

DHC-E Trend & DHC-E Plus Electric Tankless Water Heaters

> 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 DHC-E 8/10-2 Plus			DHC-E 12/15-2 Trend DHC-E 12/15-2 Plus	
Item no.	200057	200061		200058 (Trend) 202145 (Plus)			200059 (Trend) 200056 (Plus)	
Phase - 50/60 Hz	1							
Voltage	120 V	240 V	208 V	240 V	208 V	240 V		208 V
Wattage ¹ , 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	50 A /	60 A	43.3 A / 52 A
Min. recommended circuit breaker size,² 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, ³ 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
Minimum water flow to activate unit	0.264 gpm (1.0 l/min)							
Weight	5.5 lb (2.5 kg)							
Dimensions	Height $14^{1}/8^{"}$ (360 mm) x Width 8" (202 mm) x Depth $4^{5}/16^{"}$ (109 mm)							
Nominal water volume	0.07 gal (0.277 l)	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 ⁴								
Standard specification at	59°F (15°C)	68°F (20°C) 77°F (25°C)						
Minimum resistivity $\rho \geq$	1100 Ωcm	970 Ωcm 895 Ωcm						
Maximum conductivity $\sigma \leq$	91 mS/m	910 μS/cm	103 mS/m	1031 μS/c	m	112 mS/m	11	17 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.

- 1 Factory default setting is jumper position 2 [high]
- Overcurrent protection sized at 100% of load. Tankless water heaters are considered a non-continuous load. Use only GFCI Class A circuit breakers.
- ³ 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.
- ⁴ Do not connect to a salt-regenerated water softener or a water supply of salt water.

 $\label{thm:commendations} These \ are \ our \ recommendations. \ Check \ local \ codes \ for \ compliance \ if \ necessary.$

Technical Data & Wiring Diagrams

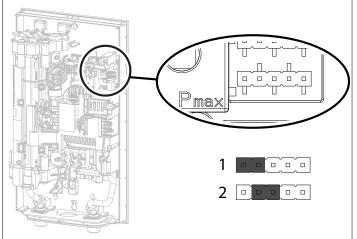
	Power output in kW		100°F DHW output in gpm				
	Rated voltage			Cold water inlet temperature			
Model	120 V	208 V	240 V	41°F	50°F	59°F	68°F
DHC-E 3/3.5-1	3.0			0.35	0.41	0.5	0.64
Trend	3.5			0.41	0.48	0.58	0.75
		2.9		0.34	0.4	0.48	0.62
DHC-E		4.5		0.52	0.61	0.75	0.96
4/6-2 Trend			3.8	0.44	0.52	0.63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

	Power output in kW		122°F DHW output in gpm				
	Rated voltage			Cold water inlet temperature			
Model	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
DHC-E 4/6-2		4.5		0.38	0.43	0.49	0.57
Trend			3.8	0.32	0.36	0.41	0.48
			6.0	0.51	0.57	0.65	0.76
DHC-E 8/10-2 Trend & Plus		5.4		0.46	0.51	0.59	0.68
		7.2		0.61	0.68	0.78	0.91
			7.2	0.61	0.68	0.78	0.91
			9.6	0.81	0.91	1.04	1.21
DHC-E 12/15-2 Trend & Plus		9.0		0.76	0.85	0.98	1.14
		10.8		0.9	1.02	1.16	1.35
			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].

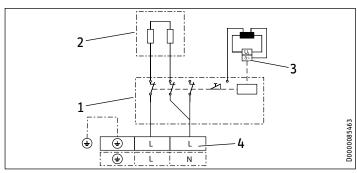
If lower output is needed, set the red jumper to stage 1 [low].



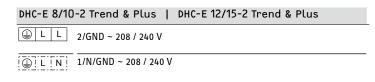
DHC-E 3/3.5-1 Trend

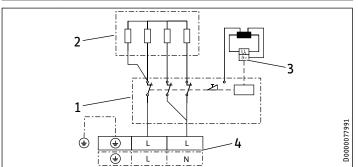
[] L [N] 1/N/GND ~ 120 V

DHC-E 4/6-2 Trend



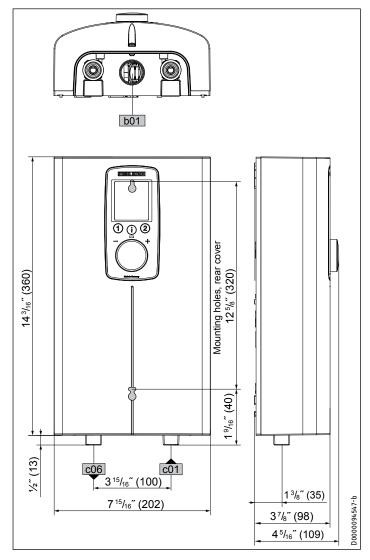
- 1 Power PCB with integral safety switch
- 2 Direct Coil[™] heating system
- 3 Self-resetting high limit safety cut-out, Klixon
- 4 Wiring block

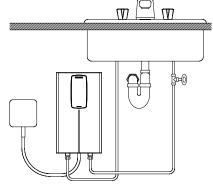




- 1 Power PCB with integral safety switch
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Dimensions







Intertek

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

ISO 9001



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

			DHC-E	و
b02	Entry electrical cables I			
c01	Cold water inlet	Male thread	1/2" NF	PT }
c06	DHW outlet	Male thread	1/2" NF	PT :

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 ½″ 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					