# Enclosure Heaters

## Touch-Safe Heaters



### INDUSTRY STANDARDS

cURus Component Recognized; File No. E150057
IP 20
CE

### APPLICATION

Protect electrical, mechanical equipment from low temperatures, condensation, and corrosion with this heater, which will maintain stable enclosure temperatures by using natural convection resulting in current circulation of warm air.

### SPECIFICATIONS

- Heating element PTC resistor – temperature limiting
- Double Insulated Protection
- Mounting clip for 35 mm DIN rail, EN 60 715
- Vertical mount

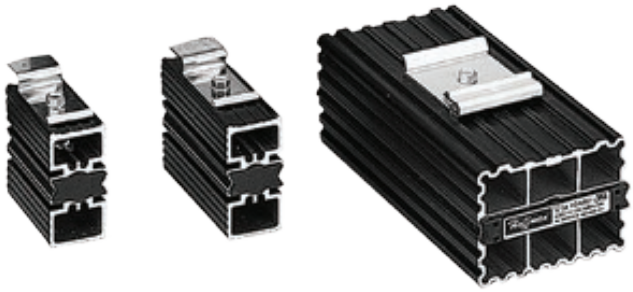
### FINISH

UL 94 V-0 Black Plastic Housing

### PERFORMANCE DATA

| Catalog Number | DAH101TS | DAH201TS | DAH501TS |
|---|---|---|---|
| **Electrical Data** | | | |
| Rated Voltage (AC/DC) | 110/120 | 110/120 | 110/120 |
| Power Consumption (Watts) | 10 | 20 | 50 |
| Start Nominal Current (Amps) | 2.5 | 4.5 | 8 |
| **Unit Construction** | | | |
| H x W x D (in./mm) | 3.9 x 1.5 x 3.0/98 x 38 x 75 | 3.9 x 1.5 x 3.0/98 x 38 x 75 | 4.3 x 2.4 x 3.5/110 x 60 x 90 |
| Weight (oz) | 5.0 | 6.1 | 10.4 |

# Semiconductor Heaters



## INDUSTRY STANDARDS

cURus Component Recognized; File No. E150057
IEC IP54
CE

## APPLICATION

Protect electrical, pneumatic, hydraulic and mechanical equipment from low temperatures, condensation and corrosion with this heater, which maintains a stable enclosure temperature.

## SPECIFICATIONS

- PTC (Positive Temperature Coefficient) heating element
- Mounting clip for 35 mm DIN rails EN 50022

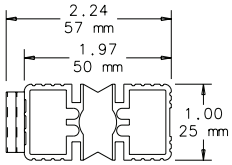
## FINISH

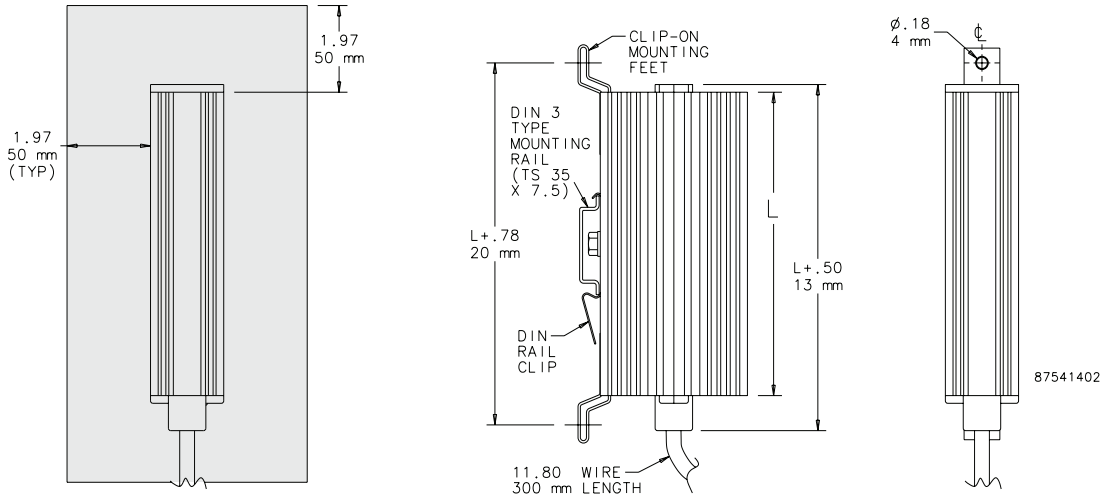
- Black anodized, extruded aluminum

## PERFORMANCE DATA SEMICONDUCTOR HEATER

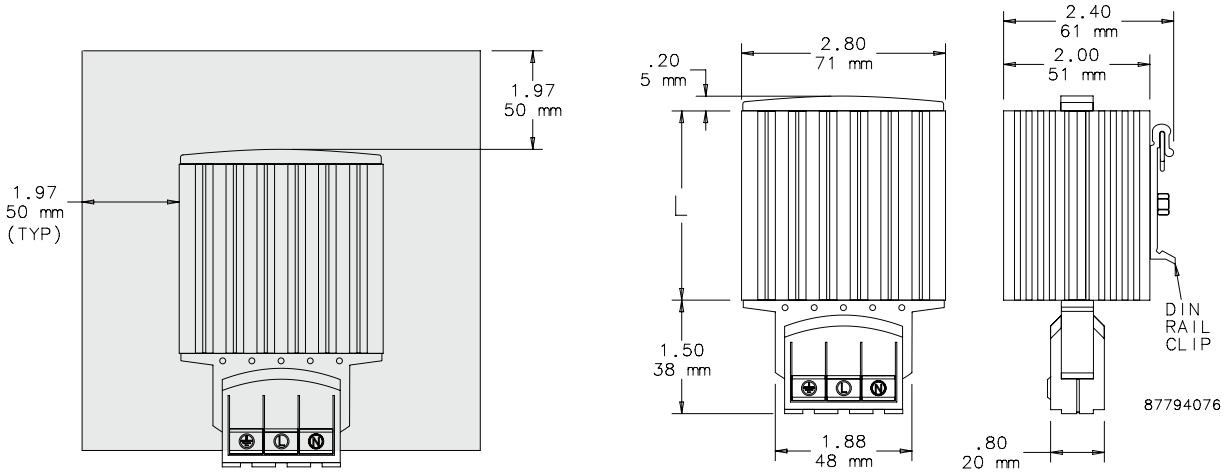
| Catalog Number | DAH101 | DAH301 | DAH601 |
|---|---|---|---|
| **Electrical Data** | | | |
| Rated Voltage (AC/DC) | 110/120 | 110/120 | 110/250 |
| Power Consumption (Watts) | 10 | 30 | 60 |
| Start Nominal Current (Amps) | 0.8 | 1.2 | 2.5 |
| **Heating Performance** | | | |
| Watts | 10 | 30 | 60 |
| **Unit Construction** | | | |
| L (in./mm) | 3.9 x 1.5 x 3.0/98 x 38 x 75 | 3.9 x 1.5 x 3.0/98 x 38 x 75 | 4.3 x 2.4 x 3.5/110 x 60 x 90 |
| Weight (lb./kg) | 0.45/0.20 | 0.66/0.30 | 1.10/0.50 |

**Clearance range for DAH101 & DAH301**



## Clearance range for DAH601



# Electric Heaters



**115/230 Volt 100/200 Watt**

**115/230 Volt 400/800 Watt**

**115/230 Volt 1300 Watt**

## INDUSTRY STANDARDS

UL 508A Component Recognized; File No. E61997
CE

## APPLICATION

Protect mechanical, electrical and electronic equipment from low temperatures, condensation and corrosion with this thermostatically controlled, fan-driven heater that maintains a stable enclosure temperature.
Fan draws cool air from the bottom of the enclosure and passes this air across the thermostat and heating element before being released into enclosure cavity. Heated air is discharged through the top of the heater unit.

## SPECIFICATIONS

- Aluminum housing
- Thermostat range adjustable from 0°F to 100°F (–18°C to 38°C)
- Four 10–32 x self-tapping screws are included with each heater
- Ball bearing fan
- Terminal strip with clamp connector that accepts both solid and stranded wire

## FINISH

- Brushed aluminum

## ⚠ CAUTION:

These electric heaters are not designed for use in dusty, dirty, corrosive, or hazardous locations. Portions of the heater can get hot. Adequate protection must be taken to protect people from potential burns, and to protect other components from this heat. nVent recommends this heater only be installed in a totally-enclosed metal enclosure.

**Do not install heaters on wood panels**

Heat sensitive components should not be placed near the heater discharge area since this air can be quite warm. The clearance range defines the space that must be kept free of these components for proper and safe operation of the heater.

## PERFORMANCE DATA 100 AND 200 WATT HEATERS

| Catalog Number | DAH1001A | DAH1002A | DAH2001A | DAH2002A |
|---|---|---|---|---|
| **Electrical Data** | | | | |
| Rated Voltage | 115 | 230 | 115 | 230 |
| Frequency (Hz) | 50/60 | 50/60 | 50/60 | 50/60 |
| Power Consumption (Watts) | 100 | 100 | 200 | 200 |
| Nominal Current (Amps) | 0.98 | 0.49 | 1.89 | 0.95 |
| **Heating Performance** | | | | |
| Watts | 100 | 100 | 200 | 200 |
| **Unit Construction** | | | | |
| Weight (lb./kg) | 1.6/0.73 | 1.6/0.73 | 1.6/0.73 | 1.6/0.73 |
| X (in./mm) | 4.00/102 | 4.00/102 | 6.00/152 | 6.00/152 |

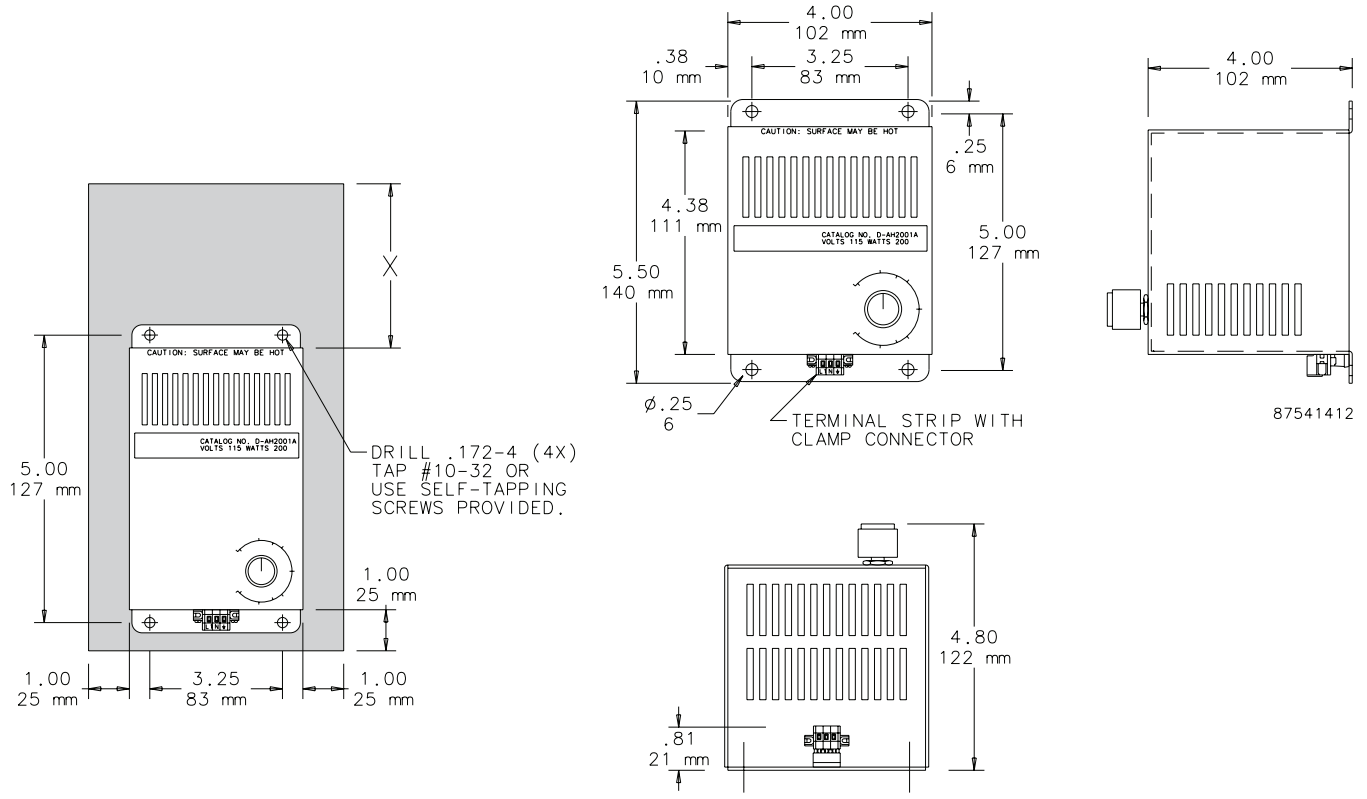
## PERFORMANCE DATA 400 AND 800 WATT HEATERS

| Catalog Number | DAH4001B | DAH4002B | DAH8001B | DAH8002B |
|---|---|---|---|---|
| **Electrical Data** | | | | |
| Rated Voltage | 115 | 230 | 115 | 230 |
| Frequency (Hz) | 50/60 | 50/60 | 50/60 | 50/60 |
| Power Consumption (Watts) | 400 | 400 | 800 | 800 |
| Nominal Current (Amps) | 3.72 | 1.86 | 7.37 | 3.69 |
| **Heating Performance** | | | | |
| Watts | 400 | 400 | 800 | 800 |
| **Unit Construction** | | | | |
| Weight (lb./kg) | 2.2/1.00 | 2.2/1.00 | 2.2/1.00 | 2.2/1.00 |
| X (in./mm) | 6.00/152 | 6.00/152 | 8.00/203 | 8.00/203 |

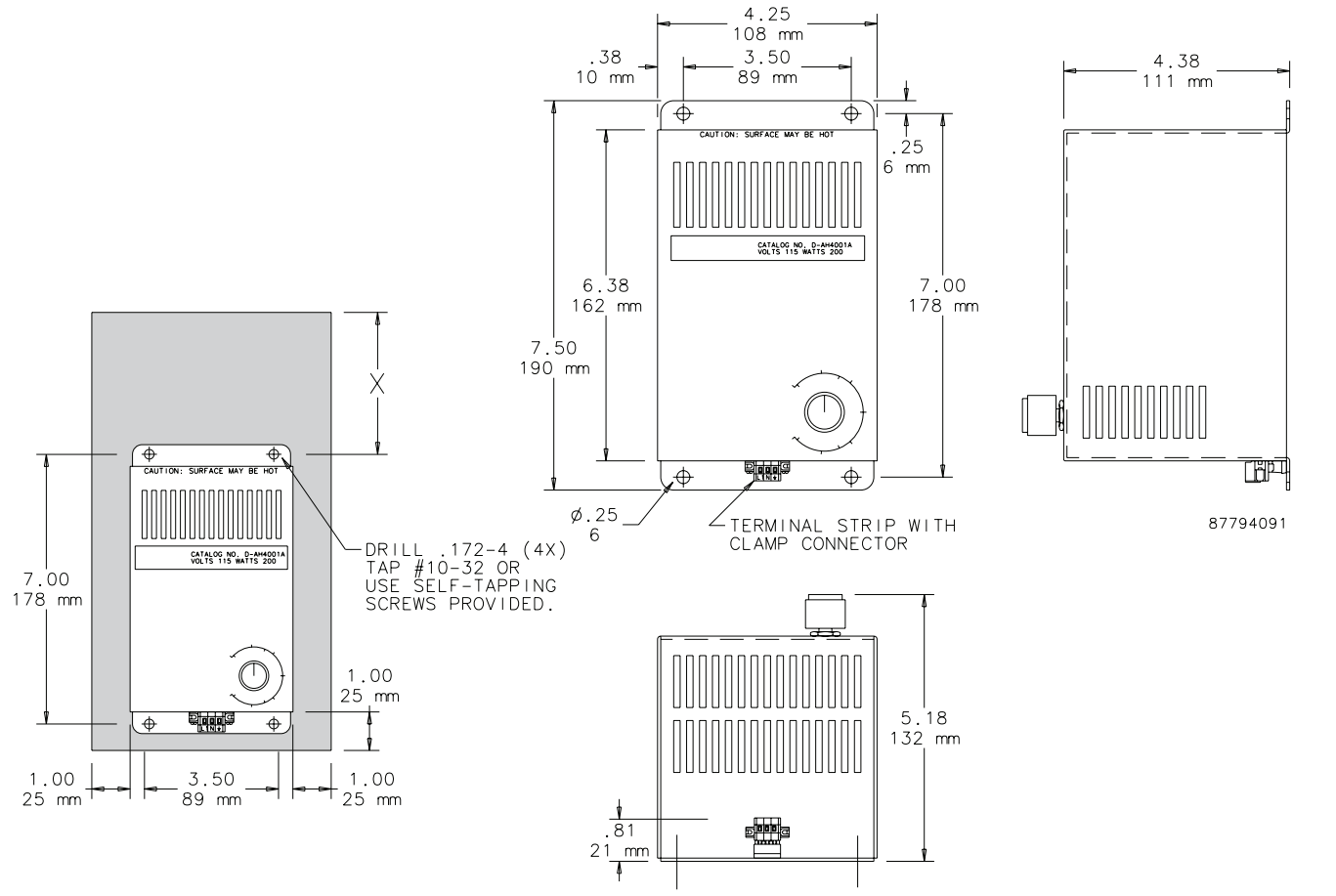
## PERFORMANCE DATA 1300 WATT HEATERS

| Catalog Number | DAH13001C | DAH13002C |
|---|---|---|
| **Electrical Data** | | |
| Rated Voltage | 115 | 230 |
| Frequency (Hz) | 50/60 | 50/60 |
| Power Consumption (Watts) | 1300 | 1300 |
| Nominal Current (Amps) | 11.5 | 5.7 |
| **Heating Performance** | | |
| Watts | 1300 | 1300 |
| **Unit Construction** | | |
| Weight (lb./kg) | 3.4/1.54 | 3.4/1.54 |
| X (in./mm) | 8.00/203 | 8.00/203 |

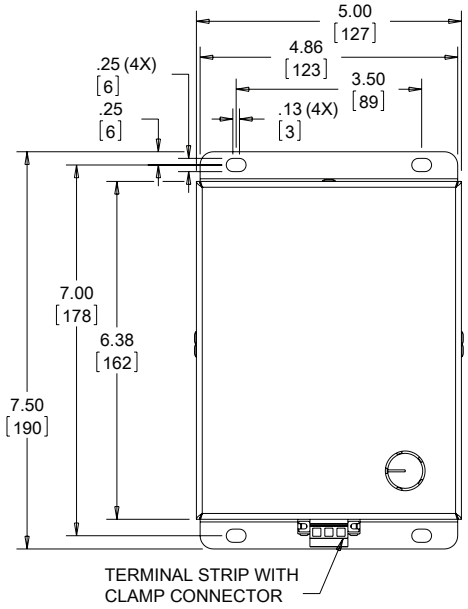
## Dimensions and Clearance Range Drawing for DAH1001A, –2A and DAH2001A, –2A

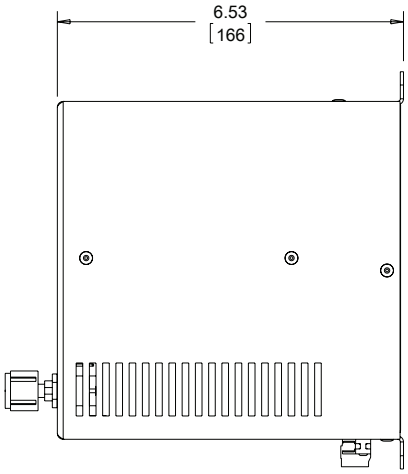


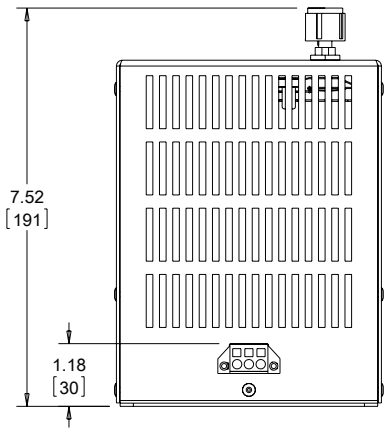

## Dimensions and Clearance Range Drawing for DAH4001B, –2B and DAH8001B, –2B



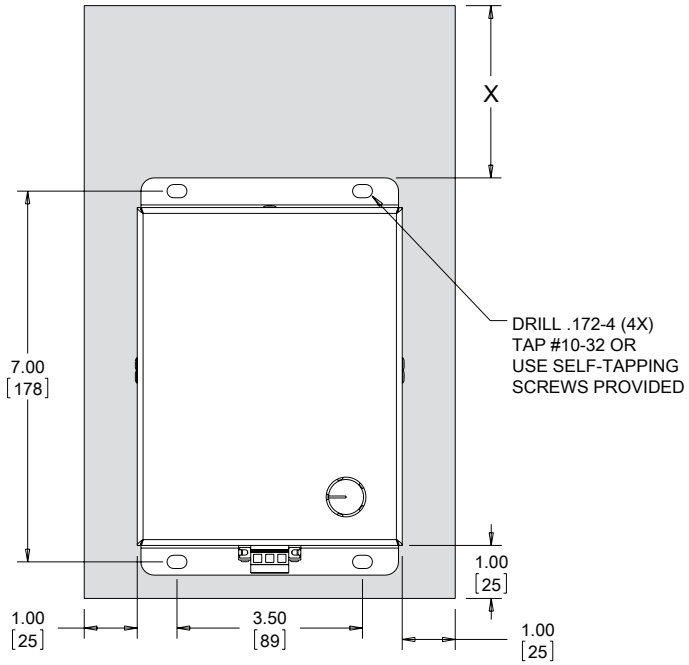
## Dimensions and Clearance Range Drawing for DAH13001C and DAH13002C




89091692



# Hazardous Location Heater, ATEX



## INDUSTRY STANDARDS

CE
Conformity Certificate LCIE (Laboratoire Central des Industries Electriques) LCIE 01 ATEX 6073
EE x d IIC T4/II 2 GD, IP6x T135°C
IEC 60529, IP65/I (grounded)

## APPLICATION

Designed for use in hazardous locations where electrical components require protection from condensation and corrosion, sudden temperature drops and low temperatures.

## SPECIFICATIONS

- Maintenance-free
- High-performance heating cartridge (element)
- Large convection surface
- Extruded aluminum heat sink
- DIN clip for mounting
- Connection cable: Si HF–JZ 3 x AWG 18 x 3.3 ft. (0.75 mm² x 1 m)
- Operating voltage 110–120 VAC

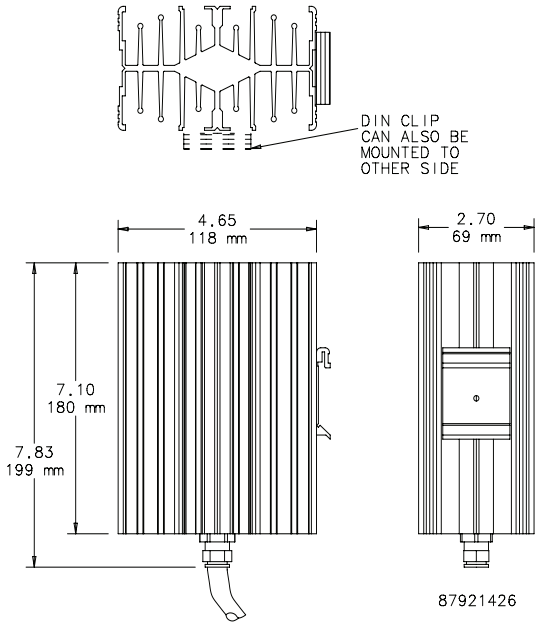
## FINISH

- Black anodized

## PERFORMANCE DATA SEMICONDUCTOR HEATER

| Catalog Number | HLHEAT100 |
|---|---|
| **Design Data** | |
| Heating Power (Watts) | 100 |
| Surface Temperature T4 (°F/°C) * | 275/135 |
| **Unit Construction** | |
| Unit Dimensions – H x W x D (in./mm) | 7.10/180 x 4.65/118 x 2.70/69 |

* Surface temperature when mounted vertically.



# Hazardous Location Heaters and Thermostats



## INDUSTRY STANDARDS

CE
cCSAus
See additional certifications in product tables.

## APPLICATION

Designed for use in hazardous locations where electrical components require protection from cold freezing temperatures, condensation and corrosion.

## SPECIFICATIONS

- 50 W, 80 W, 200 W, 300 W, 400 W and 600 W models available
- Provides freeze protection down to –76°F/–60°C
- Conductive and Convection heating types available
- 50W and 80W models can be mounted directly to manifolds, measuring or analyzing instruments, control valves, and similar equipment
- 200W, 300W, 400W, 600W models are finned heaters that heat the area by transferring the heat from the heater to surrounding air, creating a convection current
- Two thermostat options available with a 50°F/10°C or 68°F/20°C set point

## FINISH

- Black anodized aluminium

## PERFORMANCE DATA 50W AND 80W HAZARDOUS LOCATION HEATERS

| Catalog Number | DAHHL501AC | DAHHL801AC |
|---|---|---|
| **Heating Performance** | | |
| Watts | 50 | 80 |
| Heating Type | Conductive | Conductive |
| Power Regulation | Self Limiting | Self Limiting |
| **Hazardous Location Certifications** | | |
| Agency Approvals | ATEX, IECEx, CE, cCSAus | ATEX, IECEx, CE, cCSAus |
| ATEX / IECEx Certification | PTB 02 ATEX 1116 X; IECEx PTB 07.0055X<br>II 2 G Ex db IIC T4; II 2 D Ex tb IIIC T135°C | PTB 02 ATEX 1116 X; IECEx PTB 07.0055X<br>II 2 G Ex db IIC T3; II 2 D Ex tb IIIC T200°C |
| NEC cCSAus Certification | CSA 1655545 (LR43674)<br>Class I Zone 1 and 2 Group IIC<br>Class I Div 1 Groups A,B,C,D T4<br>Class II Div 1 Groups E,F,G | CSA 1655545 (LR43674)<br>Class I Zone 1 and 2 Group IIC<br>Class I Div 1 Groups A,B,C,D T3<br>Class II Div 1 Groups E,F,G |
| **Electrical Data** | | |
| Rated Voltage (Vac or Vdc) | 110 – 265 | 110 – 265 |
| **Operating Range** | | |
| Maximum (°F/°C) | 302/150 | 302/150 |
| Minimum (°F/°C) | –76/–60 | –76/–60 |
| **Unit Construction** | | |
| Material | Black, anodized, seawater-proof aluminium | |
| **Accessories** | | |
| Thermostat* | HLTSTAT10C, HLTSTAT20C | |
| **Unit Dimensions** | | |
| Height (in./mm) | 3.5/90 | 3.5/90 |
| Width (in./mm) | 1.6/40 | 1.6/40 |
| Depth (in./mm) | 1.2/30 | 1.2/30 |
| Weight (lb./kg) | 1.1/.50 | 1.1/.50 |

* Thermostats sold separately as an accessory.

## PERFORMANCE DATA 200W, 300W, 400W, 600W HAZARDOUS LOCATION HEATERS

| Catalog Number | DAHHL200AC | DAHHL300AC | DAHHL4001A | DAHHL4002A | DAHHL6001A | DAHHL6002A |
|---|---|---|---|---|---|---|
| **Heating Performance** | | | | | | |
| Watts | 200 | 300 | 400 | 400 | 600 | 600 |
| Heating Type | Convection | Convection | Convection | Convection | Convection | Convection |
| Power Regulation | Self Limiting | Self Limiting | Constant Power | Constant Power | Constant Power | Constant Power |
| **Hazardous Location Certifications** | | | | | | |
| Agency Approvals | ATEX, IECEx, CE, cCSAus | | ATEX, IECEx, CE, cCSAus | | ATEX, IECEx, CE, cCSAus | |
| ATEX / IECEx Certification | PTB 02 ATEX 1116X IECEx PTB 07.0055 X II 2 G Ex db IIC T3 II 2 D Ex tb IIIC T200°C | | PTB 02 ATEX 1041X IECEx PTB 07.0052 X II 2 G Ex db IIC T3 II 2 D Ex tb IIIC T200°C | | PTB 02 ATEX 1041X IECEx PTB 07.0052 X II 2 G Ex db IIC T3 II 2 D Ex tb IIIC T200°C | |
| NEC cCSAus Certification | CSA 1655545 (LR43674) Class I Zone 1 and 2 Group IIC Class I Div 1 Groups A,B,C,D T3 Class II Div 1 Groups E,F,G | | CSA 1655545 (LR43674) Class I Zone 1 and 2 Group IIC Class I Div 1 Groups A,B,C,D T3 Class II Div 1 Groups E,F,G | | CSA 1655545 (LR43674) Class I Zone 1 and 2 Group IIC Class I Div 1 Groups A,B,C,D T3 Class II Div 1 Groups E,F,G | |
| **Electrical Data** | | | | | | |
| Rated Voltage (Vac or Vdc) | 110–265 | 110–265 | 108–132 | 207–253 | 108–132 | 207–253 |
| **Operating Range** | | | | | | |
| Maximum (°F/°C) | 302/150 | 302/150 | 302/150 | 302/150 | 302/150 | 302/150 |
| Minimum (°F/°C) | –76/–60 | –76/–60 | –76/–60 | –76/–60 | –76/–60 | –76/–60 |
| **Unit Construction** | | | | | | |
| Material | Black, anodized, seawater-proof aluminium | | | | | |
| **Accessories** | | | | | | |
| Thermostat* | HLTSTAT10C, HLTSTAT20C | | | | | |
| **Unit Dimensions** | | | | | | |
| Height (in./mm) | 8.9/225 | 12.8/325 | 8.9/225 | 8.9/225 | 12.8/325 | 12.8/325 |
| Width (in./mm) | 9.0/229 | 9.0/229 | 9.0/229 | 9.0/229 | 9.0/229 | 9.0/229 |
| Depth (in./mm) | 2.4/60 | 2.4/60 | 2.4/60 | 2.4/60 | 2.4/60 | 2.4/60 |
| Weight (lb./kg) | 8.7/3.95 | 12.5/5.65 | 8.7/3.95 | 8.7/3.95 | 12.5/5.65 | 12.5/5.65 |

* A thermostat is required for 400W and 600W models. It is sold separately as an accessory.

## PERFORMANCE DATA HAZARDOUS LOCATION THERMOSTATS

| Catalog Number | HLTSTAT10C | HLTSTAT20C |
|---|---|---|
| **Hazardous Location Certifications** | | |
| Agency Approvals | ATEX, IECEx, CE, cCSAus | ATEX, IECEx, CE, cCSAus |
| ATEX / IECEx Certification | PTB 03 ATEX 1136 X<br>IECEx PTB 07.0054<br>II 2 G Ex db IIC T6<br>II 2 D Ex tb IIIC T80°C | PTB 03 ATEX 1136 X<br>IECEx PTB 07.0054<br>II 2 G Ex db IIC T6<br>II 2 D Ex tb IIIC T80°C |
| NEC cCSAus Certification | CSA 1655545 (LR43674)<br>Class I Zone 1 and 2 Group IIC<br>Class I Div 1 Groups A,B,C,D T6<br>Class II Div 1 Groups E,F,G | CSA 1655545 (LR43674)<br>Class I Zone 1 and 2 Group IIC<br>Class I Div 1 Groups A,B,C,D T6<br>Class II Div 1 Groups E,F,G |
| **Electrical Data** | | |
| Rated Voltage (Vac or Vdc) | 0–275 | 0–275 |
| Max. Rated Current (Amps) | 10 | 10 |
| Operating Range | | |
| Maximum (°F/°C) | 302/150 | 302/150 |
| Minimum (°F/°C) | –76/–60 | –76/–60 |

| Catalog Number | HLTSTAT10C | HLTSTAT20C |
|---|---|---|
| Thermostats Nominal Setpoints | | |
| Switch-on Temperature (°F/°C) | 50/10 | 68/20 |
| Switch-off Temperature (°F/°C) | 64/18 | 82/28 |
| **Unit Construction** | | |
| Material | Black, anodized, seawater-proof aluminium | |
| **Unit Dimensions** | | |
| Height (in./mm) | 1.10/28 | 1.10/28 |
| Width (in./mm) | .90/24 | .90/24 |
| Depth (in./mm) | 4.30/108 | 4.30/108 |
| Weight (lb./kg) | .50/.20 | .50/.20 |



Our powerful portfolio of brands:

CADDY ERICO HOFFMAN ILSCO RAYCHEM SCHROFF

©2024 nVent. All nVent marks and logos are owned or licensed by nVent Services GmbH or its affiliates. All other trademarks are the property of their respective owners. nVent reserves the right to change specifications without notice.