

Q-SERIES

Deionized Water Heater

MTBF >20,000
HOURS

+/- 3 °C
ACCURACY

HIGH PURITY
FLUID PATH
(GE214 QUARTZ)

CREVICE-FREE
FLUID PATH

MULTIPLE VOLTAGE
AND POWER
OPTIONS



VOLTAGE
208, 380, 415, 480



POWER
30kW to 144kW



MAX TEMPERATURE
95 °C / 203 °F



MAX PRESSURE
4.1 Bar / 60 PSI



CERTIFICATIONS
CE, Semi S2 & S8

The Q-Series Heater features Trebor's thin-film on quartz electric resistive technology in an enclosed unit that offers multiple power configurations, plumbing options, and control options. The Q-Series is intended for batch cleaning applications requiring a steady flow of high purity DI water on demand.

This is PURE INNOVATION.

TREBOR

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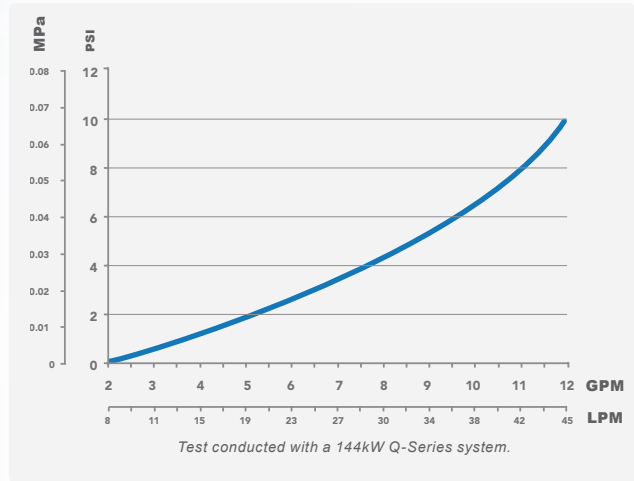
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A Unit of IDEX Corporation

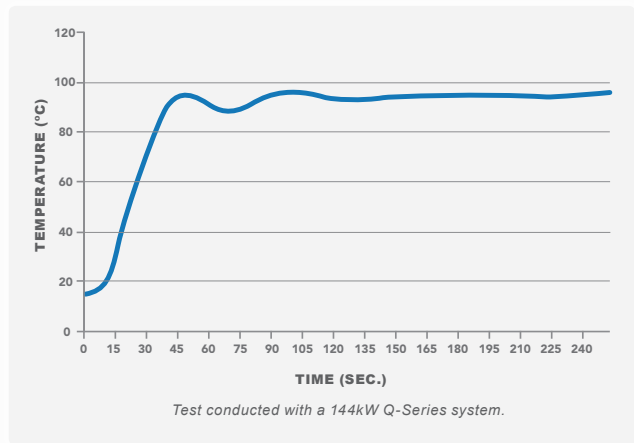
PERFORMANCE SUMMARY

Heater Type	Thin-film on quartz electric resistive heating
Voltages	208, 380, 415, 480 Volt; 50/60 Hz
Temperature Limit	95 °C
Temperature Control	±3 °C in most conditions
Pressure Range	15 to 60 PSI DI water supply
Flow Rate	1 to 45 LPM (.25 to 12 GPM); depending on system size
Efficiency	>98%
Element Life	>20,000 hrs
Control System	Zero crossfire SSRs with multi-loop PID control
Communication Options	Modbus/RTU - Serial (standard), Modbus/TCP - Ethernet, DeviceNet
Wetted Surfaces	GE 214 quartz, PTFE, PFA, & PVDF - no elastomer o-rings
Safety Features	Low liquid level detection Redundant over temperature protection Over pressure protection Open thermocouple detection EMO GFI/Earth Leakage
Safety Compliance	SEMI S2-0310 CE SEMI S8-0308
Warranty	One-year standard, extended warranties available

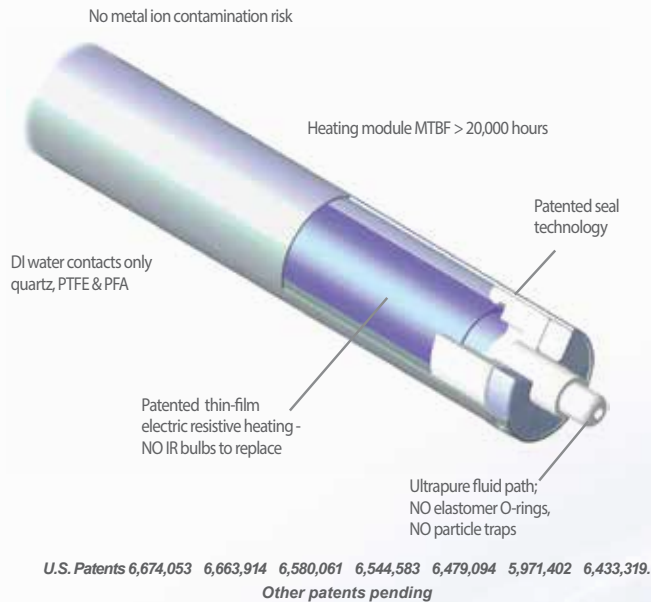
PRESSURE DROP



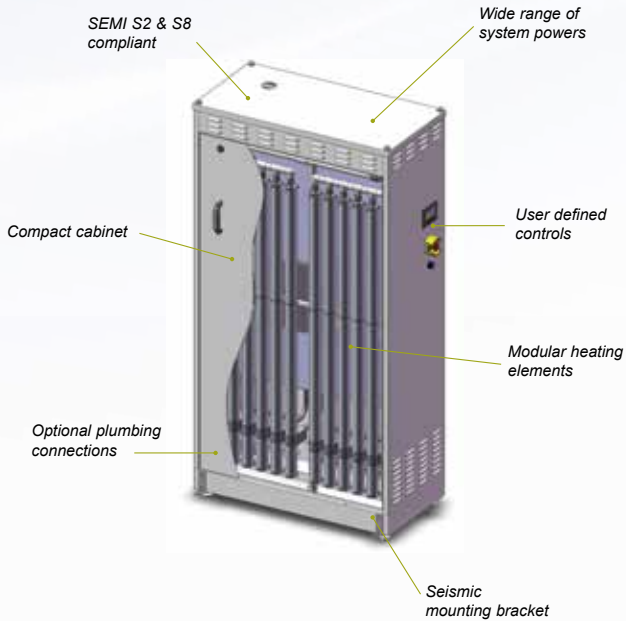
TEMPERATURE PERFORMANCE



PATENTED HEATER TECHNOLOGY



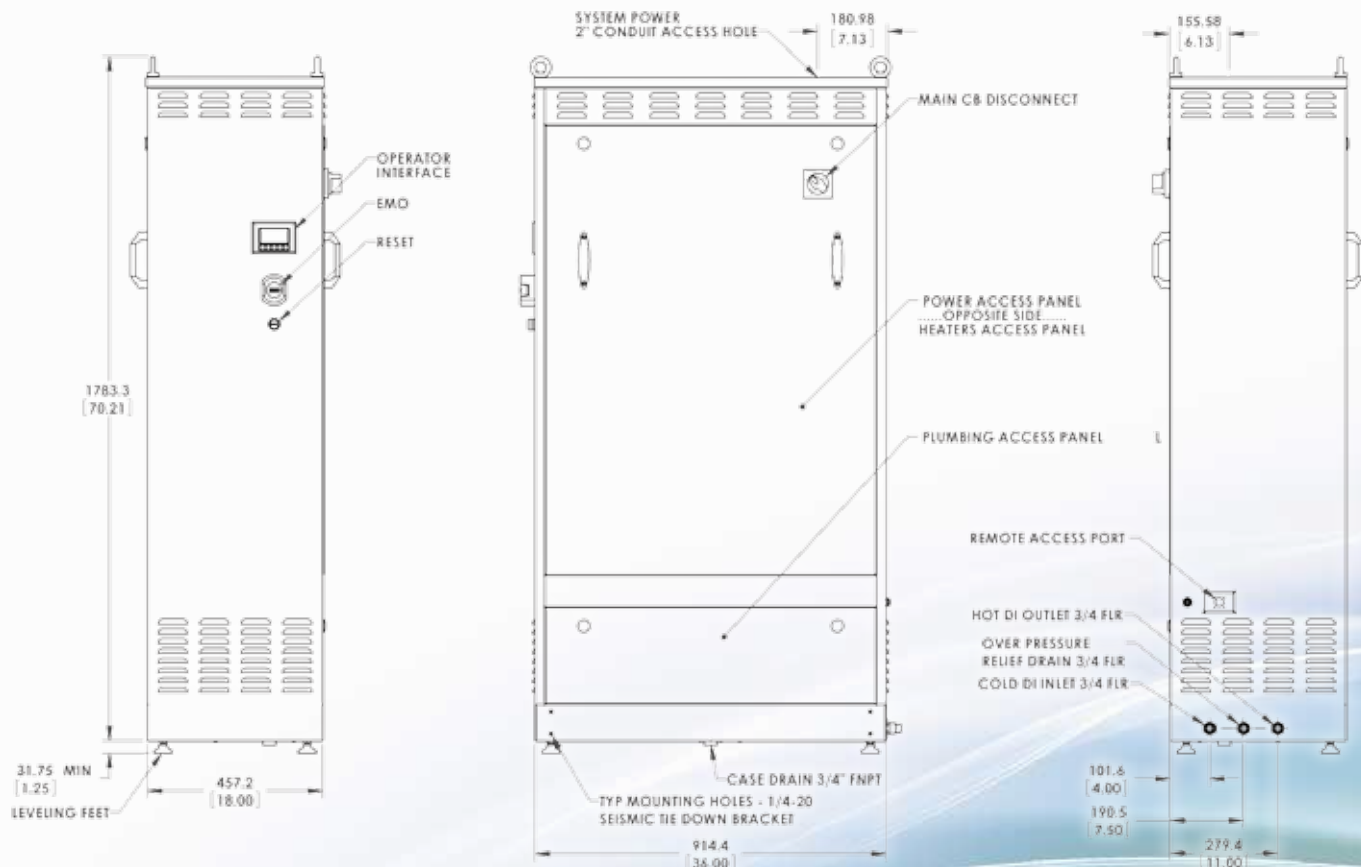
Q-SERIES ADVANTAGES



Power	Voltage (50/60 Hz)		Current Ratings (Amps)	Heating Module
30 kW		380 415	45	3
30 kW		480	40	3
30 kW	208		100	3
36 kW		480	45	3
40 kW	208		125	4
50 kW	208		155	5
60 kW		380 415	95	6
60 kW		480	75	6
60 kW	208		185	6
72 kW		480	90	6
70 kW	208		215	7
80 kW	208		245	8
90 kW		380 415	140	9
90 kW		480	110	9
90 kW	208		275	9
100 kW	208		305	10
108 kW		480	135	10
120 kW		380 415	185	12
120 kW		480	150	12
144 kW		480	180	12

Refer to back page for determining the right heater size for your application.

DIMENSIONS IN MILLIMETERS (IN.)



OPTIONS AND ORDERING

HEATER	Q	Q-Series Batch Heater
POWER	030 036 060 072 090 108 120 144	30 kW 36 kW 60 kW 72 kW 90 kW 108 kW 120 kW 144 kW
VOLTAGE	V208 V380 V415 V480	208VAC 50/60 Hz, 3 Phase 380VAC 50/60 Hz, 3 Phase 415VAC 50/60 Hz, 3 Phase 480VAC 50/60 Hz, 3 Phase
PLUMBING	A B	All PFA PVDF and PFA
OPTIONS	00	No Option

Example of an order number based on configuration options:

Q	144	V480	B	00
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SIZING FORMULA

In order to determine which heater size you need, determine the power (kW) required with the following formula:

Required kW = 0.264 (Flow in GPM) (Temp Delta °C)

Heater Sizing Formula Example

Ambient Water Temp = 25 °C

Desired Process Temp = 70 °C

Temperature Delta = 45 °C

Required kW = 0.264 (4 GPM) (45 °C) = 47.5 kW

For optimal temperature response and to compensate for seasonal changes in ambient water temperature, we recommend adding 25% excess heating capacity.

47.5 kW(1.25) = 57 kW. Trebor recommends a 60 kW heater for this application

Trebor uses virgin PTFE and PFA in all products...no re-processed material is allowed.

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