

**DHC-E Trend & DHC-E Plus Electric Tankless Water Heater**

› Compact point-of-use model with selectable power output for commercial applications

**Features**

- › Unlimited supply of hot water
- › Suitable for hard and soft water areas
- › Largely insusceptible to scale build-up
- › Switchable power output means fewer models spec more jobs
- › High limit switch with manual reset
- › Easy installation 1/2" NPT connections
- › Interactive backlit display
- › DHC-E Plus models feature Advanced Flow Control™ and larger display with more info
- › Engineered in Germany to be the best
- › Exclusive design prevents dry firing
- › No T & P relief valve needed (Check local code)
- › 10-year leakage/3-year parts warranty
- › Direct Coil™ nichrome heating element housed in glass-reinforced polyamide heating chamber
- › On-demand, continuous hot water
- › No standby heat loss with tankless design
- › 99% efficiency
- › Mounts on wall at point-of-use
- › Cold water only line needed to be run to lavatory
- › Compact European design allow mounting in cabinet
- › Compatible with sensor actuated or metered faucets
- › Tankless design prevents Legionella bacteria growth

**Models & Technical Data**

| Model                                                                                  | DHC-E 3/3.5-1 Trend                                                                                                    |               | DHC-E 4/6-2 Trend |                 | DHC-E 8/10-2 Trend<br>DHC-E 8/10-2 Plus |                 | DHC-E 12/15-2 Trend<br>DHC-E 12/15-2 Plus |  |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|-----------------|-----------------------------------------|-----------------|-------------------------------------------|--|
| Item no.                                                                               | 200057                                                                                                                 |               | 200061            |                 | 200058 (Trend)<br>202145 (Plus)         |                 | 200059 (Trend)<br>200056 (Plus)           |  |
| Phase - 50/60 Hz                                                                       | 1                                                                                                                      |               |                   |                 |                                         |                 |                                           |  |
| Voltage                                                                                | 120 V                                                                                                                  | 240 V         | 208 V             | 240 V           | 208 V                                   | 240 V           | 208 V                                     |  |
| Wattage <sup>1</sup> , jumper position 1 [low] / 2 [high]                              | 3 kW / 3.5 kW                                                                                                          | 3.8 kW / 6 kW | 2.9 kW / 4.5 kW   | 7.2 kW / 9.6 kW | 5.4 kW / 7.2 kW                         | 12 kW / 14.4 kW | 9 kW / 10.8 kW                            |  |
| Amperage, jumper position 1 [low] / 2 [high]                                           | 25 A / 29.2 A                                                                                                          | 15.8 A / 25 A | 13.9 A / 21.7 A   | 30 A / 40 A     | 26 A / 34.6 A                           | 50 A / 60 A     | 43.3 A / 52 A                             |  |
| Min. recommended circuit breaker size, <sup>2</sup> jumper position 1 [low] / 2 [high] | 25 A / 30 A                                                                                                            | 20 A / 25 A   | 15 A / 25 A       | 30 A / 40 A     | 30 A / 35 A                             | 50 A / 60 A     | 50 A / 60 A                               |  |
| Min. recommended AWG wire size, <sup>3</sup> jumper position 1 [low] / 2 [high]        | 10/2 / 10/2                                                                                                            | 12/2 / 10/2   | 14/2 / 10/2       | 10/2 / 8/2      | 10/2 / 8/2                              | 8/2 / 6/2       | 8/2 / 6/2                                 |  |
| Uniform Energy Factor (UEF) jumper position 1 [low] / 2 [high]                         | 0.99 / 0.99                                                                                                            | TBD / 0.98    |                   | 0.98 / 0.96     |                                         | 0.96 / 0.97     |                                           |  |
| Recovery efficiency jumper position 1 [low] / 2 [high]                                 | 96% / 97%                                                                                                              | TBD / 99%     |                   | 96% / 98%       |                                         | 96% / 99%       |                                           |  |
| Minimum water flow to activate unit                                                    | 0.264 gpm (1.0 l/min)                                                                                                  |               |                   |                 |                                         |                 |                                           |  |
| Weight                                                                                 | 5.5 lb (2.5 kg)                                                                                                        |               |                   |                 |                                         |                 |                                           |  |
| Dimensions                                                                             | Height 14 <sup>1</sup> / <sub>8</sub> " (360 mm) x Width 8" (202 mm) x Depth 4 <sup>3</sup> / <sub>16</sub> " (109 mm) |               |                   |                 |                                         |                 |                                           |  |
| Nominal water volume                                                                   | 0.07 gal (0.277 l)                                                                                                     |               |                   |                 |                                         |                 |                                           |  |
| Max. permissible inlet temperature                                                     | 149°F (65°C)                                                                                                           |               |                   |                 |                                         |                 |                                           |  |
| Maximum permissible pressure                                                           | 145 psi (10 bar)                                                                                                       |               |                   |                 |                                         |                 |                                           |  |
| Water connections                                                                      | 1/2" NPT                                                                                                               |               |                   |                 |                                         |                 |                                           |  |
| ELECTRICAL RESISTIVITY & CONDUCTIVITY*                                                 |                                                                                                                        |               |                   |                 |                                         |                 |                                           |  |
| Standard specification at                                                              | 59°F (15°C)                                                                                                            |               |                   | 68°F (20°C)     |                                         |                 | 77°F (25°C)                               |  |
| Minimum resistivity ρ ≥                                                                | 1100 Ωcm                                                                                                               |               |                   | 970 Ωcm         |                                         |                 | 895 Ωcm                                   |  |
| Maximum conductivity σ ≤                                                               | 91 mS/m                                                                                                                | 910 μS/cm     | 103 mS/m          | 1031 μS/cm      | 112 mS/m                                | 1117 μS/cm      |                                           |  |

DHC-E 3/3.5-1 Trend and 4/6-2 Trend ship with pressure compensating flow-reducer/aerators that must be installed.

<sup>1</sup> Factory default setting is jumper position 2 [high]

<sup>2</sup> Overcurrent protection sized at 100% of load. Tankless water heaters are considered a non-continuous load. Use only GFCI Class A circuit breakers.

<sup>3</sup> Copper conductors with a temperature rating of 75°C or greater must be used. Conductors should be sized to maintain a voltage drop of less than 3% under load.

<sup>4</sup> Do not connect to a salt-regenerated water softener or a water supply of salt water.

These are our recommendations. Check local codes for compliance if necessary.

# Technical Data & Wiring Diagrams

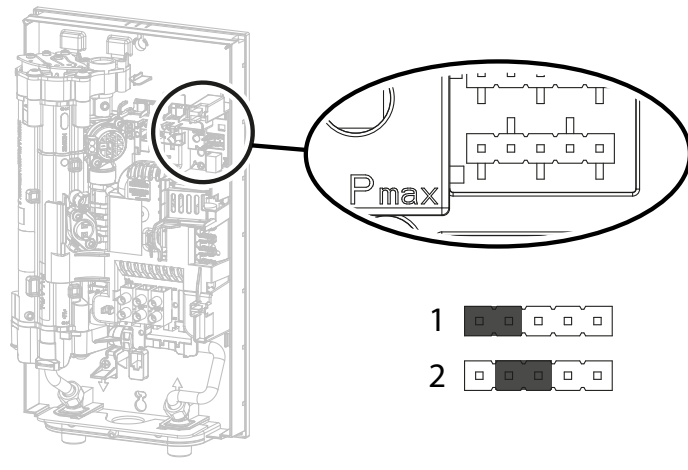
| Model                      | Power output in kW |       |       | 100°F DHW output in gpm      |      |      |      |
|----------------------------|--------------------|-------|-------|------------------------------|------|------|------|
|                            | Rated voltage      |       |       | Cold water inlet temperature |      |      |      |
|                            | 120 V              | 208 V | 240 V | 41°F                         | 50°F | 59°F | 68°F |
| DHC-E 3/3.5-1 Trend        | 3.0                |       |       | 0.35                         | 0.41 | 0.5  | 0.64 |
|                            | 3.5                |       |       | 0.41                         | 0.48 | 0.58 | 0.75 |
|                            |                    | 2.9   |       | 0.34                         | 0.4  | 0.48 | 0.62 |
|                            |                    | 4.5   |       | 0.52                         | 0.61 | 0.75 | 0.96 |
| DHC-E 4/6-2 Trend          |                    |       | 3.8   | 0.44                         | 0.52 | 0.63 | 0.81 |
|                            |                    |       | 6.0   | 0.69                         | 0.82 | 1.0  | 1.28 |
|                            |                    | 5.4   |       | 0.63                         | 0.74 | 0.9  | 1.15 |
|                            |                    | 7.2   |       | 0.83                         | 0.98 | 1.2  | 1.54 |
| DHC-E 8/10-2 Trend         |                    |       | 7.2   | 0.83                         | 0.98 | 1.2  | 1.54 |
|                            |                    |       | 9.6   | 1.11                         | 1.31 | 1.6  | 2.05 |
|                            |                    | 9.0   |       | 1.04                         | 1.23 | 1.5  | 1.92 |
|                            |                    | 10.8  |       | 1.24                         | 1.46 | 1.78 | 2.28 |
| DHC-E 12/15-2 Trend & Plus |                    |       | 12.0  | 1.39                         | 1.64 | 2.0  | 2.56 |
|                            |                    |       | 14.4  | 1.67                         | 1.97 | 2.4  | 3.07 |

| Model                      | Power output in kW |       |       | 122°F DHW output in gpm      |      |      |      |
|----------------------------|--------------------|-------|-------|------------------------------|------|------|------|
|                            | Rated voltage      |       |       | Cold water inlet temperature |      |      |      |
|                            | 120 V              | 208 V | 240 V | 41°F                         | 50°F | 59°F | 68°F |
| DHC-E 3/3.5-1 Trend        | 3.0                |       |       | -                            | 0.28 | 0.33 | 0.38 |
|                            | 3.5                |       |       | 0.3                          | 0.33 | 0.38 | 0.44 |
|                            |                    | 2.9   |       | -                            | 0.28 | 0.31 | 0.37 |
|                            |                    | 4.5   |       | 0.38                         | 0.43 | 0.49 | 0.57 |
| DHC-E 4/6-2 Trend          |                    |       | 3.8   | 0.32                         | 0.36 | 0.41 | 0.48 |
|                            |                    |       | 6.0   | 0.51                         | 0.57 | 0.65 | 0.76 |
|                            |                    | 5.4   |       | 0.46                         | 0.51 | 0.59 | 0.68 |
|                            |                    | 7.2   |       | 0.61                         | 0.68 | 0.78 | 0.91 |
| DHC-E 8/10-2 Trend & Plus  |                    |       | 7.2   | 0.61                         | 0.68 | 0.78 | 0.91 |
|                            |                    |       | 9.6   | 0.81                         | 0.91 | 1.04 | 1.21 |
|                            |                    | 9.0   |       | 0.76                         | 0.85 | 0.98 | 1.14 |
|                            |                    | 10.8  |       | 0.9                          | 1.02 | 1.16 | 1.35 |
| DHC-E 12/15-2 Trend & Plus |                    |       | 12.0  | 1.01                         | 1.14 | 1.3  | 1.52 |
|                            |                    |       | 14.4  | 1.21                         | 1.37 | 1.56 | 1.82 |

DHC-E Trend & Plus are adjustable to deliver 2 stages of power output.

Factory-default setting is stage 2 [high].

If lower output is needed, set the red jumper to stage 1 [low].

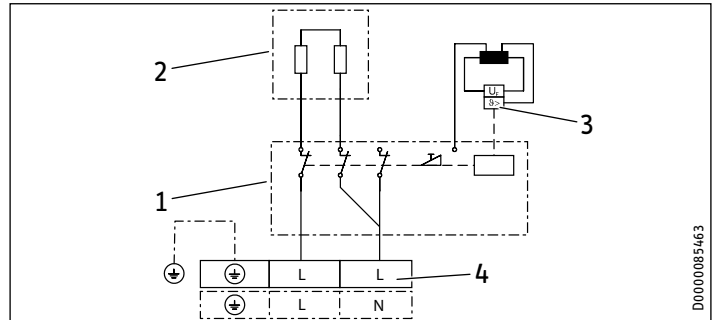


## DHC-E 3/3.5-1 Trend

1/N/GND ~ 120 V

## DHC-E 4/6-2 Trend

2/GND ~ 208 / 240 V

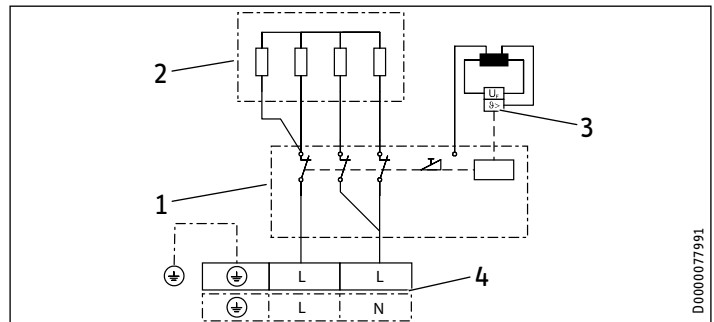


- 1 Power PCB with integral safety switch
- 2 Direct Coil™ heating system
- 3 Self-resetting high limit safety cut-out, Klixon
- 4 Wiring block

## DHC-E 8/10-2 Trend & Plus | DHC-E 12/15-2 Trend & Plus

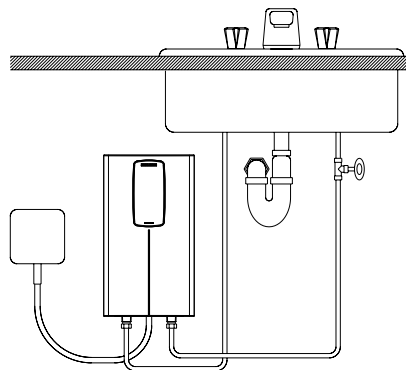
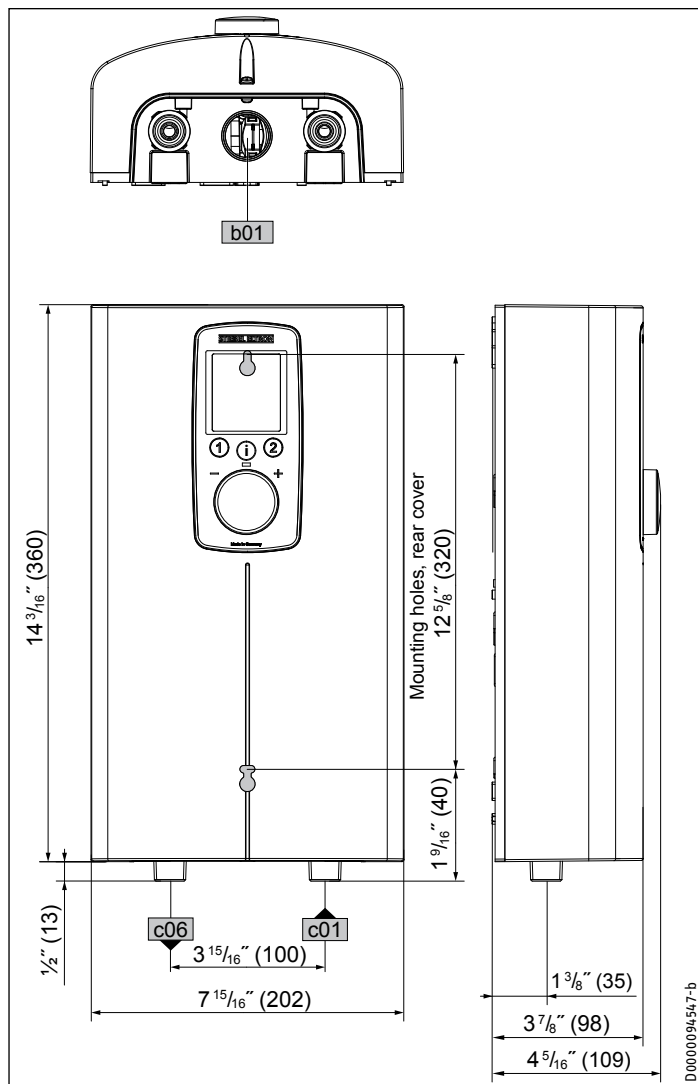
2/GND ~ 208 / 240 V

1/N/GND ~ 208 / 240 V



- 1 Power PCB with integral safety switch
- 2 Direct Coil™ heating system
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## Dimensions



Intertek

Conforms to UL Std. 499  
Certified to CAN/CSA  
Std. C22.2 No.64

**ISO 9001**  
CERTIFIED



Tested and certified by WQA  
against NSF/ANSI/CAN 372  
for lead free compliance.

|     |                           | DHC-E                |
|-----|---------------------------|----------------------|
| b02 | Entry electrical cables I |                      |
| c01 | Cold water inlet          | Male thread 1/2" NPT |
| c06 | DHW outlet                | Male thread 1/2" NPT |

## Specification

The electric tankless water heater shall be equipped with a direct coil nichrome heating element housed in a pressure-tested, glass-reinforced polyamide heating chamber. The unit shall be equipped with a flow sensor with a miniaturized turbine that feeds the water flow rate information into the main circuit board. The output temperature shall be adjustable between 68 °F (20 °C) and 140 °F (60 °C). The temperature adjustment shall be via a knob that is positioned on the front cover. The unit shall be equipped with a safety high-limit switch with manual reset that triggers at 185 °F (85 °C). The water connections shall be designed for standard 1/2" NPT female adapter. The housing of the unit shall be made of high impact polycarbonate plastic. DHC-E Plus models shall be equipped with Advanced Flow Control™ (German patent DE 3805441 C2, among others) to automatically adjust the flow of water to ensure a constant output temperature, even if demand exceeds capacity. The unit shall conform to UL Std. 499, be certified to CAN/CSA Std. C22.2 No. 64, and be certified by WQA against NSF/ANSI/CAN 372 for lead-free compliance.

Engineer/Architect \_\_\_\_\_ Date \_\_\_\_\_

Job Name/Customer \_\_\_\_\_ Location \_\_\_\_\_

Contractor \_\_\_\_\_ Representative \_\_\_\_\_

Qty \_\_\_\_\_ kW \_\_\_\_\_ Voltage \_\_\_\_\_ Amps \_\_\_\_\_

DHC Trend model \_\_\_\_\_