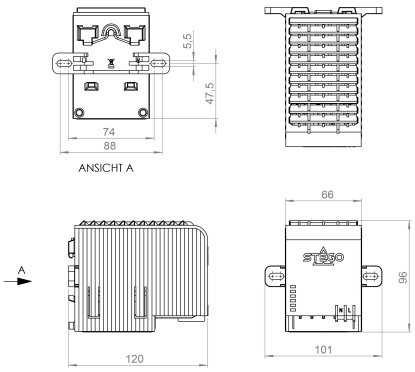
OVERVIEW TECHNICAL DATA

Electrical protection	Overvoltage protection
Temperature monitoring	Overheating protection in the event of fan failure (not reversible)
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Inrush current duration	12 s
Frequency	50;60 Hz
Service life	>50000 h
Surface temperature	< + 80 °C
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Connection type	Connection terminal (push-in)
Connection	2 x stranded wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm²
Mounting	Clip for 35 mm DIN rail; screw flange
Installation position	Airflow direction "in" vertical and lateral
Setup height	3000 m
Height	96 mm
Width	66 mm
Depth	120 mm
Weight	500 g

PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Nominal current	Heating capacity	Axial fan	Storage temperature
03232.0-00	220 V - 240 V	12 A	6 A	1000 W	65 m³/h	-40 °C - 70 °C
03231.0-00	220 V - 240 V	12 A	6 A	800 W	50 m³/h	-45 °C - 70 °C
03232.9-00	100 V - 120 V	18 A	12 A	1000 W	65 m³/h	-45 °C - 70 °C
03230.9-00	100 V - 120 V	18 A	12 A	600 W	30 m³/h	-45 °C - 70 °C
03231.9-00	100 V - 120 V	18 A	12 A	800 W	50 m³/h	-45 °C - 70 °C
03230.0-00	220 V - 240 V	12 A	6 A	600 W	30 m³/h	-45 °C - 70 °C

TECHNICAL DRAWINGS



ENCLOSURE HEATER

LT 065



Compact loop heater for heating casings with electrical and electronic installations. Good self-convection due to high hot air flow. Touch-safe plastic casing minimizes surface temperatures to 80 °C. Also available in designs with thermostat (LTF 065 series).

- Shock and vibration proof according to railroad standard DIN EN IEC 61373:2011-04, Cat. 1 B
- Quick installation thanks to clip fixing and pressure clamp
- Low surface temperature
- Double insulated (plastic housing)
- Wide voltage range
- Heater body in loop design for optimum temperature distribution

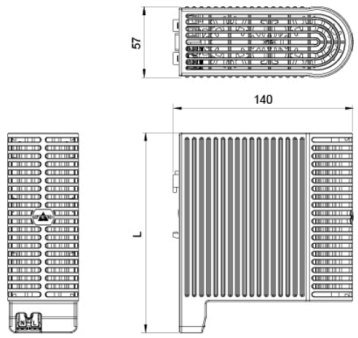
OVERVIEW TECHNICAL DATA

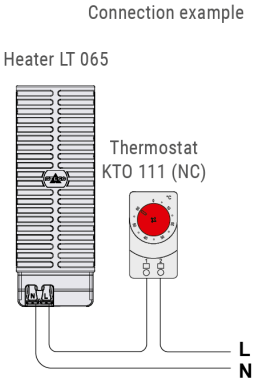
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black and white
AC/DC	AC;DC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Surface temperature	< + 80 °C
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Connection	2 x pressure clamps for 0.5 - 1.5 mm² stranded wire (with wire end ferrule) and 0.5 - 2.5 mm² rigid wire
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Width	57 mm
Depth	140 mm
Note	Surface temperature according to VDE 0100, except upper grid surface;Heating capacity measured at +20 °C (+68 °F) ambient temperature.

PRODUCT VARIANTS

Article number	Inrush current	Heating capacity	Height	Weight
06500.0-00	4 A	50 W	101 mm	400 g
06504.0-00	8 A	150 W	161 mm	750 g
06503.0-00	6 A	100 W	161 mm	750 g

TECHNICAL DRAWINGS





ENCLOSURE HEATER

LTS 064



Compact heating for casings with electrical and electronic installations. The heater body in loop design improves convection. The plastic casing is designed so that the surface temperature on the touchable side surfaces does not exceed 80 °C. Pressure clamps enable quick and easy electrical connection.

- Quick installation thanks to clip fixing and pressure clamp
- Low surface temperature
- Double insulated (plastic housing)
- Wide voltage range
- Heater body in loop design for optimum temperature distribution
- Shock and vibration proof

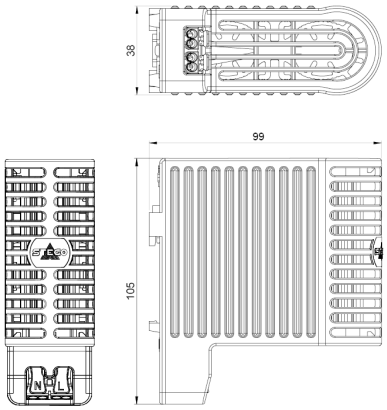
OVERVIEW TECHNICAL DATA

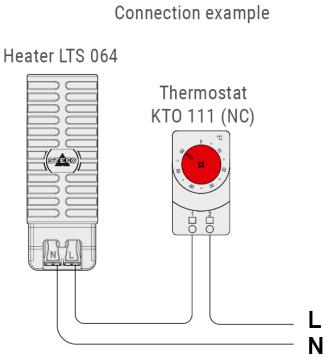
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black and white
AC/DC	AC;DC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Surface temperature	< + 80 °C
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Connection	2 x pressure clamps for 0.5 - 1.5 mm² stranded wire (with wire end ferrule) and 0.5 - 2.5 mm² rigid wire
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	105 mm
Width	38 mm
Depth	99 mm
Weight	200 g
Note	Surface temperature according to VDE 0100, except upper grid surface;Heating capacity measured at +20 °C (+68 °F) ambient temperature.

PRODUCT VARIANTS

Article number	Inrush current	Heating capacity
06401.0-00	2 A	20 W
06403.0-00	4 A	40 W
06402.0-00	2 A	30 W

TECHNICAL DRAWINGS





ENCLOSURE HEATER

LTF 065



Compact loop heater based on PTC heating elements for heating casings with electrical or electronic components. The heater can be used to prevent both low temperatures and condensation on built-in components. Fast electrical contacting through pressure clamps.

- Quick installation thanks to clip fixing and pressure clamp
- Low surface temperature
- Double insulated (plastic housing)
- Wide voltage range
- Integrated tamper-proof thermostat
- Heater body in loop design for optimum temperature distribution
- Shock and vibration proof

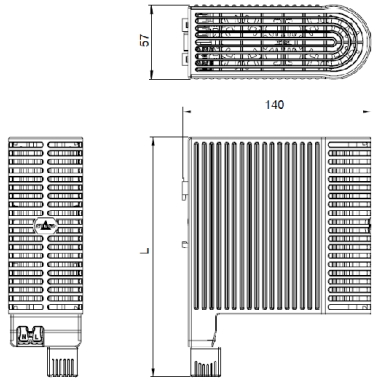
OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black and white
AC/DC	AC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Surface temperature	< + 80 °C
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Connection	2 x pressure clamps for 0.5 - 1.5 mm² stranded wire (with wire end ferrule) and 0.5 - 2.5 mm² rigid wire
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Width	57 mm
Depth	140 mm
Note	Surface temperature according to VDE 0100, except upper grid surface; heating capacity measured at +20 °C (+68 °F) ambient temperature; switch-on/off temperature tolerance at +5 K.

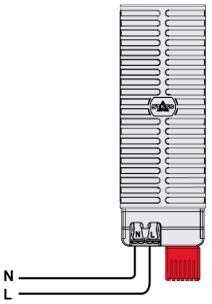
PRODUCT VARIANTS

Article number	Inrush current	Heating capacity	Switch-off temperature	Switch-on temperature	Height	Weight
06514.0-00	8 A	150 W	15 °C	5 °C	184 mm	750 g
06513.0-00	6 A	100 W	15 °C	5 °C	184 mm	750 g
06510.0-00	4 A	50 W	15 °C	5 °C	124 mm	400 g
06523.0-00	6 A	100 W	25 °C	15 °C	184 mm	750 g
06524.0-00	8 A	150 W	25 °C	15 °C	184 mm	750 g
06520.0-00	4 A	50 W	25 °C	15 °C	124 mm	400 g

TECHNICAL DRAWINGS



Connection example



ENCLOSURE HEATER

LP 165



Compact loop heater based on PTC heating elements for heating casings with electrical or electronic installations. The innovative aluminium profile in loop design creates an optimized chimney effect for safe temperature control of the enclosure. Quick and easy installation / electrical contacting using pressure clamps.

- Quick installation thanks to clip fixing and pressure clamp
- Dynamic heating thanks to PTC technology
- Heater body in loop design for optimum temperature distribution
- Wide voltage range
- Worldwide approvals

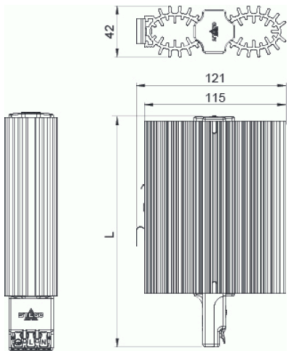
OVERVIEW TECHNICAL DATA

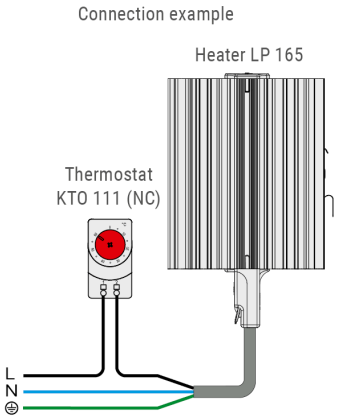
Protection class	I
Protection type	IP20
Connection case	Plastic to UL94 V-0, black
Heating element	PTC resistor (PTC)
Heater element	Aluminium profile, anodised
AC/DC	AC;DC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Connection	3 x pressure clamps for 0.5 - 1.5 mm² stranded wire (with wire end ferrule) and 0.5 - 2.5 mm² rigid wire
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Width	42 mm
Depth	121 mm
Note	Heating capacity measured at +20 °C (+68 °F) ambient temperature.

PRODUCT VARIANTS

Article number	Inrush current	Heating capacity	Height	Weight
16502.0-00	4 A	75 W	107 mm	300 g
16504.0-00	8 A	150 W	167 mm	500 g
16501.0-00	4 A	60 W	107 mm	300 g
16503.0-00	6 A	100 W	167 mm	500 g

TECHNICAL DRAWINGS





ENCLOSURE HEATER

LPS 164



Compact loop heater based on PTC heating elements for heating casings with electrical or electronic components. The heating can be used to prevent both low temperatures and condensation on built-in components. The design of the aluminum profile creates a chimney effect, which ensures even temperature distribution in the enclosure.

- Quick installation thanks to clip fixing
- Dynamic heating thanks to PTC technology
- Heater body in loop design for optimum temperature distribution
- Wide voltage range
- Worldwide approvals

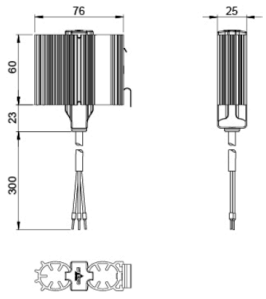
OVERVIEW TECHNICAL DATA

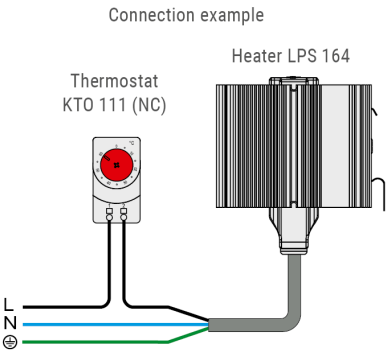
Protection class	I
Protection type	IP20
Heating element	PTC resistor (PTC)
Heater element	Aluminium profile, anodised
AC/DC	AC;DC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection cable
Connection	3 x 0.5 mm² x 300 mm cable
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	83 mm
Width	25 mm
Depth	76 mm
Weight	200 g
Note	Heating capacity measured at +20 °C (+68 °F) ambient temperature.

PRODUCT VARIANTS

Article number	Inrush current	Heating capacity
16401.0-00	2 A	20 W
16403.9-00	4 A	40 W
16402.0-00	2 A	30 W
16400.0-00	2 A	10 W
16404.0-00	4 A	50 W
16400.9-00	2 A	10 W
16404.9-00	4 A	50 W
16403.0-00	4 A	40 W
16402.9-00	2 A	30 W
16401.9-00	2 A	20 W

TECHNICAL DRAWINGS





FLAT ENCLOSURE HEATER

RC 016



This small and flat enclosure heater offers optimum condensation protection in small enclosures, casings and installation spaces. The PTC heating element transfers its heat to an anodised aluminum profile. The compact contact heating is designed for continuous operation.

- Wide voltage range for electrical connection
- PTC heating element with dynamic response behavior
- Compact dimensions, use: e.g. as camera heater
- High heating capacity per volume

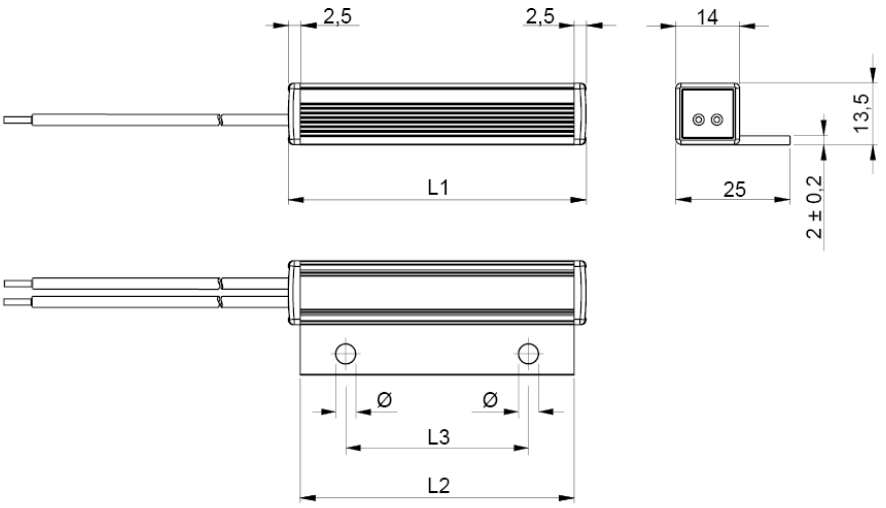
OVERVIEW TECHNICAL DATA

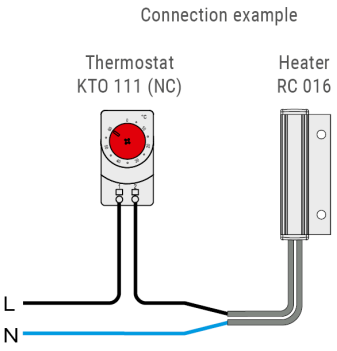
Protection class	II
Protection type	IP40
Heating element	PTC resistor (PTC)
Heater element	Aluminium profile, anodised
AC/DC	AC;DC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Surface temperature	< + 180 °C
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection cable
Connection	2x AWG 20, 300 mm
Mounting	Screw fixing
Installation position	any
Height	13,5 mm
Width	25 mm
Depth	35 mm
Note	Heating capacity measured at +20 °C (+68 °F) ambient temperature;When operating under AC/DC 140 V, the heating capacity is reduced by approx. 10 %.

PRODUCT VARIANTS

Article number	Inrush current	Heating capacity	Weight
01673.0-00	3 A	13 W	40 g
01662.0-00	2,5 A	10 W	30 g
01651.0-00	2 A	8 W	20 g

TECHNICAL DRAWINGS





ENCLOSURE HEATER WITH FAN

CSL 028



This compact enclosure heater with fan and PTC heating element prevents condensation in enclosures with a high component density. The touch-safe plastic casing ensures user safety by protecting against heat.

- PTC heating element: temperature-limiting, direct response behavior
- Touch-safe heat protection
- Screw fixing and mounting with clip fixing for DIN rail 35 mm possible
- Electrical connection via pressure clamps
- Temperature safety cut-out to prevent overheating

OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Service life	>40000 h
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	2-pole clamp 2.5 mm²
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	90 mm
Width	85 mm
Depth	113 mm
Weight	500 g
Note	Other voltages on request;Heating capacity at +20 °C (+68 °F) ambient temperature.

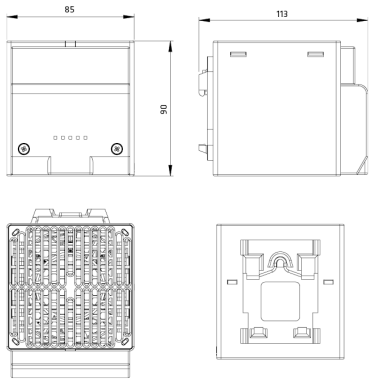
PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Heating capacity	Mounting
02811.9-00	120 V	6 A	250 W	Clip for 35 mm DIN rail
02810.9-00	120 V	9 A	400 W	Clip for 35 mm DIN rail
02811.9-01	120 V	6 A	250 W	Screw fixing
02811.0-01	230 V	9 A	250 W	Screw fixing
02811.0-00	230 V	9 A	250 W	Clip for 35 mm DIN rail
02810.0-00	230 V	15 A	400 W	Clip for 35 mm DIN rail
02810.9-01	120 V	9 A	400 W	Screw fixing
02810.0-01	230 V	15 A	400 W	Screw fixing

ACCESSORIES

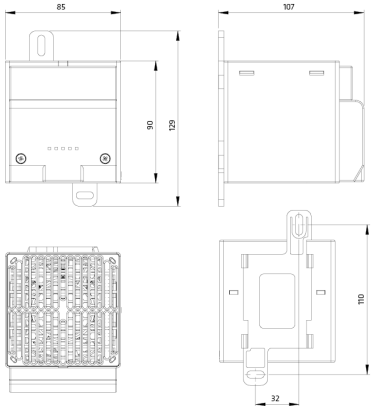
Article number	Packaging unit	Casing	Height	Width	Depth	Weight
252017	1 Piece	Plastic to UL94 V-0, black	12 mm	85 mm	85 mm	500 g

TECHNICAL DRAWINGS



CSL 028 clip fixing

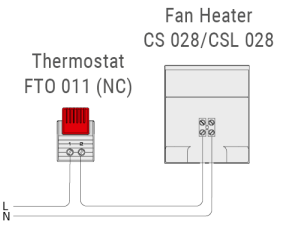
View: back side



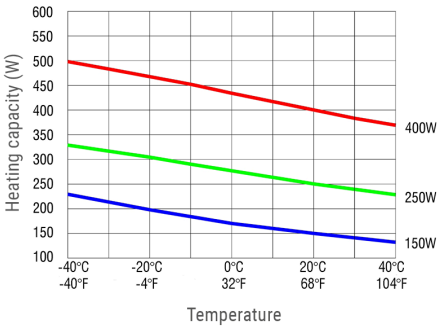
CSL 028 screw fixing

View: back side

Connection example



Heating capacity / Ambient temperature diagram
CS 028 / CSL 028



ENCLOSURE HEATER WITH FAN

CS 028



This compact enclosure heater with fan and PTC heating element prevents condensation in enclosures with a high component density. The touch-safe plastic casing ensures user safety by protecting against heat.

- PTC heating element: temperature-limiting, direct response behavior
- Touch-safe heat protection
- Screw fixing and mounting with clip fixing for DIN rail 35 mm possible
- Electrical connection via pressure clamps
- Temperature safety cut-out to prevent overheating

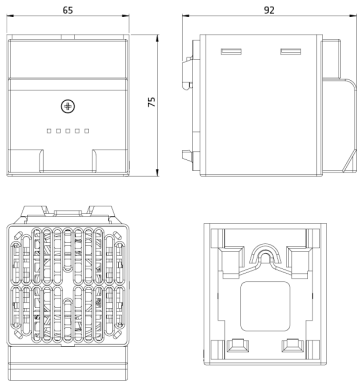
OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Heating capacity	150 W
Axial fan	13,8 m³/h
Service life	>40000 h
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	2-pole clamp 2.5 mm²
Installation position	Airflow direction "in" vertical / connection at the bottom
Weight	300 g
Note	Other voltages on request;Heating capacity at +20 °C (+68 °F) ambient temperature.

PRODUCT VARIANTS

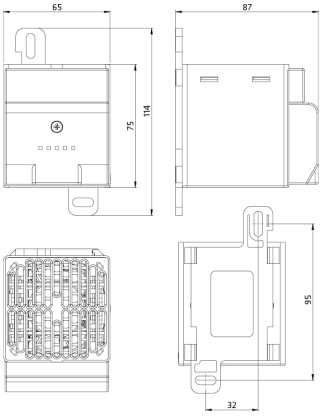
Article number	Operating voltage	Inrush current	Mounting	Height	Width	Depth
02800.9-01	120 V	6 A	Screw fixing	90 mm	85 mm	107 mm
02800.0-01	230 V	12 A	Screw fixing	90 mm	85 mm	107 mm
02800.0-00	230 V	12 A	Clip for 35 mm DIN rail	75 mm	65 mm	92 mm
02800.9-00	120 V	6 A	Clip for 35 mm DIN rail	75 mm	65 mm	92 mm

TECHNICAL DRAWINGS



CS 028 clip fixing

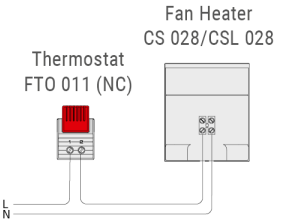
View: back side



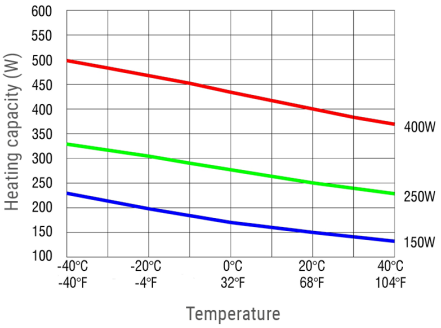
CS 028 screw fixing

View: back side

Connection example



Heating capacity / Ambient temperature diagram
CS 028 / CSL 028



ENCLOSURE HEATER

HG 140



This compact PTC convection heater is for use in enclosures and casings. This enables you to achieve condensation prevention for effective operational safety of electrical systems and installations.

- Pressure terminal connection for quick electrical connection
- PTC heating element with dynamic response behavior
- This enclosure heater is designed for continuous operation
- Quick installation with clip fixing for 35 mm DIN rail

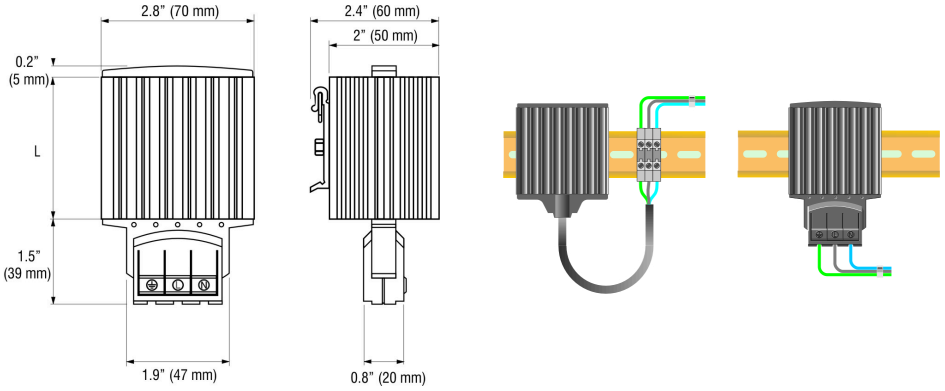
OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP20
Connection case	Plastic to UL94 V-0, black
Heating element	PTC resistor (PTC)
Heater element	Aluminium profile, anodised
AC/DC	AC;DC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Connection	3 x pressure clamps for 0.5 - 1.5 mm² stranded wire (with wire end ferrule) and 0.5 - 2.5 mm² rigid wire
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Width	70 mm
Depth	60 mm
Note	Other voltages on request;When operating below AC/DC 140 V, the heating capacity is reduced by approx. 10 %.

PRODUCT VARIANTS

Article number	Inrush current	Heating capacity	Height	Weight
14006.0-00	4 A	75 W	185 mm	500 g
14003.0-00	3,5 A	45 W	110 mm	300 g
14005.0-00	2,5 A	60 W	185 mm	400 g
14001.0-00	3 A	30 W	110 mm	300 g
14007.0-00	4,5 A	100 W	185 mm	500 g
14008.0-00	9 A	150 W	265 mm	700 g
14000.0-00	1,5 A	15 W	110 mm	300 g

TECHNICAL DRAWINGS



CARTRIDGE HEATER

RCE 016



This compact cartridge heater for controlling the temperature of small casings and enclosures protects against condensation. The PTC heating element embedded in the aluminium heater body is temperature-limiting (self-regulating).

- Wide voltage range for electrical connection
- PTC heating element with dynamic response behavior
- Application: e.g. as heating for valve housings, gears, servomotors
- Energy-saving contact heating

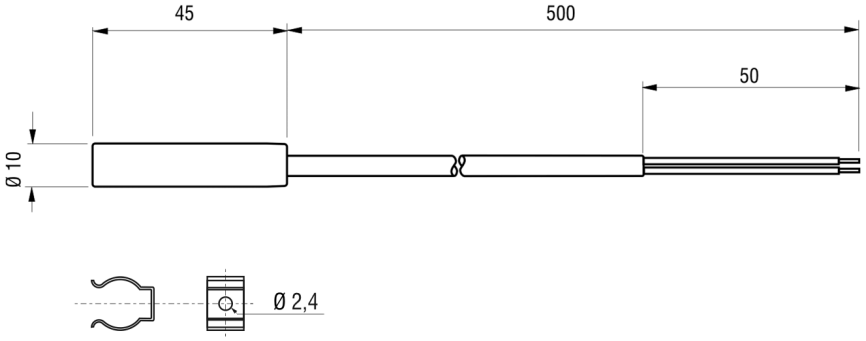
OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP54
Heating element	PTC resistor (PTC)
Heater element	Aluminium
AC/DC	AC;DC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection cable
Connection	2x AWG 22 cable (silicone)
Installation position	any
Height	Ø10 mm
Width	Ø10 mm
Depth	45 mm
Weight	20 g
Note	Other voltages on request;Heating capacity measured at +20 °C (+68 °F) ambient temperature ;When operating under AC/DC 140 V, the heating capacity is reduced by approx. 10 %.

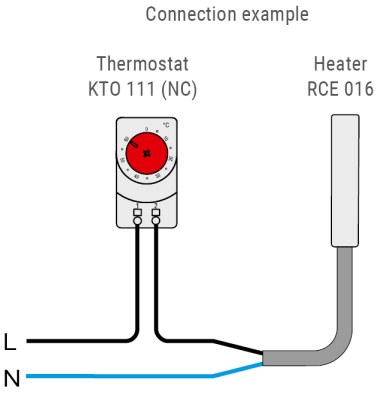
PRODUCT VARIANTS

Article number	Inrush current	Heating capacity	Surface temperature
01623.0-00	2,5 A	9 W	< + 175 °C
01622.0-00	2 A	5 W	< + 165 °C

TECHNICAL DRAWINGS



Mounting clips, Art. No. 09008.0-01
(1 packing unit = 2 pieces)



ENCLOSURE HEATER

CS 060



This is a compact enclosure heater with a PTC heating element for reliable protection against condensation in enclosures and casings. The convection heater is safe to touch thanks to its plastic sheathing and thus protects applications from the effects of heat. This heater is also available as a series with a fixed thermostat (tamper-proof thermostat): CSF 060

- Safe to touch, low surface temperature
- Quick installation on 35 mm DIN rail
- This enclosure heater is designed for continuous operation
- PTC heating element

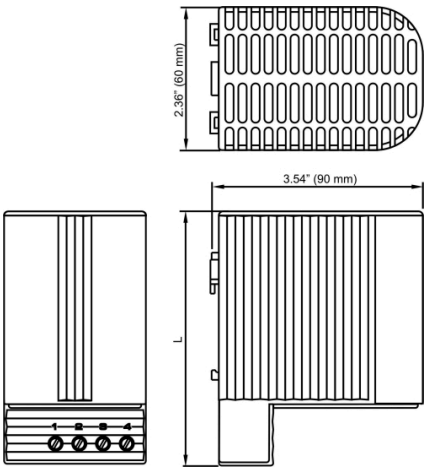
OVERVIEW TECHNICAL DATA

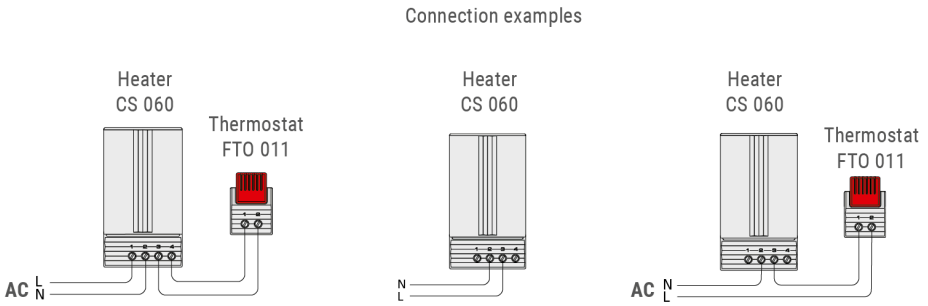
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC;DC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Surface temperature	< + 80 °C
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	4-pole clamp 2.5 mm²
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Width	60 mm
Depth	90 mm
Note	Other voltages on request;When operating under AC/DC 140 V, the heating capacity is reduced by approx. 10 %;Heating capacity at ambient temperature-see performance/ambient temperature diagram; air outlet temperature 50 mm from the protective grille.

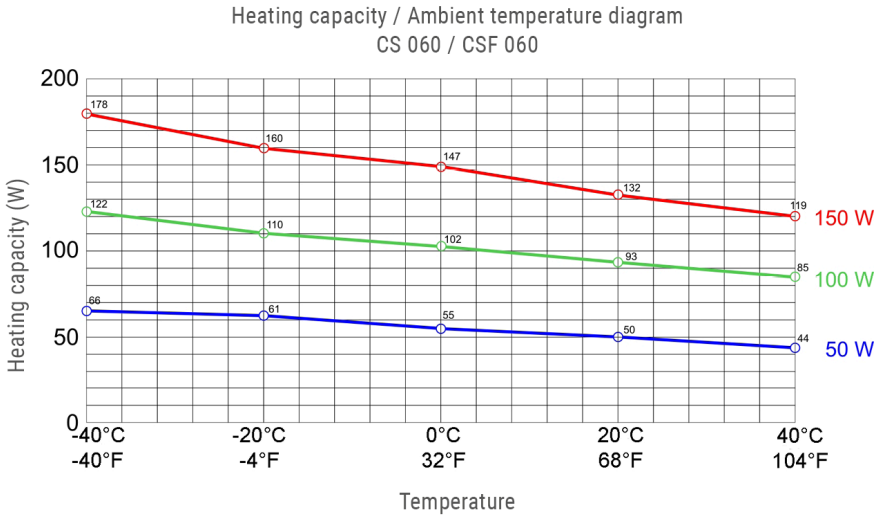
PRODUCT VARIANTS

Article number	Inrush current	Heating capacity	Air outlet temperature	Height	Weight
06010.0-00	4,5 A	100 W	120 °C	110 mm	300 g
06000.0-00	2,5 A	50 W	86 °C	110 mm	300 g
06020.0-00	8 A	150 W	145 °C	150 mm	500 g

TECHNICAL DRAWINGS







ENCLOSURE HEATER

CSF 060



The compact PTC enclosure heater with integrated tamper-proof thermostat provides reliable protection against condensation in enclosures and casings. Practical: The integrated, fixed thermostat makes an external thermostat superfluous. Two tried-and-tested presets are available (switch-off and switch-on temperature: +15 °C and 5 °C; +25 °C and 15 °C).

- With integrated tamper-proof thermostat
- Safe to touch, low surface temperature
- Quick installation on 35 mm DIN rail
- This enclosure heater is designed for continuous operation
- PTC heating element

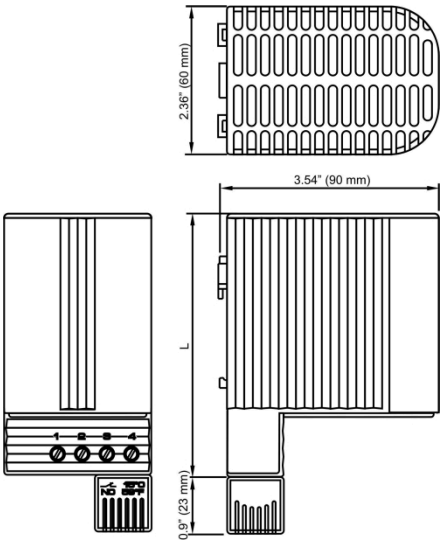
OVERVIEW TECHNICAL DATA

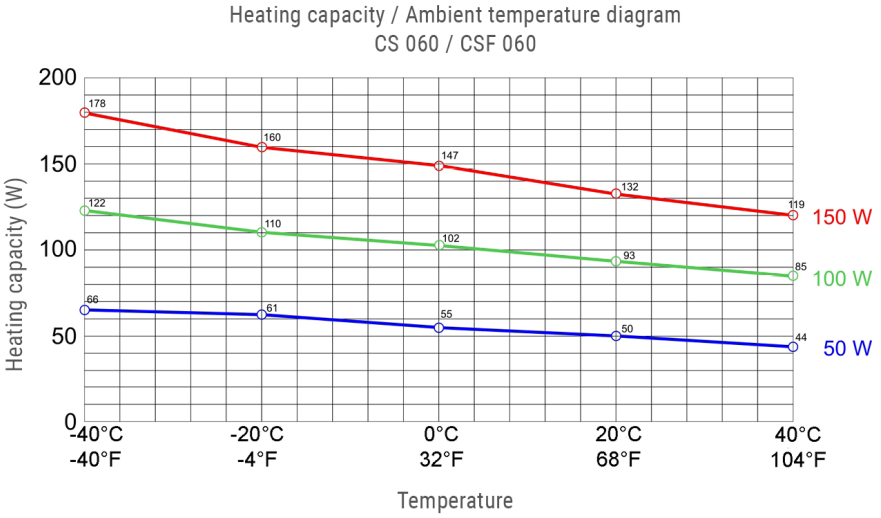
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Surface temperature	< + 80 °C
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	2-pole clamp 2.5 mm²
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Width	60 mm
Depth	90 mm
Note	Other switch-off and switch-on temperatures on request. ;Switch-on temperature tolerance at +5K.;Operation below AC 140 V reduces the heating capacity by approx. 10 %.;Heating capacity at ambient temperature - see power/ambient temperature diagram; air outlet temperature 50 mm from the protective grille;

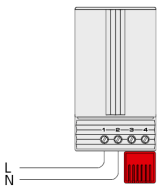
PRODUCT VARIANTS

Article number	Inrush current	Heating capacity	Switch-off temperature	Switch-on temperature	Air outlet temperature	Height	Weight
06012.0-00	4,5 A	100 W	25 °C	15 °C	120 °C	110 mm	300 g
06001.0-00	2,5 A	50 W	15 °C	5 °C	86 °C	110 mm	300 g
06021.0-00	8 A	150 W	15 °C	5 °C	120 °C	150 mm	500 g
06011.0-00	4,5 A	100 W	15 °C	5 °C	120 °C	110 mm	300 g
06022.0-00	8 A	150 W	25 °C	15 °C	120 °C	150 mm	500 g
06002.0-00	2,5 A	50 W	25 °C	15 °C	86 °C	110 mm	300 g

TECHNICAL DRAWINGS







Connection example

ENCLOSURE HEATER WITH FAN

CR 130



This compact high-performance fan heater is used to protect against frost and condensation in enclosures and casings. It is a combination of high performance cartridge heater and fan and thus achieves a high heating and air flow. CR 030 versions allow easy mounting of the heating to the base of an enclosure. Available with integrated tamper-proof thermostat version.

- High performance cartridge heater
- Temperature safety cut-out as overheating protection
- Screw fixing for the housing base of an application
- Integrated thermostat

OVERVIEW TECHNICAL DATA

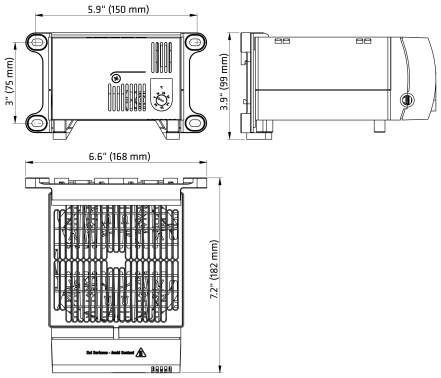
Temperature monitoring	Overheating protection in the event of fan failure with automatic reset, additional protection by irreversible fuse
Protection class	II
Protection type	IP20
Heating element	High-performance heating cartridge
Heater element	Aluminum profile
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Heating capacity	950 W
Axial fan	160 m³/h
Service life	>50000 h
Switching differential	7 K
Switching differential tolerance	
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	2-pole max. 2.5 mm² with strain relief
Mounting	Clip for 35 mm DIN rail; screw fixing
Installation position	Airflow direction "in" vertical / connection at the bottom

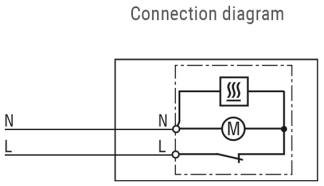
Height	99 mm
Width	168 mm
Depth	182 mm
Weight	1500 g
Note	Fan heater with thermostat;other heating capacities from 200 W on request;tolerance ±4 K;switching temperature differential 7 K (±4 K tolerance).

PRODUCT VARIANTS

Article number	Operating voltage	Setting range
13051.0-00	230 V	0 °C - 60 °C
13059.9-00	120 V	32 °F - 140 °F

TECHNICAL DRAWINGS





ENCLOSURE HEATER

HGK 047



This compact enclosure heater with PTC heating element prevents condensation from forming in enclosures. It is a convection heater for small enclosures and casings. The heater body is designed in anodised aluminum profile.

- Wide voltage range for electrical connection
- PTC heating element with dynamic response behavior
- This enclosure heater is designed for continuous operation
- Quick installation with clip fixing for 35 mm DIN rail

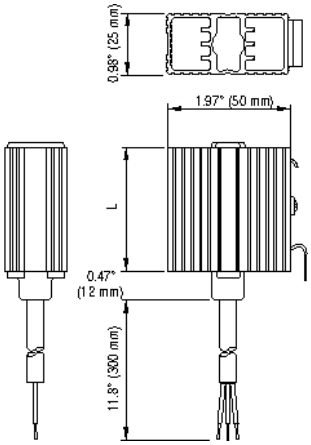
OVERVIEW TECHNICAL DATA

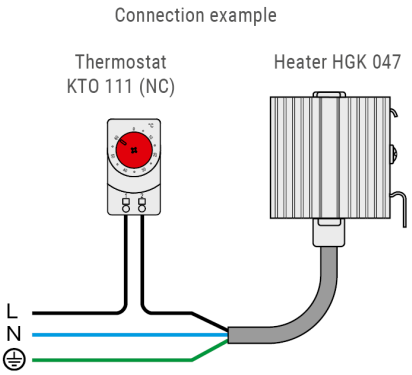
Protection class	I
Protection type	IP44
Heating element	PTC resistor (PTC)
Heater element	Aluminium profile, anodised
AC/DC	AC;DC
Frequency	50;60 Hz
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection cable
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	25 mm
Width	50 mm
Note	Other voltages on request;Heating capacity at +20 °C (+68 °F) ambient temperature; (min. 110 V, max. 265 V) when operating under AC/DC 140 V, the heating capacity is reduced by approx. 10%.

PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Heating capacity	Connection	Depth	Weight
04702.0-00	120 V - 240 V	3 A	30 W	3 x 0.5 mm² x 300 mm cable (silicone)	82 mm	200 g
04701.0-00	120 V - 240 V	2,5 A	20 W	3 x 0.5 mm² x 300 mm cable (silicone)	72 mm	200 g
04702.9-00	120 V - 230 V	3 A	30 W	3 x AWG 20 x 300 mm cable	82 mm	200 g
04701.9-00	120 V - 230 V	2,5 A	20 W	3 x AWG 20 x 300 mm cable	60 mm	200 g
04700.0-00	120 V - 240 V	1 A	10 W	3 x 0.5 mm² x 300 mm cable (silicone)	52 mm	100 g
04700.9-00	120 V - 230 V	1 A	10 W	3 x AWG 20 x 300 mm cable	52 mm	100 g

TECHNICAL DRAWINGS





ENCLOSURE HEATER

CSK 060



This compact PTC enclosure heater is designed to protect against condensation in your enclosure and installation space. Safety: The plastic-coated heater body reaches a maximum temperature of +85 °C on its surface and safely protects applications from heat.

- Wide voltage range for electrical connection
- PTC heating element with dynamic response behavior
- Energy-saving, temperature-limiting, safe to touch
- Designed for continuous operation
- Quick installation with clip fixing for 35 mm DIN rail

OVERVIEW TECHNICAL DATA

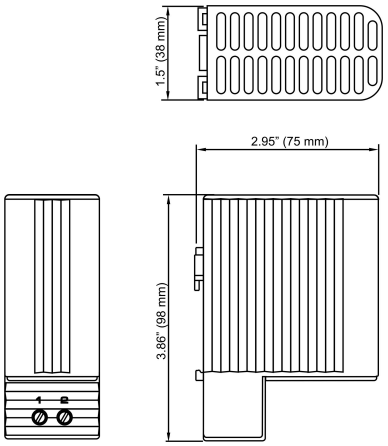
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC;DC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Surface temperature	< + 85 °C
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	2-pole clamp 2.5 mm²
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	98 mm
Width	38 mm
Depth	75 mm

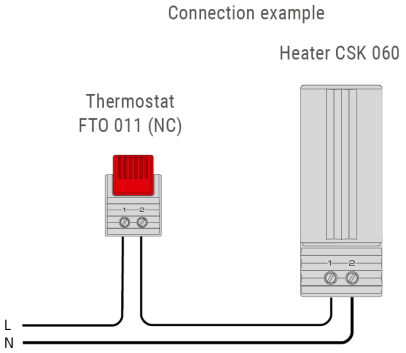
Note	Other voltages on request;Surface temperature according to VDE 0100, except upper grid surface;Heating capacity measured at +20 °C (+68 °F) ambient temperature. When operating under AC/DC 140 V, the heating capacity is reduced by approx. 10 %.

PRODUCT VARIANTS

Article number	Inrush current	Heating capacity	Switching differential	Switching differential tolerance	Weight
06040.0-00	1 A	10 W			200 g
06050.0-00	3,8 A	30 W	4 K	± 1 K	300 g
06030.0-00	2,5 A	20 W			300 g

TECHNICAL DRAWINGS





ENCLOSURE HEATER WITH FAN

HVL 031



The HVL 031 is a space-saving fan heater for temperature control in enclosures, casings and technical installation spaces. It serves as a contactor against condensation. This resistance heater is available in five power levels, each in AC 230 V and AC 120 V. All HVL 031s include a fan.

- Compact, flat construction, high air through-flow rate
- Overheating protection with automatic switch-off
- Clip fixing for 35 mm DIN rail
- Version HV 031 available for fan self-mounting

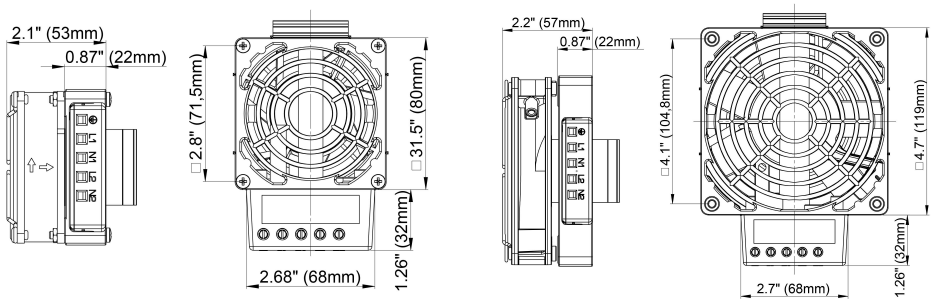
OVERVIEW TECHNICAL DATA

Temperature monitoring	Overheating protection in the event of fan failure with automatic reset
Protection class	I
Protection type	IP20
Connection case	Plastic to UL94 V-0, black
Heating element	High-performance heating cartridge
Heater element	Aluminium die casting
AC/DC	AC
Frequency	50;60 Hz
Service life	>50000 h
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm² max.
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Note	Heating with fan;Heating may only be operated in conjunction with a fan. There is a risk of overheating!

PRODUCT VARIANTS

Article number	Operating voltage	Heating capacity	Height	Width	Depth	Weight
03113.0-00	230 V	200 W	57 mm	119 mm	151 mm	900 g
03103.9-00	120 V	150 W	53 mm	80 mm	112 mm	600 g
03102.0-00	230 V	100 W	53 mm	80 mm	112 mm	600 g
03115.0-00	230 V	400 W	57 mm	119 mm	151 mm	900 g
03113.9-00	120 V	200 W	57 mm	119 mm	151 mm	900 g
03114.9-00	120 V	300 W	57 mm	119 mm	151 mm	900 g
03114.0-00	230 V	300 W	57 mm	119 mm	151 mm	900 g
03102.9-00	120 V	100 W	53 mm	80 mm	112 mm	600 g
03103.0-00	230 V	150 W	53 mm	80 mm	112 mm	600 g
03115.9-00	120 V	400 W	57 mm	119 mm	151 mm	900 g

TECHNICAL DRAWINGS



ENCLOSURE HEATER WITH FAN

HGL 046



The compact fan heater heats the air inside the enclosure or casing to protect against harmful condensation. The convection effect of this resistance heater is maximized by the integrated fan.

- Compact convection heater
- Resistance heating element
- Temperature safety cut-out: overheating protection in the event of fan failure
- Long service life

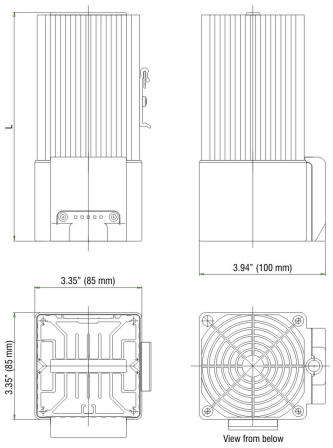
OVERVIEW TECHNICAL DATA

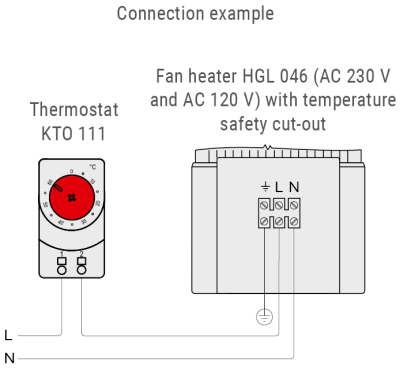
Temperature monitoring	Overheating protection in the event of fan failure with automatic reset
Protection class	I
Protection type	IP20
Connection case	Plastic to UL94 V-0, black
Heating element	Resistance heater
Heater element	Aluminium profile, anodised
AC/DC	AC
Frequency	50;60 Hz
Service life	>50000 h
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Connection	Internal connection terminal 1.5 mm² with strain relief
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Width	85 mm
Depth	100 mm
Note	Other voltages on request;Note: according to UL 508A, NITW file on request

PRODUCT VARIANTS

Article number	Operating voltage	Heating capacity	Surface temperature	Height	Weight
04640.9-00	120 V	250 W	< + 70 °C	182 mm	1100 g
04640.0-00	230 V	250 W	< + 70 °C	182 mm	1100 g
04641.9-00	120 V	400 W	< + 75 °C	222 mm	1400 g
04641.0-00	230 V	400 W	< + 75 °C	222 mm	1400 g

TECHNICAL DRAWINGS





ENCLOSURE HEATER WITH FAN

CR 030



This compact high-performance fan heater is used to protect against frost and condensation in enclosures and casings. It is a combination of high performance cartridge heater and fan and thus achieves a high heating and air flow. CR 030 versions allow easy mounting of the heating to the base of an enclosure. Available with integrated tamper-proof thermostat version.

- High performance cartridge heater
- Temperature safety cut-out as overheating protection
- Screw fixing for the housing base of an application
- Integrated thermostat

OVERVIEW TECHNICAL DATA

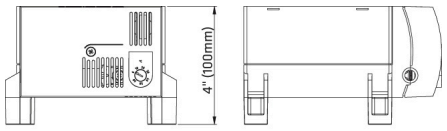
Temperature monitoring	Overheating protection in the event of fan failure with automatic reset, additional protection by irreversible fuse
Protection class	II
Protection type	IP20
Heating element	High-performance heating cartridge
Heater element	Aluminum profile
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Heating capacity	950 W
Axial fan	160 m³/h
Service life	>50000 h
Switching differential	7 K
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	2-pole max. 2.5 mm² with strain relief
Mounting	Screw fixing
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	100 mm

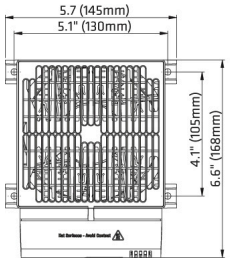
Width	145 mm
Depth	168 mm
Weight	1400 g

PRODUCT VARIANTS

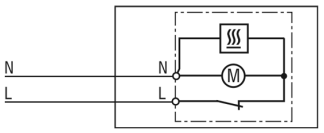
Article number	Operating voltage	Setting range	Switching differential tolerance	Note
03059.9-00	120 V	32 °F - 140 °F		Fan heater with thermostat;other heating capacities from 200 W on request;tolerance ±4 K;switching temperature differential 7 K (±4 K tolerance).
03051.0-00	230 V	0 °C - 60 °C	± 1 K	Fan heater with thermostat;other heating capacities from 200 W on request;Operating temperature of the heating with integrated hygrostat: 0 to +60 °C (+32 to +140 °F);Switching temperature differential 7 K (±4 K tolerance).

TECHNICAL DRAWINGS





Connection diagram



ENCLOSURE HEATER WITH FAN

CSF 028



This PTC enclosure heater with fan and fixed thermostat provides condensation protection in the enclosure and casing. It is particularly space-saving. The integrated fixed thermostat is available in two temperature presets. The heating is touch-safe for the application thanks to the touch-safe plastic coating of the heater body.

- PTC heating element: temperature-limiting, direct response behavior
- Touch-safe heat protection, therefore safe to touch
- Screw fixing and mounting with clip fixing for DIN rail 35 mm possible
- Electrical connection via pressure clamps
- Temperature safety cut-out to prevent overheating

OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	2-pole clamp 2.5 mm²
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	90 mm
Width	85 mm
Depth	113 mm
Weight	500 g
Note	Other voltages on request;Tolerance ±5 K;Heating capacity at +20 °C (+68 °F) ambient temperature; switch-on temperature tolerance at +5K, other switch-off and switch-on temperatures on request.

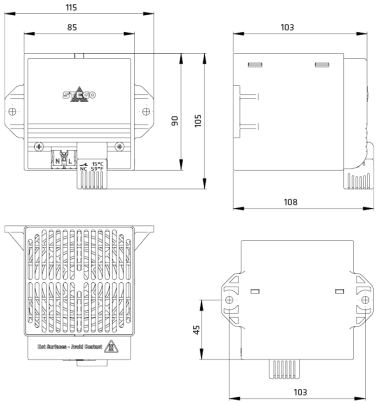
PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Heating capacity	Switch-off temperature	Switch-on temperature	Mounting
02821.9-08	120 V	6 A	250 W	15 °C	5 °C	Screw fixing
02821.0-11	230 V	9 A	250 W	25 °C	15 °C	Screw fixing
02820.9-08	120 V	9 A	400 W	15 °C	5 °C	Screw fixing
02821.9-09	120 V	6 A	250 W	25 °C	15 °C	Clip for 35 mm DIN rail
02821.9-06	120 V	6 A	250 W	15 °C	5 °C	Clip for 35 mm DIN rail
02820.0-06	230 V	15 A	400 W	15 °C	5 °C	Clip for 35 mm DIN rail
02820.0-09	230 V	15 A	400 W	25 °C	15 °C	Clip for 35 mm DIN rail
02820.9-11	120 V	9 A	400 W	25 °C	15 °C	Screw fixing
02820.9-09	120 V	9 A	400 W	25 °C	15 °C	Clip for 35 mm DIN rail
02821.0-09	230 V	9 A	250 W	25 °C	15 °C	Clip for 35 mm DIN rail
02821.0-06	230 V	9 A	250 W	15 °C	5 °C	Clip for 35 mm DIN rail
02821.0-08	230 V	9 A	250 W	15 °C	5 °C	Screw fixing
02821.9-11	120 V	6 A	250 W	25 °C	15 °C	Screw fixing
02820.9-06	120 V	9 A	400 W	15 °C	5 °C	Clip for 35 mm DIN rail
02820.0-11	230 V	15 A	400 W	25 °C	15 °C	Screw fixing
02820.0-08	230 V	15 A	400 W	15 °C	5 °C	Screw fixing

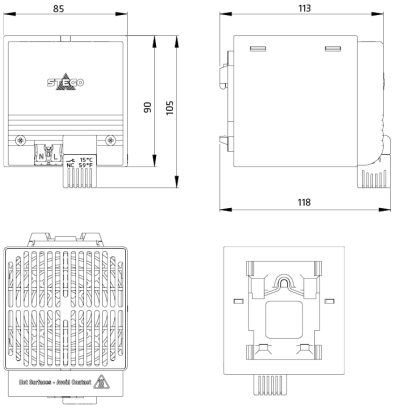
ACCESSORIES

Article number	Packaging unit	Casing	Height	Width	Depth	Weight
252017	1 Piece	Plastic to UL94 V-0, black	12 mm	85 mm	85 mm	500 g

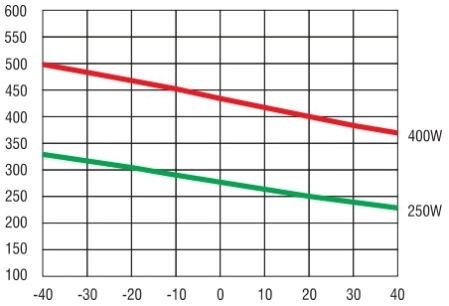
TECHNICAL DRAWINGS



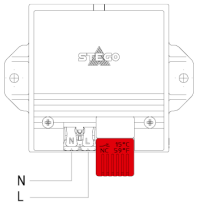
CSF 028 screw flange fixing View: back side



CSF 028 clip fixing View: back side



Connection example



ENCLOSURE HEATER WITHOUT FAN

HV 031



The space-saving fan heater for temperature control in enclosures, casings and technical installation spaces provides contactor protection against condensation. Resistance heater available in five power levels, each in AC 230 V and AC 120 V. HV 031 enclosure heaters are supplied without a fan. The installation of a fan is essential for operation.

- Compact, flat construction
- Overheating protection with automatic shutdown
- Fan self-mounting mandatory
- Clip fixing for 35 mm DIN rail

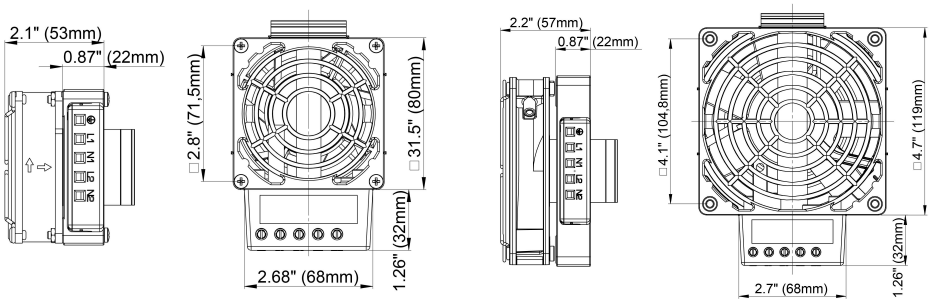
OVERVIEW TECHNICAL DATA

Temperature monitoring	Overheating protection in the event of fan failure with automatic reset
Protection class	I
Protection type	IP20
Connection case	Plastic to UL94 V-0, black
Heating element	High-performance heating cartridge
Heater element	Aluminium die casting
AC/DC	AC
Frequency	50;60 Hz
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	22 mm
Note	Heating without fan;Heating may only be operated in conjunction with a fan;Heating may only be operated in conjunction with a fan (min. 150 m³/h). There is a risk of overheating!

PRODUCT VARIANTS

Article number	Operating voltage	Heating capacity	Connection	Width	Depth	Weight
03111.0-00	230 V	300 W	3-pole clamp 2.5 mm² max.	119 mm	151 mm	500 g
03100.0-00	230 V	100 W	3-pole clamp 2.5 mm²	80 mm	112 mm	400 g
03110.0-00	230 V	200 W	3-pole clamp 2.5 mm² max.	119 mm	151 mm	500 g
03100.9-00	120 V	100 W	3-pole clamp 2.5 mm² max.	80 mm	112 mm	400 g
03111.9-00	120 V	300 W	3-pole clamp 2.5 mm² max.	119 mm	151 mm	500 g
03112.9-00	120 V	400 W	3-pole clamp 2.5 mm² max.	119 mm	151 mm	500 g
03110.9-00	120 V	200 W	3-pole clamp 2.5 mm² max.	119 mm	151 mm	500 g
03101.0-00	230 V	150 W	3-pole clamp 2.5 mm² max.	80 mm	112 mm	400 g
03101.9-00	120 V	150 W	3-pole clamp 2.5 mm² max.	80 mm	112 mm	400 g
03112.0-00	230 V	400 W	3-pole clamp 2.5 mm² max.	119 mm	151 mm	500 g

TECHNICAL DRAWINGS



ENCLOSURE HEATER WITH FAN

CS 130



The high-performance fan heater is designed for uniform temperature control of enclosures and casings to protect against harmful condensation. Designs with integrated thermostat are available. Heating technology: PTC for dynamic response behavior. Touch-safe for users thanks to touch-safe plastic casing.

- Versions with integrated thermostat
- Version for screw fixing to the base of the enclosure
- Versions with tamper-proof thermostat
- User protection: touch-safe sheathing

OVERVIEW TECHNICAL DATA

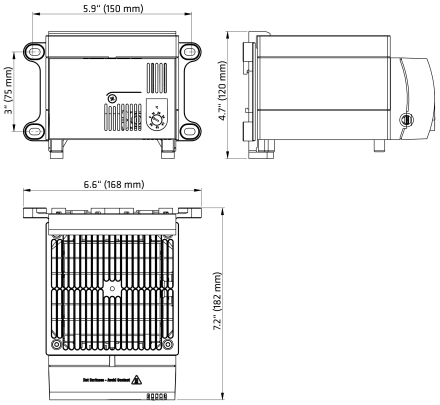
Temperature monitoring	Overheating protection in the event of fan failure with automatic reset
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Heating capacity	1200 W
Axial fan	160 m³/h
Service life	>50000 h
Switching differential tolerance	
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	2-pole max. 2.5 mm² with strain relief
Mounting	Clip for 35 mm DIN rail; screw fixing
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	120 mm
Width	168 mm
Depth	182 mm

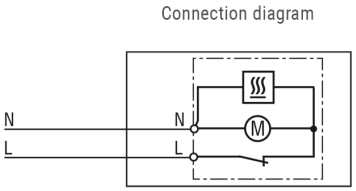
Weight	1200 g

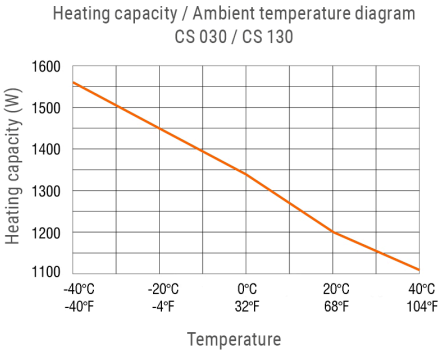
PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Setting range	Switching differential	Design	Note
13060.9-01	120 V	16 A			Fan heater without thermostat	
13060.0-01	230 V	13 A			Fan heater without thermostat	
13060.9-00	120 V	16 A	32 °F - 140 °F	7 K	Fan heater with thermostat	Tolerance ±4 K
13060.0-00	230 V	13 A	0 °C - 60 °C	7 K	Fan heater with thermostat	Tolerance ±4 K

TECHNICAL DRAWINGS







FLAT ENCLOSURE HEATER

CP 061



Flat heater: This flat enclosure heater can be used in enclosures and casings. The resistance heater is suitable for convection and contact heat dissipation. The space-saving, flat form factor makes it ideal for use in installation spaces with a high component density.

- Space-saving thanks to compact, flat construction
- Screw fixing for simple and stable installation
- Integrated temperature safety cut-out
- Linear expansion compensation; strain relief

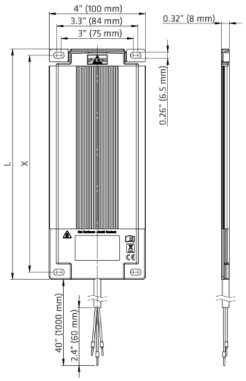
OVERVIEW TECHNICAL DATA

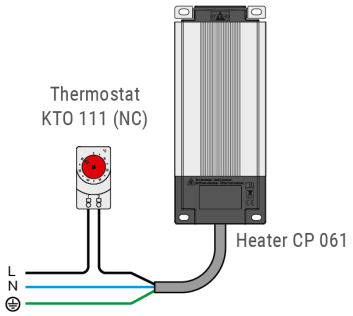
Temperature monitoring	Overheating protection in the event of failure with automatic reset
Protection class	I
Protection type	IP30
Connection case	Plastic to UL94 V-0, black
Heating element	Resistance heater
Heater element	Aluminum profile
AC/DC	AC
Frequency	50;60 Hz
Surface temperature	< + 150 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection type	Connection cable
Connection	Halogen-free silicone cable 3 x 0.75 mm²(3 x AWG 19), 1 m
Mounting	Screw fixing
Installation position	horizontal | airflow direction "in" vertical / connection at the bottom
Height	8 mm
Width	100 mm

PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Heating capacity	Operating temperature	Drill hole spacing	Depth	Weight
06100.9-00	120 V	0,5 A	50 W	-40 °C - 40 °C	225 mm	239 mm	400 g
06100.0-00	230 V	0,3 A	50 W	-40 °C - 60 °C	225 mm	239 mm	400 g
06101.0-00	230 V	0,5 A	100 W	-40 °C - 60 °C	400 mm	414 mm	700 g
06101.9-00	120 V	0,9 A	100 W	-40 °C - 40 °C	400 mm	414 mm	700 g

TECHNICAL DRAWINGS





Connection example

ENCLOSURE HEATER WITH FAN

CR 027



This heating with PTC element is used to prevent frost and condensation in the enclosure and casing. The built-in fan further intensifies the heating effect through convection. The integrated, adjustable thermostat saves space in the application.

- Adjustable, integrated thermostat
- Plastic casing, safe to touch
- Optical indicator
- Temperature safety cut-out to prevent overheating

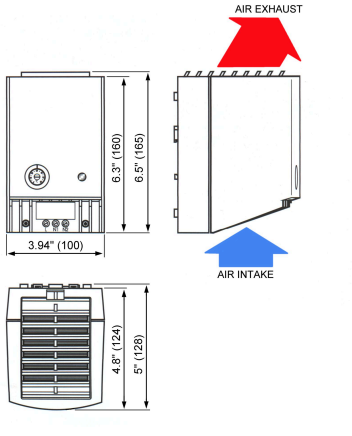
OVERVIEW TECHNICAL DATA

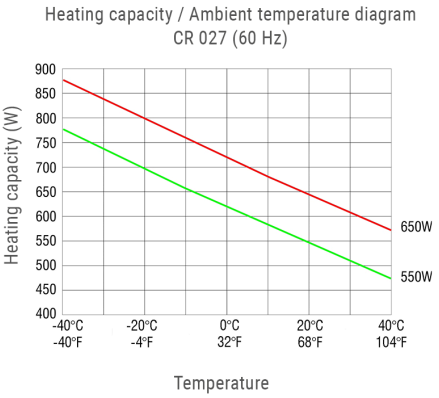
Temperature monitoring	Overheating protection in the event of fan failure with automatic reset
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Operating display	Glow lamp
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Frequency	50;60 Hz
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	2-pole clamp 2.5 mm²
Mounting	Clip for 35 mm DIN rail
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	165 mm
Width	128 mm
Depth	100 mm
Note	Heating capacity at +20 °C (+68 °F) ambient temperature; setting range thermostat of switching temperature differential 7K (+4K tolerance).

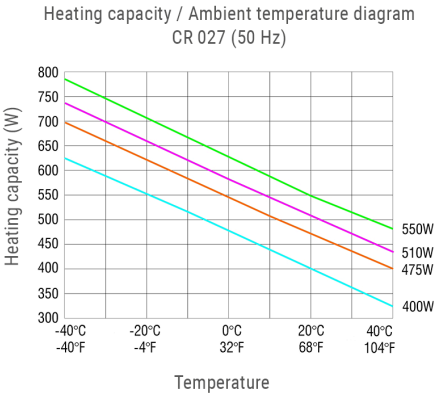
PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Heating capacity	Axial fan	Setting range	Weight
02701.9-00	100 V - 120 V	15 A	510 W - 650 W	45 m³/h	32 °F - 140 °F	1100 g
02700.0-00	220 V - 240 V	11 A	475 W - 550 W	35 m³/h	0 °C - 60 °C	900 g
02701.0-00	220 V - 240 V	13 A	550 W - 650 W	45 m³/h	0 °C - 60 °C	1100 g
02700.9-00	100 V - 120 V	14 A	400 W - 550 W	35 m³/h	32 °F - 140 °F	900 g

TECHNICAL DRAWINGS







ENCLOSURE HEATER WITH FAN

CS 030



The high-performance fan heater is designed for uniform temperature control of enclosures and casings to protect against harmful condensation. Designs with integrated thermostat are available. Heating technology: PTC for dynamic response behavior. Touch-safe for users thanks to touch-safe plastic casing.

- Versions with integrated thermostat
- Version for screw fixing to the base of the enclosure
- Versions with tamper-proof thermostat
- User protection: touch-safe sheathing

OVERVIEW TECHNICAL DATA

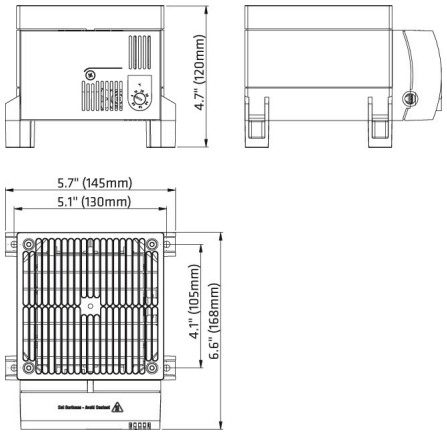
Temperature monitoring	Overheating protection in the event of fan failure with automatic reset
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Heating capacity	1200 W
Axial fan	160 m³/h
Service life	>50000 h
Switching differential tolerance	
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Torque	0,8 Nm max.
Connection	2-pole max. 2.5 mm² with strain relief
Mounting	Screw fixing
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	120 mm
Width	145 mm
Depth	168 mm

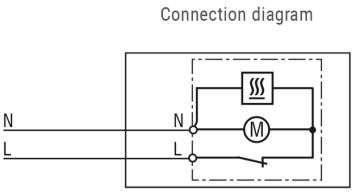
Weight	1200 g

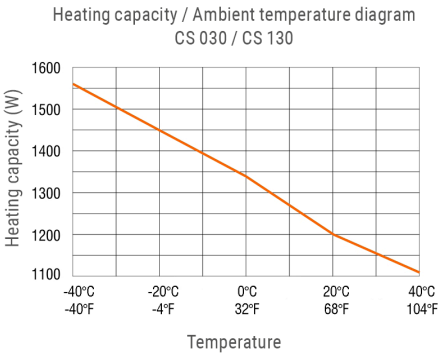
PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Setting range	Switching differential	Design	Note
03060.0-00	230 V	13 A	0 °C - 60 °C	7 K	Fan heater with thermostat	Tolerance ±4 K;Heating capacity at +20 °C (+68 °F) ambient temperature; setting range of switching temperature differential 7K (+4K tolerance); to UL 508A, NITW file on request.
03060.9-00	120 V	16 A	32 °F - 140 °F	7 K	Fan heater with thermostat	Tolerance ±4 K;Heating capacity at +20 °C (+68 °F) ambient temperature; setting range of switching temperature differential 7K (+4K tolerance); to UL 508A, NITW file on request.
03060.0-01	230 V	13 A			Fan heater without thermostat	Heating capacity at +20 °C (+68 °F) ambient temperature; setting range of switching temperature differential 7K (+4K tolerance); to UL 508A, NITW file on request.
03060.9-01	120 V	16 A			Fan heater without thermostat	Heating capacity at +20 °C (+68 °F) ambient temperature; setting range of switching temperature differential 7K (+4K tolerance); to UL 508A, NITW file on request.

TECHNICAL DRAWINGS







ENCLOSURE HEATER WITH FAN

CSF 032



This is a compact PTC enclosure heater with fan and tamper-proof thermostat to prevent frost and condensation forming in casings and installation spaces. A plastic sheath makes the heating safe to touch during application.

- Designs available with integrated tamper-proof thermostat (switch-on/off temperature: + 25 °C / + 15 °C or + 15 °C / + 5 °C)
- Compact, slim construction with high heating capacity
- Clip fixing for 35 mm DIN rail and screw fixing
- User safety: touch-safe plastic casing

OVERVIEW TECHNICAL DATA

Temperature monitoring	Overheating protection in the event of fan failure with automatic reset
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Heating capacity	1000 W
Axial fan	63 m³/h
Service life	>50000 h
Surface temperature	< + 80 °C
Operating temperature	-40 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection type	IEC power plug according to IEC320 C18
Connection	IEC power plug according to IEC320 C18
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	88 mm
Width	66 mm
Depth	152,5 mm
Weight	500 g

Note	Tolerance ±5 K;Other switch-off and switch-on temperatures on request;Female connectors and supply lines for the electrical connection are not included in the scope of delivery. Supply lines can be ordered separately, see accessories;Heating capacity at +25 °C (+77 °F) ambient temperature; switch-on temperature tolerance +5K.

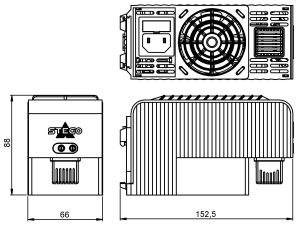
PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Switch-off temperature	Switch-on temperature	Mounting
03202.9-01	100 V - 120 V	18 A	15 °C	5 °C	Screw fixing
03201.0-01	220 V - 240 V	12 A	25 °C	15 °C	Screw fixing
03202.9-00	100 V - 120 V	18 A	15 °C	5 °C	Clip for 35 mm DIN rail
03201.9-00	100 V - 120 V	18 A	25 °C	15 °C	Clip for 35 mm DIN rail
03201.0-00	220 V - 240 V	12 A	25 °C	15 °C	Clip for 35 mm DIN rail
03202.0-00	220 V - 240 V	12 A	15 °C	5 °C	Clip for 35 mm DIN rail

ACCESSORIES

Article number	Depth
244380	2000 mm
237009	
244379	1000 mm

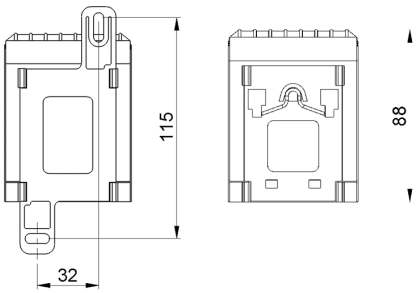
TECHNICAL DRAWINGS



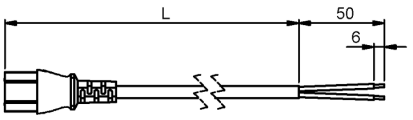
View: back side

Screw fixing

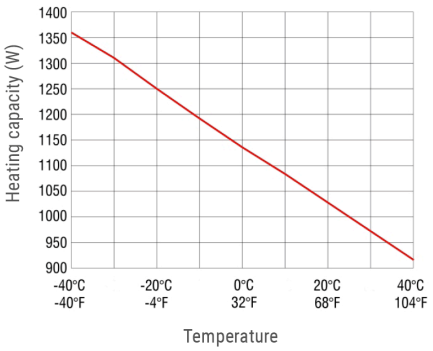
Clip fixing



Connection cable with female power insert connector according IEC320 C17



Heating capacity / Ambient temperature diagram
CS 032 / CSF 032



FLAT ENCLOSURE HEATER

RC 016



Contact heater for use in small casings if the temperature must not fall below a minimum temperature and condensation is to be prevented. The heaters are designed for continuous operation.

- Wide voltage range for electrical connection
- PTC heating element with dynamic response behavior
- Compact dimensions, use: e.g. as camera heater
- High heating capacity per volume

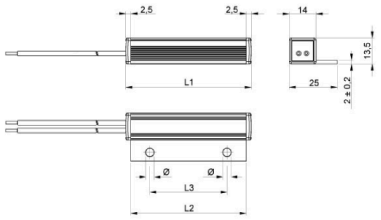
OVERVIEW TECHNICAL DATA

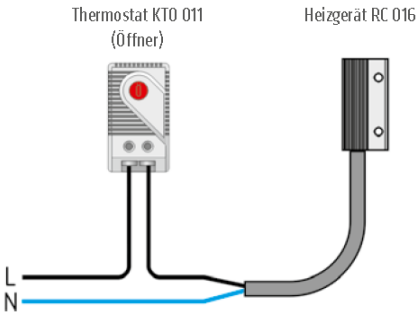
Protection class	II
Protection type	IP54
Heating element	PTC resistor (PTC)
Heater element	Aluminium profile, anodised
AC/DC	AC;DC
Operating voltage	120 V - 240 V
Frequency	50;60 Hz
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection cable
Mounting	Screw fixing
Installation position	any
Height	12,5 mm
Width	25 mm
Note	Other voltages on request;Heating capacity measured at +20 °C (+68 °F) ambient temperature;When operating under AC/DC 140 V, the heating capacity is reduced by approx. 10 %.

PRODUCT VARIANTS

Article number	Inrush current	Heating capacity	Surface temperature	Connection	Depth	Weight
01610.0-00	2,5 A	13 W	< + 170 °C	2x AWG 22 cable (silicone)	60 mm	40 g
01602.0-00	2 A	8 W	< + 165 °C	2x AWG 18 stranded wire	30 mm	20 g
01609.0-00	2,5 A	10 W	< + 155 °C	2x AWG 22 cable (silicone)	50 mm	20 g

TECHNICAL DRAWINGS





ENCLOSURE HEATER WITH FAN

CS 032



The compact enclosure heater with fan and PTC heating element helps to prevent frost and condensation forming in casings and installation spaces. The plastic sheathing makes the heating safe to touch during application. Quick electrical connection via IEC power plug.

- Compact, slim construction with high heating capacity
- Clip fixing for 35 mm DIN rail and screw fixing
- User safety: touch-safe plastic casing

OVERVIEW TECHNICAL DATA

Temperature monitoring	Overheating protection in the event of fan failure with automatic reset
Protection class	II
Protection type	IP20
Heating element	PTC resistor (PTC)
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Heating capacity	1000 W
Axial fan	63 m³/h
Service life	>50000 h
Surface temperature	< + 80 °C
Operating temperature	-40 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection type	IEC power plug according to IEC320 C18
Connection	IEC power plug according to IEC320 C18
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	88 mm
Width	66 mm
Depth	152,5 mm
Weight	500 g

Note	Other switch-on and switch-off temperatures on request;The scope of delivery does not include female connectors and supply lines for the electrical connection. Supply lines can be ordered separately, see accessories;Heating capacity at +25 °C (+77 °F) ambient temperature; switch-on temperature tolerance +5K.

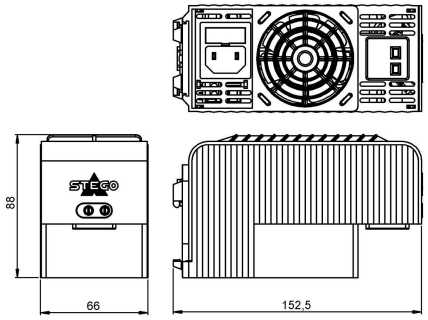
PRODUCT VARIANTS

Article number	Operating voltage	Inrush current	Mounting
03209.0-01	220 V - 240 V	12 A	Screw fixing
03209.9-00	100 V - 120 V	18 A	Clip for 35 mm DIN rail
03209.0-00	220 V - 240 V	12 A	Clip for 35 mm DIN rail
03209.9-01	100 V - 120 V	18 A	Screw fixing

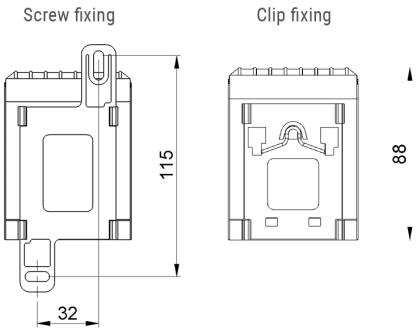
ACCESSORIES

Article number	Depth
244380	2000 mm
237009	
244379	1000 mm

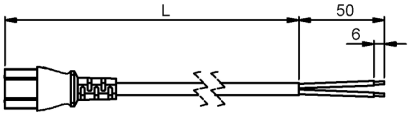
TECHNICAL DRAWINGS



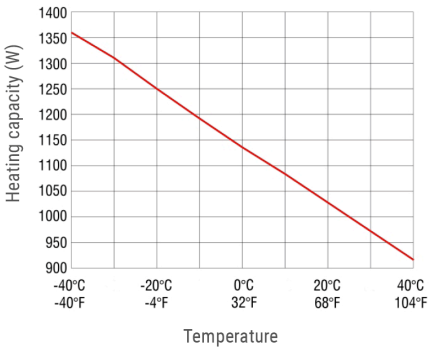
View: back side



Connection cable with female power insert connector according IEC320 C17

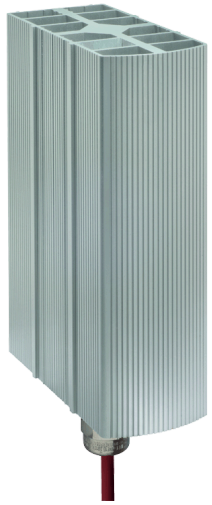


Heating capacity / Ambient temperature diagram
CS 032 / CSF 032



EXPLOSION-PROOF ENCLOSURE HEATER

CREX 020



Temperature class T5 (surface temperature max. 100 °C): Enclosure heater for explosion-proof environments prevents condensation and temperature fluctuations. Reliable protection against frost in enclosures and control cabinets as well as measuring equipment in explosive environments or mine workings exposed to firedamp.

- Maintenance-free convection heating without fan
- High-performance heating cartridge
- Heater body: Aluminium profile, anodised
- Mounting types: Screw flange, clip
- Ready for connection: silicone cable with strain relief in 1 m

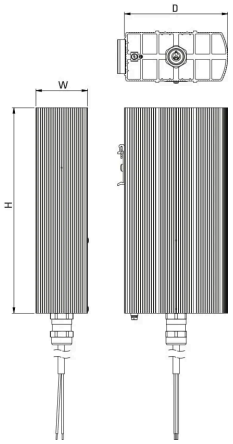
OVERVIEW TECHNICAL DATA

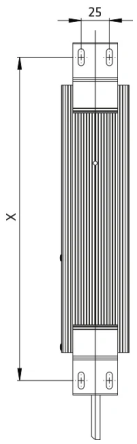
Protection class	I
Protection type	IP66
Heating element	High-performance heating cartridge
Heater element	Aluminium profile, silver anodised
AC/DC	AC
Frequency	50;60 Hz
Surface temperature	< + 100 °C
Operating temperature	-60 °C - 50 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-60 °C - 85 °C
Connection type	Connection cable
Connection	Halogen-free silicone cable 3 x 0.75 mm², 1 m
Connection PE	0,75 - 2,5 mm²
Installation position	Airflow direction "in" vertical / connection at the bottom
Temperature class	T5

PRODUCT VARIANTS

Article number	Operating voltage	Heating capacity	Drill hole spacing	Mounting	Height	Width	Depth	Weight
02052.9-10	120 V	100 W	350 mm	Screw fixing	300 mm	80 mm	160 mm	2800 g
02051.0-00	230 V	50 W	230 mm	Clip for 35 mm DIN rail; screw fixing	180 mm	60 mm	120 mm	1400 g
02051.9-00	120 V	50 W	230 mm	Clip for 35 mm DIN rail; screw fixing	180 mm	60 mm	120 mm	1400 g
02052.0-10	230 V	100 W	350 mm	Screw fixing	300 mm	80 mm	160 mm	2800 g

TECHNICAL DRAWINGS





EXPLOSION-PROOF ENCLOSURE HEATER

CREX 020



Temperature class T3 (surface temperature max. 200 °C): Enclosure heater for explosion-proof environments prevents condensation and temperature fluctuations. Reliable protection against frost in enclosures and control cabinets as well as measuring equipment in explosive environments or mine workings exposed to firedamp.

- Maintenance-free convection heating without fan
- High-performance heating cartridge
- Heater body: Aluminium profile, anodised
- Mounting types: screw flange, clip
- Ready for connection: silicone cable with strain relief in 1 or 2 m

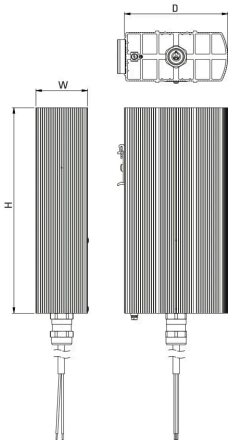
OVERVIEW TECHNICAL DATA

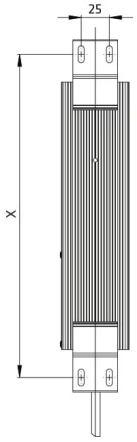
Protection class	I
Protection type	IP66
Heating element	High-performance heating cartridge
Heater element	Aluminium profile, silver anodised
AC/DC	AC
Frequency	50;60 Hz
Surface temperature	< + 200 °C
Operating temperature	-60 °C - 85 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-60 °C - 85 °C
Connection type	Connection cable
Connection	Halogen-free silicone cable 3 x 0.75 mm², 1 m
Connection PE	0,75 - 2,5 mm²
Installation position	Airflow direction "in" vertical / connection at the bottom
Temperature class	T3

PRODUCT VARIANTS

Article number	Operating voltage	Heating capacity	Drill hole spacing	Mounting	Height	Width	Depth	Weight
02032.9-00	120 V	100 W	230 mm	Clip for 35 mm DIN rail; screw fixing	180 mm	48 mm	80 mm	1000 g
02035.9-10	120 V	250 W	270 mm	Screw fixing	220 mm	80 mm	160 mm	2300 g
02031.0-00	230 V	50 W	160 mm	Clip for 35 mm DIN rail; screw fixing	110 mm	48 mm	80 mm	700 g
02031.9-00	120 V	50 W	160 mm	Clip for 35 mm DIN rail; screw fixing	110 mm	48 mm	80 mm	700 g
02033.0-00	230 V	150 W	230 mm	Clip for 35 mm DIN rail; screw fixing	180 mm	60 mm	120 mm	1400 g
02033.9-00	120 V	150 W	230 mm	Clip for 35 mm DIN rail; screw fixing	180 mm	60 mm	120 mm	1400 g
02035.0-10	230 V	250 W	270 mm	Screw fixing	220 mm	80 mm	160 mm	2300 g
02034.0-00	230 V	200 W	290 mm	Clip for 35 mm DIN rail; screw fixing	240 mm	60 mm	120 mm	1700 g
02032.0-00	230 V	100 W	230 mm	Clip for 35 mm DIN rail; screw fixing	180 mm	48 mm	80 mm	1000 g
02034.9-00	120 V	200 W	290 mm	Clip for 35 mm DIN rail; screw fixing	240 mm	60 mm	120 mm	1700 g

TECHNICAL DRAWINGS





EXPLOSION-PROOF ENCLOSURE HEATER

CREX 020



Temperature class T4 (surface temperature max. 135 °C): Enclosure heater for explosion-proof environments prevents condensation and temperature fluctuations. Reliable protection against frost in enclosures and control cabinets as well as measuring equipment in explosive environments or mine workings exposed to firedamp.

- Maintenance-free convection heating without fan
- High-performance heating cartridge
- Heater body: Aluminium profile, anodised
- Mounting types: Screw flange, clip
- Ready for connection: silicone cable with strain relief in 1 m

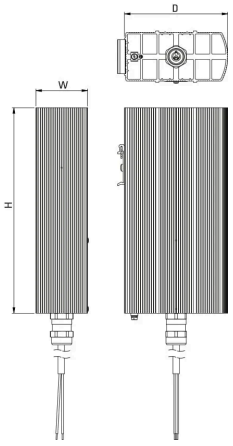
OVERVIEW TECHNICAL DATA

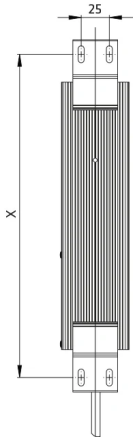
Protection class	I
Protection type	IP66
Heating element	High-performance heating cartridge
Heater element	Aluminium profile, silver anodised
AC/DC	AC
Frequency	50;60 Hz
Surface temperature	< + 135 °C
Operating temperature	-60 °C - 50 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-60 °C - 85 °C
Connection type	Connection cable
Connection	Halogen-free silicone cable 3 x 0.75 mm², 1 m
Connection PE	0,75 - 2,5 mm²
Installation position	Airflow direction "in" vertical / connection at the bottom
Temperature class	T4

PRODUCT VARIANTS

Article number	Operating voltage	Heating capacity	Drill hole spacing	Mounting	Height	Width	Depth	Weight
02043.9-10	120 V	150 W	270 mm	Screw fixing	220 mm	80 mm	160 mm	2300 g
02041.0-00	230 V	50 W	160 mm	Clip for 35 mm DIN rail; screw fixing	110 mm	48 mm	80 mm	700 g
02044.0-10	230 V	200 W	350 mm	Screw fixing	300 mm	80 mm	160 mm	2800 g
02042.0-00	230 V	100 W	230 mm	Clip for 35 mm DIN rail; screw fixing	180 mm	60 mm	120 mm	1400 g
02041.9-00	120 V	50 W	160 mm	Clip for 35 mm DIN rail; screw fixing	110 mm	48 mm	80 mm	700 g
02043.0-10	230 V	150 W	270 mm	Screw fixing	220 mm	80 mm	160 mm	2300 g
02044.9-10	120 V	200 W	350 mm	Screw fixing	300 mm	80 mm	160 mm	2800 g
02042.9-00	120 V	100 W	230 mm	Clip for 35 mm DIN rail; screw fixing	180 mm	60 mm	120 mm	1400 g

TECHNICAL DRAWINGS





ENCLOSURE HEATER WITH FAN

DCR 130



This resistance heater with fan is designed for connection to a DC voltage supply. Optionally with adjustable integrated thermostat or hygrostat. Accessories: external sensor. Installation type: either clip or screw fixing.

- Push-in terminals for quick electrical connection
- User safety: touch-safe due to touch-safe plastic sheathing
- Accessories: external sensor
- Integrated switch module: Thermostat or hygrostat

OVERVIEW TECHNICAL DATA

Temperature monitoring	Overheating protection in the event of fan failure with automatic reset, additional protection by irreversible fuse
Protection class	II
Protection type	IP20
Heating element	High-performance heating cartridge
Heater element	Aluminum profile
Casing	Plastic to UL94 V-0, black
AC/DC	DC
Axial fan	160 m³/h
Service life	>50000 h
Switching differential tolerance	
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Connection	2-pole "Push-In" connection terminal Stranded wire1 1.5 mm² (AWG 16) with strain relief; max. 2.5 mm² (AWG 12)
Mounting	Clip for 35 mm DIN rail; screw fixing
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	99 mm
Width	168 mm
Depth	179 mm

Weight	1300 g

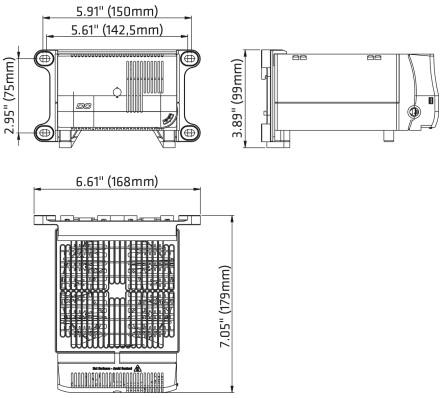
PRODUCT VARIANTS

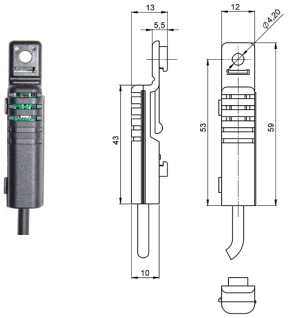
Article number	Operating voltage	Heating capacity	Setting range	Switching differential	Design	Note
13092.1-03	24 V	200 W	40 % RH - 90 % RH	4 % RH	Fan heater with integrated hygrostat with connection for external humidity sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1% rH
13097.3-13	56 V	800 W	-20 °C - 40 °C	3 K	Fan heater with integrated thermostat with connection for external temperature sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1 K
13097.3-12	56 V	800 W	-20 °C - 40 °C	3 K	Fan heater with integrated thermostat with internal temperature sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1 K
13092.1-12	24 V	200 W	-20 °C - 40 °C	3 K	Fan heater with integrated thermostat with internal temperature sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1 K
13092.1-13	24 V	200 W	-20 °C - 40 °C	3 K	Fan heater with integrated thermostat with connection for external temperature sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1 K
13095.3-03	56 V	600 W	40 % RH - 90 % RH	4 % RH	Fan heater with integrated hygrostat with connection for external humidity sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1% rH

EXTERNAL SENSOR

Article number	Depth
267071	1000 mm
267072	2000 mm
267126	3000 mm

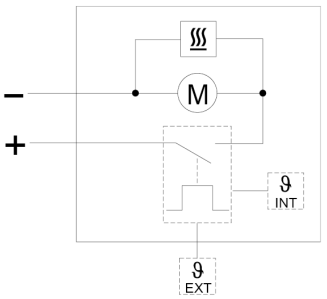
TECHNICAL DRAWINGS





The external sensor can be ordered separately.

Connection diagram



ENCLOSURE HEATER WITH FAN

HVI 030



The space-saving fan heater with fan is designed for reliable protection against condensation in enclosures and casings. A high heating capacity with small dimensions is achieved by using a high-performance cartridge heater in combination with a fan. Designs for fan self-installation are available. Note: The heating must always be operated in conjunction with a fan.

- Compact, flat construction
- Temperature safety cut-out as overheating protection
- Fanless versions available for self-installation of fans
- Quick electrical connection with pressure clamps

OVERVIEW TECHNICAL DATA

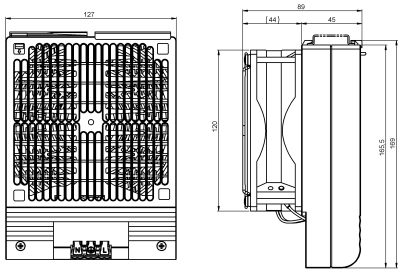
Temperature monitoring	Overheating protection in the event of fan failure with automatic reset, additional protection by irreversible fuse
Protection class	I (fan), II (heater)
Protection type	IP20
Heating element	High-performance heating cartridge
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Axial fan	150 m³/h
Service life	>50000 h
Operating temperature	-10 °C - 50 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Connection	2-pole Duo pressure clamp for rigid wire cable 2.5 mm², stranded wire with wire end ferrule 1.5 mm²
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	89 mm
Width	127 mm
Depth	169 mm
Weight	1300 g

Note	Other heating capacities and voltages on request;Other heating capacities and voltages on request;Heating may only be operated in conjunction with a fan (min. 150 m³/h). There is a risk of overheating!

PRODUCT VARIANTS

Article number	Operating voltage	Heating capacity	Mounting
03083.9-00	120 V	600 W	Clip for 35 mm DIN rail
03082.0-01	230 V	700 W	Screw fixing
03083.0-00	230 V	600 W	Clip for 35 mm DIN rail
03082.9-01	120 V	700 W	Screw fixing
03084.9-01	120 V	500 W	Screw fixing
03083.0-01	230 V	600 W	Screw fixing
03084.0-01	230 V	500 W	Screw fixing
03082.0-00	230 V	700 W	Clip for 35 mm DIN rail
03084.0-00	230 V	500 W	Clip for 35 mm DIN rail
03084.9-00	120 V	500 W	Clip for 35 mm DIN rail
03082.9-00	120 V	700 W	Clip for 35 mm DIN rail

TECHNICAL DRAWINGS



ENCLOSURE HEATER

HVI 030



The space-saving fan heater is designed for reliable protection against condensation in enclosures and casings. High heating capacity with small dimensions is achieved by using a high-performance cartridge heater. The HVI 030 designs shown here are designed for self-installation of the fan. A suitable axial fan must be installed by the operator. Note: The heating must not be operated without a fan.

- Compact, flat construction
- Temperature safety cut-out as overheating protection
- Fanless version: for self-installation of fans by the operator
- Quick electrical connection with pressure clamps

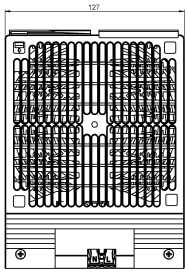
OVERVIEW TECHNICAL DATA

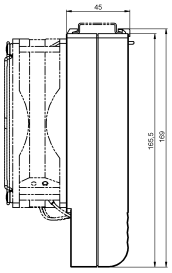
Temperature monitoring	Overheating protection in the event of fan failure with automatic reset, additional protection by irreversible fuse
Protection class	II
Protection type	IP20
Heating element	High-performance heating cartridge
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Frequency	50;60 Hz
Axial fan	For self-assembly, not included in the scope of delivery
Operating temperature	-10 °C - 50 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Connection	2-pole Duo pressure clamp for rigid wire cable 2.5 mm², stranded wire with wire end ferrule 1.5 mm²
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	45 mm
Width	127 mm
Depth	169 mm
Weight	700 g
Note	Other heating capacities and voltages on request;Other heating capacities and voltages on request;Heating may only be operated in conjunction with a fan (min. 150 m³/h). There is a risk of overheating!

PRODUCT VARIANTS

Article number	Operating voltage	Heating capacity	Mounting
03072.0-01	230 V	700 W	Screw fixing
03074.0-00	230 V	500 W	Clip for 35 mm DIN rail
03073.0-00	230 V	600 W	Clip for 35 mm DIN rail
03072.0-00	230 V	700 W	Clip for 35 mm DIN rail
03073.0-01	230 V	600 W	Screw fixing
03073.9-00	120 V	600 W	Clip for 35 mm DIN rail

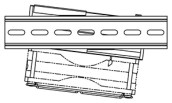
TECHNICAL DRAWINGS



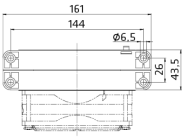


View: back side

Twist clip fixing



Screw fixing



ENCLOSURE HEATER WITH FAN

DCR 030



This resistance heater with fan is designed for connection to a DC voltage supply. Optionally with adjustable integrated thermostat or hygrostat. Accessories: external sensor. Installation type: Housing base installation using screws.

- Push-in terminals for quick electrical connection
- User safety: touch-safe due to touch-safe plastic sheathing
- Accessories: external sensor
- Integrated switch module: Thermostat or hygrostat

OVERVIEW TECHNICAL DATA

Temperature monitoring	Overheating protection in the event of fan failure with automatic reset, additional protection by irreversible fuse
Protection class	II
Protection type	IP20
Heating element	High-performance heating cartridge
Heater element	Aluminum profile
Casing	Plastic to UL94 V-0, black
AC/DC	DC
Axial fan	160 m³/h
Service life	>50000 h
Switching differential tolerance	
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection type	Connection terminal
Connection	2-pole "Push-In" connection terminal Stranded wire1 1.5 mm² (AWG 16) with strain relief; max. 2.5 mm² (AWG 12)
Mounting	Screw fixing
Installation position	Airflow direction "in" vertical / connection at the bottom
Height	100 mm
Width	145 mm
Depth	166 mm

Weight	1400 g

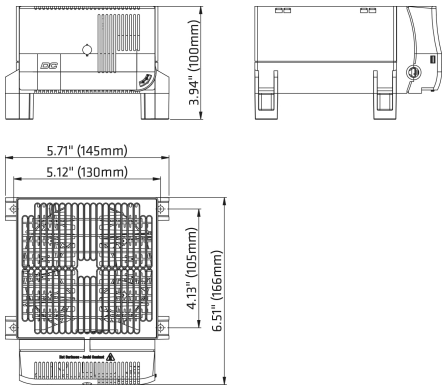
PRODUCT VARIANTS

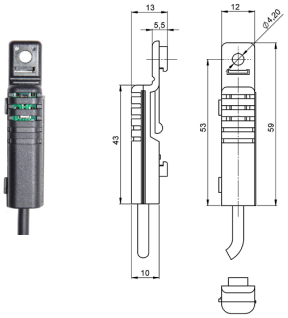
Article number	Operating voltage	Heating capacity	Setting range	Switching differential	Design	Note
03095.3-03	56 V	600 W	40 % RH - 90 % RH	4 % RH	Fan heater with integrated hygrostat with connection for external humidity sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1% rH
03092.1-13	24 V	200 W	-20 °C - 40 °C	3 K	Fan heater with integrated thermostat with connection for external temperature sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1 K
03092.1-12	24 V	200 W	-20 °C - 40 °C	3 K	Fan heater with integrated thermostat with internal temperature sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1 K
03097.3-12	56 V	800 W	-20 °C - 40 °C	3 K	Fan heater with integrated thermostat with internal temperature sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1 K
03097.3-13	56 V	800 W	-20 °C - 40 °C	3 K	Fan heater with integrated thermostat with connection for external temperature sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1 K
03092.1-03	24 V	200 W	40 % RH - 90 % RH	4 % RH	Fan heater with integrated hygrostat with connection for external humidity sensor	Fan heater with thermostat;other designs (heating capacities, setting ranges) and operating voltage DC 48 V on request;tolerance ±1% rH

EXTERNAL SENSOR

Article number	Depth
267071	1000 mm
267072	2000 mm
267126	3000 mm

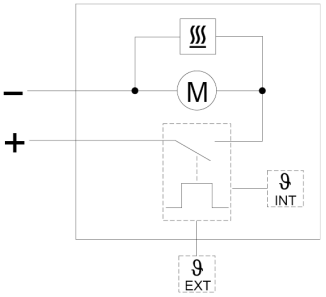
TECHNICAL DRAWINGS





The external sensor can be ordered separately.

Connection diagram



COOLING
PROTECTION AGAINST OVERHEATING



Electrical installations and electronic systems require controlled temperatures for reliable operation. STEGO filter fans efficiently dissipate heat and cool using ambient air. This prevents overheating and ensures stable operating conditions with low energy consumption.

FILTER FAN PLUS - SIZE 1 (92 X 92 MM)

FPO 018



Filter fan FPO size 1 (92 x 92 mm) for air conditioning enclosures and casings. Configuration: FPO - airflow direction "out" (design: intaking). Optimum filter fan for enclosures: The Filter Fan Plus draws the heating air from the enclosure to the outside. Cooler outside air enters the enclosure via the inlet filter. The air flow protects the electrical components.

- Filter fan with self-closing flaps as air outlet
- Only one filter mat required (on the inlet filter)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter mat	Flaps
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Power consumption	12 W
Axial fan	Fan body aluminium, rotor metal
Service life	>50000 h
Operating temperature	-40 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 300 mm
Mounting frame	With 4 built-in rotary latches for locking
Height	120 mm
Width	120 mm
Depth	94 mm
Installation depth	72 mm
Weight	600 g
Mounting cut-out	92 x 92 mm
Note	Other voltages on request;Drilling pattern for screw fixing marked on mounting frame.

Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level
01880.0-00	230 V	50 Hz	15 m³/h	24 m³/h	38 dB(A)
01880.9-00	115 V	60 Hz	19 m³/h	32 m³/h	41 dB(A)

FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08633.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	84x84 mm

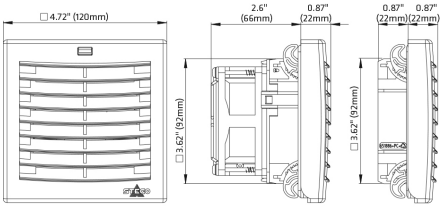
HOSE-PROOF HOOD

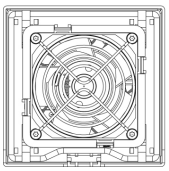
Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08670.0-00	Silicone, food safe	FPI/FPO 018 92 x 92 mm	214 mm	195 mm	48 mm	800 g

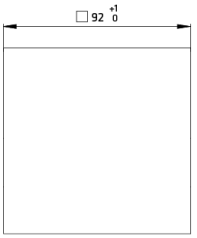
INLET FILTER - SIZE 1 (92 X 92 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11880.0-30	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	120 mm	120 mm	44 mm	22 mm	200 g

TECHNICAL DRAWINGS







Enclosure cut-out

FILTER FAN PLUS - SIZE 1 (92 X 92 MM)

FPI 018



Filter fan FPI size 1 (92 x 92 mm) for air conditioning enclosures and casings. Configuration: FPI - airflow direction "in" (standard version: blowing). Optimum air conditioning of your enclosure: The Filter Fan Plus blows cooler outside air into the enclosure. The warmer air inside the enclosure is discharged via the exit filter. The resulting air flow cools the enclosure and protects the components from overheating.

- Only one filter mat required (on the filter fan)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G3
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor metal
Service life	>50000 h
Operating temperature	-40 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 300 mm
Mounting frame	With 4 built-in rotary latches for locking
Height	120 mm
Width	120 mm
Depth	88 mm
Installation depth	66 mm
Weight	600 g
Mounting cut-out	92 x 92 mm
Note	Other voltages on request;Drilling pattern for screw fixing marked on mounting frame.

Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level
01870.9-30	115 V	60 Hz	11 W	16 m³/h	23 m³/h	43 dB(A)
01870.0-30	230 V	50 Hz	12 W	13 m³/h	19 m³/h	39 dB(A)

EXIT FILTER - SIZE 1 (92 X 92 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11870.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	120 mm	120 mm	51 mm	22 mm	200 g

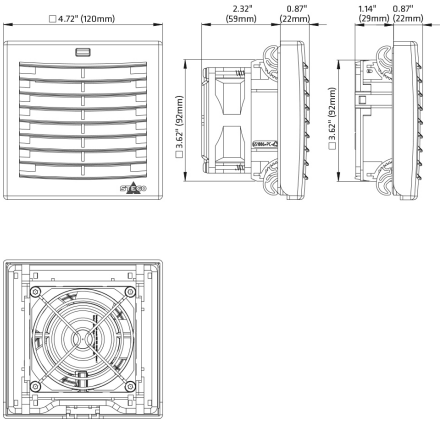
FILTER MAT BAG

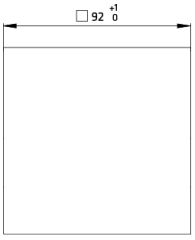
Article number	Packaging unit	Filter mat	Mounting cut-out
08633.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	84x84 mm

HOSE-PROOF HOOD

Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08670.0-00	Silicone, food safe	FPI/FPO 018 92 x 92 mm	214 mm	195 mm	48 mm	800 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 1 (92 X 92 MM)

FPO 018



Filter fan FPO size 1 (92 x 92 mm) for air conditioning enclosures and casings. Configuration: FPO - airflow direction "out" (design: intaking). Optimum filter fan for enclosures: The Filter Fan Plus draws the heating air from the enclosure to the outside. Cooler outside air enters the enclosure via the inlet filter. The air flow protects the electrical components.

- Filter fan with self-closing flaps as air outlet
- Only one filter mat required (on the inlet filter)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter mat	Flaps
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Axial fan	Fan body aluminium, rotor metal
Service life	>70000 h
Operating temperature	-20 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 300 mm
Mounting frame	With 4 built-in rotary latches for locking
Height	120 mm
Width	120 mm
Depth	90 mm
Installation depth	66 mm
Weight	300 g
Mounting cut-out	92 x 92 mm
Note	Drilling pattern for screw fixing marked on mounting frame.
Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level
01880.2-00	24 V	2,7 W	17 m³/h	31 m³/h	48 dB(A)
01880.1-00	48 V	3 W	18 m³/h	33 m³/h	49 dB(A)

FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08633.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	84x84 mm

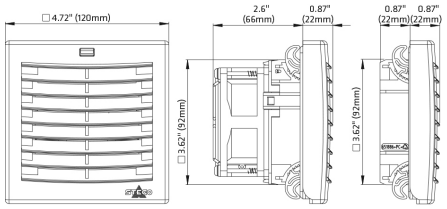
HOSE-PROOF HOOD

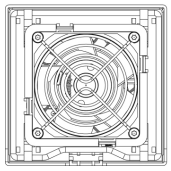
Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08670.0-00	Silicone, food safe	FPI/FPO 018 92 x 92 mm	214 mm	195 mm	48 mm	800 g

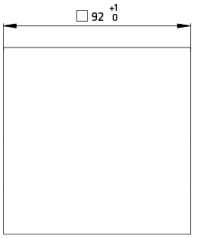
INLET FILTER - SIZE 1 (92 X 92 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11880.0-30	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	120 mm	120 mm	44 mm	22 mm	200 g

TECHNICAL DRAWINGS







Enclosure cut-out

FILTER FAN PLUS - SIZE 1 (92 X 92 MM)

FPI 018



Filter fan FPI size 1 (92 x 92 mm) for air conditioning enclosures and casings. Configuration: FPI - airflow direction "in" (standard version: blowing). Optimum air conditioning of your enclosure: The Filter Fan Plus blows cooler outside air into the enclosure. The warmer air inside the enclosure is discharged via the exit filter. The resulting air flow cools the enclosure and protects the components from overheating.

- Only one filter mat required (on the filter fan)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G3
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Axial fan	Fan body aluminium, rotor metal
Average emission sound pressure level	49 dB(A)
Service life	>70000 h
Operating temperature	-20 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 300 mm
Mounting frame	With 4 built-in rotary latches for locking
Height	120 mm
Width	120 mm
Depth	81 mm
Installation depth	59 mm
Weight	300 g
Mounting cut-out	92 x 92 mm
Note	Drilling pattern for screw fixing marked on mounting frame.

Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing
01870.1-30	48 V	3 W	17 m³/h	23 m³/h
01870.2-30	24 V	2,7 W	16 m³/h	22 m³/h

EXIT FILTER - SIZE 1 (92 X 92 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11870.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	120 mm	120 mm	51 mm	22 mm	200 g

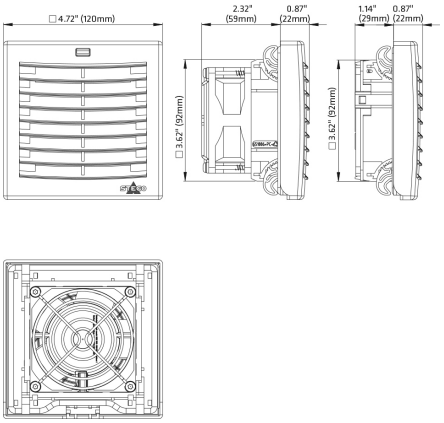
FILTER MAT BAG

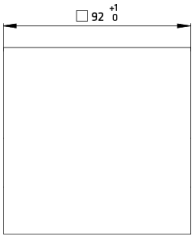
Article number	Packaging unit	Filter mat	Mounting cut-out
08633.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	84x84 mm

HOSE-PROOF HOOD

Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08670.0-00	Silicone, food safe	FPI/FPO 018 92 x 92 mm	214 mm	195 mm	48 mm	800 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 2 (124 X 124 MM)

FPO 018



Filter fan FPO size 2 (124 x 124 mm) for air conditioning enclosures and casings. Configuration: FPO - airflow direction "out" (design: intaking). Optimum filter fan for enclosures: The Filter Fan Plus draws the heating air from the enclosure to the outside. Cooler outside air enters the enclosure via the inlet filter. The air flow protects the electrical components.

- Filter fan with self-closing flaps as air outlet
- Only one filter mat required (on the inlet filter)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter mat	Flaps
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor metal
Service life	>37000 h
Operating temperature	-40 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 300 mm
Height	152 mm
Width	152 mm
Depth	104 mm
Installation depth	79 mm
Weight	900 g
Mounting cut-out	124 x 124 mm
Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level	Note
01881.0-00	230 V	50 Hz	19 W	47 m³/h	97 m³/h	49 dB(A)	Other voltages on request;Drilling pattern for screw fixing marked on mounting frame.
01881.9-00	115 V	60 Hz	18 W	58 m³/h	117 m³/h	52 dB(A)	Drilling pattern for screw fixing marked on mounting frame.

FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08634.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	118x118 mm

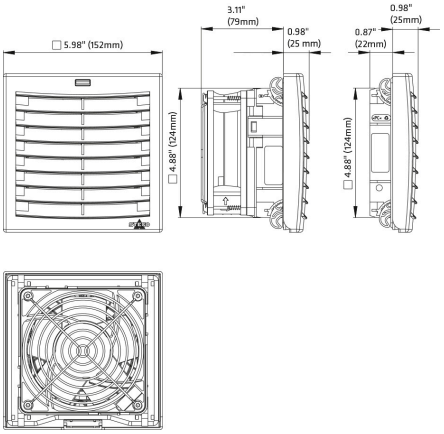
HOSE-PROOF HOOD

Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08671.0-00	Silicone, food safe	FPI/FPO 018 124 x 124 mm	279 mm	225 mm	58 mm	1200 g

INLET FILTER - SIZE 2 (124 X 124 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11881.0-30	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	152 mm	152 mm	47 mm	22 mm	200 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 2 (124 X 124 MM)

FPI 018



Filter fan FPI size 2 (124 x 124 mm) for air conditioning enclosures and casings. Configuration: FPI - airflow direction "in" (standard version: blowing). Optimum air conditioning of your enclosure: The Filter Fan Plus blows cooler outside air into the enclosure. The warmer air inside the enclosure is discharged via the exit filter. The resulting air flow cools the enclosure and protects the components from overheating.

- Only one filter mat required (on the filter fan)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G3
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor metal
Service life	>37000 h
Operating temperature	-40 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 300 mm
Mounting frame	With 4 built-in rotary latches for locking
Height	152 mm
Width	152 mm
Depth	91 mm
Installation depth	66 mm
Weight	800 g
Mounting cut-out	124 x 124 mm
Note	Other voltages on request;Drilling pattern for screw fixing marked on mounting frame.

Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level
01871.9-30	115 V	60 Hz	18 W	51 m³/h	62 m³/h	53 dB(A)
01871.0-30	230 V	50 Hz	19 W	42 m³/h	52 m³/h	49 dB(A)

EXIT FILTER - SIZE 2 (124 X 124 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11871.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	152 mm	152 mm	60 mm	22 mm	200 g

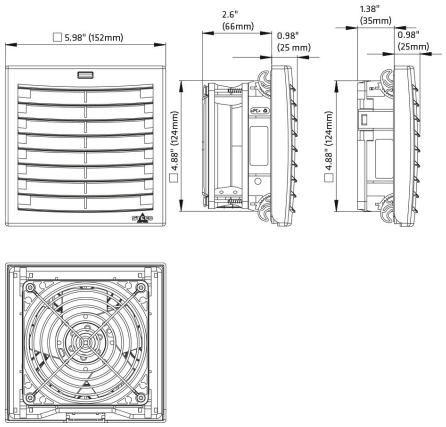
FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08634.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	118x118 mm

HOSE-PROOF HOOD

Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08671.0-00	Silicone, food safe	FPI/FPO 018 124 x 124 mm	279 mm	225 mm	58 mm	1200 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 2 (124 X 124 MM)

FPO 018



Filter fan FPO size 2 (124 x 124 mm) for air conditioning enclosures and casings. Configuration: FPO - airflow direction "out" (design: intaking). Optimum filter fan for enclosures: The Filter Fan Plus draws the heating air from the enclosure to the outside. Cooler outside air enters the enclosure via the inlet filter. The air flow protects the electrical components.

- Filter fan with self-closing flaps as air outlet
- Only one filter mat required (on the inlet filter)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter mat	Flaps
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Axial fan	Fan body aluminium, rotor metal
Cooling airflow rate outlet filter	63 m³/h
Service life	>65000 h
Operating temperature	-20 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 300 mm
Mounting frame	With 4 built-in rotary latches for locking
Height	152 mm
Width	152 mm
Depth	104 mm
Installation depth	79 mm
Weight	500 g
Mounting cut-out	124 x 124 mm
Note	Drilling pattern for screw fixing marked on mounting frame.
Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Power consumption	Cooling airflow rate blowing	Average emission sound pressure level
01881.1-00	48 V	4,2 W	125 m³/h	50 dB(A)
01881.2-00	24 V	4,1 W	118 m³/h	56 dB(A)

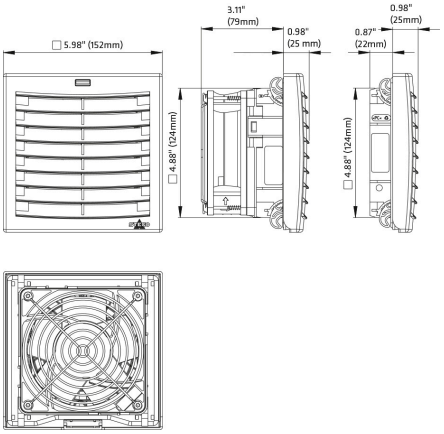
FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08634.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	118x118 mm

HOSE-PROOF HOOD

Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08671.0-00	Silicone, food safe	FPI/FPO 018 124 x 124 mm	279 mm	225 mm	58 mm	1200 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 2 (124 X 124 MM)

FPI 018



Filter fan FPI size 2 (124 x 124 mm) for air conditioning enclosures and casings. Configuration: FPI - airflow direction "in" (standard version: blowing). Optimum air conditioning of your enclosure: The Filter Fan Plus blows cooler outside air into the enclosure. The warmer air inside the enclosure is discharged via the exit filter. The resulting air flow cools the enclosure and protects the components from overheating.

- Only one filter mat required (on the filter fan)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G3
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Axial fan	Fan body aluminium, rotor metal
Cooling airflow rate outlet filter	56 m³/h
Average emission sound pressure level	58 dB(A)
Service life	>65000 h
Operating temperature	-20 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 300 mm
Mounting frame	With 4 built-in rotary latches for locking
Height	152 mm
Width	152 mm
Depth	91 mm
Installation depth	66 mm
Weight	500 g
Mounting cut-out	124 x 124 mm

Note	Other voltages on request;Drilling pattern for screw fixing marked on mounting frame.
Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Power consumption	Cooling airflow rate blowing
01871.2-30	24 V	4,1 W	66 m³/h
01871.1-30	48 V	4,2 W	67 m³/h

EXIT FILTER - SIZE 2 (124 X 124 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11871.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	152 mm	152 mm	60 mm	22 mm	200 g

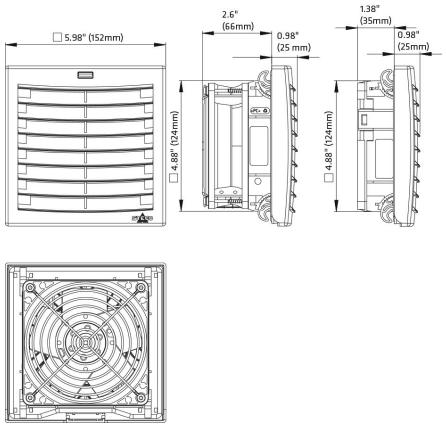
FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08634.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	118x118 mm

HOSE-PROOF HOOD

Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08671.0-00	Silicone, food safe	FPI/FPO 018 124 x 124 mm	279 mm	225 mm	58 mm	1200 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 3 (176 X 176 MM)

FPO 018



Filter fan FPO size 3 (176 x 176 mm) for air conditioning enclosures and casings. Configuration: FPO - airflow direction "out" (design: intaking). Optimum filter fan for enclosures: The Filter Fan Plus draws the heating air from the enclosure to the outside. Cooler outside air enters the enclosure via the inlet filter. The air flow protects the electrical components.

- Filter fan with self-closing flaps as air outlet
- Only one filter mat required (on the inlet filter)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	Flaps
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor metal
Service life	>65000 h
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm²
Height	215 mm
Width	215 mm
Depth	142 mm
Installation depth	117 mm
Weight	1600 g
Mounting cut-out	176 x 176 mm
Note	Drilling pattern for screw fixing marked on mounting frame.
Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level	Operating temperature
01882.0-00	230 V	50 Hz	45 W	137 m³/h	263 m³/h	56 dB(A)	-25 °C - 50 °C
01882.9-00	115 V	60 Hz	38 W	166 m³/h	313 m³/h	60 dB(A)	-25 °C - 70 °C

FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08635.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	168x168 mm

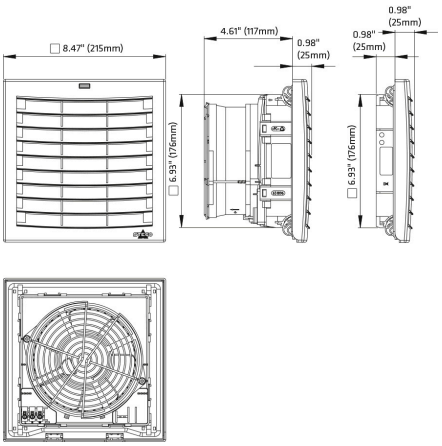
HOSE-PROOF HOOD

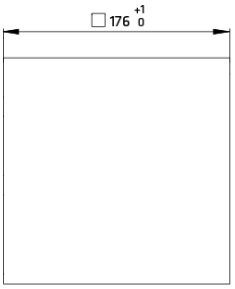
Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08672.0-00	Silicone, food safe	FPI/FPO 018 176 x 176 mm	359 mm	294 mm	68 mm	2000 g

INLET FILTER - SIZE 3 (176 X 176 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11882.0-30	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	215 mm	215 mm	50 mm	25 mm	400 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 3 (176 X 176 MM)

FPI 018



Filter fan FPI size 3 (176 x 176 mm) for air conditioning enclosures and casings. Configuration: FPI - airflow direction "in" (standard version: blowing). Optimum air conditioning of your enclosure: The Filter Fan Plus blows cooler outside air into the enclosure. The warmer air inside the enclosure is discharged via the exit filter. The resulting air flow cools the enclosure and protects the components from overheating.

- Only one filter mat required (on the filter fan)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G3
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor metal
Service life	>65000 h
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm²
Mounting frame	With 4 built-in rotary latches for locking
Height	215 mm
Width	215 mm
Depth	142 mm
Installation depth	117 mm
Weight	1600 g
Mounting cut-out	176 x 176 mm
Note	Other voltages on request;Drilling pattern for screw fixing marked on mounting frame.

Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level	Operating temperature
01872.9-30	115 V	60 Hz	38 W	187 m³/h	204 m³/h	58 dB(A)	-25 °C - 70 °C
01872.0-30	230 V	50 Hz	45 W	139 m³/h	170 m³/h	55 dB(A)	-25 °C - 50 °C

EXIT FILTER - SIZE 3 (176 X 176 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11872.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	215 mm	215 mm	67 mm	25 mm	400 g

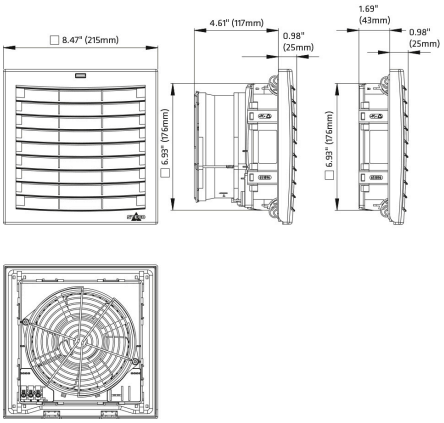
FILTER MAT BAG

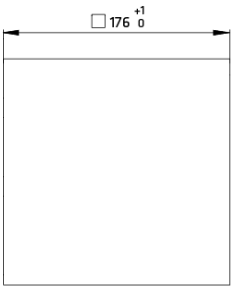
Article number	Packaging unit	Filter mat	Mounting cut-out
08635.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	168x168 mm

HOSE-PROOF HOOD

Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08672.0-00	Silicone, food safe	FPI/FPO 018 176 x 176 mm	359 mm	294 mm	68 mm	2000 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 3 (176 X 176 MM)

FPO 018



Filter fan FPO size 3 (176 x 176 mm) for air conditioning enclosures and casings. Configuration: FPO - airflow direction "out" (design: intaking). Optimum filter fan for enclosures: The Filter Fan Plus draws the heating air from the enclosure to the outside. Cooler outside air enters the enclosure via the inlet filter. The air flow protects the electrical components.

- Filter fan with self-closing flaps as air outlet
- Only one filter mat required (on the inlet filter)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	Flaps
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Power consumption	12 W
Axial fan	Fan body aluminium, rotor metal
Average emission sound pressure level	63 dB(A)
Service life	>80000 h
Operating temperature	-25 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm²
Height	215 mm
Width	215 mm
Depth	142 mm
Installation depth	117 mm
Weight	1500 g
Mounting cut-out	176 x 176 mm

Note	Drilling pattern for screw fixing marked on mounting frame.
Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Cooling airflow rate outlet filter	Cooling airflow rate blowing
01882.2-00	24 V	141 m³/h	269 m³/h
01882.1-00	48 V	146 m³/h	277 m³/h

FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08635.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	168x168 mm

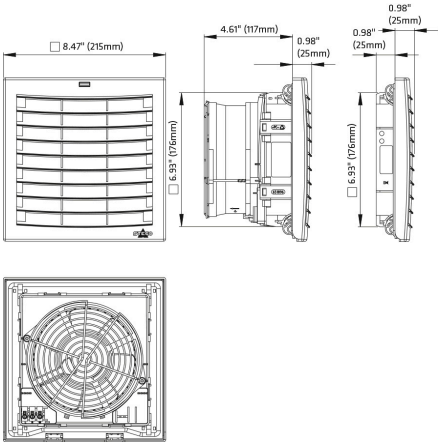
HOSE-PROOF HOOD

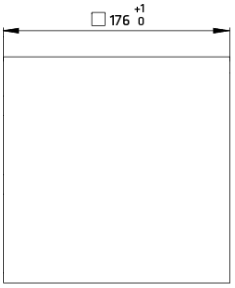
Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08672.0-00	Silicone, food safe	FPI/FPO 018 176 x 176 mm	359 mm	294 mm	68 mm	2000 g

INLET FILTER - SIZE 3 (176 X 176 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11882.0-30	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	215 mm	215 mm	50 mm	25 mm	400 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 3 (176 X 176 MM)

FPI 018



Filter fan FPI size 3 (176 x 176 mm) for air conditioning enclosures and casings. Configuration: FPI - airflow direction "in" (standard version: blowing). Optimum air conditioning of your enclosure: The Filter Fan Plus blows cooler outside air into the enclosure. The warmer air inside the enclosure is discharged via the exit filter. The resulting air flow cools the enclosure and protects the components from overheating.

- Only one filter mat required (on the filter fan)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	II
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G3
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Power consumption	12 W
Axial fan	Fan body aluminium, rotor metal
Average emission sound pressure level	63 dB(A)
Service life	>80000 h
Operating temperature	-25 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm²
Mounting frame	With 4 built-in rotary latches for locking
Height	215 mm
Width	215 mm
Depth	142 mm
Installation depth	117 mm
Weight	1500 g

Mounting cut-out	176 x 176 mm
Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Note
01872.2-30	24 V	156 m³/h	178 m³/h	Other voltages on request;Drilling pattern for screw fixing marked on mounting frame.
01872.1-30	48 V	147 m³/h	170 m³/h	Drilling pattern for screw fixing marked on mounting frame.

EXIT FILTER - SIZE 3 (176 X 176 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11872.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	215 mm	215 mm	67 mm	25 mm	400 g

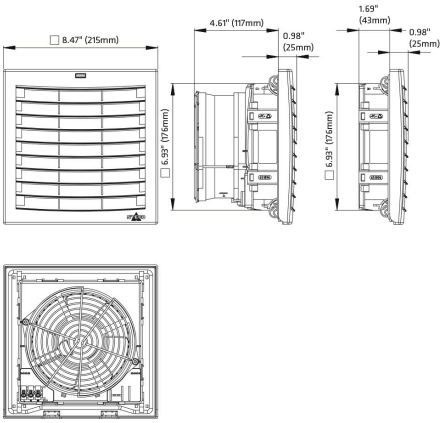
FILTER MAT BAG

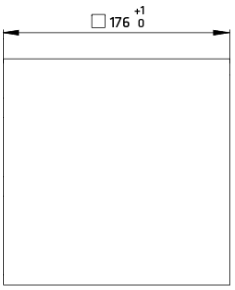
Article number	Packaging unit	Filter mat	Mounting cut-out
08635.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	168x168 mm

HOSE-PROOF HOOD

Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08672.0-00	Silicone, food safe	FPI/FPO 018 176 x 176 mm	359 mm	294 mm	68 mm	2000 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 4 (223 X 223 MM)

FPI 018



Filter fan FPI size 4 (223 x 223 mm) for air conditioning enclosures and casings. Configuration: FPI - airflow direction "in" (standard version: blowing). Optimum air conditioning of your enclosure: The Filter Fan Plus blows cooler outside air into the enclosure. The warmer air inside the enclosure is discharged via the exit filter. The resulting air flow cools the enclosure and protects the components from overheating.

- Only one filter mat required (on the filter fan)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G3
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor metal
Service life	>56000 h
Operating temperature	-25 °C - 65 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm²
Mounting frame	With 4 built-in rotary latches for locking
Height	257 mm
Width	257 mm
Depth	171 mm
Installation depth	147 mm
Weight	2400 g
Mounting cut-out	223 x 223 mm
Note	Drilling pattern for screw fixing marked on mounting frame.

Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level
01873.9-30	115 V	60 Hz	81 W	293 m³/h	332 m³/h	67 dB(A)
01873.0-30	230 V	50 Hz	64 W	271 m³/h	305 m³/h	64 dB(A)

EXIT FILTER - SIZE 4 (223 X 223 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11873.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	257 mm	257 mm	72 mm	25 mm	500 g

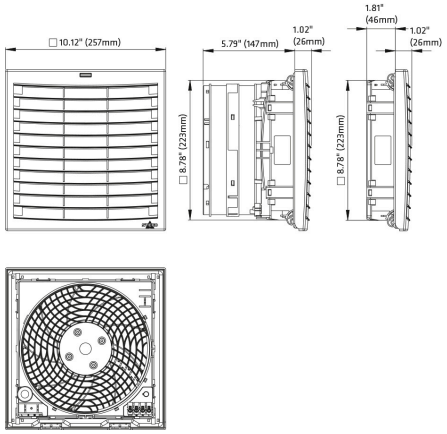
FILTER MAT BAG

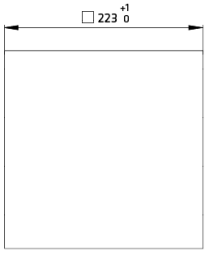
Article number	Packaging unit	Filter mat	Mounting cut-out
08636.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	215x215 mm

HOSE-PROOF HOOD

Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08673.0-00	Silicone, food safe	FPI/FPO 018 223 x 223 mm	415 mm	369 mm	78 mm	2800 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 4 (223 X 223 MM)

FPO 018



Filter fan FPO size 4 (223 x 223 mm) for air conditioning enclosures and casings. Configuration: FPO - airflow direction "out" (design: intaking). Optimum filter fan for enclosures: The Filter Fan Plus draws the heating air from the enclosure to the outside. Cooler outside air enters the enclosure via the inlet filter. The air flow protects the electrical components.

- Filter fan with self-closing flaps as air outlet
- Only one filter mat required (on the inlet filter)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	Flaps
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor metal
Service life	>56000 h
Operating temperature	-25 °C - 65 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm²
Mounting frame	With 4 built-in rotary latches for locking
Height	257 mm
Width	257 mm
Depth	171 mm
Installation depth	147 mm
Weight	2400 g
Mounting cut-out	223 x 223 mm
Note	Drilling pattern for screw fixing marked on mounting frame.

Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level
01883.9-00	115 V	60 Hz	81 W	310 m³/h	581 m³/h	68 dB(A)
01883.0-00	230 V	50 Hz	64 W	281 m³/h	536 m³/h	65 dB(A)

FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08636.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	215x215 mm

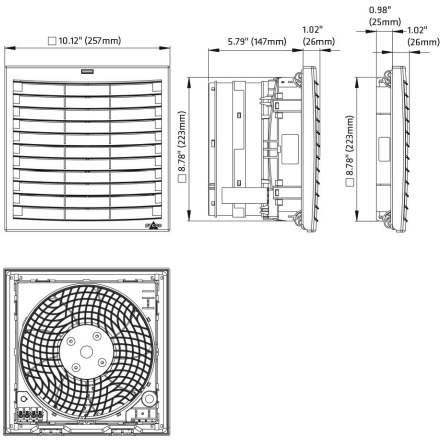
HOSE-PROOF HOOD

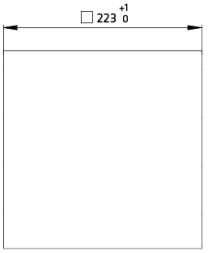
Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08673.0-00	Silicone, food safe	FPI/FPO 018 223 x 223 mm	415 mm	369 mm	78 mm	2800 g

INLET FILTER - SIZE 4 (223 X 223 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11883.0-30	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	257 mm	257 mm	51 mm	25 mm	500 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 5 (291 X 291 MM)

FPO 018



Filter fan FPO size 5 (291 x 291 mm) for air conditioning enclosures and casings. Configuration: FPO - airflow direction "out" (design: intaking). Optimum filter fan for enclosures: The Filter Fan Plus draws the heating air from the enclosure to the outside. Cooler outside air enters the enclosure via the inlet filter. The air flow protects the electrical components.

- Filter fan with self-closing flaps as air outlet
- Only one filter mat required (on the inlet filter)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter mat	Flaps
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor metal
Operating humidity	≤75 % RH
Storage humidity	≤75 % RH
Storage temperature	-40 °C - 70 °C
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm²
Mounting frame	With 4 built-in rotary latches for locking
Height	322 mm
Width	322 mm
Depth	189 mm
Installation depth	160 mm
Mounting cut-out	291 x 291 mm
Note	Drilling pattern for screw fixing marked on mounting frame.
Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level	Service life	Operating temperature	Weight
01884.9-00	115 V	60 Hz	90 W	391 m³/h	703 m³/h	62 dB(A)	>76000 h	-40 °C - 55 °C	3200 g
01884.0-01	230 V	50 Hz	140 W	599 m³/h	1010 m³/h	70 dB(A)	>54000 h	-40 °C - 55 °C	3400 g
01884.0-00	230 V	50 Hz	95 W	413 m³/h	727 m³/h	63 dB(A)	>76000 h	-40 °C - 55 °C	3200 g
01884.9-01	115 V	60 Hz	165 W	609 m³/h	1031 m³/h	71 dB(A)	>54000 h	50 Hz: —40 - +55 °C 60 Hz: -25 - +50 °C °C	3400 g

FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08637.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	283x283 mm

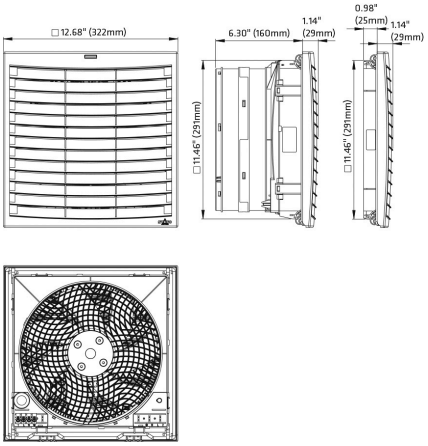
HOSE-PROOF HOOD

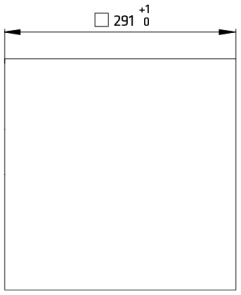
Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08674.0-00	Silicone, food safe	FPI/FPO 018 291 x 291 mm	485 mm	409 mm	103 mm	3700 g

INLET FILTER - SIZE 5 (291 X 291 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11884.0-30	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	322 mm	322 mm	54 mm	25 mm	800 g

TECHNICAL DRAWINGS





Enclosure cut-out

FILTER FAN PLUS - SIZE 5 (291 X 291 MM)

FPI 018



Filter fan FPI size 5 (291 x 291 mm) for air conditioning enclosures and casings. Configuration: FPI - airflow direction "in" (standard version: blowing). Optimum air conditioning of your enclosure: The Filter Fan Plus blows cooler outside air into the enclosure. The warmer air inside the enclosure is discharged via the exit filter. The resulting air flow cools the enclosure and protects the components from overheating.

- Only one filter mat required (on the filter fan)
- Easy installation thanks to mounting frame with twist locks
- Effective air circulation
- Accessories: Hose-proof hood to increase the protection type to IP56

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G3
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor metal
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm²
Mounting frame	With 4 built-in rotary latches for locking
Height	322 mm
Width	322 mm
Depth	189 mm
Installation depth	160 mm
Mounting cut-out	291 x 291 mm
Protection type UL	NEMA Type 12

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level	Service life	Operating temperature	Weight	Note
01874.0-30	230 V	50 Hz	95 W	373 m³/h	433 m³/h	62 dB(A)	>76000 h	-25 °C - 55 °C	3100 g	Other voltages on request;Drilling pattern for screw fixing marked on mounting frame.
01874.9-31	115 V	60 Hz	165 W	593 m³/h	665 m³/h	72 dB(A)	>76000 h	-25 °C - 50 °C	3300 g	Drilling pattern for screw fixing marked on mounting frame.
01874.9-30	115 V	60 Hz	90 W	339 m³/h	394 m³/h	61 dB(A)	>76000 h	-25 °C - 35 °C	3100 g	Drilling pattern for screw fixing marked on mounting frame.
01874.0-31	230 V	50 Hz	140 W	560 m³/h	624 m³/h	70 dB(A)	>54000 h	-25 °C - 55 °C	3300 g	Other voltages on request;Drilling pattern for screw fixing marked on mounting frame.

EXIT FILTER - SIZE 5 (291 X 291 MM)

Article number	Filter mat	Height	Width	Depth	Installation depth	Weight
11874.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	322 mm	322 mm	79 mm	25 mm	800 g

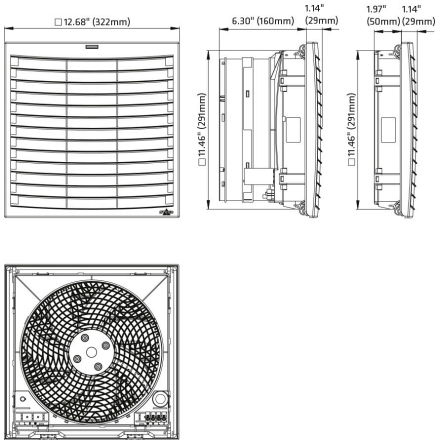
FILTER MAT BAG

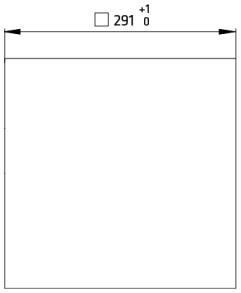
Article number	Packaging unit	Filter mat	Mounting cut-out
08637.0-00	5 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	283x283 mm

HOSE-PROOF HOOD

Article number	Material sealing	Cut-out dimensions	Height	Width	Depth	Weight
08674.0-00	Silicone, food safe	FPI/FPO 018 291 x 291 mm	485 mm	409 mm	103 mm	3700 g

TECHNICAL DRAWINGS

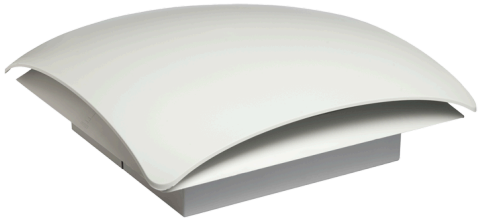




Enclosure cut-out

ROOF FILTER FAN

RFP 018



The roof filter fan ensures uniform air circulation in the enclosure or casing. The resulting air flow cools the electrical components. Note: The application of roof filter fans always requires pressure compensation. Either in combination with an inlet filter or an inlet filter fan.

- Low installation depth
- Quiet in operation with high air flow rate
- High operational reliability
- Time-saving installation and filter mat replacement

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP32
Filter material	Plastic fibre with progressive structure
Filter mat	G3
Casing	Plastic to UL94 V-0, light gray; UV light resistant to UL746C (f1)
AC/DC	AC
Axial fan	Fan body aluminium, rotor plastic
Service life	>50000 h
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm² max.
Width	354 mm
Depth	354 mm
Mounting cut-out	246 x 246 mm
Note	The roof filter fan must always be operated in combination with an inlet filter (e.g. Art. 11803.0-00) or an inlet filter fan (e.g. Art. No. 01803.0-00) for pressure compensation in the enclosure.

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate blowing	Average emission sound pressure level	Operating temperature	Storage temperature	Connection type	Height	Installation depth	Weight
01861.0-00	230 V	50 Hz	64 W	500 m³/h	67 dB(A)	-25 °C - 70 °C	-25 °C - 70 °C		180 mm	107 mm	2600 g
01860.0-00	230 V	50 Hz	68 W	300 m³/h	55 dB(A)	-10 °C - 70 °C	-40 °C - 70 °C	Connection terminal	125 mm	52 mm	3300 g
01860.0-02	120 V	60 Hz	60 W	345 m³/h	55 dB(A)	-10 °C - 70 °C	-40 °C - 70 °C		125 mm	52 mm	3300 g
01861.0-02	120 V	60 Hz	85 W	575 m³/h	67 dB(A)	-25 °C - 70 °C	-25 °C - 70 °C		180 mm	107 mm	2600 g

FILTER MAT BAG

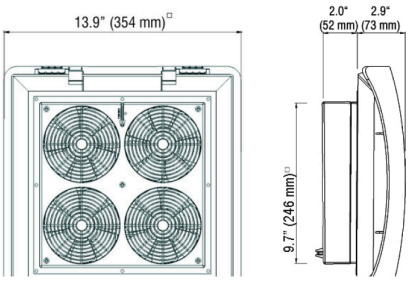
Article number	Packaging unit	Filter mat	Mounting cut-out
08613.0-01	3 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	282x282 mm

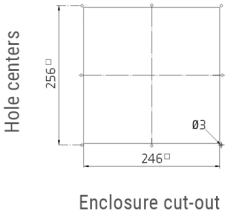
ROOF EXIT FILTER

Article number	Packaging unit	Filter mat	Installation depth	Weight	Mounting cut-out
11860.0-00	3 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	10 mm	1000 g	246x246 mm

TECHNICAL DRAWINGS

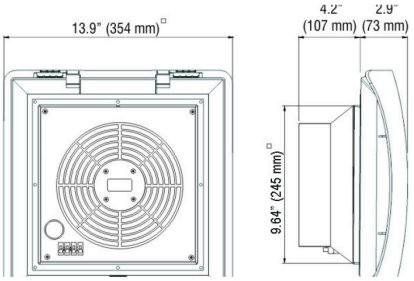
Roof Filter Fan (01860.0-XX)





Enclosure cut-out

Roof Filter Fan (01861.0-XX)



FILTER FAN - SIZE 1

FF 018



Size 1 filter fan for optimum ventilation of enclosures and casings with electrical/electronic installations. The internal temperature is lowered by supplying filtered, cooler outside air and discharging heated inside air. The resulting air flow prevents the formation of hot pockets and protects the components from overheating. This filter fan series is intended for indoor use. The plastic used for the hood material is highly UV light resistant.

- Quiet in operation
- Low installation depth
- Functional design
- Time-saving installation and maintenance
- UV light resistant

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G4
Casing	UL94 V-0 plastic, light gray
AC/DC	AC
Power consumption	13 W
Axial fan	Fan body aluminium, rotor plastic
Average emission sound pressure level	31 dB(A)
Service life	>50000 h
Operating temperature	-10 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 100 mm long, with 2.5 mm² pressure clamps
Drill hole spacing	109 mm
Height	134 mm
Width	129 mm
Depth	80 mm
Installation depth	45 mm
Weight	600 g

Mounting cut-out	97 x 97 mm

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Cooling airflow rate outlet filter	Cooling airflow rate blowing
01800.0-01	120 V	60 Hz	18 m³/h	24 m³/h
01800.0-00	230 V	50 Hz	16 m³/h	21 m³/h

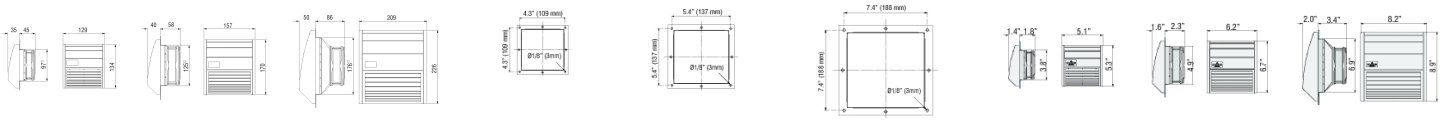
EXIT FILTER - SIZE 1

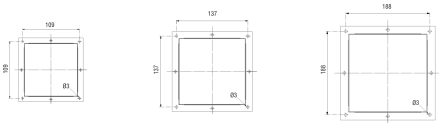
Article number	Filter mat	Height	Depth	Installation depth	Weight
11800.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	134 mm	51 mm	16 mm	300 g

FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08600.0-00	3 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	89x89 mm
08603.0-00	3 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	89x89 mm

TECHNICAL DRAWINGS





FILTER FAN - SIZE 2

FF 018



Size 2 filter fan for optimum ventilation of enclosures and casings with electrical/electronic installations. The supply of filtered, cold ambient air and the removal of heated internal air reduces the internal temperature. The resulting air flow prevents the formation of hot pockets and protects the components from overheating. This filter fan series is intended for indoor use. The plastic used for the hood material is highly UV light resistant.

- Easy to maintain
- High air through-flow rate
- Functional design
- Time-saving installation
- UV light resistant

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G4
Casing	UL94 V-0 plastic, light gray
AC/DC	AC
Power consumption	15 W
Axial fan	Fan body aluminium, rotor plastic
Average emission sound pressure level	40 dB(A)
Service life	>50000 h
Operating temperature	-10 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 100 mm long, with 2.5 mm² pressure clamps
Drill hole spacing	137 mm
Height	170 mm
Width	157 mm
Depth	98 mm
Installation depth	58 mm
Weight	1000 g

Mounting cut-out	125 x 125 mm

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Cooling airflow rate outlet filter	Cooling airflow rate blowing
01801.0-00	230 V	50 Hz	42 m³/h	55 m³/h
01801.0-01	120 V	60 Hz	48 m³/h	63 m³/h

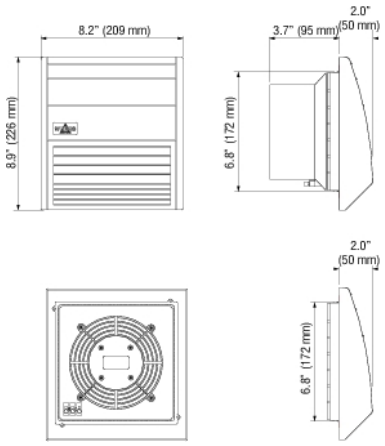
EXIT FILTER - SIZE 2

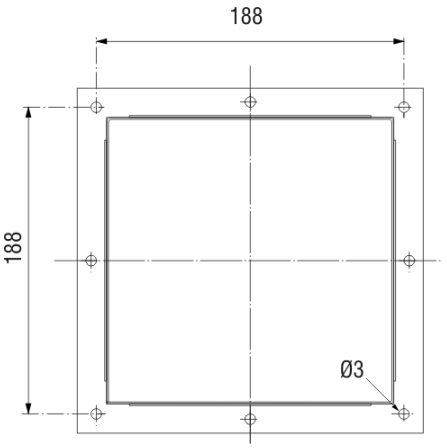
Article number	Filter mat	Height	Depth	Installation depth	Weight
11801.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	170 mm	56 mm	16 mm	400 g

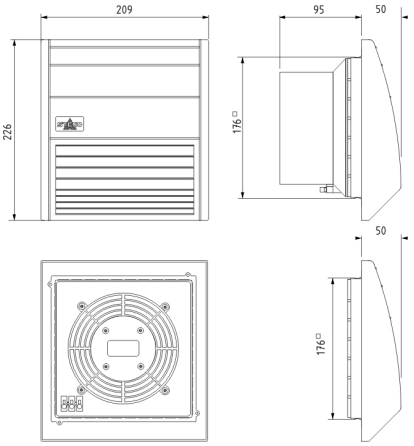
FILTER MAT BAG

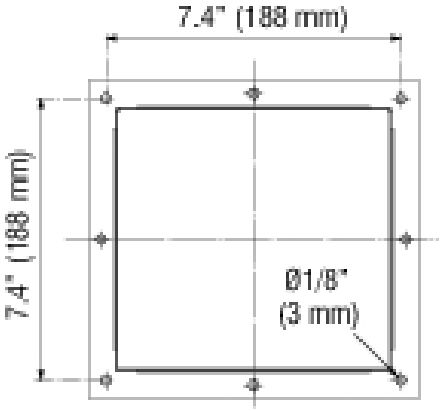
Article number	Packaging unit	Filter mat	Mounting cut-out
08601.0-00	3 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	118x118 mm
08607.0-00	3 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	122x122 mm

TECHNICAL DRAWINGS









FILTER FAN - SIZE 3

FF 018



Size 3 filter fan for optimum ventilation of enclosures and casings with electrical/electronic installations. The supply of filtered, cold ambient air and the removal of heated internal air reduces the internal temperature. The resulting air flow prevents the formation of hot pockets and protects the components from overheating. With four integrated, quiet in operation axial fans, this filter fan achieves a particularly high, uniform air circulation and thus offers high operational reliability with a very low installation depth. This filter fan series is intended for indoor use. The plastic used for the hood material is highly UV light resistant.

- Quiet in operation, easy to maintain
- Low installation depth
- High air through-flow rate
- Uniform air circulation
- High operational reliability
- UV light resistant

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G4
Casing	UL94 V-0 plastic, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor plastic
Service life	>50000 h
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Drill hole spacing	188 mm
Height	226 mm
Width	209 mm
Depth	136 mm
Mounting cut-out	176 x 176 mm

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level	Operating temperature	Storage temperature	Torque	Connection	Installation depth	Weight
01802.0-00	230 V	50 Hz	15 W	68 m³/h	102 m³/h	39 dB(A)	-10 °C - 70 °C	-40 °C - 70 °C		2 stranded wires, 100 mm long, with 2.5 mm² pressure clamps	86 mm	1300 g
01802.0-01	120 V	60 Hz	15 W	78 m³/h	117 m³/h	39 dB(A)	-10 °C - 70 °C	-40 °C - 70 °C		2 stranded wires, 100 mm long, with 2.5 mm² pressure clamps	86 mm	1300 g
01804.0-00	230 V	50 Hz	45 W	125 m³/h	200 m³/h	52 dB(A)	-25 °C - 50 °C	-25 °C - 50 °C	0,8 Nm max.	3-pole clamp 2.5 mm²	95 mm	1700 g
01804.0-01	120 V	60 Hz	39 W	143 m³/h	230 m³/h	52 dB(A)	-25 °C - 60 °C	-25 °C - 60 °C	0,8 Nm max.	3-pole clamp 2.5 mm²	95 mm	1700 g

EXIT FILTER - SIZE 3

Article number	Available until	Filter mat	Height	Depth	Installation depth	Weight
11802.0-00	1.4.2026	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	226 mm	66 mm	16 mm	600 g

FILTER MAT BAG

Article number	Packaging unit	Filter mat	Mounting cut-out
08602.0-00	3 Piece	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %	168x168 mm

TECHNICAL DRAWINGS

FILTER FAN - SIZE 4

FF 018



Size 4 filter fan for optimum ventilation of enclosures and casings with electrical/electronic installations. The supply of filtered, cold ambient air and the removal of heated internal air reduces the internal temperature. The resulting air flow prevents the formation of hot pockets and protects the components from overheating. The axial fan ensures a high air through-flow rate. This filter fan series is intended for indoor use. The plastic used for the hood material is highly UV light resistant.

- High air through-flow rate
- Functional design
- Time-saving installation
- UV light resistant

OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP54
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	G4
Casing	UL94 V-0 plastic, light gray
AC/DC	AC
Axial fan	Fan body aluminium, rotor plastic
Service life	>50000 h
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Torque	0,8 Nm max.
Connection	3-pole clamp 2.5 mm²
Drill hole spacing	263 mm
Height	284 mm
Width	284 mm
Mounting cut-out	250 x 250 mm

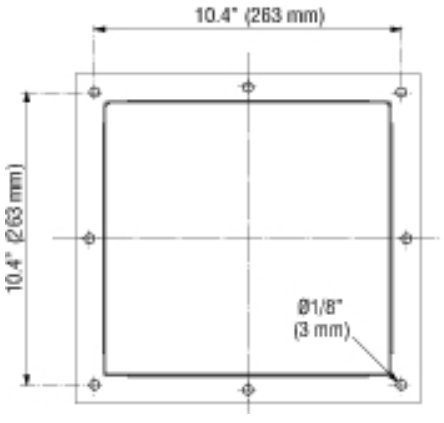
PRODUCT VARIANTS

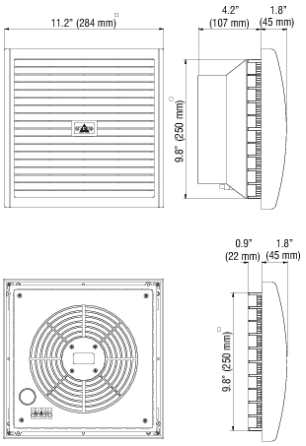
Article number	Operating voltage	Frequency	Power consumption	Cooling airflow rate outlet filter	Cooling airflow rate blowing	Average emission sound pressure level	Operating temperature	Storage temperature	Depth	Installation depth	Weight
01803.0-00	230 V	50 Hz	68 W	230 m³/h	300 m³/h	56 dB(A)	-10 °C - 70 °C	-40 °C - 70 °C	110 mm	65 mm	3300 g
01805.0-00	230 V	50 Hz	64 W	300 m³/h	550 m³/h	65 dB(A)	-25 °C - 70 °C	-25 °C - 70 °C	152 mm	107 mm	2700 g
01805.0-01	120 V	60 Hz	85 W	345 m³/h	632 m³/h	65 dB(A)	-25 °C - 70 °C	-25 °C - 70 °C	152 mm	107 mm	2700 g
01803.0-01	120 V	60 Hz	68 W	264 m³/h	345 m³/h	56 dB(A)	-10 °C - 70 °C	-40 °C - 70 °C	110 mm	65 mm	3300 g

EXIT FILTER - SIZE 4

Article number	Filter mat
11803.0-00	ISO coarse 55 % according to ISO 16890 (G3), grav. Initial gravimetric arrestance 57 %

TECHNICAL DRAWINGS





OUTDOOR FILTER FAN

FF 018



The outdoor filter fan is used in enclosures and casings in outdoor areas from which warm air needs to be dissipated due to increased heat generation (solar radiation, heat loss from built-in components). The casing material is highly weather proof and UV light resistant. To clean or change the filter mat, only the lockable flaps of the outdoor hood need to be opened; there is no need to open the enclosure (safety risk).

- Filter mat change from outside
- Secure, lockable
- Impact-resistant
- Weather proof and UV light resistant

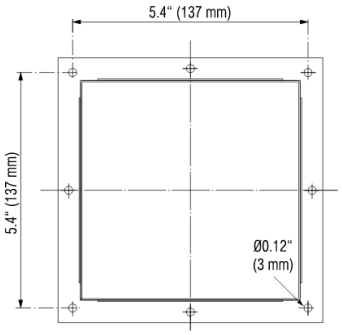
OVERVIEW TECHNICAL DATA

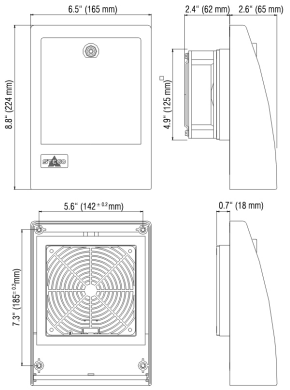
Protection class	I
Protection type	IP55
Material hood	Plastic to UL94 V-0, light gray
Filter material	Plastic fibre with progressive structure
Filter mat	M5
Casing	UL94 V-0 plastic, light gray
AC/DC	AC
Power consumption	15 W
Axial fan	Fan body aluminium, rotor plastic
Average emission sound pressure level	40 dB(A)
Service life	>50000 h
Operating temperature	-10 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	2 stranded wires, 100 mm long, with 2.5 mm² pressure clamps
Drill hole spacing	137 mm
Height	170 mm
Width	157 mm
Depth	127 mm
Installation depth	62 mm
Weight	1000 g
Mounting cut-out	125 x 125 mm

PRODUCT VARIANTS

Article number	Operating voltage	Frequency	Cooling airflow rate blowing
01821.0-02	120 V	60 Hz	23 m³/h
01821.0-00	230 V	50 Hz	20 m³/h

TECHNICAL DRAWINGS





19 INCH FAN TRAY

LE 019



Compact, powerful fan tray for circulating the air in 19 inch electronic enclosures for targeted heat dissipation from assemblies. The self-convection of the cabinet surface is improved and the formation of heat pockets is prevented. Also available with integrated thermostat.

- Height air flow
- Ball-bearing-mounted fans for high service life
- Supplied ready for connection
- Optical indicator

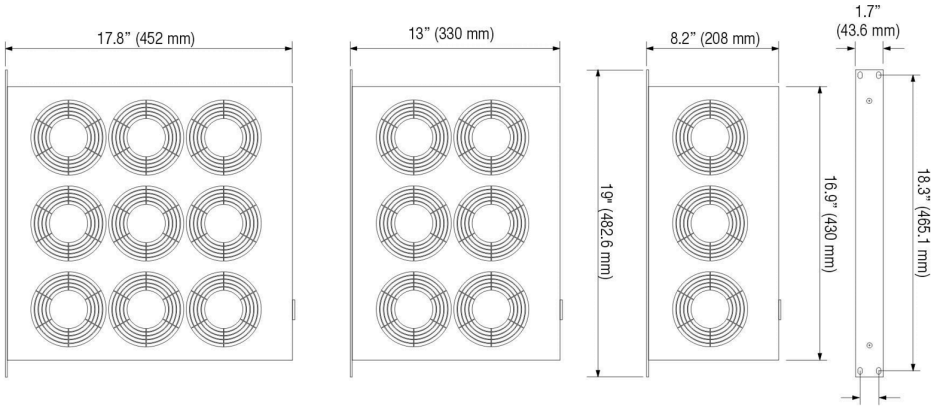
OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP20
Operating display	integrated in front panel
Casing	Steel sheet, galvanised
AC/DC	AC
Service life	>50000 h @ 25 °C
Operating temperature	-10 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 70 °C
Connection	IEC power plug installed on the rear side
Height	43,6 mm
Width	483 mm
Note	Application in 19" cabinets: For fan trays without integrated thermostat, we recommend the combination with our twin thermostat (item no. 01176.0-00) for temperature control and for the connection of a visual or acoustic signal transmitter as a warning function in the event of overheating in the event of a fan failure. For the fan tray with integrated thermostat, a thermostat (KTS 111 art. no. 11101.0-00) can also be switched as a warning contact for temperature monitoring, which - connected to a signal transmitter - reacts when the fans fail and gives a signal before overheating.

PRODUCT VARIANTS

Article number	Operating voltage	Rotational_speed	Frequency	Power consumption	Axial fan	Cooling airflow rate blowing	Average emission sound pressure level	Setting range	Depth	Weight
01950.0-00	230 V	2600 1/min	50 Hz	135 W	9	1458 m³/h	58 dB(A)		452 mm	7800 g
01930.0-00	230 V	2600 1/min	50 Hz	45 W	3	486 m³/h	55 dB(A)		208 mm	3000 g
01940.1-00	230 V	2600 1/min	50 Hz	90 W	6	972 m³/h	57 dB(A)	0 °C - 60 °C	330 mm	5700 g
01930.1-00	230 V	2600 1/min	50 Hz	45 W	3	486 m³/h	55 dB(A)	0 °C - 60 °C	208 mm	3400 g
01940.0-00	230 V	2600 1/min	50 Hz	90 W	6	972 m³/h	57 dB(A)		330 mm	5300 g
01950.1-00	230 V	2600 1/min	50 Hz	135 W	9	1458 m³/h	58 dB(A)	0 °C - 60 °C	452 mm	7900 g
01931.1-00	120 V	2900 1/min	60 Hz	45 W	3	486 m³/h	55 dB(A)	0 °C - 60 °C	208 mm	3400 g
01931.0-00	120 V	2900 1/min	60 Hz	45 W	3	486 m³/h	55 dB(A)		208 mm	3000 g
01951.1-00	120 V	2900 1/min	60 Hz	135 W	9	1458 m³/h	58 dB(A)	0 °C - 60 °C	452 mm	7900 g

TECHNICAL DRAWINGS



HOSE-PROOF HOOD

FFH 086



Hose-proof hood made of stainless steel VA increases the protection type of filter fans Plus FPI 018 and FPO 018 to IP56. Application: Outdoors and in industrial applications with harsh environmental conditions.

- Increased protection type
- Easy to clean
- Filter mat change from outside
- Impact-resistant, robust
- Safe against unauthorized removal
- Weather-resistant
- Versatile in use
- Protective grid

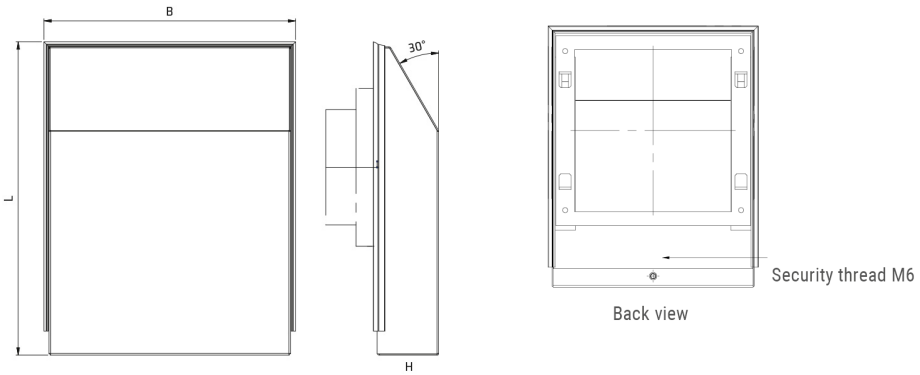
OVERVIEW TECHNICAL DATA

Protection type	IP56
Material sealing	Silicone, food safe
Material hood	Stainless steel
Operating temperature	
Storage temperature	
Mounting	Screw fixing
Note	For installation over STEGO filter fans FPI/FPO 018 and FF 018 and when the seal is fully seated.
Protection type UL	Nema Type 4/4x

PRODUCT VARIANTS

Article number	Cut-out dimensions	Height	Width	Depth	Weight
08671.0-00	FPI/FPO 018 124 x 124 mm	279 mm	225 mm	58 mm	1200 g
08672.0-00	FPI/FPO 018 176 x 176 mm	359 mm	294 mm	68 mm	2000 g
08674.0-00	FPI/FPO 018 291 x 291 mm	485 mm	409 mm	103 mm	3700 g
08670.0-00	FPI/FPO 018 92 x 92 mm	214 mm	195 mm	48 mm	800 g
08673.0-00	FPI/FPO 018 223 x 223 mm	415 mm	369 mm	78 mm	2800 g

TECHNICAL DRAWINGS



REGULATING
CONTROLLED
CLIMATE CONDITIONS



STEGO temperature and humidity control systems provide the basis for stable operating conditions. Our thermostats, hygrostats, hygrotherms and controllers respond precisely to climate changes inside the control cabinet, preventing condensation and temperature fluctuations.

NEW: ELECTRONIC HYGROTHERM - AVAILABLE TO ORDER

ETF 012



The electronic hygrotherm simultaneously monitors temperature and air humidity in enclosures and casings. Condensation is avoided by switching the heating and fans as required.

- Adjustable temperature and air humidity
- Wide-range voltage
- Standard DIN width (35 mm)
- Push-in terminal
- High switching capacity
- Operating temperature down to -40 °C
- Optical status display

OVERVIEW TECHNICAL DATA

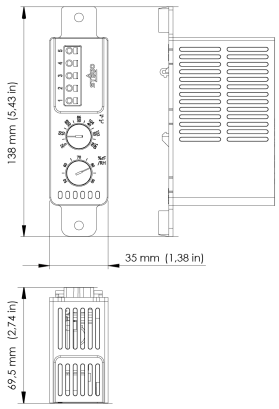
Setting range	0 °C - 60 °C
Contact type	Relay
Protection type	IP20
Operating display	LED
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Operating voltage	24 V - 240 V
Inrush current	30 A
Inrush current duration	10 s
Frequency	45-65 Hz
Power consumption	1 W
Switching current ohmic	16 A
Reference voltage ohmic	240 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	1,6 A
Reference voltage inductive maximum	240 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	0,6 A
Reference voltage dc ohmic	60 VDC
Reference voltage	24 VDC
Reaction time	3 s
Service life	>30000 cycles
Setting range 2	50 % RH - 90 % RH

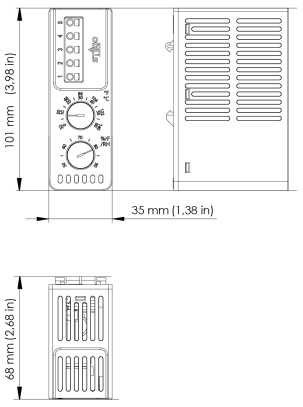
Switching differential	2 K
Switching differential tolerance	± 1 K
Switching differential 2	4 % RH
Switching differential 2 tolerance	± 1 % RH
Operating temperature	-40 °C - 70 °C
Operating humidity	≤95 % RH
Storage humidity	≤95 % RH
Storage temperature	-45 °C - 85 °C
Connection	5-pole clamp: rigid wire/stranded wire with wire end ferrule 2.5 mm² (AWG 14)
Design	Change-over contact
Width	35 mm
Depth	69,5 mm
Weight	200 g
Note	Switching resistive load (switching inductive load). Wire end ferrules must be used for connections with stranded wires.

PRODUCT VARIANTS

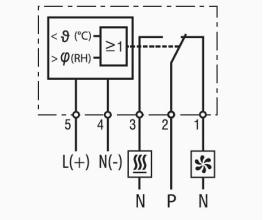
Article number	Mounting	Height
01260.0-00	Clip for 35 mm DIN rail, EN 60715 and screw connection	138 mm
01260.0-01	Clip for 35 mm DIN rail, EN 60715	101 mm

TECHNICAL DRAWINGS





Connection diagram



NEW: MECHANICAL HYGROSTAT

MFR 012



The hygrostat is used to prevent condensate and regulates heating and fans. From a critical relative humidity of 65 %, the temperature is increased so that the relative air humidity decreases and condensate is prevented from forming.

- Adjustable relative air humidity
- Changeover contact (heating or cooling)
- High switching capacity
- Clip mounting

OVERVIEW TECHNICAL DATA

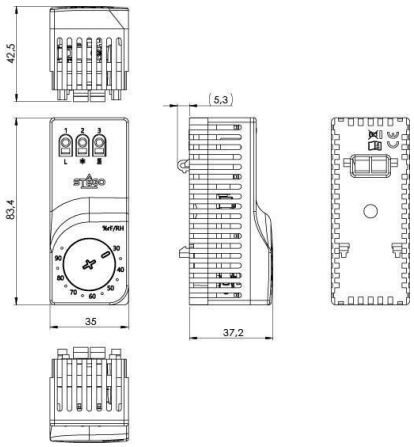
Setting range	30 % RH - 95 % RH
Contact type	Snap-action contact
Protection type	IP30
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	AC 5 A;DC 20 W
Switching current ohmic	10 A
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current dc ohmic	0,6 A
Reference voltage dc ohmic	30 VDC
Reference voltage	20 V
Switching current	0,1 A
Service life	10 A; 10000 cycles 6 A; 50000 cycles
Switching differential	4 % RH
Switching differential tolerance	± 1,5 % RH
Operating temperature	0 °C - 60 °C
Operating humidity	≤95 % RH
Storage humidity	≤95 % RH
Storage temperature	-40 °C - 60 °C

Connection type	Connection terminal (push-in)
Connection	3 x stranded wire 1.0 - 2.5 mm² (with wire end ferrule) and rigid wire 1.0 - 2.5 mm²
Design	Change-over contact
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	84 mm
Width	35 mm
Depth	43 mm
Weight	45 g
Note	Switching differential referred to 50 % rH. Wire end ferrules must be used for connections with stranded wires.

PRODUCT VARIANTS

Article number
01250.0-00

TECHNICAL DRAWINGS



MECHANICAL HYGROSTAT

MFR 012



The hygrostat is used to prevent condensate and regulates heating and fans. From a critical relative humidity of 65 %, the temperature is increased so that the relative air humidity decreases and condensate is prevented from forming.

- Adjustable relative air humidity
- Changeover contact (heating or cooling)
- High switching capacity
- Clip mounting

OVERVIEW TECHNICAL DATA

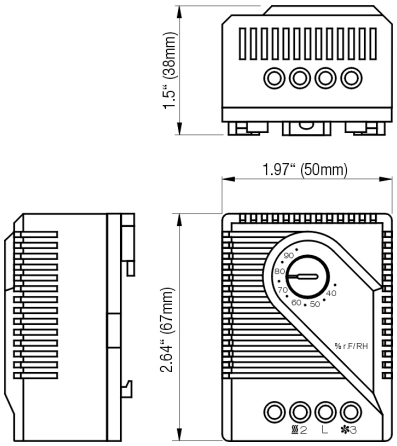
Setting range	35 % RH - 95 % RH
Contact type	Snap-action contact
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	AC 5 A;DC 20 W
Switching current ohmic	5 A
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current dc ohmic	0,6 A
Reference voltage dc ohmic	30 VDC
Reference voltage	20 V
Switching current	0,1 A
Service life	>50000 cycles
Switching differential	4 % RH
Switching differential tolerance	± 3 % RH
Operating temperature	0 °C - 60 °C
Operating humidity	≤95 % RH
Storage humidity	≤95 % RH
Storage temperature	-40 °C - 60 °C
Torque	0,5 Nm max.

Connection	3-pole clamp: Rigid wire cable 2.5 mm² (AWG 14) Stranded wire² 1.5 mm² (AWG 16)
Design	Change-over contact
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	67 mm
Width	50 mm
Depth	38 mm
Weight	60 g
Note	Switching differential referred to 50 % rH. Wire end ferrules must be used for connections with stranded wires.
CCC	CQC

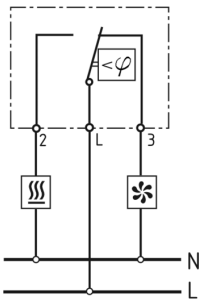
PRODUCT VARIANTS

Article number
01220.0-00

TECHNICAL DRAWINGS

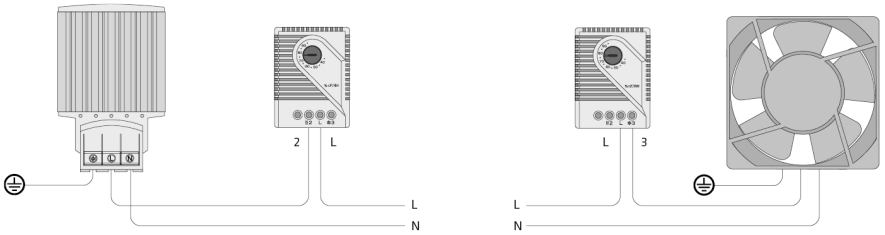


Connection diagram



Heater

Filter fan, cooling equipment, signal device



Connection examples

THERMOSTAT SWITCH (NC)

KTO 111



The mechanical NC thermostat opens when the temperature rises and is used to control heaters or to switch signal transmitters when the temperature undershoots. The use of push-in terminals prevents the supply lines from coming loose.

- Tight-fitting supply lines thanks to push-in terminals
- Time saving due to tool-free connection
- Large adjustment wheel enables convenient adjustability
- Optimized air inlets
- Can be used at altitudes of up to 5000 meters

OVERVIEW TECHNICAL DATA

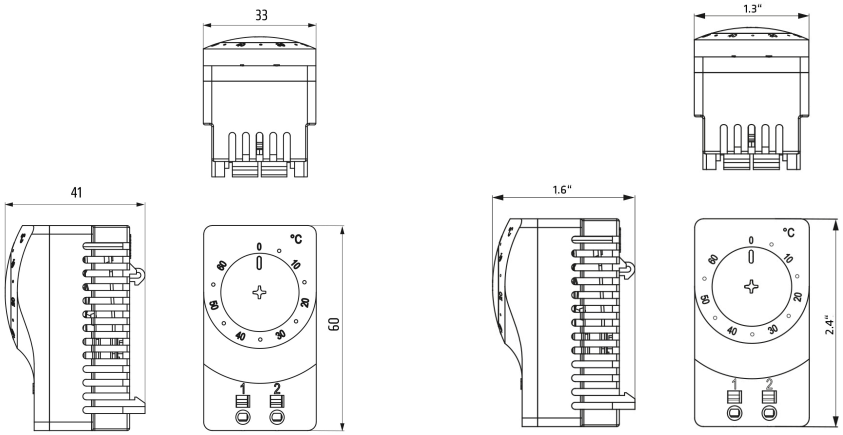
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	10 s
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	2 A
Reference voltage inductive maximum	250 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	1 A
Reference voltage dc ohmic	30 VDC
Minimal switching capacity	0,48 W
Reference voltage	24 V
Switching current	20 mA
Service life	>100000 cycles
Switching differential	7 K
Switching differential tolerance	± 4 K
Operating temperature	-45 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH

Storage temperature	-45 °C - 80 °C
Connection	2 push-in terminals Rigid wire cable 2.5 mm² (AWG 14) Stranded wire 1.5 mm² (AWG 16)
Design	Normally closed (NC)
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	60 mm
Width	33 mm
Depth	41 mm
Weight	40 g
Note	Overvoltage category: II: up to 5000 m; III: up to 2000 m.;The controller's contact system is exposed to the effects of the environment, which can change the contact resistance. This can lead to a voltage drop and/or self-heating of the contacts. Stripped length of rigid wire cable: 8 to 12 mm. Wire end ferrules (square or trapezoidal crimped) must be used for connections with stranded wires. Length of wire end ferrule: 8 mm or 12 mm. The height of the current has an influence on the tolerance accuracy, values specified: Switching resistive load (switching inductive load).
CCC	CQC

PRODUCT VARIANTS

Article number	Setting range	Switching capacity	Switching current ohmic
11100.0-00	0 °C - 60 °C	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W	10 A
11100.9-00	32 °F - 140 °F	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W	10 A
11100.0-02	20 °C - 80 °C	AC 250 V: 3 (2) A; AC 120 V: 3 (2) A; DC 24-72 V: 30 W	3 A
11100.0-01	-10 °C - 50 °C	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W	10 A
11100.9-01	14 °F - 122 °F	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W	10 A

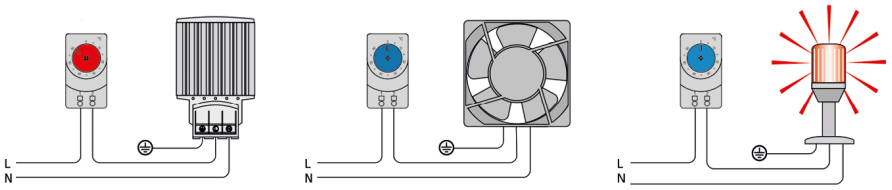
TECHNICAL DRAWINGS



Thermostat KTO 111 (NC) Heater

Thermostat KTS 111 (NO) e.g. Fan

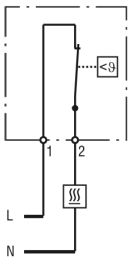
Thermostat KTS 111 (NO) e.g. Signal device



Connection examples

Thermostat KTO 111 (NC)

Connection diagram



Heater

Filter fan, cooling equipment, signal device

DUAL THERMOSTAT

ZR 011



Normally closed (NC) and normally open (NO) thermostats in one casing. Unlike thermostats with changeover contacts, the double thermostat switches independently. This allows heating and cooling devices to be switched in different temperature ranges.

- Normally closed contact (NC, heating) and normally open contact (NO, cooling) in one casing
- Snap-action contact enables independent switching
- Temperatures can be set separately
- High switching capacity
- Clip mounting

OVERVIEW TECHNICAL DATA

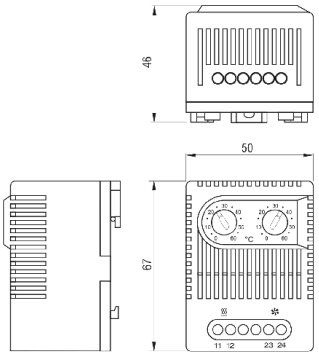
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W
Switching current ohmic	10 A
Switching current 2 ohmic	15 A
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	2 A
Reference voltage inductive maximum	250 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	1 A
Reference voltage dc ohmic	30 VDC
Minimal switching capacity	0,48 W
Reference voltage	24 V
Switching current	20 mA
Service life	>100000 cycles

Switching differential	7 K
Switching differential tolerance	± 4 K
Operating temperature	-45 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 80 °C
Torque	0,5 Nm max.
Connection	4-pole clamp: Rigid wire cable 2.5 mm² (AWG 14) Stranded wire1 1.5 mm² (AWG 16)
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	67 mm
Width	50 mm
Depth	46 mm
Weight	90 g
Note	CSA approved;01176.0-00 and 01176.0-01 for controlling heat exchangers and fans (e.g. LE 019) and as an alarm or signaling contact for monitoring the internal temperature of the control cabinet. Wire end ferrules must be used for connections with stranded wires. The controller's contact system is exposed to environmental influences, which can change the contact resistance. This can lead to a voltage drop and/or self-heating of the contacts.
CCC	CQC

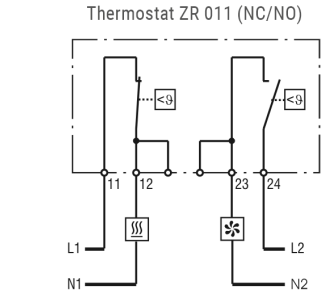
PRODUCT VARIANTS

Article number	Setting range	Setting range 2	Design
01172.0-00	0 °C - 60 °C	0 °C - 60 °C	Normally closed (NC); Normally open (NO)
01172.0-01	32 °F - 140 °F	32 °F - 140 °F	Normally closed (NC); Normally open (NO)
01175.0-00	-10 °C - 50 °C	20 °C - 80 °C	Normally closed (NC); Normally open (NO)
01176.0-00	0 °C - 60 °C	0 °C - 60 °C	Normally open (NO); Normally closed (NO)

TECHNICAL DRAWINGS

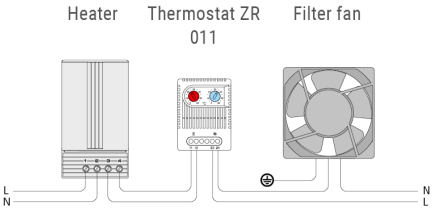


Connection diagram



Heater

Filter fan, cooling equipment, signal device



Connection example

ELECTRONIC THERMOSTAT

ET 011



Electronic thermostat for controlling electrical DC 24 V devices with high power. Heaters, cooling devices or signal transmitters can be switched via the potential-free changeover contact. In contrast to mechanical thermostats, the ET 011 is characterized by a low hysteresis (= switching temperature differential). This results in more precise temperature control.

- High DC switching capacity
- Small hysteresis
- Adjustable temperature
- Changeover contact
- Clip mounting

OVERVIEW TECHNICAL DATA

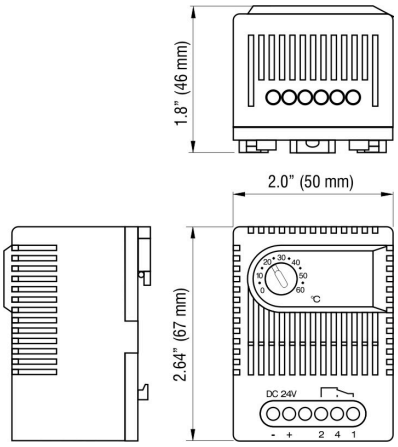
Sensor	PTC
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	24 V
Inrush current	16 A
Power consumption	1 W
Switching capacity	16 A (28 V)
Switching current ohmic	16 A
Reference voltage ohmic	28 VDC
Switching current inductive	2,6 A
Reference voltage inductive maximum	28 VDC
Service life	>100000 cycles
Switching differential	3 K
Switching differential tolerance	± 1 K
Operating temperature	-40 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 80 °C
Torque	0,5 Nm max.
Connection	5-pole clamp: Rigid wire cable 2.5 mm² (AWG 14) Stranded wire1 1.5 mm² (AWG 16)

Design	Change-over contact
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	67 mm
Width	50 mm
Depth	46 mm
Weight	80 g

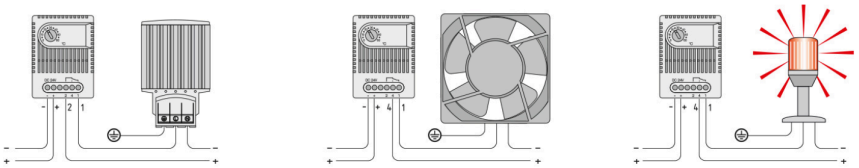
PRODUCT VARIANTS

Article number	Setting range
01190.0-00	0 °C - 60 °C
01190.0-01	32 °F - 140 °F

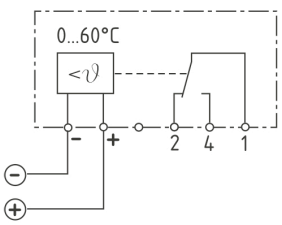
TECHNICAL DRAWINGS



Connection diagram



Connection examples



ELECTRONIC HYGROSTAT

EFR 012



The hygrostat is used to prevent condensate and monitors the relative humidity in enclosures and casings. When the set value is reached, the heating is switched on and the integrated LED lights up.

- Adjustable or fixed relative air humidity
- Visual status display (LED)
- High switching capacity
- Temperature-compensated
- Clip mounting

OVERVIEW TECHNICAL DATA

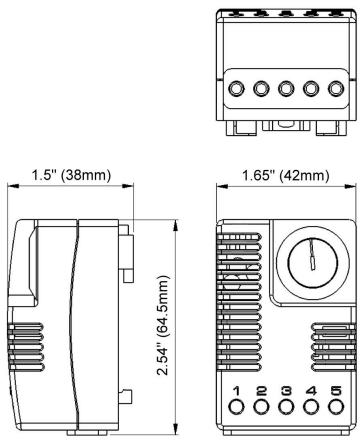
Contact type	Relay
Protection type	IP20
Operating display	LED
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Inrush current	16 A
Inrush current duration	10 s
Power consumption	1 W
Switching capacity	8 (1.6) A (AC) ; 100 W (DC)
Switching current ohmic	8 A
Reference voltage ohmic	240 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	1,6 A
Reference voltage inductive maximum	240 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	4,2 A
Reference voltage dc ohmic	24 VDC
Minimal switching capacity	0,3 W
Reference voltage	5 V
Switching current	5 mA
Reaction time	5 s
Service life	>50000 cycles
Switching differential	5 % RH

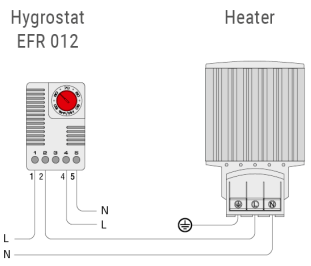
Switching differential tolerance	± 3 % RH
Operating temperature	0 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-20 °C - 70 °C
Torque	0,5 Nm max.
Connection	5-pole clamp: rigid wire/stranded wire with wire end ferrule 2.5 mm² (AWG 14)
Design	Change-over contact
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	64,5 mm
Width	42 mm
Depth	38 mm
Weight	70 g
Note	Switching resistive load (switching inductive load). Wire end ferrules must be used for connections with stranded wires.

PRODUCT VARIANTS

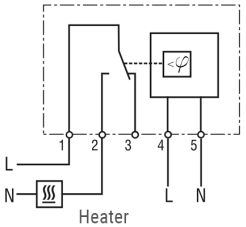
Article number	Setting range	Operating voltage
01245.0-00	40 % RH - 90 % RH	230 V
01245.9-00	40 % RH - 90 % RH	120 V
01246.0-00	65 % RH	230 V
01246.9-00	65 % RH	120 V

TECHNICAL DRAWINGS





Connection example



Connection diagram

THERMOSTAT SWITCH (NO)

STS 011



The mechanical thermostat NO (normally open) closes when the temperature rises and is used to control filter fans, heat exchangers, cooling devices or to switch signal transmitters when the temperature is exceeded. The bimetal thermostat has a small hysteresis.

- Thumbwheel setting dial
- Small hysteresis enables precise control
- Optimized air inlets
- High switching capacity

OVERVIEW TECHNICAL DATA

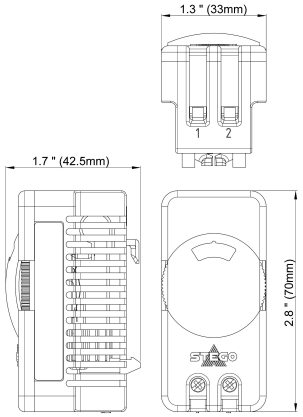
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W
Switching current ohmic	10 A
Switching current 2 ohmic	15 A
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	2 A
Reference voltage inductive maximum	250 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	1 A
Reference voltage dc ohmic	30 VDC
Minimal switching capacity	0,48 W
Reference voltage	24 V
Switching current	20 mA
Service life	>100000 cycles

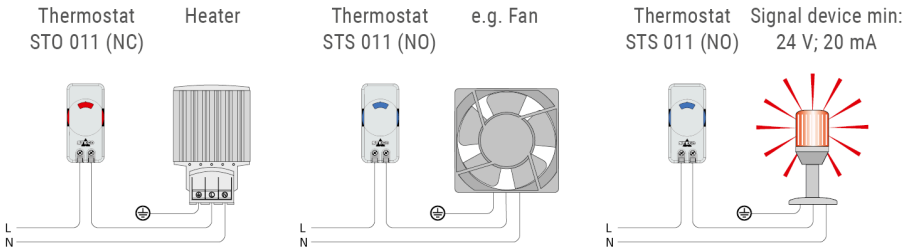
Switching differential	4 K
Switching differential tolerance	± 3 K
Operating temperature	-45 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 80 °C
Torque	0,5 Nm max.
Connection	2-pole clamp: Rigid wire cable 2.5 mm² (AWG 14) Stranded wire 1.5 mm² (AWG 16)
Design	Normally open (NO)
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	70 mm
Width	33 mm
Depth	42 mm
Weight	50 g
Note	The controller's contact system is exposed to the effects of the environment, which can change the contact resistance. This can lead to a voltage drop and/or self-heating of the contacts. Switching resistive loads (switching inductive loads). Wire end ferrules must be used for connections with stranded wires.

PRODUCT VARIANTS

Article number	Setting range
01116.0-00	0 °C - 60 °C
01116.9-00	32 °F - 140 °F

TECHNICAL DRAWINGS

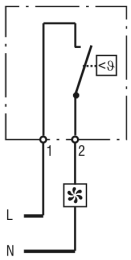




Connection examples

Thermostat
STS 111 (NO)

Connection diagram



Heater

Filter fan, cooling equipment, signal device

ELECTRONIC THERMOSTAT

ETR 011



Electronic thermostat for controlling heating, cooling devices, filter fans or signal transmitters. Detects the ambient temperature and switches via the output relays with changeover contact. If, for example, a heating system is in operation, the integrated LED lights up.

- Large setting range
- Small hysteresis enables precise control
- Visual status display (LED)
- Changeover contact (heating or cooling)
- Clip mounting

OVERVIEW TECHNICAL DATA

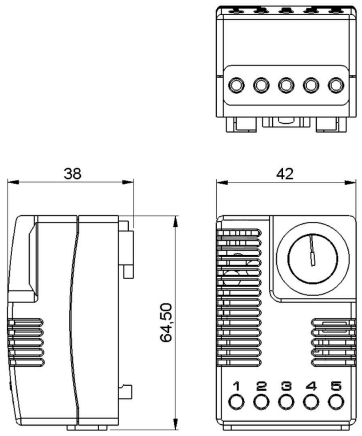
Contact type	Relay
Sensor	NTC
Protection type	IP20
Operating display	LED
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Inrush current	16 A
Power consumption	1 W
Switching capacity	8 (1.6) A (AC) ; 100 W (DC)
Switching current ohmic	8 A
Reference voltage ohmic	240 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	1,6 A
Reference voltage inductive maximum	240 VAC
Reference voltage 2	120 VAC
Reference voltage dc ohmic	24 VDC
Minimal switching capacity	0,3 W
Reference voltage	5 V
Switching current	5 mA
Reaction time	5 s
Service life	>50000 cycles
Switching differential	4 K
Switching differential tolerance	± 1 K

Operating temperature	-40 °C - 85 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection	5-pole clamp: rigid wire/stranded wire with wire end ferrule 2.5 mm² (AWG 14)
Design	Change-over contact
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	64,5 mm
Width	42 mm
Depth	38 mm
Weight	70 g
Note	Wire end ferrules must be used for connections with stranded wires. Switching resistive load (switching inductive load).

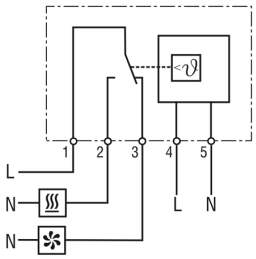
PRODUCT VARIANTS

Article number	Setting range	Operating voltage	Inrush current duration	Switching current dc ohmic	Torque
01131.9-00	-4 °F - 140 °F	120 V	10 s		0,5 Nm max.
01131.0-00	-20 °C - 60 °C	230 V		4,2 A	

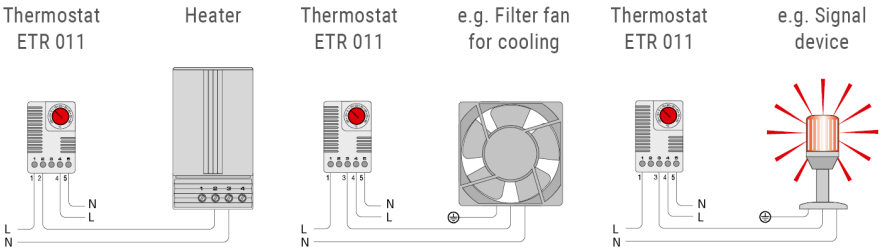
TECHNICAL DRAWINGS



Connection diagram



Heater
Filter fan, cooling equipment, signal device



Connection examples

TAMPER-PROOF THERMOSTAT (NO)

FTS 011



The NO thermostat closes when the temperature rises and is used to control filter fans, heat exchangers, cooling devices or to switch signal transmitters when the temperature is exceeded. The temperature is permanently set. This gives you a high switching accuracy.

- Small dimensions
- Fixed temperature setting
- High switching accuracy
- Clip mounting

OVERVIEW TECHNICAL DATA

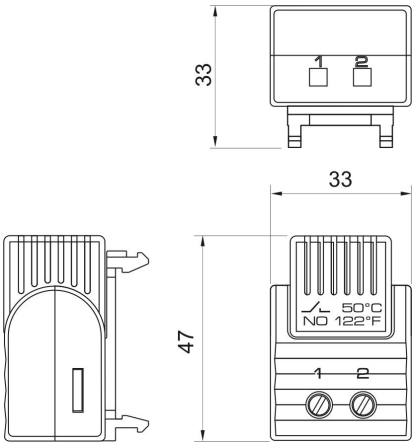
Setting range	firm
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	AC 250 V: 5 (1.6) A; AC 120 V: 10 (2) A; DC 24-72 V: 30 W
Switching current ohmic	5 A
Switching current 2 ohmic	10 A
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	1,6 A
Switching current 2 inductive	2 A
Reference voltage inductive maximum	250 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	1 A
Reference voltage dc ohmic	30 VDC
Minimal switching capacity	0,48 W
Reference voltage	24 V

Switching current	20 mA
Service life	>100000 cycles
Operating temperature	-40 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 80 °C
Torque	0,8 Nm max.
Connection	2-pole clamp: Rigid wire/stranded wire 2.5 mm² (AWG 14)
Design	Normally open (NO)
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	47 mm
Width	33 mm
Depth	33 mm
Weight	30 g

PRODUCT VARIANTS

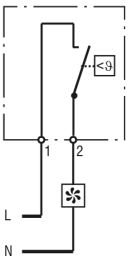
Article number	Switch-off temperature	Switch-off temperature tolerance	Switch-on temperature	Switch-on temperature tolerance
01161.0-02	25 °C	± 6 K	35 °C	± 6 K
01161.0-00	40 °C	± 6 K	50 °C	± 7 K
01161.0-01	50 °C	± 7 K	60 °C	± 7 K

TECHNICAL DRAWINGS



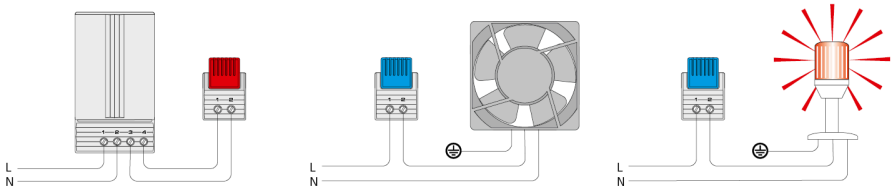
Thermostat
FTS 111 (NO)

Connection diagram



Heater

Filter fan, cooling equipment, signal device



Connection examples

THERMOSTAT SWITCH (NO)

KTS 111



The mechanical NO thermostat closes when the temperature rises and is used to control filter fans, heat exchangers, cooling devices or to switch signal transmitters when the temperature is exceeded. The use of push-in terminals prevents the supply lines from coming loose.

- Tight-fitting supply lines thanks to push-in terminals
- Time saving due to tool-free connection
- Large adjustment wheel enables convenient adjustability
- Optimized air inlet
- Can be used at altitudes of up to 5000 meters

OVERVIEW TECHNICAL DATA

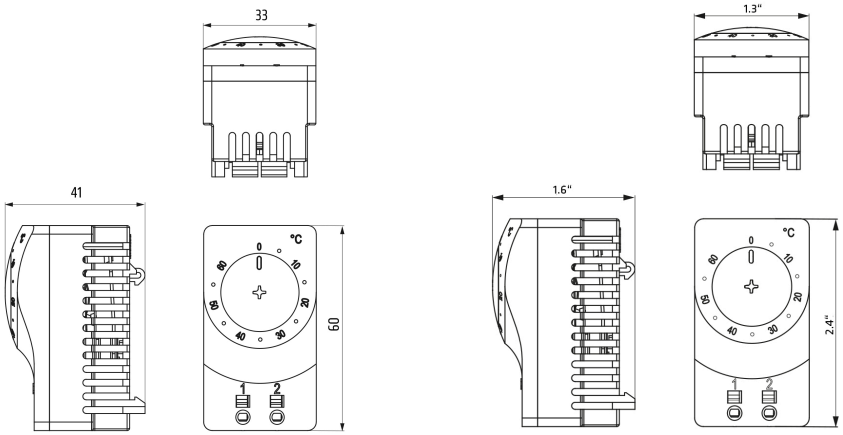
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	10 s
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	2 A
Reference voltage inductive maximum	250 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	1 A
Reference voltage dc ohmic	30 VDC
Minimal switching capacity	0,48 W
Reference voltage	24 V
Switching current	20 mA
Service life	>100000 cycles
Switching differential	7 K
Switching differential tolerance	± 4 K
Operating temperature	-45 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH

Storage temperature	-45 °C - 80 °C
Connection	2 push-in terminals Rigid wire cable 2.5 mm² (AWG 14) Stranded wire 1.5 mm² (AWG 16)
Design	Normally open (NO)
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	60 mm
Width	33 mm
Depth	41 mm
Weight	40 g
Note	Overvoltage category: II: up to 5000 m; III: up to 2000 m.;The controller's contact system is exposed to the effects of the environment, which can change the contact resistance. This can lead to a voltage drop and/or self-heating of the contacts. Stripped length of rigid wire cable: 8 to 12 mm. Wire end ferrules (square or trapezoidal crimped) must be used for connections with stranded wires. Length of wire end ferrule: 8 mm or 12 mm. The height of the current has an influence on the tolerance accuracy, values specified: Switching resistive load (switching inductive load).
CCC	CQC

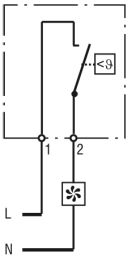
PRODUCT VARIANTS

Article number	Setting range	Switching capacity	Switching current ohmic
11101.0-00	0 °C - 60 °C	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W	10 A
11101.0-02	20 °C - 80 °C	AC 250 V: 3 (2) A; AC 120 V: 3 (2) A; DC 24-72 V: 30 W	3 A
11101.0-01	-10 °C - 50 °C	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W	10 A
11101.9-00	32 °F - 140 °F	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W	10 A
11101.9-01	14 °F - 122 °F	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W	10 A

TECHNICAL DRAWINGS



Thermostat KTS 111 (NO)



Connection diagram

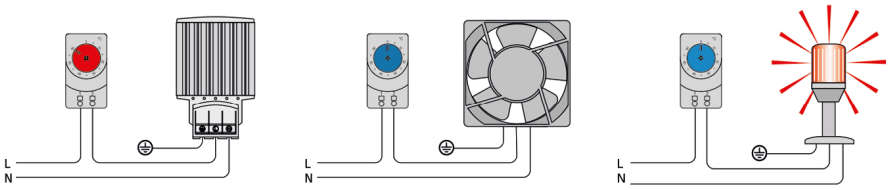
Heater

Filter fan, cooling equipment, signal device

Thermostat KTO 111 (NC) Heater

Thermostat KTS 111 (NO) e.g. Fan

Thermostat KTS 111 (NO) e.g. Signal device



Connection examples

TAMPER-PROOF THERMOSTAT (NC)

FTO 011



The NC thermostat opens when the temperature rises and is used to control heaters or to switch signal transmitters when the temperature undershoots. The temperature is permanently set. This gives you a high switching accuracy.

- Small dimensions
- Fixed temperature setting
- High switching accuracy
- Clip mounting

OVERVIEW TECHNICAL DATA

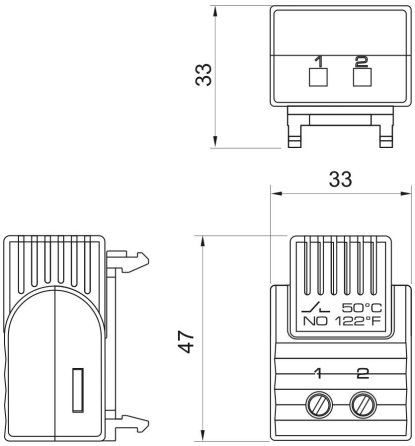
Setting range	firm
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	AC 250 V: 5 (1.6) A; AC 120 V: 10 (2) A; DC 24-72 V: 30 W
Switching current ohmic	5 A
Switching current 2 ohmic	10 A
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	1,6 A
Switching current 2 inductive	2 A
Reference voltage inductive maximum	250 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	1 A
Reference voltage dc ohmic	30 VDC
Minimal switching capacity	0,48 W
Reference voltage	24 V

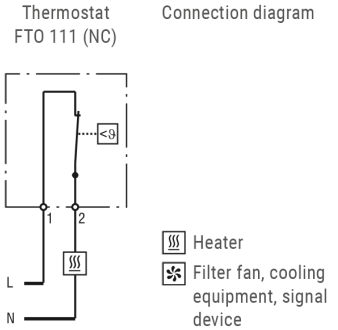
Switching current	20 mA
Service life	>100000 cycles
Switch-off temperature tolerance	± 5 K
Switch-on temperature tolerance	± 5 K
Operating temperature	-40 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 80 °C
Torque	0,8 Nm max.
Connection	2-pole clamp: Rigid wire/stranded wire 2.5 mm² (AWG 14)
Design	Normally closed (NC)
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	47 mm
Width	33 mm
Depth	33 mm
Weight	30 g
Note	Other switch-on/switch-off temperatures on request. Wire end ferrules must be used for connections with stranded wires. Switching of resistive load (switching of inductive load).

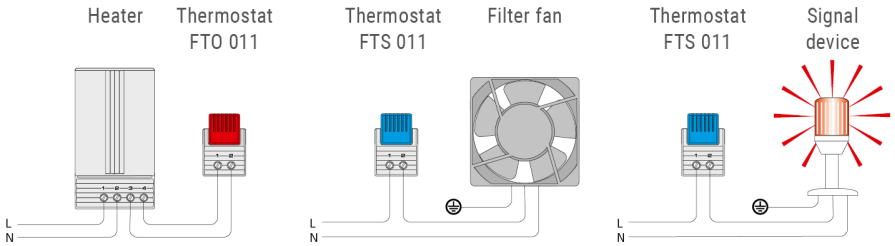
PRODUCT VARIANTS

Article number	Switch-off temperature	Switch-on temperature
01160.0-01	25 °C	15 °C
01160.0-00	15 °C	5 °C
01160.0-05	10 °C	0 °C

TECHNICAL DRAWINGS







Connection examples

THERMOSTAT SWITCH (NC)

STO 011



The mechanical NC thermostat opens when the temperature rises and is used to control heaters or to switch signal transmitters when the temperature undershoots. The bimetal thermostat has a small hysteresis and an anti frost assurance.

- Thumbwheel setting dial
- Small hysteresis enables precise control
- Anti frost assurance
- Optimized air inlets
- High switching capacity

OVERVIEW TECHNICAL DATA

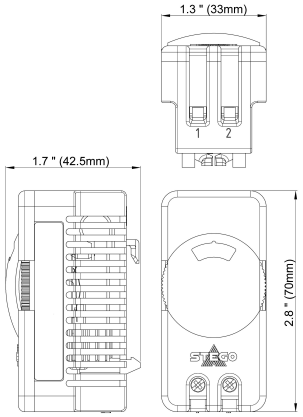
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	AC 250 V: 10 (2) A; AC 120 V: 15 (2) A; DC 24-72 V: 30 W
Switching current ohmic	10 A
Switching current 2 ohmic	15 A
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	2 A
Reference voltage inductive maximum	250 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	1 A
Reference voltage dc ohmic	30 VDC
Minimal switching capacity	0,48 W
Reference voltage	24 V
Switching current	20 mA
Service life	>100000 cycles

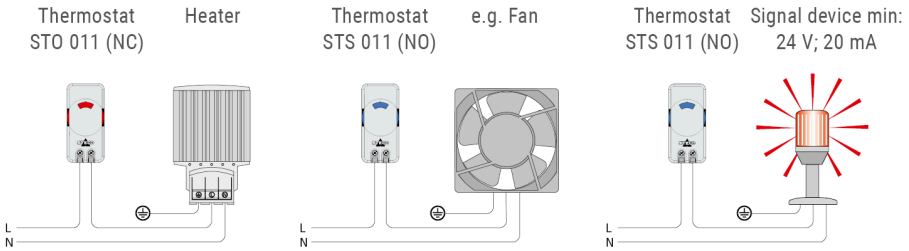
Switching differential	4 K
Switching differential tolerance	± 3 K
Operating temperature	-45 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 80 °C
Torque	0,5 Nm max.
Connection	2-pole clamp: Rigid wire cable 2.5 mm² (AWG 14) Stranded wire 1.5 mm² (AWG 16)
Design	Normally closed (NC)
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	70 mm
Width	33 mm
Depth	42 mm
Weight	50 g
Note	The controller's contact system is exposed to the effects of the environment, which can change the contact resistance. This can lead to a voltage drop and/or self-heating of the contacts. Switching resistive loads (switching inductive loads). Wire end ferrules must be used for connections with stranded wires.

PRODUCT VARIANTS

Article number	Setting range
01115.0-00	0 °C - 60 °C
01115.9-00	32 °F - 140 °F

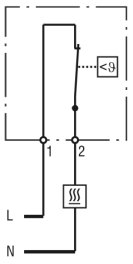
TECHNICAL DRAWINGS





Connection examples

Thermostat
STO 111 (NC)



Connection diagram

Heater

Filter fan, cooling equipment, signal device

MECHANICAL THERMOSTAT

FZK 011



The set value corresponds to the upper switching point, here the normally closed contact opens. The set value minus the switching temperature differential of 5 K (and tolerances) corresponds to the lower switching point, here the normally closed contact closes. The mechanical thermostat is used to control heating, cooling devices, filter fans or signal transmitters.

- Adjustable temperature
- Small hysteresis enables precise control
- High switching capacity
- Changeover contact (heating or cooling)
- Clip mounting

OVERVIEW TECHNICAL DATA

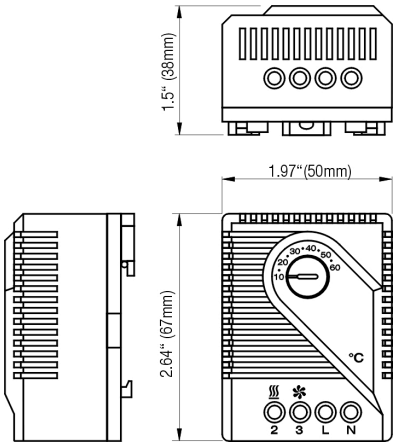
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	Normally closed: AC 10 (4) A, DC 30 W; Normally open: AC 5 (2) A, DC 30 W
Switching current ohmic	10 A(NC)
Switching current 2 ohmic	5 A(NO)
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	4 A(NC)
Switching current 2 inductive	2 A(NO)
Reference voltage inductive maximum	250 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	1 A
Reference voltage dc ohmic	30 VDC
Minimal switching capacity	0,48 W
Reference voltage	24 V
Switching current	10 mA
Service life	>100000 cycles

Switching differential	5 K
Switching differential tolerance	-3/+2 K
Operating temperature	-45 °C - 65 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 65 °C
Torque	0,5 Nm max.
Connection	4-pole clamp: Rigid wire/stranded wire² 2.5 mm² (AWG 14)
Design	Change-over contact
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	67 mm
Width	50 mm
Depth	38 mm
Weight	100 g
Note	The controller's contact system is exposed to environmental influences, which can change the contact resistance. This can lead to a voltage drop and/or self-heating of the contacts. During usage of the NC (normally closed) contact, there is the possibility of thermal return to reduce the switching temperature differential by connecting the clamp "N" (RF heating resistor). It depends on the ambient conditions and must be determined in tests for the respective application. Wire end ferrules must be used for connections with stranded wires.

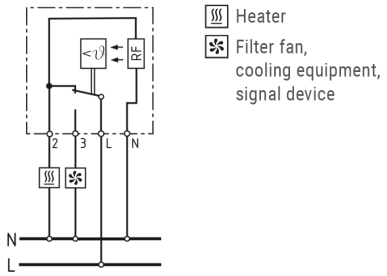
PRODUCT VARIANTS

Article number	Setting range	Operating voltage
01170.0-00	5 °C - 60 °C	230 V
01170.0-02	-20 °C - 35 °C	230 V
01170.9-00	40 °F - 140 °F	120 V
01170.0-01	40 °F - 140 °F	230 V
01170.9-01	5 °C - 60 °C	120 V

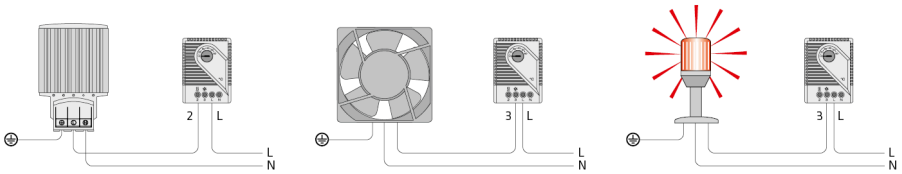
TECHNICAL DRAWINGS



Connection diagram



Heater
Filter fan, cooling equipment, signal device



Connection examples

EXPLOSION-PROOF THERMOSTAT

REX 011



Ex-protected thermostat of temperature class T6 (max. 85 °C). High switching capacity for direct control of connected heaters. Application: Enclosures and control cabinets in explosive environments. Mechanical thermostat with high response accuracy and response speed.

- Low switching temperature differential
- High switching capacity
- Compact integrated tamper-proof thermostat
- Silicone connection cable with strain relief in 1 or 2 m length

OVERVIEW TECHNICAL DATA

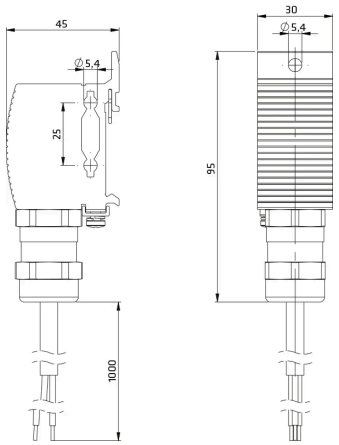
Setting range	firm
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection class	I
Protection type	IP66
Casing	Aluminium, silver anodised
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	12 s
Switching capacity	AC 250 V 10 A; DC 24 V 1 A
Switching current ohmic	10 A
Reference voltage ohmic	50 VAC
Reference voltage 2 ohmic	
Switching current dc ohmic	1 A
Reference voltage dc ohmic	24 VDC
Service life	>100000 cycles
Switch-off temperature tolerance	± 3 K
Switch-on temperature tolerance	± 3 K
Switching differential	5 K
Switching differential tolerance	± 3 K
Operating temperature	-60 °C - 60 °C
Operating humidity	≤90 % RH

Storage humidity	≤90 % RH
Storage temperature	-60 °C - 85 °C
Connection PE	1,0 - 2,5 mm²
Design	Normally closed (NC)
Mounting	Clip for 35 mm DIN rail, EN 60715 M5 screw fixing
Height	95 mm
Width	30 mm
Depth	45 mm
Weight	300 g
Note	At currents above 4 A, the switching temperature differential changes.

PRODUCT VARIANTS

Article number	Switch-off temperature	Switch-on temperature	Connection
01185.0-00	15 °C	10 °C	Halogen-free silicone cable 3 x 1 mm², 1 m
01185.0-01	15 °C	10 °C	Halogen-free silicone cable 3 x 1 mm², 2 m
01185.1-00	25 °C	20 °C	Halogen-free silicone cable 3 x 1 mm², 1 m
01185.1-01	25 °C	20 °C	Halogen-free silicone cable 3 x 1 mm², 2 m

TECHNICAL DRAWINGS



TAMPER-PROOF DUAL THERMOSTAT

FTD 011



Fixed thermostat normally closed (NC) and normally open (NO) contacts in one casing. Unlike thermostats with changeover contacts, the double thermostat switches independently. This allows heating and cooling devices to be switched in different temperature ranges.

- Normally closed contact (NC, normally closed, heating) and normally open contact (NO, normally closed, cooling) in one casing
- Snap-action contact enables independent switching
- Fixed temperature setting
- High switching accuracy
- Clip mounting

OVERVIEW TECHNICAL DATA

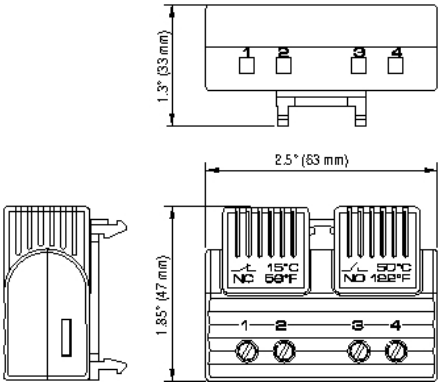
Setting range	firm
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC;DC
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	AC 250 V: 5 (1.6) A; AC 120 V: 10 (2) A; DC 24-72 V: 30 W
Switching current ohmic	5 A
Switching current 2 ohmic	10 A
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	1,6 A
Switching current 2 inductive	2 A
Reference voltage inductive maximum	250 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	1 A
Reference voltage dc ohmic	30 VDC
Minimal switching capacity	0,48 W
Reference voltage	24 V

Switching current	20 mA
Service life	>100000 cycles
Switch-off temperature	15 °C
Switch-off temperature tolerance	± 5 K
Switch-off temperature 2 tolerance	± 6 K
Switch-on temperature	5 °C
Switch-on temperature tolerance	± 5 K
Switch-on temperature 2 tolerance	± 7 K
Operating temperature	-40 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 80 °C
Torque	0,8 Nm max.
Connection	2-pole clamp: Rigid wire/stranded wire 2.5 mm² (AWG 14)
Design	Normally closed (NC); Normally open (NO)
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	47 mm
Width	63 mm
Depth	33 mm
Weight	40 g
Note	Other switch-on/switch-off temperatures on request. Wire end ferrules must be used for connections with stranded wires. Switching of resistive load (switching of inductive load).

PRODUCT VARIANTS

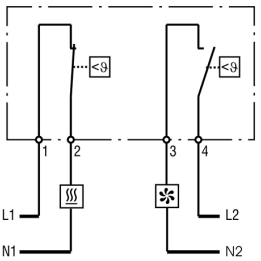
Article number	Switch-off temperature 2	Switch-on temperature 2
01163.0-02	+25 °C	35 °C
01163.0-00	+40 °C	50 °C

TECHNICAL DRAWINGS



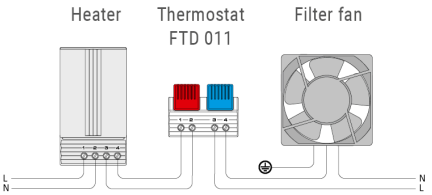
Connection diagram

Thermostat FTD 011 (NC/NO)



Heater

Filter fan, cooling equipment, signal device



Connection example

ELECTRONIC THERMOSTAT

DCT 010



Electronic thermostat with integrated switch module for controlling DC devices in enclosures and casings. Switches all common loads in enclosure applications: Heating, fans, signal transmitters, etc. Normally open versions (NO) in two versions with a wide temperature setting range. Normally closed versions (NC) with secondary switch function: 65 % RH fixed setting.

- Internal switch module with high DC switching capacity
- Adjustable temperature
- Small hysteresis
- External sensor

OVERVIEW TECHNICAL DATA

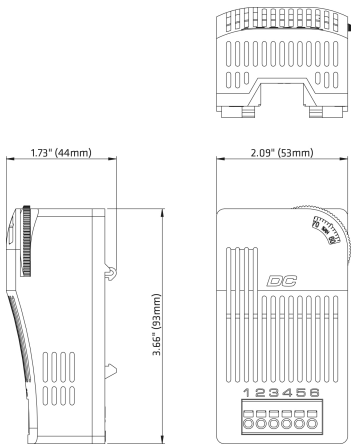
Contact type	MOSFET
Protection type	IP20
Operating display	LED
External sensor	Cable 2 m with snap-in male connector
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	20 V - 56 V
Inrush current	24 A
Inrush current duration	10 s
Power consumption	1 W
Reference voltage ohmic	20...56 VDC
Reaction time	5 s
Service life	>100000 cycles
Switching differential	3 K
Switching differential tolerance	± 1 K
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 80 °C
Connection	6-pole clamp: stranded wire 1.5 mm² (AWG 16); max. 2.5 mm² (AWG 12)
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	93 mm
Width	53 mm
Depth	44 mm

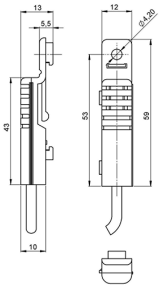
Weight	120 g
Note	Secondary switch function: Versions with a secondary switch function can also react to humidity and thus offer greater contactor protection for the electronics. Switching differential: 4% rH (+1% tolerance) at +25 °C (+77 °F), 50% rH. Wire end ferrules must be used for connections with stranded wires.

PRODUCT VARIANTS

Article number	Setting range	Switching capacity	Switching current ohmic	Setting range 2	Operating temperature	Design
01011.0-41	-10 °C - 50 °C	13 A (DC)	13 A	65 % RH	-40 °C - 50 °C	Normally closed (NC)
01011.0-21	-10 °C - 50 °C	13 A (DC)	13 A		-40 °C - 50 °C	Normally open (NO)
01011.0-22	0 °C - 60 °C	11 A (DC)	11 A		-40 °C - 60 °C	Normally open (NO)

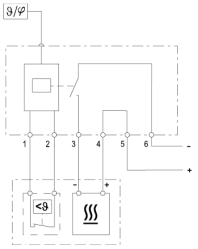
TECHNICAL DRAWINGS



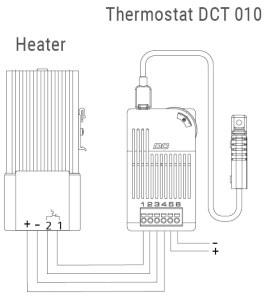


External sensor

Connection diagram



Connection example



ELECTRONIC HYGROTHERM

ETF 012



The electronic hygrotherm simultaneously monitors temperature and air humidity in enclosures and casings. Condensation is avoided by switching the heating and fans as required. In the design with an external sensor, this can be placed anywhere in the enclosure, enabling precise measurement.

- Adjustable temperature and air humidity
- Wide-range voltage
- High switching capacity
- Operating temperature down to -40 °C
- Optical status display

OVERVIEW TECHNICAL DATA

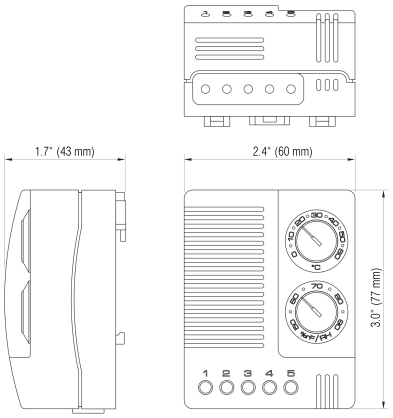
Contact type	Relay
Protection type	IP20
Operating display	LED
Casing	Plastic to UL94 V-0, light gray
Inrush current	30 A
Inrush current duration	10 s
Power consumption	1 W
Switching capacity	AC 240 V, 10 (1.6) A; DC 30 W, DC 60 V, 0.6 A
Switching current ohmic	10 A
Reference voltage ohmic	240 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	1,6 A
Reference voltage inductive maximum	240 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	0,6 A
Reference voltage dc ohmic	60 VDC
Reaction time	5 s
Service life	VDE: >15000 cycles UL: >30000 cycles
Setting range 2	50 % RH - 90 % RH
Switching differential	2 K
Switching differential tolerance	± 1 K

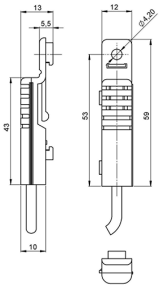
Switching differential 2	4 % RH
Switching differential 2 tolerance	± 1 % RH
Operating temperature	-40 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 60 °C
Torque	0,5 Nm max.
Connection	5-pole clamp: rigid wire/stranded wire with wire end ferrule 2.5 mm² (AWG 14)
Design	Change-over contact
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	77 mm
Width	60 mm
Depth	43 mm
Weight	200 g
Note	Switching resistive load (switching inductive load). Wire end ferrules must be used for connections with stranded wires.

PRODUCT VARIANTS

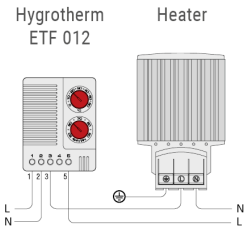
Article number	Setting range	External sensor	AC/DC	Operating voltage
01230.9-00	32 °F - 140 °F		AC	100 V - 240 V
01230.0-00	0 °C - 60 °C		AC	100 V - 240 V
01231.0-01	0 °C - 60 °C	External hygrotherm sensor with 2 m cable	AC	100 V - 240 V
01231.0-00	0 °C - 60 °C	External hygrotherm sensor with 1 m cable	AC	100 V - 240 V
01231.9-01	32 °F - 140 °F	External hygrotherm sensor with 2 m cable	AC	100 V - 240 V
01231.9-00	32 °F - 140 °F	External hygrotherm sensor with 1 m cable	AC	100 V - 240 V
01231.1-00	0 °C - 60 °C	External hygrotherm sensor with 1 m cable	DC	24 V - 48 V
01231.1-01	0 °C - 60 °C	External hygrotherm sensor with 2 m cable	DC	24 V - 48 V

TECHNICAL DRAWINGS

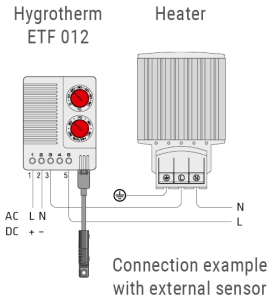




External sensor

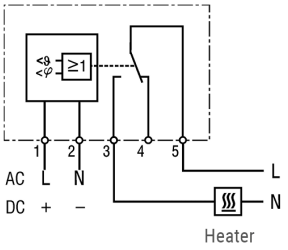


Connection example
with integrated sensor



Connection example
with external sensor

Connection diagram



SWITCH MODULE

DCM 010



Switch module for switching DC devices with high power in enclosure applications. Use as a thermostat or hygrostat: Control via potential-free, external contact.

- High DC switching capacity
- Wide DC voltage range
- Versatile use
- Simple, quick connection

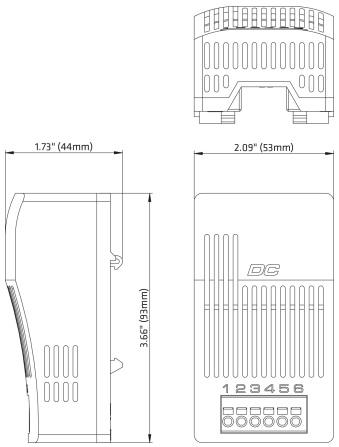
OVERVIEW TECHNICAL DATA

Setting range	adjustable
Contact type	MOSFET
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	20 V - 56 V
Inrush current	30 A
Inrush current duration	10 s
Power consumption	1 W
Reference voltage ohmic	20...56 VDC
Service life	>100000 cycles
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 80 °C
Connection	6-pole clamp: stranded wire 1.5 mm² (AWG 16); max. 2.5 mm² (AWG 12)
Design	Normally open (NO)
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	93 mm
Width	53 mm
Depth	44 mm
Weight	65 g
Note	Wire end ferrules must be used for connections with stranded wires.

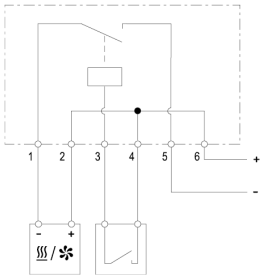
PRODUCT VARIANTS

Article number	Switching capacity	Switching current ohmic	Operating temperature
01010.0-20	11 A (DC)	11 A	-40 °C - 60 °C
01010.0-10	13 A (DC)	13 A	-40 °C - 50 °C
01010.0-00	15 A (DC)	15 A	-40 °C - 40 °C

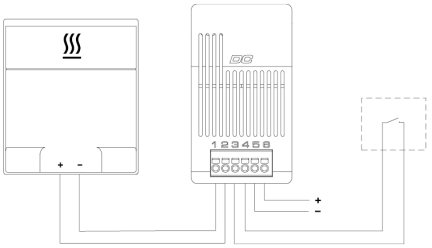
TECHNICAL DRAWINGS



Connection diagram



Connection example



ELECTRONIC HYGROSTAT

DCF 010



Electronic hygrostat with integrated switch module for controlling DC devices in enclosures and housings. Designed as a normally open contact (NO), it switches all common loads in enclosure applications: Fans, coolers, signal transmitters.

- Internal switch module with high DC switching capacity
- Relative humidity adjustable
- Secondary switch function: fixed temperature 5 °C
- Small hysteresis
- External sensor

OVERVIEW TECHNICAL DATA

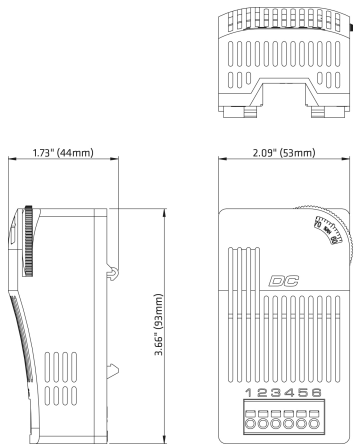
Setting range	40 % RH - 90 % RH
Contact type	MOSFET
Protection type	IP20
Operating display	LED
External sensor	Cable 2 m with snap-in male connector
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	20 V - 56 V
Inrush current	24 A
Inrush current duration	10 s
Power consumption	1 W
Reference voltage ohmic	20...56 VDC
Reaction time	5 s
Service life	>100000 cycles
Setting range 2	5 °C
Switch-on temperature	5 °C
Switching differential	4 % RH
Switching differential tolerance	± 1 % RH
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 80 °C
Connection	6-pole clamp: stranded wire 1.5 mm² (AWG 16); max. 2.5 mm² (AWG 12)
Design	Normally open (NO)

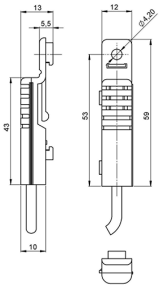
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	93 mm
Width	53 mm
Depth	44 mm
Weight	120 g
Note	Secondary switch function: Versions with a secondary switch function can also react to temperature and thus offer even greater contactor protection for the electronics. Switching differential: 3K (+1K tolerance) at +25 °C (+77 °F), 50% RH. Wire end ferrules must be used for connections with stranded wires.

PRODUCT VARIANTS

Article number	Switching capacity	Switching current ohmic	Operating temperature
01012.0-20	15 A (DC)	15 A	-40 °C - 40 °C
01012.0-21	13 A (DC)	13 A	-40 °C - 50 °C
01012.0-22	11 A (DC)	11 A	-40 °C - 60 °C

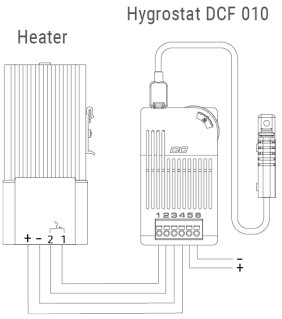
TECHNICAL DRAWINGS



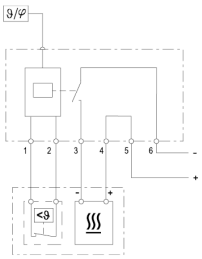


External sensor

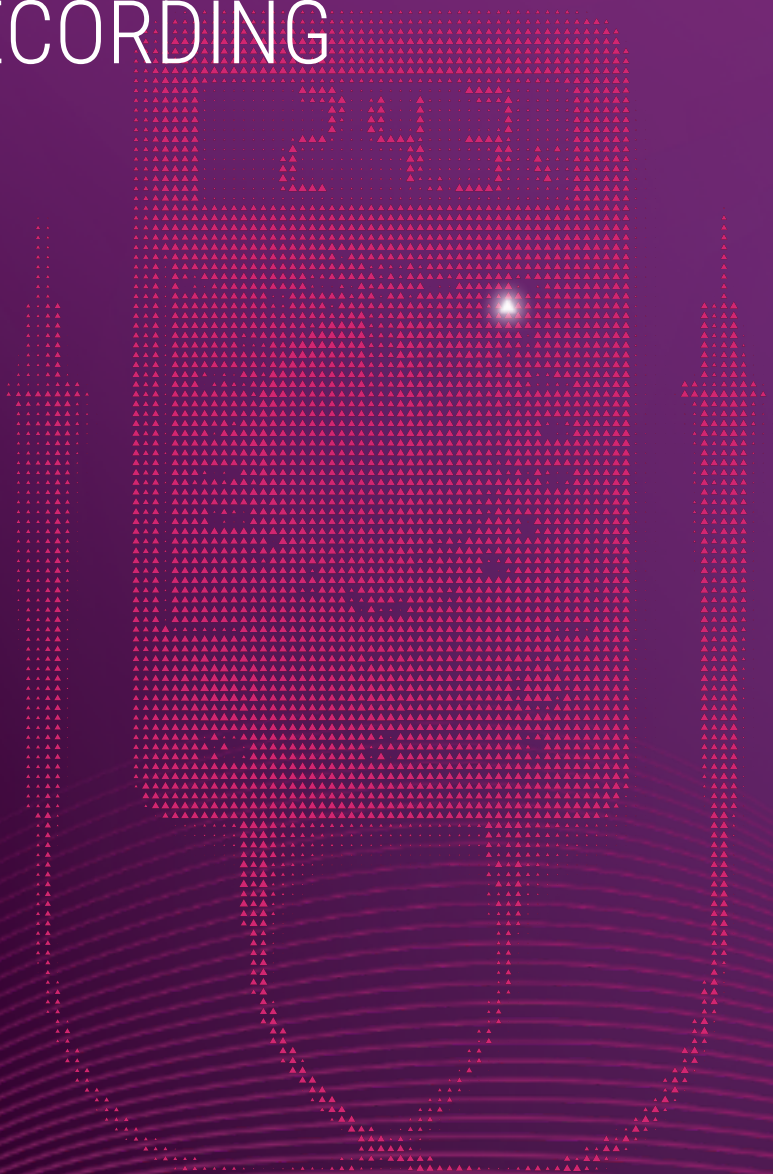
Connection example



Connection diagram



MEASURING
PRECISE CLIMATE DATA RECORDING



STEGO smart sensors measure temperature, humidity and other climate-related parameters inside control cabinets and enclosures – precisely, digitally and in real time. IO-Link sensor solutions provide analog and digital signals and enable seamless integration into modern automation systems.

NEW: 3-PHASE SMART CURRENT SENSOR

ESS 076



The ESS 076 (3-phase) smart current sensor measures three-phase alternating current without contact. The three current conductors are fed through the openings of the through-type transformers. The measured current is processed digitally. It is output either via the analog output or via the IO-Link interface. Power and energy are calculated internally. These values are also output via the IO-Link interface.

- Measures three-phase AC currents without contact
- Cable diameter up to 11.4 mm
- Clip and screw fixing
- Analog 4-20 mA interface
- Digital IO-Link interface

OVERVIEW TECHNICAL DATA

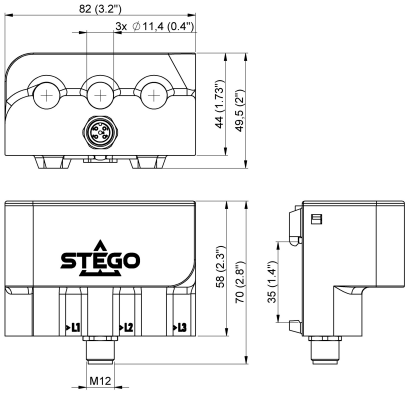
Measurement signal	Amperage
Electrical protection	Reverse polarity protection, short-circuit proof, overvoltage protection
Protection class	III
Protection type	IP30
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	24 V
Frequency	50; 60 Hz
Power consumption	1 W
Measurement range	0 A - 100 A
Measurement range tolerance	± 0,5; (± 1,5) A
Load resistance external	≤ 500 Ω
Operating temperature	-40 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection	M12 round plug, IEC 61076-2-101, 4-pin, A-coded, shielded
Design	IO-Link (version 1.1), 4 - 20 mA
Mounting	Clip for 35 mm DIN rail, EN 60715; screw fixing with supplied mounting bracket
Installation position	any
Height	70 mm
Width	82 mm

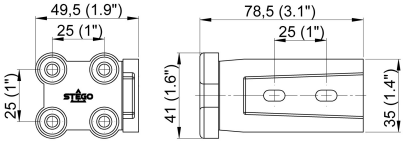
Depth	49,5 mm
Weight	200 g
Note	Conductor diameter 11.4 mm. Tolerances measured at DC 24 V.

PRODUCT VARIANTS

Article number
07601.2-00

TECHNICAL DRAWINGS





IO-LINK CONVERTER

IOC 074



The IO-Link converter converts three analog signals into the IO-Link protocol. This allows, for example, analog sensors to be integrated into an existing IO-Link environment (retrofit).

- Converts 0-20 mA or 4-20 mA analog signals to IO-Link
- IO-Link interface
- Supports three analog measurement signals
- Simple installation via clip

OVERVIEW TECHNICAL DATA

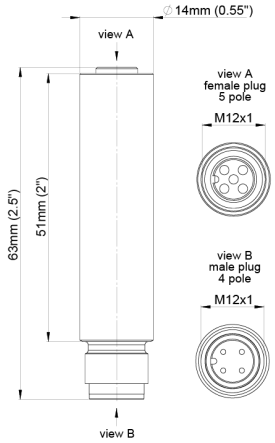
Packaging unit	1 Piece
Electrical protection	IO-Link: Reverse polarity protection, overvoltage protection
Protection class	III (SELV)
Protection type	IP65, IP66, IP67
Material sealing	NBR
Casing	Stainless steel
AC/DC	DC
Operating voltage	24 V
Nominal current	62,5 mA
Frequency	0 Hz
Power consumption	1,5 W
Load resistance external	250 Ohm
Operating temperature	-40 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection type	M12 connector plug
Connection	IO-Link: Male connector M12 IEC61076-2-101 4-pole A-coded, Signal interface: Female connector M12 IEC61076-2-101 5-pole A-coded
Design	IO-Link version 1.1
Mounting	Clip
Installation position	any
Setup height	4000 m

Height	Ø14 mm
Width	Ø14 mm
Depth	63 mm
Weight	50 g

PRODUCT VARIANTS

Article number
07402.0-00

TECHNICAL DRAWINGS



SMART CURRENT SENSOR

ESS 076



The ESS 076 smart current sensor measures the AC current of cables without contact. Measured data is output in analog (4-20 mA signal) or digital (IO-Link) form. Measured and processed data - such as power and energy - is made available to higher-level systems such as machine control systems or edge computers for condition monitoring via the IO-Link interface.

- Measures AC current up to 100 A contactless
- Cable diameter up to 11.4 mm
- Internal processing of measured values
- Analog and digital interface in one device

OVERVIEW TECHNICAL DATA

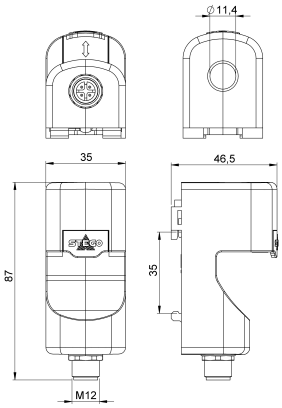
Measurement signal	Amperage
Electrical protection	Reverse polarity protection, short-circuit proof, overvoltage protection
Protection class	III
Protection type	IP30
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	24 V
Frequency	50; 60 Hz
Power consumption	0,95 W
Measurement range	0 A - 100 A
Measurement range tolerance	± 0,5 A
Load resistance external	≤ 500 Ω
Operating temperature	-40 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection	M12 round plug, IEC 61076-2-101, 4-pin, A-coded, shielded
Design	IO-Link (version 1.1), 4 - 20 mA
Mounting	Clip for 35 mm DIN rail, EN 60715
Installation position	any
Height	86 mm
Width	35 mm
Depth	46,5 mm

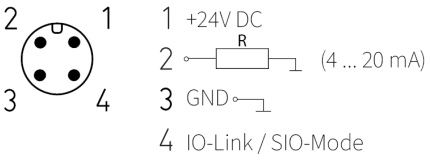
Weight	100 g
Note	Conductor diameter 11.4 mm. Tolerances measured at DC 24 V.

PRODUCT VARIANTS

Article number
07600.2-00

TECHNICAL DRAWINGS





SMART SENSOR CLIMATE DIGITAL

CSS 014



The smart sensor measures temperature and air humidity and transmits signals digitally. The converted measured values are passed on as a standardized digital IO-Link signal. Control and monitoring units for industrial systems and machines receive the data from the smart sensor.

- Digital interface
- Quick connection: M12 male connector
- High measurement range and accuracy
- Compact dimensions
- Simple mounting: Clip or screw fixing

OVERVIEW TECHNICAL DATA

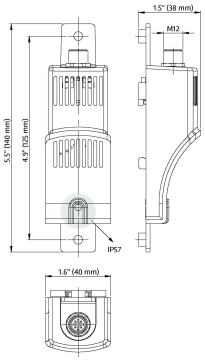
Measurement signal	Temperature, air humidity, event data, diagnostic data, device data
Electrical protection	Reverse polarity protection, short-circuit proof, overvoltage protection
Protection class	III
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	24 V
Power consumption	0,3 W
Measurement range	-40 °C - 80 °C
Measurement range tolerance	± 0,3 K
Measurement range 2	0 % RH - 100 % RH
Measurement range tolerance 2	± 3 % RH
Reaction time	1: t60 <195 s / 2: t60 <14 s
Operating temperature	-40 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection	M12 round plug, IEC 61076-2-101, 4-pin, A-coded, shielded
Design	IO-Link (version 1.1); SSP 4.1.2
Mounting	Clip for 35 mm DIN rail, EN 60715 and M5 screw fixing
Height	140 mm
Width	40 mm
Depth	38 mm

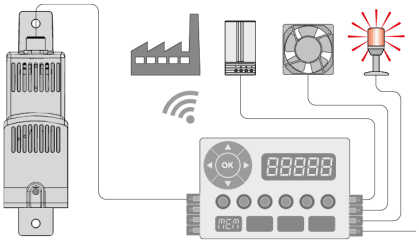
Weight	50 g
Note	Tolerance from +5 to +60°C (please request diagrams to view tolerances outside these ranges) / tolerance from 20 to 80% RH. The circuit board is painted on both sides with a certified protective lacquer to protect against condensation and thus corrosion and to increase creepage resistance.

PRODUCT VARIANTS

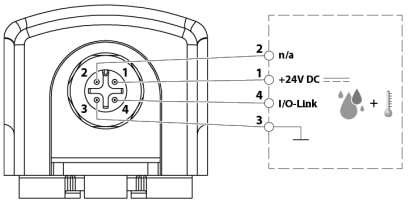
Article number
01411.2-01

TECHNICAL DRAWINGS





Connection example



Pin assignment for 4-pin
M12 round plug connector

SMART SENSOR CLIMATE ANALOG

CSS 014



The smart sensor measures temperature and air humidity and transmits analog signals. The converted measured values are passed on as a standardized analogue 4 - 20 mA signal. Control and monitoring units for industrial systems and machines are the recipients of the smart sensor's data.

- Analog interface
- Quick connection: M12 male connector
- High measurement range and accuracy
- Compact dimensions
- Simple mounting: Clip or screw fixing

OVERVIEW TECHNICAL DATA

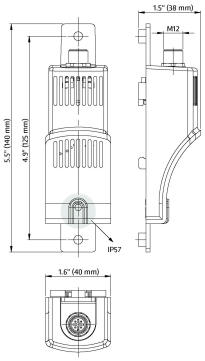
Measurement signal	Temperature, air humidity
Electrical protection	Reverse polarity protection, short-circuit proof, overvoltage protection
Protection class	III
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	24 V
Power consumption	1.8 W (typically 0.4 W) W
Measurement range	-40 °C - 60 °C
Measurement range tolerance	± 1 K
Measurement range 2	0 % RH - 100 % RH
Measurement range tolerance 2	± 4 % RH
Load resistance external	≤ 500 Ω
Reaction time	1: t60 <195 s / 2: t60 <14 s
Operating temperature	-40 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection	M12 round plug, IEC 61076-2-101, 4-pin, A-coded, shielded
Design	4 - 20 mA
Mounting	Clip for 35 mm DIN rail, EN 60715 and M5 screw fixing
Height	140 mm
Width	40 mm

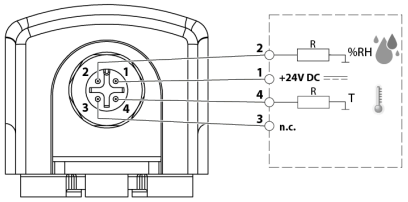
Depth	38 mm
Weight	50 g
Note	Tolerance from 20 to 80% rH/ tolerance from +5 to +60°C (please request diagram to view tolerances outside these ranges). The circuit board is painted on both sides with a certified protective lacquer to protect against condensation and thus corrosion and to increase creepage resistance.

PRODUCT VARIANTS

Article number
01420.2-00

TECHNICAL DRAWINGS





Pin assignment for 4-pin
M12 round plug connector

SENSORS FOR SENSOR HUB

SEN 073



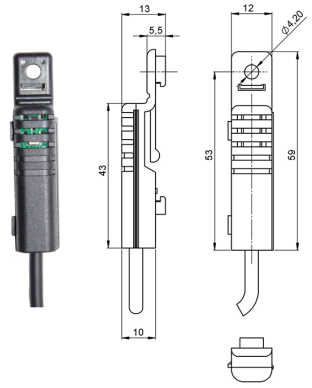
OVERVIEW TECHNICAL DATA

Operating humidity	≤100 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Design	SHC 071 sensor
Setup height	≤4000 m

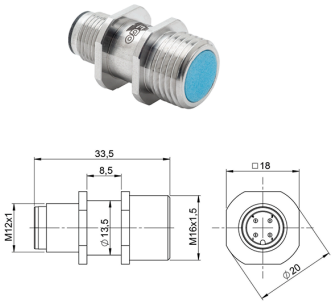
PRODUCT VARIANTS

Article number	Measurement signal	Protection type	Casing	Measurement range	Measurement range tolerance	Measurement range 2	Measurement range tolerance 2	Reaction time	Operating temperature	Connection	Mounting	Height	Width	Depth	Weight
07303.0-00	Air quality, temperature	IP64	Stainless steel	0 VOC index - 500 VOC index		-10 °C - 50 °C	± 0,2 K	1: t63 <10 s / 2: t63 <150 s	-10 °C - 50 °C	Male connector M12 IEC 61076-2-101, 4-pole, A-coded	incl. pipe clip for screw fixing, Ø 3 mm	Ø 20 mm	Ø 20 mm	33,5 mm	25 g
07300.1-01	Temperature, relative humidity	IP20	Plastic to UL94 V-0, black	-40 °C - 80 °C	± 0,2 K	0 % RH - 100 % RH	± 2 %	1: t63 <90 s / 2: t63 <7 s	-40 °C - 85 °C	Cable with male connector, shielded, 2.0 m	Clip for 35 mm DIN rail, EN 60715 and M4 screw fixing	13 mm	12 mm	59 mm	70 g
07302.0-00	visible light	IP65	Stainless steel	0,01 lx - 83865 lx	± 0,2 %			t90 <7 s	-40 °C - 70 °C	Male connector M12 IEC 61076-2-101, 4-pole, A-coded	incl. pipe clip for screw fixing, Ø 3 mm	Ø 20 mm	Ø 20 mm	40 mm	25 g
07300.1-00	Temperature, relative humidity	IP20	Plastic to UL94 V-0, black	-40 °C - 80 °C	± 0,2 K	0 % RH - 100 % RH	± 2 %	1: t63 <90 s / 2: t63 <7 s	-40 °C - 85 °C	Cable with male connector, shielded, 1.0 m	Clip for 35 mm DIN rail, EN 60715 and M4 screw fixing	13 mm	12 mm	59 mm	40 g
07301.0-00	Absolute air pressure, temperature	IP64	Stainless steel	300 hPa - 1100 hPa	± 1,0 hPa	-40 °C - 70 °C	± 0,5 K	1: t63 <5 s / 2: t63 <150 s	-40 °C - 70 °C	Male connector M12 IEC 61076-2-101, 4-pole, A-coded	incl. pipe clip for screw fixing, Ø 3 mm	Ø 20 mm	Ø 20 mm	33,5 mm	25 g
07300.0-00	Temperature, relative humidity	IP64	Stainless steel	-40 °C - 70 °C	± 0,2 K	0 % RH - 100 % RH	± 2 %	1: t63 <120 s / 2: t63 <20 s	-40 °C - 70 °C	Male connector M12 IEC 61076-2-101, 4-pole, A-coded	incl. pipe clip for screw fixing, Ø 3 mm	Ø 20 mm	Ø 20 mm	33,5 mm	25 g

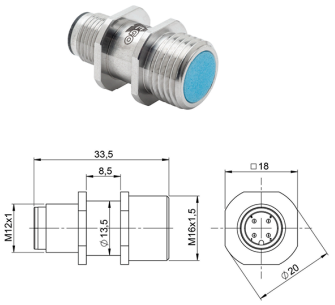
TECHNICAL DRAWINGS



07300.1-00 | 07300.1-01



07300.0-00 | 07301.0-00 | 07303.0-00



07300.0-00 | 07301.0-00 | 07303.0-00

ACTUATOR HUB

AHC 072



This digital IO-Link hub switches up to three actuators or loads via relays. The switching commands are issued via an IO-Link interface from higher-level field devices such as: Edge computer, cloud, PLC controller, etc.

- Connection for up to three actuators
- Quick connection of the actuators with push-in terminals
- Quick connection to the master with M12 plug connector
- Simple clip and screw fixing
- Optical indicators (LEDs) for each port

OVERVIEW TECHNICAL DATA

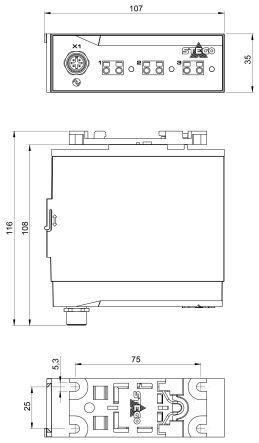
Electrical protection	Reverse polarity protection, short-circuit proof, overvoltage protection
Protection class	III
Protection type	IP40
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	24 V
Inrush current	16 A
Inrush current duration	10 s
Power consumption	1,4 W
Measurement range	
Switching capacity	AC 240 V, 10 AC DC 30 V, 10 A
Operating temperature	-40 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection	M12 round plug, IEC 61076-2-101, 4-pole, A-coded, shielded Connections for 3 actuators 2-pole push-in terminals, stranded wire with wire end ferrule 1.5 mm²/AWG 18
Design	IO-Link (Version 1.1)
Mounting	Clip for 35 mm DIN rail, EN 60715 and M5 screw fixing
Setup height	≤4000 m
Height	35 mm

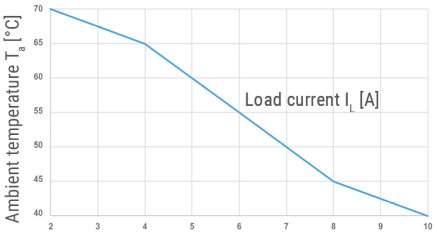
Width	107 mm
Depth	116 mm
Weight	160 g
Note	The maximum operating temperature depends on the current (see diagram) and the number of loads.

PRODUCT VARIANTS

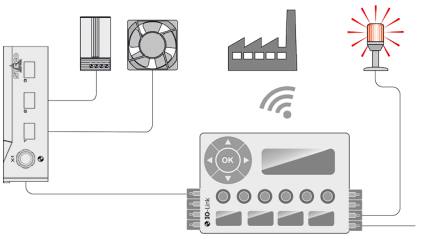
Article number
07200.2-00

TECHNICAL DRAWINGS





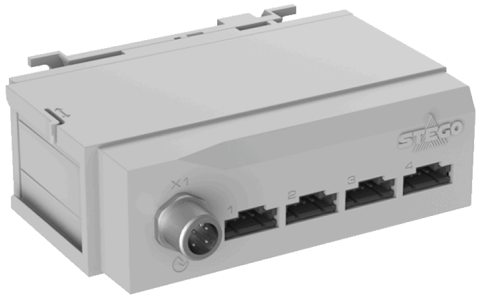
Current in relation to temperature with 3 active relays



Connection example

SENSOR HUB

SHC 071



This interface adds IO-Link functionality to digital STEGO sensors. Measurement data from up to four external, non-IO-Link-capable sensors is transmitted to an IO-Link master. The sensor hub thus quadruples the capacity of a port on the IO-Link master. That's how easy it is to turn a digital STEGO sensor into an IO-Link sensor.

- Connection of up to four digital STEGO sensors (see version table below) to an IO-Link master
- Quick connection: M12 male connector
- Connector for sensors

OVERVIEW TECHNICAL DATA

Measurement signal	4 slots SEN 073
Electrical protection	Reverse polarity protection, short-circuit proof, overvoltage protection
Protection class	III
Protection type	IP40
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	24 V
Power consumption	0,5 W
Operating temperature	-40 °C - 80 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection	M12 round plug, IEC 61076-2-101, 4-pin, A-coded, shielded
Design	IO-Link (Version 1.1)
Mounting	Clip for 35 mm DIN rail, EN 60715 and M5 screw fixing
Setup height	≤4000 m
Height	35 mm
Width	107 mm
Depth	87 mm
Weight	110 g
Note	Sensors SEN 073 not included in article number

PRODUCT VARIANTS

Article number
07100.2-00

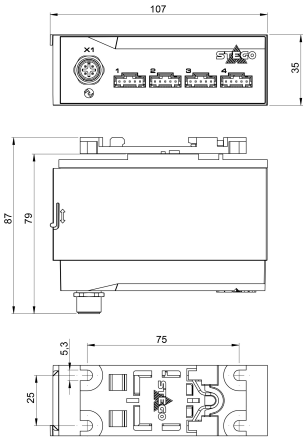
CABLES

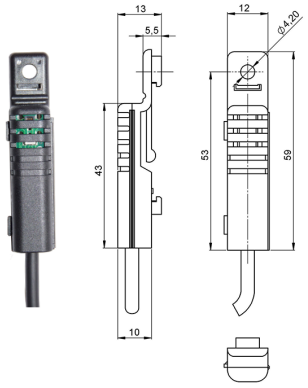
Article number	Connection
244446	for self-assembly, incl. M12 cable socket IEC 61076-2-101, 4-pole, A-coded, shielded
244445	Fully assembled with M12 cable socket IEC 61076-2-101, 4-pin, A-coded, shielded
244447	for self-assembly, incl. M12 cable socket IEC 61076-2-101, 4-pole, A-coded, shielded

SENSORS FOR SENSOR HUB

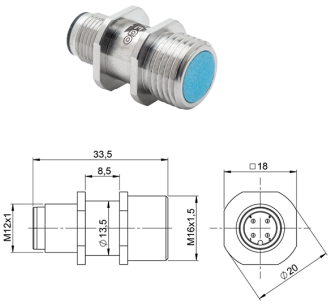
Article number	Measurement signal	Casing	Measurement range	Measurement range 2	Measurement range tolerance 2	Reaction time	Operating temperature	Operating humidity	Storage humidity	Storage temperature	Connection	Design	Setup height	Height	Width	Depth	Weight	Measurement range tolerance
07303.0-00	Air quality, temperature	Stainless steel	0 VOC index - 500 VOC index	-10 °C - 50 °C	± 0,2 K	1: t63 <10 s / 2: t63 <150 s	-10 °C - 50 °C	≤100 % RH	≤90 % RH	-40 °C - 85 °C	Male connector M12 IEC 61076-2-101, 4-pole, A-coded	SHC 071 sensor	≤4000 m	Ø 20 mm	Ø 20 mm	33,5 mm	25 g	
07300.1-01	Temperature, relative humidity	Plastic to UL94 V-0, black	-40 °C - 80 °C	0 % RH - 100 % RH	± 2 %	1: t63 <90 s / 2: t63 <7 s	-40 °C - 85 °C	≤100 % RH	≤90 % RH	-40 °C - 85 °C	Cable with male connector, shielded, 2.0 m	SHC 071 sensor	≤4000 m	13 mm	12 mm	59 mm	70 g	± 0,2 K
07302.0-00	visible light	Stainless steel	0,01 lx - 83865 lx			t90 <7 s	-40 °C - 70 °C	≤100 % RH	≤90 % RH	-40 °C - 85 °C	Male connector M12 IEC 61076-2-101, 4-pole, A-coded	SHC 071 sensor	≤4000 m	Ø 20 mm	Ø 20 mm	40 mm	25 g	± 0,2 %
07300.1-00	Temperature, relative humidity	Plastic to UL94 V-0, black	-40 °C - 80 °C	0 % RH - 100 % RH	± 2 %	1: t63 <90 s / 2: t63 <7 s	-40 °C - 85 °C	≤100 % RH	≤90 % RH	-40 °C - 85 °C	Cable with male connector, shielded, 1.0 m	SHC 071 sensor	≤4000 m	13 mm	12 mm	59 mm	40 g	± 0,2 K
07301.0-00	Absolute air pressure, temperature	Stainless steel	300 hPa - 1100 hPa	-40 °C - 70 °C	± 0,5 K	1: t63 <5 s / 2: t63 <150 s	-40 °C - 70 °C	≤100 % RH	≤90 % RH	-40 °C - 85 °C	Male connector M12 IEC 61076-2-101, 4-pole, A-coded	SHC 071 sensor	≤4000 m	Ø 20 mm	Ø 20 mm	33,5 mm	25 g	± 1,0 hPa
07300.0-00	Temperature, relative humidity	Stainless steel	-40 °C - 70 °C	0 % RH - 100 % RH	± 2 %	1: t63 <120 s / 2: t63 <20 s	-40 °C - 70 °C	≤100 % RH	≤90 % RH	-40 °C - 85 °C	Male connector M12 IEC 61076-2-101, 4-pole, A-coded	SHC 071 sensor	≤4000 m	Ø 20 mm	Ø 20 mm	33,5 mm	25 g	± 0,2 K

TECHNICAL DRAWINGS

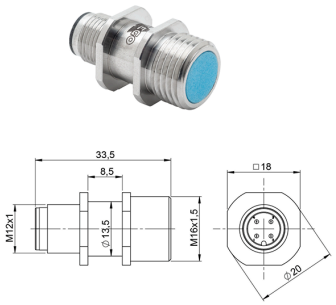




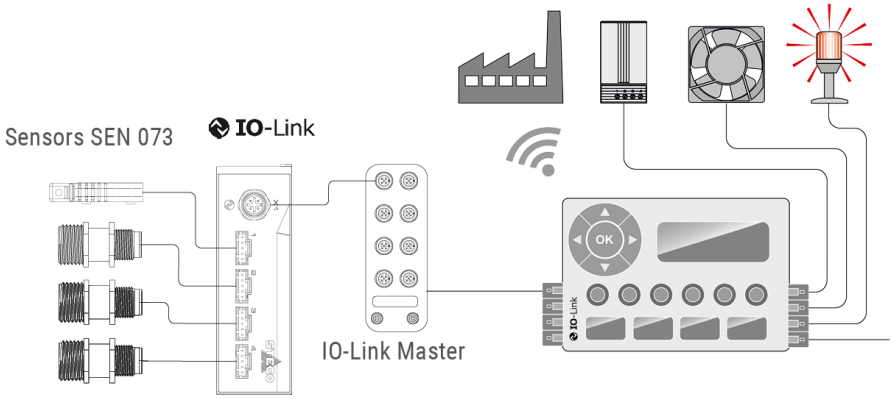
07300.1-00 | 07300.1-01



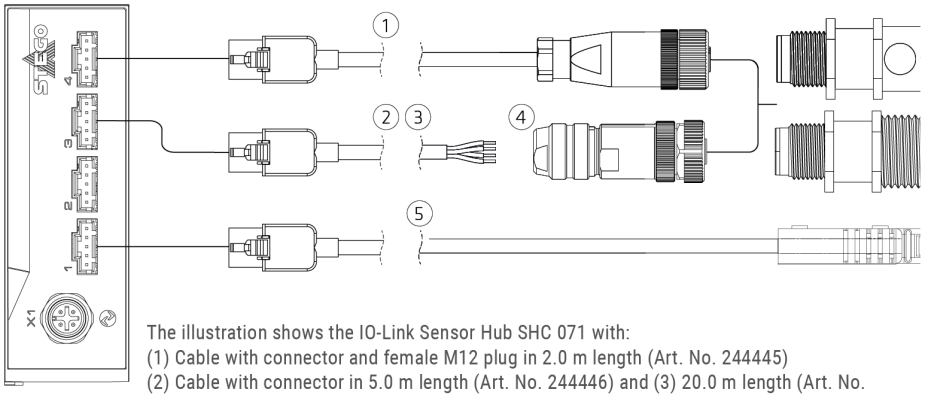
07300.0-00 | 07301.0-00 | 07303.0-00



07300.0-00 | 07301.0-00 | 07303.0-00



Connection example



The illustration shows the IO-Link Sensor Hub SHC 071 with:
(1) Cable with connector and female M12 plug in 2.0 m length (Art. No. 244445)
(2) Cable with connector in 5.0 m length (Art. No. 244446) and (3) 20.0 m length (Art. No. 244447), each incl. (4) female M12 plug for self-assembly
(5) Temperature+Humidity Sensor SEN 073, IP20, in 1.0 m or 2.0 m cable length with connector

SMART DISTANCE SENSOR

DSS 015



The compact smart distance sensor uses ultrasonic waves and the principle of time-of-flight (ToF) measurement to determine the distance to objects. It is suitable for numerous application areas in the fields of distance and level monitoring. In contrast to other distance measuring methods (measuring principle e.g. laser), the DSS 015 detects even transparent objects such as glass, film and liquids and is insensitive to changing light conditions. Connection to higher-level control systems (e.g. PLC) is very easy via the IO-Link interface.

- Digital IO-Link interface
- Small dimensions
- Versatile screw mounting
- Quick connection with M12 plug connector
- High accuracy
- Large distance measuring range

OVERVIEW TECHNICAL DATA

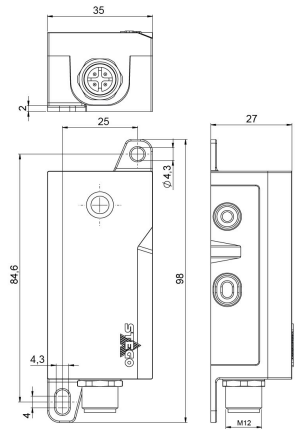
Measurement signal	Distance
Electrical protection	Reverse polarity protection, short-circuit proof, overvoltage protection
Protection class	III
Protection type	IP40
Casing	Plastic to UL94 V-0, light gray
AC/DC	DC
Operating voltage	24 V
Power consumption	0,6 W
Measurement range	0,3 m - 4 m
Measurement range tolerance	± 2 %
Operating temperature	-25 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection	M12 round plug, IEC 61076-2-101, 4-pin, A-coded, shielded
Design	IO-Link (Version 1.1)
Mounting	M4 or M3 screw fixing
Height	98 mm
Width	35 mm
Depth	27 mm
Weight	40 g

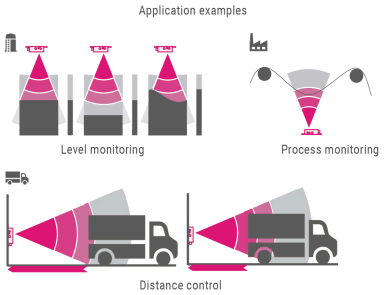
Note	Measurement resolution 1 mm;Measuring frequency 10 Hz;Aligned perpendicular to the measured object

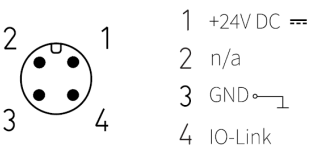
PRODUCT VARIANTS

Article number
01500.2-00

TECHNICAL DRAWINGS







LIGHTING

IDEAL LIGHTING CONDITIONS



Visibility inside control cabinets and enclosures is a key safety factor. STEGO LED lights provide clear illumination – day and night, in any installation position. They combine high luminous output with energy efficiency and long service life. Versions with motion or door switches add convenience and automatically reduce energy consumption.

NEW: LED ENCLOSURE LAMP MULTI WIDE VOLTAGE

LED 025



LED lights with Multi Wide Voltage are ideal for flexible use in enclosures and casings of different sizes. Multi Wide Voltage supports both AC and DC voltages, ensuring maximum flexibility in the application. Fewer versions mean optimized processes in procurement and materials management. The mounting kit supplied also enables simple and versatile installation.

- Multi-wide-range voltage (AC, DC)
- Internal power unit for easy connection
- Durable and maintenance-free thanks to LED technology
- Daisy chain (up to 10 lights)
- On/off switch or motion detector
- Mounting kit for magnet, screw and clip fixing

OVERVIEW TECHNICAL DATA

Illuminant	LED
Protection class	II
Protection type	IP20
Casing	Plastic, transparent
AC/DC	AC;DC
Operating voltage	24 V - 240 V
Frequency	0;50;60 Hz
Power consumption	<4,5 W
Luminous colour	6000 - 7000 K
Luminous flux	560 Lm
Energy efficiency	E
Service life	>60000 h
Operating temperature	-40 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Depth	351 mm
Weight	200 g
Note	The light must not be used for household lighting.
CCC	CCC approved

PRODUCT VARIANTS

Article number	Switch	Connection	Mounting	Height	Width
02551.0-00	Motion detector	2-pole connector with snap lock	Magnet, clip	47,3 mm	40 mm
02551.0-10	Motion detector	2-pole Duo pressure clamp for rigid wire cable 2.5 mm², stranded wire with wire end ferrule 1.5 mm²	Magnet, clip	47,3 mm	40 mm
02551.0-01	Motion detector	2-pole connector with snap lock	Screw, clip	41 mm	52 mm
02550.0-00	On/off switch	2-pole connector with snap lock	Magnet, clip	42 mm	40 mm
02552.0-11	without	2-pole Duo pressure clamp for rigid wire cable 2.5 mm², stranded wire with wire end ferrule 1.5 mm²	Screw, clip	36 mm	52 mm
02550.0-11	On/off switch	2-pole Duo pressure clamp for rigid wire cable 2.5 mm², stranded wire with wire end ferrule 1.5 mm²	Screw, clip	36 mm	52 mm
02551.0-11	Motion detector	2-pole Duo pressure clamp for rigid wire cable 2.5 mm², stranded wire with wire end ferrule 1.5 mm²	Screw, clip	41 mm	52 mm
02552.0-10	without	2-pole Duo pressure clamp for rigid wire cable 2.5 mm², stranded wire with wire end ferrule 1.5 mm²	Magnet, clip	42 mm	40 mm
02550.0-10	On/off switch	2-pole Duo pressure clamp for rigid wire cable 2.5 mm², stranded wire with wire end ferrule 1.5 mm²	Magnet, clip	42 mm	40 mm
02550.0-01	On/off switch	2-pole connector with snap lock	Screw, clip	36 mm	52 mm

CONNECTION CABLE WITH FEMALE CONNECTOR AND OPEN END

Article number	Usage	Color	AC/DC	Design	Depth
244356	for entrance side	Female connector: white|Cable: white	AC	Connection cable 2 x 1.5 mm² with female connector	2000 mm
244357	for entrance side	Female connector: white|Cable: white	AC	Connection cable 2 x AWG 15 with female connector	2000 mm

EXTENSION CABLE WITH FEMALE AND MALE CONNECTORS FOR DAISY CHAIN WIRING

Article number	Usage	Color	AC/DC	Design	Depth
244359	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x AWG 16 with female and male connectors	1000 mm
244358	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x 1.5 mm² with female and male connectors	1000 mm

FEMALE/MALE CONNECTORS

Article number	Usage	Color	AC/DC	Design	Cable cross section
264057	for entrance side	white	AC	Female connector	0.5-2.5 mm² (AWG 14-20)
264058	for output side	white	AC	Male connector	0.5-2.5 mm² (AWG 14-20)

TECHNICAL DRAWINGS

Cable accessories



1 Connection cable, Art. No. 244356



2 Extension cable, Art. No. 244358

Connector accessories

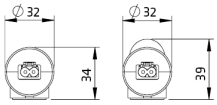


Female connector, Art. No. 264057

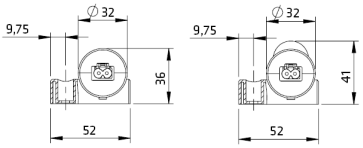


Male connector, Art. No. 264058

Side view magnet fixing



Side view screw fixing



Side view clip fixing

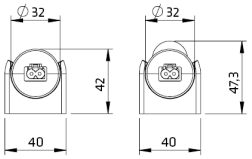
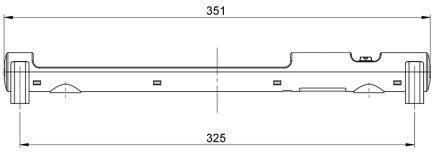
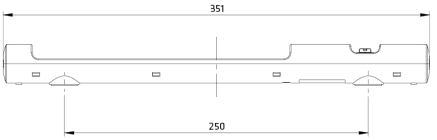


Illustration based on plug connection.



LED 025 multi wide voltage with clip fixing



LED 025 multi wide voltage with magnet or screw fixing

Cable accessories



1 Connection cable, Art. No. 244356



2 Extension cable, Art. No. 244358

Connector accessories

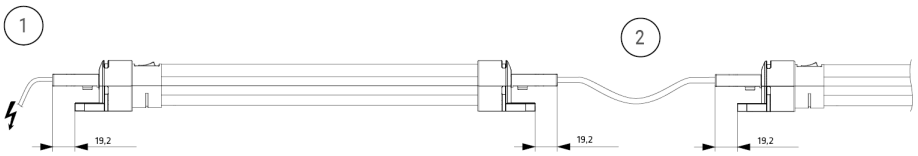


Female connector, Art. No. 264057



Male connector, Art. No. 264058

Connection example



Daisy chain application with max. 8 lamps conveniently connected via connection plugs. The snap lock connectors ensure a stable electrical connection even if subjected to heavy vibration. The example shows a AC 230 V application, using the following cables: connection cable with female connector, Art. No. 244356 (1); daisy chain extension cable with 2 connectors, Art. No. 244358 (2).

Female/male connectors are also available to assemble cables in non-standard lengths.

NEW: LED ENCLOSURE LAMP

SL 025



The flat LED light SL 025 with on/off switch and motion detector is ideal for use in cabinets and casings with electrical/electronic components with a high component density. It can be mounted narrow-sided or wide-sided with screws, or with magnet fixing at any desired position in steel cabinets without installation effort. Thanks to its integrated socket, the SL025 enables the operation of additional electrical devices. The integrated motion detector also replaces a door switch.

- Flat casing
- Wide voltage range
- Light with socket
- Screw and magnet fixing
- LED light element
- Switch and motion detector in one device
- Can be used worldwide certified

OVERVIEW TECHNICAL DATA

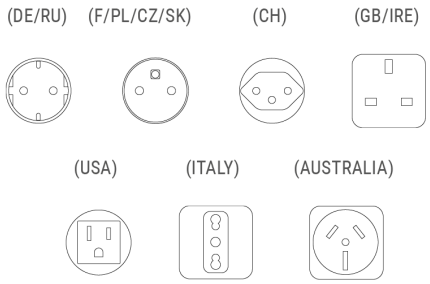
Switch	On/off switch and motion detector
Illuminant	LED
Protection class	I
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Frequency	50;60 Hz
Power consumption	4 W
Luminous colour	6000 - 7000 K
Luminous flux	560 Lm
Service life	>60000 h
Operating temperature	-40 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Torque	0,8 Nm max.
Connection	Clamp 2.5 mm² with strain relief
Mounting	Screw / magnet
Installation position	any
Height	91 mm
Width	40 mm

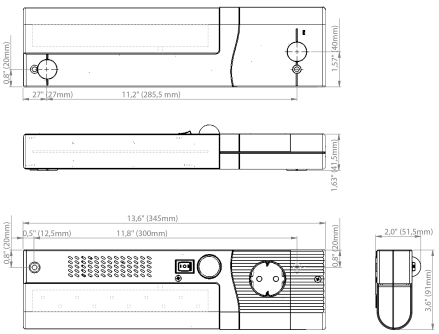
Depth	345 mm
Weight	385 g
Note	The socket is operated with mains voltage connected; motion detector has approx. 5 min. fixed duty cycle; motion detector cannot detect movement through glass doors.

PRODUCT VARIANTS

Article number	Socket	Operating voltage	Operating socket	Nominal current socket	CCC
02535.1-00	IT	100 V - 240 V	250 V	16 A	
02530.1-00	DE/RU	100 V - 240 V	250 V	16 A	
02534.1-00	USA	100 V - 120 V	125 V	15 A	
02536.1-00	AU	100 V - 240 V	240 V	10 A	CQC
02532.1-00	CH	100 V - 240 V	250 V	10 A	
02533.1-00	GB/IRE	100 V - 240 V	250 V	13 A	
02531.1-00	FR	100 V - 240 V	250 V	16 A	

TECHNICAL DRAWINGS





LED ENCLOSURE LAMP

LED 022



The optimum lamp for enclosures: the compact and powerful Varioline LED enclosure lamp. With up to 1700 Lm luminous flux for good visibility and work safety in large enclosures. The glare-free, 360° rotatable light body is equipped with mid-power LEDs. Long, maintenance-free service life of 60,000 hours.

- Switching options: PIR motion detector, on/off switch, without switch (prepared for external switch)
- Magnet or screw fixing
- Integrated power unit, daisy chain
- Available in two lengths: 400 and 600 mm
- Emitted luminous color 6,500 K (daylight); angle of radiation 120°

OVERVIEW TECHNICAL DATA

Illuminant	LED
Protection class	II
Protection type	IP20
Casing	Plastic, translucent
AC/DC	AC
Operating voltage	100 V - 240 V
Frequency	50;60 Hz
Power consumption	16 W
Luminous colour	6500 K
Luminous flux	1730 Lm
Service life	>60000 h
Operating temperature	-40 °C - 40 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection type	Connector plug
Connection	2-pole connector with snap lock
Mounting	Screw
Height	44 mm
Width	44 mm
Depth	600 mm
Weight	300 g

PRODUCT VARIANTS

Article number	Switch
02220.0-00	without
02200.0-00	On/off switch

CONNECTION CABLE WITH FEMALE CONNECTOR AND OPEN END

Article number	Usage	Color	AC/DC	Design	Depth
244356	for entrance side	Female connector: white|Cable: white	AC	Connection cable 2 x 1.5 mm² with female connector	2000 mm
244357	for entrance side	Female connector: white|Cable: white	AC	Connection cable 2 x AWG 15 with female connector	2000 mm

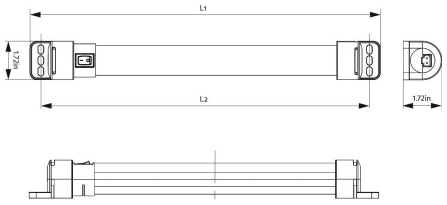
EXTENSION CABLE WITH FEMALE AND MALE CONNECTORS FOR DAISY CHAIN WIRING

Article number	Usage	Color	AC/DC	Design	Depth
244359	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x AWG 16 with female and male connectors	1000 mm
244358	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x 1.5 mm² with female and male connectors	1000 mm

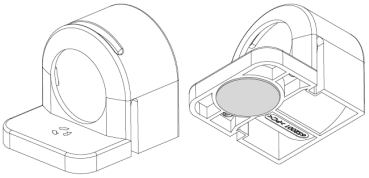
FEMALE/MALE CONNECTORS

Article number	Usage	Color	AC/DC	Design	Cable cross section
264057	for entrance side	white	AC	Female connector	0.5-2.5 mm² (AWG 14-20)
264058	for output side	white	AC	Male connector	0.5-2.5 mm² (AWG 14-20)

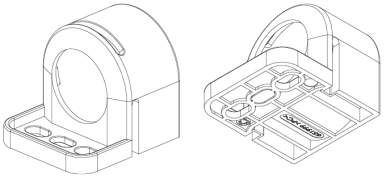
TECHNICAL DRAWINGS



Magnet fixing



Screw fixing



Connector accessories



Female connector, Art. No. 264057



Male connector, Art. No. 264058

Cable accessories



1 Connection cable, Art. No. 244356



2 Extension cable, Art. No. 244358

Connector accessories



Female connector, Art. No. 264057



Male connector, Art. No. 264058

Connector accessories



Female connector, Art. No. 264057



Male connector, Art. No. 264058

Cable accessories



1 Connection cable, Art. No. 244356



2 Extension cable, Art. No. 244358

Connector accessories

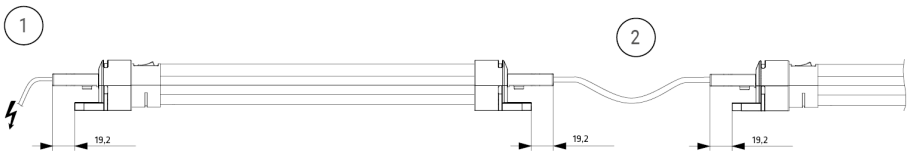


Female connector, Art. No. 264057



Male connector, Art. No. 264058

Connection example



Daisy chain application with max. 8 lamps conveniently connected via connection plugs. The snap lock connectors ensure a stable electrical connection even if subjected to heavy vibration. The example shows a AC 230 V application, using the following cables: connection cable with female connector, Art. No. 244356 (1); daisy chain extension cable with 2 connectors, Art. No. 244358 (2).

Female/male connectors are also available to assemble cables in non-standard lengths.

LED ENCLOSURE LAMP

LED 025



Compact LED enclosure lamp. Electrical connection via male connector with snap lock. High service life of the switch cabinet lamp (LED) of 60,000 hours. Mounting by magnet, clip or screw fixing. Luminaire body can be rotated through 180°, angle of radiation 120° for optimum illumination.

- Switching options: PIR motion detector, on/off switch
- Wide-range voltage
- Luminous flux 400 Lm
- Luminous color: 6000 to 7000 K (daylight white)
- Daisy chain

OVERVIEW TECHNICAL DATA

Illuminant	LED
Protection class	II
Protection type	IP20
Casing	Plastic, transparent
Frequency	50;60 Hz
Power consumption	<4 W
Luminous colour	6000 - 7000 K
Luminous flux	400 Lm
Service life	>60000 h
Operating temperature	-40 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection type	Connector plug
Connection	2-pole connector with snap lock
Depth	351 mm
Weight	200 g
Note	The light must not be used for household lighting.
CCC	CCC approved

PRODUCT VARIANTS

Article number	Switch	AC/DC	Operating voltage	Mounting	Height	Width
02540.0-00	On/off switch	AC	100 V - 240 V	Magnet	34 mm	32 mm
02540.1-01	On/off switch	DC	24 V - 48 V	Screw	36 mm	52 mm
02540.0-01	On/off switch	AC	100 V - 240 V	Screw	36 mm	52 mm
02541.0-00	Motion detector	AC	100 V - 240 V	Magnet	39 mm	32 mm
02541.0-03	Motion detector	AC	100 V - 240 V	Clip	47,3 mm	40 mm
02541.0-01	Motion detector	AC	100 V - 240 V	Screw	41 mm	52 mm
02540.1-00	On/off switch	DC	24 V - 48 V	Magnet	34 mm	32 mm
02541.1-00	Motion detector	DC	24 V - 48 V	Magnet	39 mm	32 mm
02541.1-01	Motion detector	DC	24 V - 48 V	Screw	41 mm	52 mm
02541.1-03	Motion detector	DC	24 V - 48 V	Clip	47,3 mm	40 mm
02540.0-03	On/off switch	AC	100 V - 240 V	Clip	42 mm	40 mm
02540.1-03	On/off switch	DC	24 V - 48 V	Clip	42 mm	40 mm

CONNECTION CABLE WITH FEMALE CONNECTOR AND OPEN END

Article number	Usage	Color	AC/DC	Design	Depth
244360	for entrance side	Female connector: white|Cable: white	DC	Connection cable 2 x 0.75 mm² with female connector	2000 mm
244361	for entrance side	Female connector: white|Cable: white	AC	Connection cable 2 x AWG 15 with female connector	2000 mm
244356	for entrance side	Female connector: white|Cable: white	AC	Connection cable 2 x 1.5 mm² with female connector	2000 mm
244357	for entrance side	Female connector: white|Cable: white	AC	Connection cable 2 x AWG 15 with female connector	2000 mm

EXTENSION CABLE WITH FEMALE AND MALE CONNECTORS FOR DAISY CHAIN WIRING

Article number	Usage	Color	AC/DC	Design	Depth
244359	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x AWG 16 with female and male connectors	1000 mm
244363	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x AWG 15 with female and male connectors	1000 mm
244358	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x 1.5 mm² with female and male connectors	1000 mm
244362	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x 1.5 mm² with female and male connectors	1000 mm

FEMALE/MALE CONNECTORS

Article number	Usage	Color	AC/DC	Design	Cable cross section
264059	for entrance side	blue	DC	Female connector	0.5-2.5 mm² (AWG 14-20)
264057	for entrance side	white	AC	Female connector	0.5-2.5 mm² (AWG 14-20)
264060	for output side	blue	DC	Male connector	0.5-2.5 mm² (AWG 14-20)
264058	for output side	white	AC	Male connector	0.5-2.5 mm² (AWG 14-20)

TECHNICAL DRAWINGS

Cable accessories



1 Connection cable, Art. No. 244356



2 Extension cable, Art. No. 244358

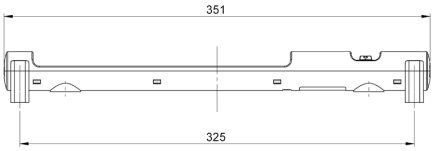
Connector accessories



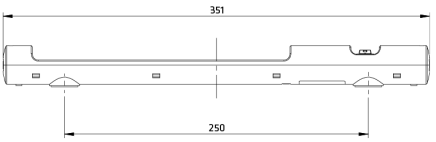
Female connector, Art. No. 264057



Male connector, Art. No. 264058

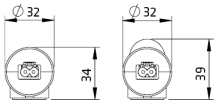


LED 025 with clip fixing

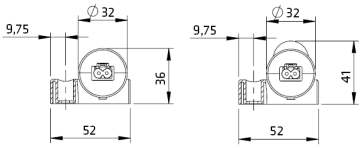


LED 025 with magnet or screw fixing

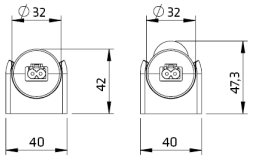
Side view magnet fixing



Side view screw fixing



Side view clip fixing



Cable accessories



1 Connection cable, Art. No. 244356



2 Extension cable, Art. No. 244358

Connector accessories

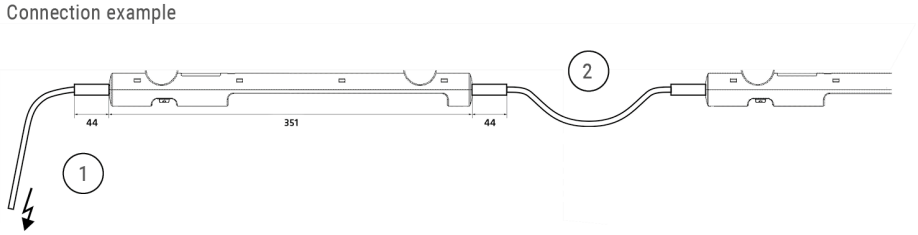


Female connector, Art. No. 264057



Male connector, Art. No. 264058

Connection example



LED 025 lamp with connector in a daisy-chain application. Up to 10 lamps can be connected via quick connection plugs. Snap-lock connectors ensure a stable electrical connection, even under heavy vibration. The example shows an AC 230 V application using a connection cable with female connector, Art. No. 244356 (1), and a daisy-chain extension cable with two connectors, Art. No. 244358 (2).

Female/male connectors are also available to assemble cables in non-standard lengths.

LED ENCLOSURE LAMP

LED 025



Space-saving Ecoline LED enclosure lamp for use in enclosures, casings and technical installation spaces with high component density. High service life of the switch cabinet lamp (LED) of 60,000 hours, mounting by magnet, clip or screw fixing. Pressure clamps for the electrical connection and daisy chain.

- Switching options: PIR motion detector, on/off switch, without switch (prepared for external switch)
- Wide-range voltage
- Luminous flux 400 Lm, daylight white: 6000 to 7000 K
- Pressure clamp connections
- Simply snaps into the clip holder, can be rotated on both sides
- Rotation angle 180° for flexible illumination (example above)

OVERVIEW TECHNICAL DATA

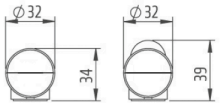
Illuminant	LED
Protection class	II
Protection type	IP20
Casing	Plastic, transparent
Frequency	50;60 Hz
Power consumption	<4 W
Luminous colour	6000 - 7000 K
Luminous flux	400 Lm
Service life	>60000 h
Operating temperature	-40 °C - 60 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection type	Connector plug
Connection	2-pole Duo pressure clamp for rigid wire cable 2.5 mm², stranded wire with wire end ferrule 1.5 mm²
Depth	351 mm
Weight	200 g
Note	DC 90 - 110 V (min. DC 80 V, max. DC 125 V);The light must not be used for household lighting.
CCC	CCC approved

PRODUCT VARIANTS

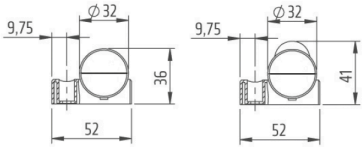
Article number	Switch	AC/DC	Operating voltage	Mounting	Height	Width
02540.3-13	On/off switch	AC	100 V - 240 V	Clip	47,3 mm	40 mm
02542.3-11	without	AC	100 V - 240 V	Screw	41 mm	52 mm
02540.3-10	On/off switch	AC	100 V - 240 V	Magnet	36 mm	32 mm
02541.3-10	Motion detector	AC	100 V - 240 V	Magnet	36 mm	32 mm
02540.3-11	On/off switch	AC	100 V - 240 V	Screw	41 mm	52 mm
02541.3-11	Motion detector	AC	100 V - 240 V	Screw	41 mm	52 mm
02542.3-13	without	AC	100 V - 240 V	Clip	47,3 mm	40 mm
02541.1-10	Motion detector	DC	24 V - 48 V	Magnet	36 mm	32 mm
02542.3-10	without	AC	100 V - 240 V	Magnet	36 mm	32 mm
02540.1-10	On/off switch	DC	24 V - 48 V	Magnet	36 mm	32 mm
02541.3-13	Motion detector	AC	100 V - 240 V	Clip	47,3 mm	40 mm
02540.1-11	On/off switch	DC	24 V - 48 V	Screw	41 mm	52 mm
02541.1-11	Motion detector	DC	24 V - 48 V	Screw	41 mm	52 mm
02541.1-13	Motion detector	DC	24 V - 48 V	Clip	47,3 mm	40 mm
02542.1-11	without	DC	24 V - 48 V	Screw	41 mm	52 mm
02542.1-10	without	DC	24 V - 48 V	Magnet	36 mm	32 mm
02540.1-13	On/off switch	DC	24 V - 48 V	Clip	47,3 mm	40 mm
02542.1-13	without	DC	24 V - 48 V	Clip	47,3 mm	40 mm

TECHNICAL DRAWINGS

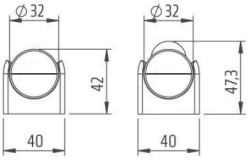
Side view magnet fixing



Side view screw fixing



Side view clip fixing





LED 025 E with magnet or screw fixing



LED 025 E with clip fixing



LED 025 E top view

LED ENCLOSURE LAMP

LED 121



The optimum lamp for enclosures: the compact and powerful Varioline LED enclosure lamp. With up to 1700 Lm luminous flux for good visibility and work safety in large enclosures. The glare-free, 360° rotatable light body is equipped with mid-power LEDs. Long, maintenance-free service life of 60,000 hours.

- Switching options: PIR motion detector, on/off switch, without switch (prepared for external switch)
- Integrated socket for: DE, FR, CH, UK, USA, IT, AUS
- Magnet or screw fixing
- Integrated power unit, daisy chain
- Available in two lengths: 500 and 700 mm
- Emitted luminous color 6,500 K (daylight); rotation angle 120° for targeted illumination

OVERVIEW TECHNICAL DATA

Switch	Motion detector
Illuminant	LED
Socket	DE/RU
Protection class	I
Protection type	IP20
Casing	Plastic, translucent
AC/DC	AC
Operating voltage	220 V - 240 V
Frequency	50;60 Hz
Power consumption	11 W
Luminous colour	6500 K
Luminous flux	1080 Lm
Nominal current socket	16 A
Service life	>60000 h
Operating temperature	-40 °C - 40 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection type	Connector plug
Connection	3-pole connector with snap lock
Height	44 mm
Width	100 mm

Depth	500 mm
Weight	300 g
Note	The light must not be used for household lighting.

PRODUCT VARIANTS

Article number	Mounting
12110.0-30	Magnet
12110.0-00	Screw

CONNECTION CABLE WITH FEMALE CONNECTOR AND OPEN END

Article number	Usage	Color	Design	Depth
244422	for entrance side	Female connector: white|Cable: white	Extension cable 2 x 1.5 mm² with female and male connectors	4000 mm
244423	for entrance side	Female connector: white|Cable: white	Extension cable 2 x AWG 16 with female and male connectors	4000 mm

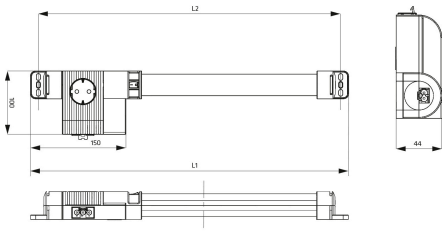
EXTENSION CABLE WITH FEMALE AND MALE CONNECTORS FOR DAISY CHAIN WIRING

Article number	Usage	Color	AC/DC	Design	Depth
244359	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x AWG 16 with female and male connectors	1000 mm
244358	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x 1.5 mm² with female and male connectors	1000 mm

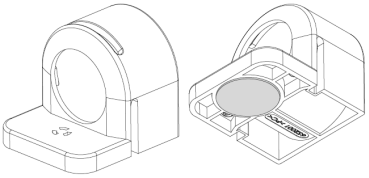
FEMALE/MALE CONNECTORS

Article number	Usage	Color	AC/DC	Design	Cable cross section
264090	for door contact	gray	AC	Male connector	0.5-2.5 mm2 (AWG 14-20)
264093	for input side and daisy chain	white	AC	Female connector	0.75-2.5 mm2 (AWG 14-18)
264091	for entrance side	white	AC	Female connector	0.75-2.5 mm2 (AWG 14-18)

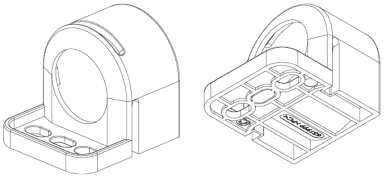
TECHNICAL DRAWINGS



Magnet fixing



Screw fixing



Connector accessories



Female connector, Art. No. 264093



Female connector, Art. No. 264091



Male connector, Art. No. 264090

Cable accessories



1 Connection cable, Art. No. 244422



2 Extension cable, Art. No. 244358



3 Connection cable, Art. No. 244424

Connector accessories



Female connector, Art. No. 264093



Female connector, Art. No. 264091



Male connector, Art. No. 264090

Cable accessories



1 Connection cable, Art. No. 244422

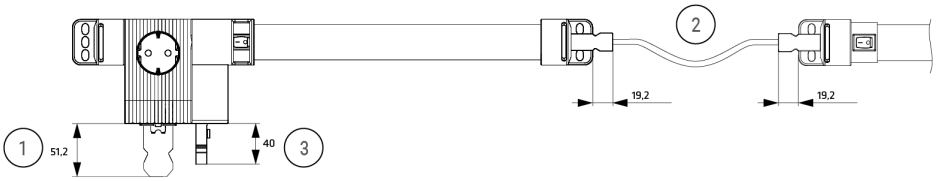


2 Extension cable, Art. No. 244358



3 Connection cable, Art. No. 244424

Connection example



The lamps are conveniently connected via connection plugs - up to 8 lamps max. can be daisy-chained this way. Female/male connectors are also available to assemble cables in non-standard lengths.

LED ENCLOSURE LAMP

LED 021



The optimum lamp for enclosures: the compact and powerful Varioline LED enclosure lamp. With up to 1700 Lm luminous flux for good visibility and work safety in large enclosures. The glare-free, 360° rotatable light body is equipped with mid-power LEDs. Long, maintenance-free service life of 60,000 hours.

- Switching options: PIR motion detector, on/off switch, without switch (prepared for external switch)
- Magnet or screw fixing
- Integrated power unit, daisy chain
- Available in two lengths: 400 and 600 mm
- Emitted luminous color 6,500 K (daylight); angle of radiation 120°

OVERVIEW TECHNICAL DATA

Illuminant	LED
Protection class	II
Protection type	IP20
Casing	Plastic, translucent
AC/DC	AC
Operating voltage	100 V - 240 V
Frequency	50;60 Hz
Power consumption	11 W
Luminous colour	6500 K
Luminous flux	1080 Lm
Service life	>60000 h
Operating temperature	-40 °C - 40 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-40 °C - 85 °C
Connection type	Connector plug
Connection	2-pole connector with snap lock
Height	44 mm
Width	44 mm
Depth	400 mm
Weight	200 g
Note	The light must not be used for household lighting;A rotation angle of 360° ensures optimally adjustable illumination.

PRODUCT VARIANTS

Article number	Switch	Mounting
02110.0-30	Motion detector	Magnet
02100.0-00	On/off switch	Screw
02120.0-00	without	Screw
02110.0-00	Motion detector	Screw
02100.0-30	On/off switch	Magnet

CONNECTION CABLE WITH FEMALE CONNECTOR AND OPEN END

Article number	Usage	Color	AC/DC	Design	Depth
244356	for entrance side	Female connector: white|Cable: white	AC	Connection cable 2 x 1.5 mm² with female connector	2000 mm
244357	for entrance side	Female connector: white|Cable: white	AC	Connection cable 2 x AWG 15 with female connector	2000 mm

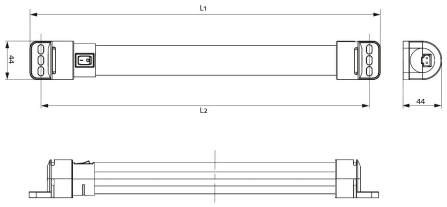
EXTENSION CABLE WITH FEMALE AND MALE CONNECTORS FOR DAISY CHAIN WIRING

Article number	Usage	Color	AC/DC	Design	Depth
244359	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x AWG 16 with female and male connectors	1000 mm
244358	Daisy chain	Female/male connectors: white|Cable: white	DC	Extension cable 2 x 1.5 mm² with female and male connectors	1000 mm

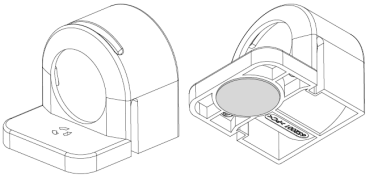
FEMALE/MALE CONNECTORS

Article number	Usage	Color	AC/DC	Design	Cable cross section
264057	for entrance side	white	AC	Female connector	0.5-2.5 mm² (AWG 14-20)
264058	for output side	white	AC	Male connector	0.5-2.5 mm² (AWG 14-20)

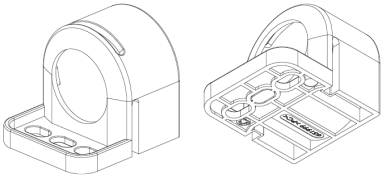
TECHNICAL DRAWINGS



Magnet fixing



Screw fixing



Cable accessories



1 Connection cable, Art. No. 244356



2 Extension cable, Art. No. 244358

Connector accessories



Female connector, Art. No. 264057



Male connector, Art. No. 264058

Cable accessories



1 Connection cable, Art. No. 244356



2 Extension cable, Art. No. 244358

Connector accessories

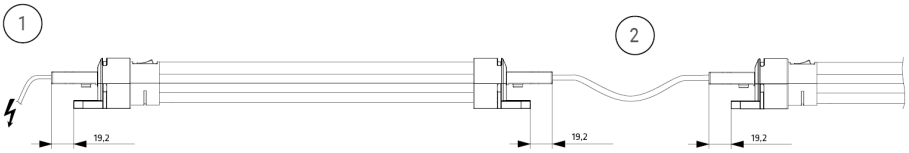


Female connector, Art. No. 264057



Male connector, Art. No. 264058

Connection example

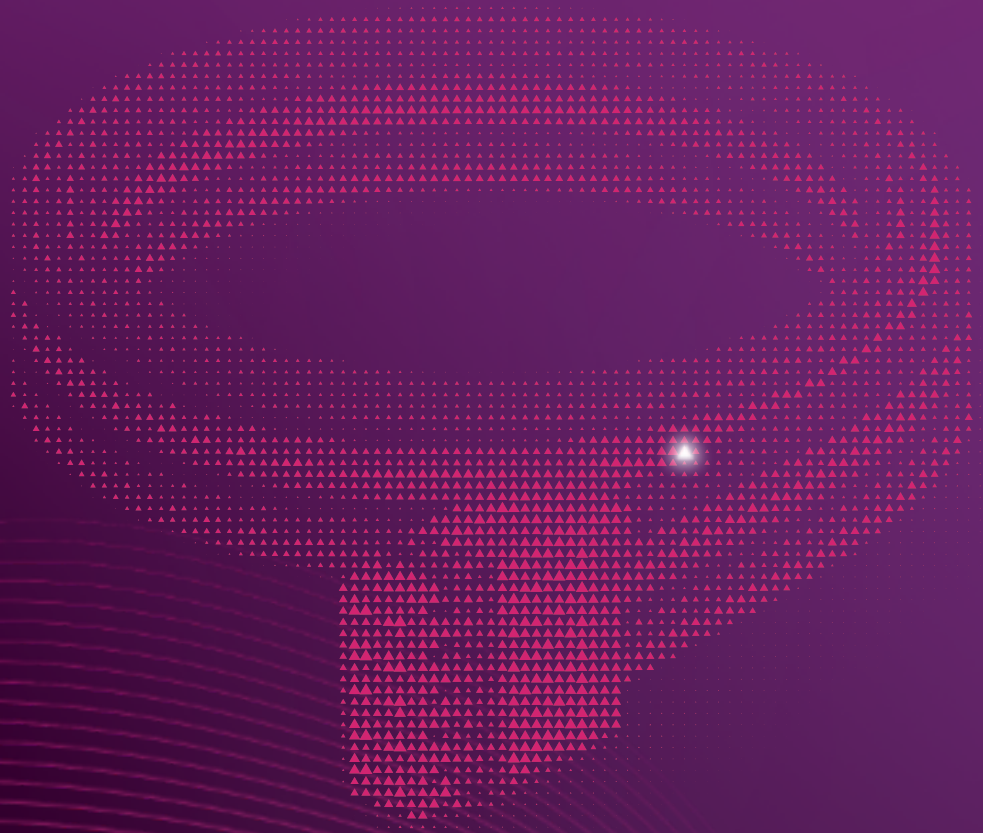


Daisy chain application with max. 8 lamps conveniently connected via connection plugs. The snap lock connectors ensure a stable electrical connection even if subjected to heavy vibration. The example shows a AC 230 V application, using the following cables: connection cable with female connector, Art. No. 244356 (1); daisy chain extension cable with 2 connectors, Art. No. 244358 (2).

Female/male connectors are also available to assemble cables in non-standard lengths.

ACCESSORIES

COMPLETE ELECTRONICS PROTECTION



STEGO accessories expand the climate control portfolio into complete system solutions. Pressure compensation and drainage elements, sockets, switches and mounting components functionally complement heating, cooling and control technology and allow application-specific customization. The result is holistic electronics protection – precisely tailored to individual requirements.

DOOR SWITCH

DS 013



Door switch for monitoring the position of enclosure doors and triggering further actions. Depending on requirements, this can, for example, switch on lighting (NC) when the enclosure door is opened or activate ventilation (NO) when the door is closed. The design with changeover contact (CO) enables use as a normally closed and/or normally open contact.

- Three designs: NC, NO and CO
- Flexible positioning without tools
- Large mechanical setting range

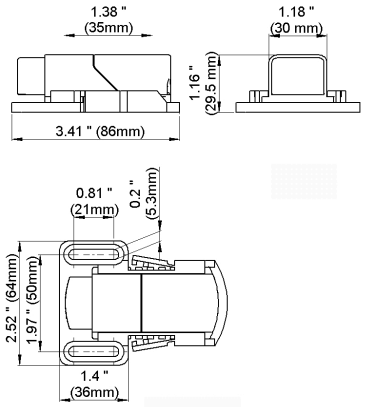
OVERVIEW TECHNICAL DATA

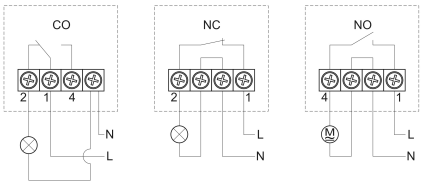
Contact type	Snap-action contact
Protection type	IP20
Casing	Plastic to UL94 V-0, black
AC/DC	AC
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	AC 250 V: 8 (1.5) A
Service life	>10000 cycles
Operating temperature	-20 °C - 85 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-20 °C - 85 °C
Torque	0,5 Nm max.
Connection	4-pole clamp
Mounting	Screw fixing (M5)
Installation position	any
Height	64 mm
Width	30 mm
Depth	87 mm
Weight	50 g

PRODUCT VARIANTS

Article number	Design
01350.0-00	Change-over contact
01351.0-00	Normally closed (NC)

TECHNICAL DRAWINGS





STEGOFIX PLUS DEVICE HOLDER

SFP 095



The STEGOFIX PLUS device holder is a flexible alternative to the 35 mm DIN rail. It enables quick and easy installation of small or additional devices that are designed for mounting on DIN rails. The STEGOFIX PLUS is suitable for devices with a clip width of max. 66 mm and with its versions - screw fixing in 25 mm increments, high-performance adhesive tape and rubberized neodymium magnets - offers the right mounting method for almost any application.

- Alternative to 35 mm DIN rail
- Simple, flexible installation
- For devices and sockets with DIN rail clip
- Screw fixing
- Adhesive tape mounting (self-adhesive)
- Magnet fixing

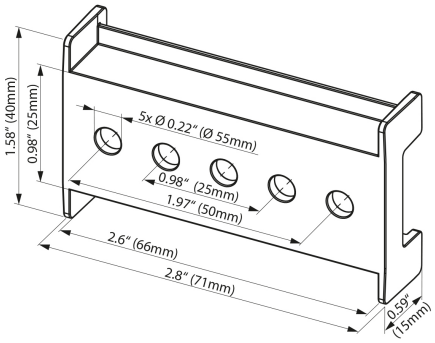
OVERVIEW TECHNICAL DATA

Casing	Plastic to UL94 V-0, black
Operating temperature	-35 °C - 75 °C
Storage temperature	
Height	40 mm
Width	71 mm
Depth	15 mm
Weight	13 g
Note	max. clip width 66 mm;screws not included

PRODUCT VARIANTS

Article number	Mounting
09550.0-05	M5 screw fixing
09550.1-05	Adhesive fixing
09550.2-05	Magnet fixing

TECHNICAL DRAWINGS





PRESSURE COMPENSATION DEVICE

DA 284



Passive pressure compensation element for casings and enclosures. Levels temperature-induced pressure differences between the inside and outside of the enclosure. Air humidity escapes through a waterproof membrane. The formation of condensate is prevented.

- Thread sizes: M12 and M40
- NBR membrane
- Water and dirt-tight, IP66

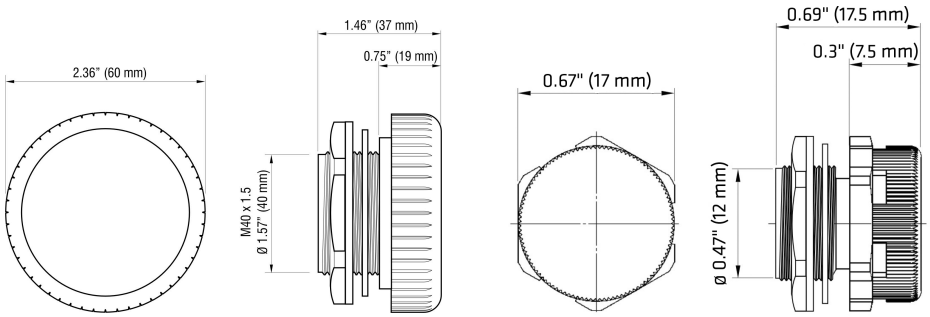
OVERVIEW TECHNICAL DATA

Protection type	IP66 / IP68 (EN60529) / IPX9K (EN40050-9)
Material sealing	NBR
Filter mat	waterproof membrane
Operating temperature	-35 °C - 70 °C
Storage temperature	-35 °C - 70 °C
Note	Material limit values are complied with in accordance with RoHS3.

PRODUCT VARIANTS

Article number	Packaging unit	Material hood	Casing	Air permeability	Torque	Cut-out dimensions	Mounting	Height	Width	Depth	Installation depth	Weight
28405.0-00	2 Piece	Plastic to UL94 V-0, light gray	Plastic to UL94 V-0, light gray	1200 l/h	5 Nm max.	Ø40,5 +0,5 mm	M40 x 1.5	Ø60 mm	Ø60 mm	37 mm	approx. 16 mm	60 g
28400.0-00	2 Piece	Plastic, light gray	Plastic, light gray	1200 l/h	5 Nm max.	Ø40,5 +0,5 mm	M40 x 1.5	Ø60 mm	Ø60 mm	37 mm	approx. 16 mm	45 g
28400.0-01	1 Piece	Plastic, light gray	Plastic, light gray	1200 l/h	5 Nm max.	Ø40,5 +0,5 mm	M40 x 1.5	Ø60 mm	Ø60 mm	37 mm	approx. 16 mm	45 g
28406.0-00	2 Piece	Plastic to UL94 V-0, light gray	Plastic to UL94 V-0, light gray	120 l/h	0,5 Nm max.	Ø12 +0,2 mm	M12 x 1.5	Ø17 mm	Ø17 mm	17,5 mm	approx. 8 mm	2 g
28400.0-04	100 Piece	Plastic, light gray	Plastic, light gray	1200 l/h	5 Nm max.	Ø40,5 +0,5 mm	M40 x 1.5	Ø60 mm	Ø60 mm	37 mm	approx. 16 mm	45 g

TECHNICAL DRAWINGS



DRAINAGE DEVICE

DD 084





Drainage device for draining condensation from casings. In compliance with protection type IP66. No splash water penetrates as a water flow-through membrane drains the enclosure by capillary action.

- IP66 protection type
- Easy installation
- Weatherproof, splash-proof

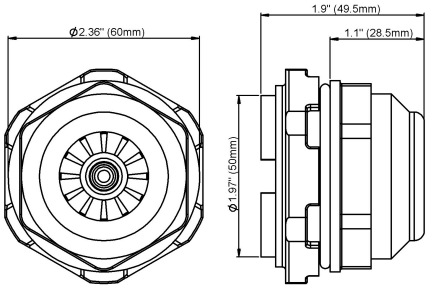
OVERVIEW TECHNICAL DATA

Protection type	IP66/IP69K(EN40050-9)
Material sealing	NBR
Material hood	Plastic, umbra gray
Casing	Plastic, black
Operating temperature	-45 °C - 70 °C
Storage temperature	-45 °C - 70 °C
Cut-out dimensions	Ø50 +0,5 mm
Mounting	M50 x 1.5
Height	Ø60 mm
Width	Ø60 mm
Depth	37 mm
Installation depth	21 mm
Weight	60 g
Note	200 ml/h with a water column of 5 mm; permissible wall thickness 0.5 - 5.5 mm Installation instructions: The drainage element is fastened in the base of the housing using the union nut in a hole of Ø 50.5+0.5 mm using the union nut. Ensure that the sealing gasket is located on the outer housing wall and that the hole is free of burrs. hole is free of burrs.

PRODUCT VARIANTS

Article number
08410.0-00

TECHNICAL DRAWINGS



ELECTRICAL SOCKET

SD 035



Electrical socket for installation on 35 mm DIN rail. Quick, screwless electrical connection using pressure clamps. Designs with and without fuse are available.

- Versions with and without fuse
- Quick mounting
- Electrical connection with pressure clamps
- Large variety of country-specific versions

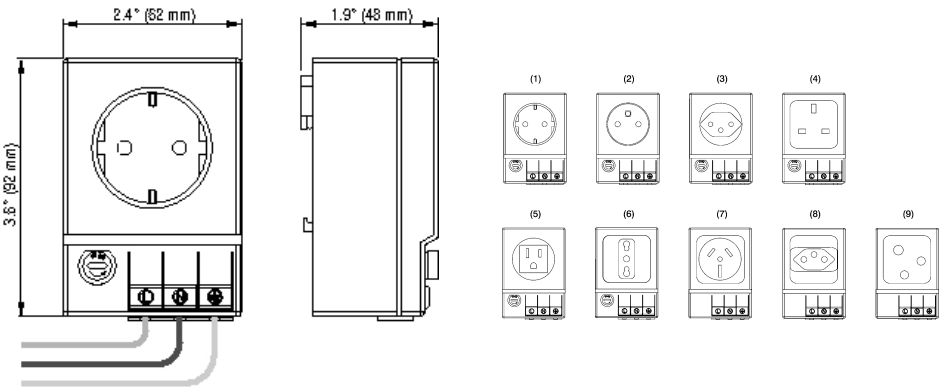
OVERVIEW TECHNICAL DATA

Protection class	I
Protection type	IP20
Casing	Plastic to UL94 V-0, light gray
AC/DC	AC
Frequency	50;60 Hz
Operating socket	
Operating temperature	-45 °C - 70 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 70 °C
Connection	3 x pressure clamps for stranded wire and rigid wire 0.5 - 2.5 mm²
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	92 mm
Width	62 mm
Depth	48 mm
Weight	200 g
Note	With fuse: Microfuse Ø 5 x 20 mm

PRODUCT VARIANTS

Article number	Socket	Nominal current socket	Design
03504.0-00	US/CA	6 A	with fuse
03505.0-01	IT	16 A	Without fuse
03508.0-01	BR	10 A	Without fuse
03505.0-00	IT	6 A	with fuse
03509.0-01	Old British BS 546	5 A	Without fuse
03503.0-00	UK/IRL	6 A	with fuse
03502.0-01	CH	10 A	Without fuse
03500.0-01	DE/RU	16 A	Without fuse
03502.0-00	CH	6 A	with fuse
03501.0-00	F/PL/CZ/SK	6 A	with fuse
03504.0-01	US/CA	15 A	Without fuse
03500.0-00	DE/RU	6 A	with fuse
03501.0-01	F/PL/CZ/SK	16 A	Without fuse
03503.0-01	UK/IRL	13 A	Without fuse
03507.0-01	AU	10 A	Without fuse

TECHNICAL DRAWINGS



VENTILATION CABLE GLAND

DAK 284



Passive pressure compensation element for the safe insertion of cables and wires into a casing. Levels temperature-induced pressure differences between the inside and outside of the enclosure. Air humidity escapes through a waterproof filter. The formation of condensate is prevented.

- Thread sizes: M12, M16 and M20
- NBR sealing gasket
- Water and dirt-tight
- Protection type IP66 / IP67

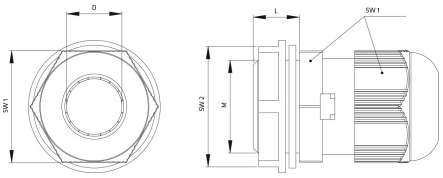
OVERVIEW TECHNICAL DATA

Packaging unit	1 Piece
Protection type	IP66 / IP67
Material sealing	NBR
Material hood	Plastic, light gray
Filter mat	waterproof membrane
Casing	Plastic, light gray
Operating temperature	-20 °C - 80 °C
Storage temperature	-20 °C - 80 °C

PRODUCT VARIANTS

Article number	Air permeability	Cut-out dimensions	Mounting	Depth	Installation depth	Weight	Note
28411.0-00	25 l/h	Ø16 mm	M16 x 1.5	10 mm	< 10 mm	8 g	Clamping range 4 - 7 mm
28412.0-00	40 l/h	Ø20 mm	M20 x 1.5	10 mm	< 10 mm	7 g	Clamping range 6 - 11 mm
28410.0-00	25 l/h	Ø12 mm	M12 x 1.5	8 mm	< 8 mm	7 g	Clamping range 4 - 7 mm

TECHNICAL DRAWINGS



PRESSURE COMPENSATION DEVICE

DA 084



In tightly sealed enclosures and casings, internal or external heat influences cause temperature fluctuations due to different pressure ratios. Pressure compensation devices compensate for pressure changes while maintaining a high protection type and preventing the ingress of dust and air humidity. The pressure compensation devices are suitable for use in enclosures and casings in accordance with DIN EN 62208.

- NBR sealing gasket
- Protection type IP55

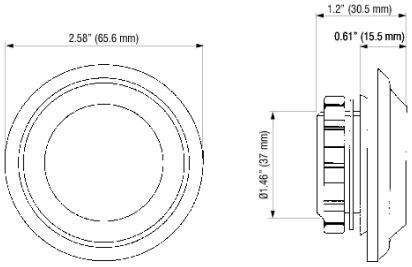
OVERVIEW TECHNICAL DATA

Protection type	IP55
Material sealing	NBR
Material hood	Plastic, light gray
Casing	Plastic, light gray
Operating temperature	-45 °C - 70 °C
Storage temperature	-45 °C - 70 °C
Torque	5 Nm max.
Connection	Anzugsmoment 5 Nm
Cut-out dimensions	Ø37 mm
Mounting	M40 x 1.5
Height	Ø65,5 mm
Width	Ø65,5 mm
Depth	30,5 mm
Installation depth	15 mm
Weight	31 g
Note	Packaging unit: 2 pieces;If the DA 084 is not installed vertically, the protection type is reduced to IP54. ;

PRODUCT VARIANTS

Article number
08400.0-02-9002

TECHNICAL DRAWINGS



SNAP-IN PRESSURE COMPENSATION ELEMENT

DA 284





Passive pressure compensation element for casings and enclosures. Levels temperature-induced pressure differences between the inside and outside of the enclosure. Air humidity escapes through a waterproof membrane. The formation of condensate is prevented.

- Waterproof membrane
- Water and dirt-tight, IP66
- Simple installation, no screw connection required

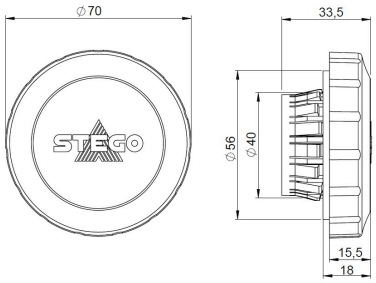
OVERVIEW TECHNICAL DATA

Packaging unit	1 Piece
Protection type	IP66 /IPX9K (EN40050-9)
Material sealing	EPDM
Material hood	Plastic, light gray
Filter mat	waterproof membrane
Casing	Plastic, light gray
Air permeability	2000 l/h
Operating temperature	-35 °C - 70 °C
Storage temperature	-35 °C - 70 °C
Cut-out dimensions	Ø40,5 +0,5 mm
Mounting	Ø40 Snap-In
Height	Ø70 mm
Width	Ø70 mm
Depth	33,5 mm
Installation depth	<15 mm
Weight	45 g

PRODUCT VARIANTS

Article number
28420.0-00

TECHNICAL DRAWINGS



PRESSURE COMPENSATION DEVICE

DA 284





Passive pressure compensation element for casings and enclosures. Levels temperature-induced pressure differences between the inside and outside of the enclosure. Air humidity escapes through a waterproof membrane. The formation of condensate is prevented.

- Thread sizes: M12 and M40
- NBR membrane
- Water and dirt-tight, IP66

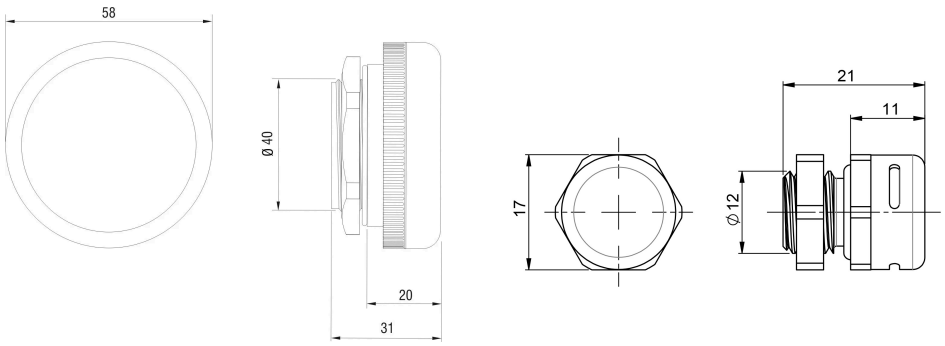
OVERVIEW TECHNICAL DATA

Packaging unit	1 Piece
Material sealing	NBR
Filter mat	waterproof membrane
Operating temperature	-35 °C - 80 °C
Storage temperature	-35 °C - 80 °C

PRODUCT VARIANTS

Article number	Protection type	Material hood	Casing	Air permeability	Torque	Cut-out dimensions	Mounting	Height	Width	Depth	Installation depth	Weight	Note
28404.0-00	IP66 / IP67	Nickel-plated aluminium	Nickel-plated aluminium	220 l/h	0,5 Nm max.	Ø12 +0,2 mm	M12 x 1.5	Ø17 mm	Ø17 mm	17,5 mm	approx. 8 mm	9 g	Material limit values are complied with in accordance with RoHS3;Air permeability at a pressure difference of min. 70 mbar; aluminium nickel-plated Corrosion testing in accordance with ISO 9227:2017
28401.0-00	IP66 (EN60529) / IPX9K (EN40050-9)	V2A	V2A	1200 l/h		Ø40,5 +0,5 mm	M40 x 1.5	Ø58 mm	Ø58 mm	31 mm	approx. 9 mm	200 g	Air permeability at a pressure difference of at least 70 mbar; V2A is not seawater-resistant
28401.0-02	IP66 (EN60529) / IPX9K (EN40050-9)	V4A	V4A	1200 l/h		Ø40,5 +0,5 mm	M40 x 1.5	Ø58 mm	Ø58 mm	31 mm	approx. 9 mm	200 g	Air permeability with a pressure difference of at least 70 mbar

TECHNICAL DRAWINGS



LOCATIONS

THE SHORT WAY TO STEGO

STEGO operates globally, providing customers worldwide with direct access to consulting, service and products. With ten subsidiaries and more than 1,500 distribution partners, we stay close to markets and ensure fast availability and technical support.

This proximity allows real-world requirements to flow directly into our development – for products that are implemented globally and available locally. Wherever electronics need protection, STEGO is your partner for reliable climate control and sustainable thermal management.



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