

## DHC Trend 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
- > 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<sup>™</sup> nichrome heating element housed in glassreinforced 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 3/3.5-1 Trend	d DHC 4/6-2 Trend		DHC 8/10-2 Trend		DHC 12/15-2 Trend		
Item no.	200060	200062		200063		200064		
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]	0.98 / 0.99	TBD / 0.98		0.99 / 0.96		0.98 / 0.98		
Recovery efficiency jumper position 1 [low] / 2 [high]	99% / 98%	% / 98% TBD / 98% 99% / 97%			97% / 97%			
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 I)							
Max. permissible inlet temperature	149°F (65°C)							
Maximum permissible pressure	145 psi (10 bar)							
Water connections	1/2" NPT							
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ELECTRICAL RESISTANT & CONDUCTIVITY									
Standard specification at	59°F (15°C)		68°F (20°C)		77°F (25°C)				
Minimum resistivity $\rho \ge$	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 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.

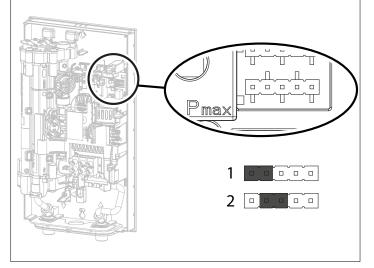
# Technical Data & Wiring Diagrams

	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 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 4/6-2 Trend		4.5		0.52	0.61	0.75	0.96	
			3.8	0.44	0.52	0.63	0.81	
			6.0	0.69	0.82	1.0	1.28	
DHC 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 12/15-2 Trend		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 3/3.5-1	3.0				0.28	0.33	0.38	
Trend	3.5			0.3	0.33	0.38	0.44	
		2.9		-	0.28	0.31	0.37	
DHC 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 8/10-2 Trend		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 12/15-2 Trend		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 Trend is adjustable to deliver 2 stages of power output. Factory-default setting is stage 2 [high].

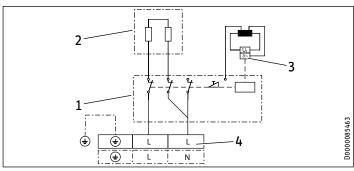
If lower output is needed, set the red jumper to stage 1 [low].



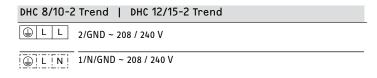
#### DHC 3/3.5-1 Trend

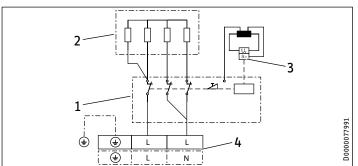
[ ] L | N | 1/N/GND ~ 120 V

#### DHC 4/6-2 Trend



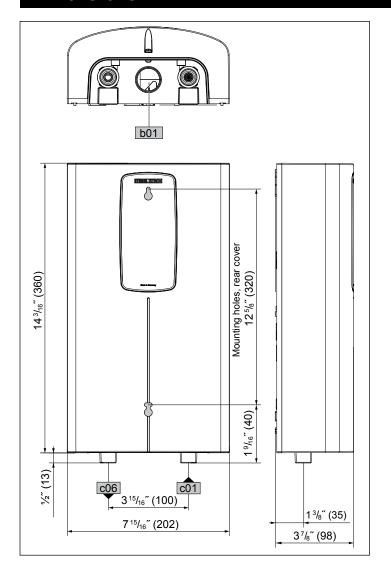
- 1 Power PCB with integral safety switch
- 2 Direct Coil<sup>™</sup> heating system
- 3 Self-resetting high limit safety cut-out, Klixon
- 4 Wiring block

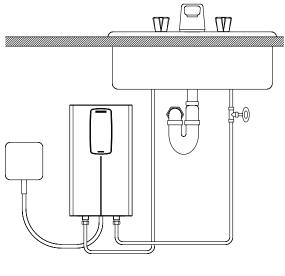




- 1 Power PCB with integral safety switch
- 2 Direct Coil<sup>™</sup> heating system
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## **Dimensions**







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.

# **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. Temperature output shall be adjustable by jumper during installation at one of the following values: 100 °F (38 °C), 109 °F (43 °C), 122 °F (50 °C), or 140 °F (60 °C). 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. 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			Representati	e	
	Qty	kW	Voltage	Amps	
DHC Trend model					