

QUANTUM 12

Appendix to Manual

SERIAL NUMBER:

PATENTS: U.S. 6544583B2, U.S. 6479094, U.S. 6433319, U.S. 6580061B2,
U.S. 6663914; ADDITIONAL PATENTS PENDING

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1 APPENDIX: QUANTUM 12

1.1 UTILITY REQUIREMENTS

Remote Signals:	Standard Ethernet, RJ-45 Connector See schematic for wiring options.
Cold DI Inlet:	3/4" Flare PFA Tube 103-414 kPa (15-60 psig)
Hot DI Outlet:	3/4" Flare PFA Tube Discharge line must be restricted to create adequate backpressure >103 kPa (15 psig). A flow restriction may be required at the point of use to limit discharge rate.
Overpressure Relief Drain:	3/4" Flare PFA Tube 3/4" flare tube or equivalent <20m (60 ft.) length to open drain
CDA or N2:	1/4" Tube – Pressure source for diaphragm valve on DI Water Inlet 414-552 kPa (60-80 psig)
Cabinet Drain:	Open to drain (do not tie to overpressure line)
System Weight:	Dry Kg. (lbs): 209 Kg (460 lbs.)
Min. Dimensions:	178cm x 81cm x 51cm (70"H x 32"W x 20"D)

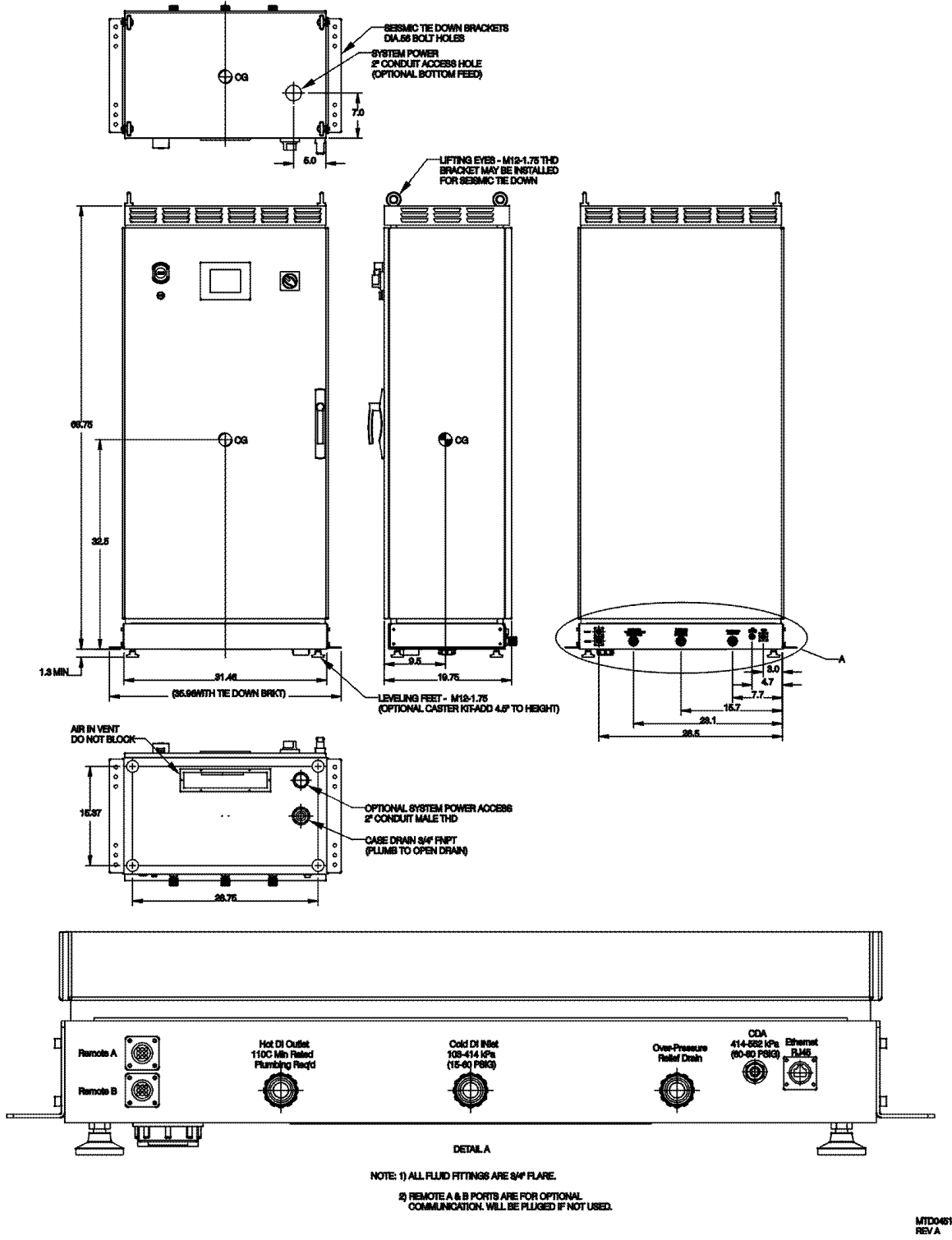
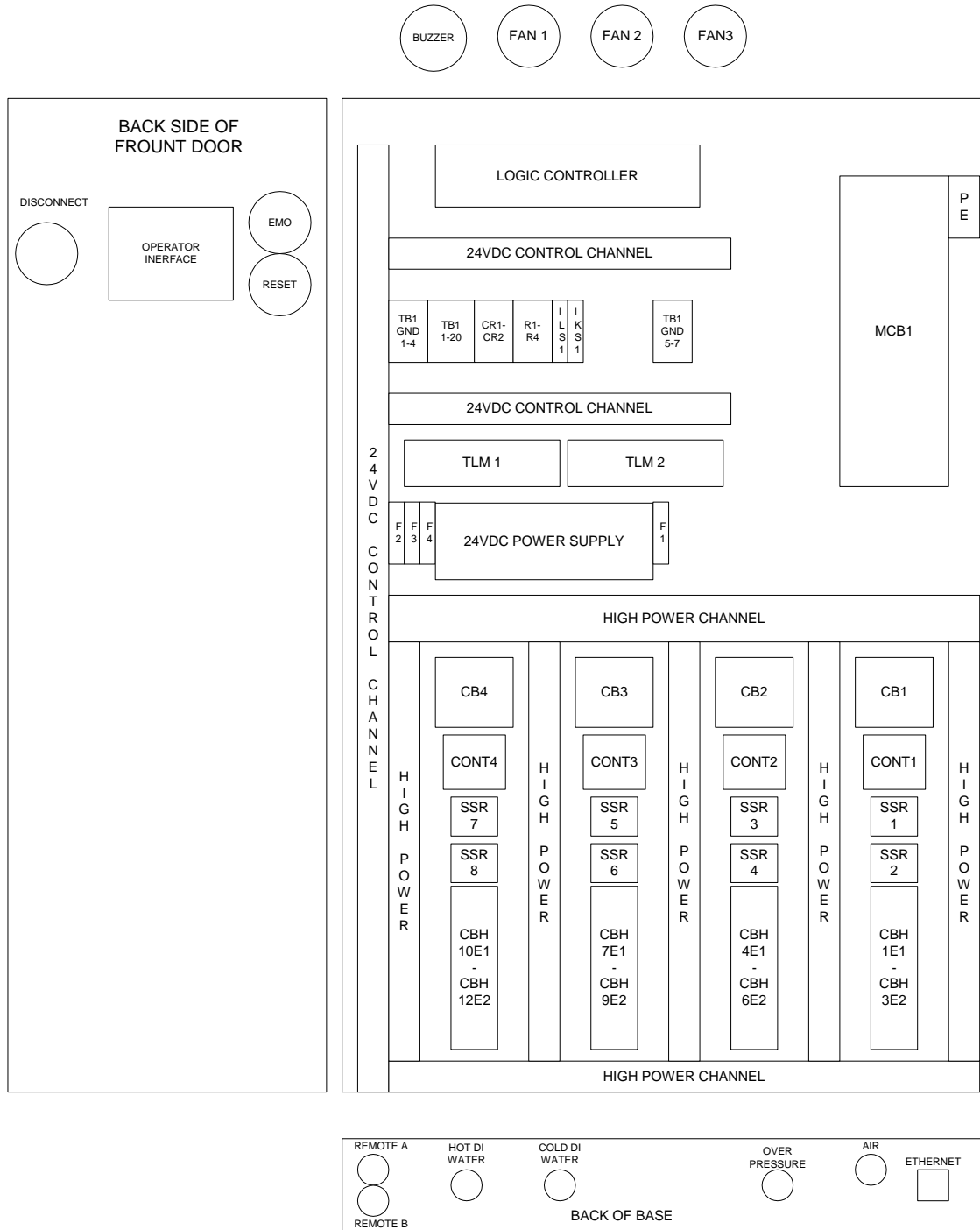


Figure 1-1: Facility Installation Layout

NOTE: Accessibility to open or remove the front and back panels is required for maintenance of the heater.



MTD0466

Figure 1-2: Electrical Component Layout

1.2 SYSTEM REQUIREMENTS

144kW 480VAC Standard Configuration

Model Number: QTM144V480A00
Heating Module: QA1V480P12
Typical Resistance: Consult factory
System Power: 480 volts, 3 phase, 50/60 Hz, 180 Amp Full Load
225 Amp over-current protection provided at machine hook-up terminals
Machine Interrupting Rating 35kA

120kW 480VAC Standard Configuration

Model Number: QTM120V480A00
Heating Module: QA1V480P10
Typical Resistance: Consult factory
System Power: 480 volts, 3 phase, 50/60 Hz, 150 Amp Full Load
200 Amp over-current protection provided at machine hook-up terminals
Machine Interrupting Rating 35kA

120kW 415VAC Standard Configuration

Model Number: QTM120V415A00
Heating Module: QA1V415P10
Typical Resistance: Consult factory
System Power: 415 volts, 3 phase, 50/60 Hz, 185 Amp Full Load
225 Amp over-current protection provided at machine hook-up terminals
Machine Interrupting Rating 35kA

120kW 380VAC Standard Configuration

Model Number: QTM120V380A00
Heating Module: QA1V380P10
Typical Resistance: Consult factory
System Power: 380 volts, 3 phase, 50/60 Hz, 185 Amp Full Load
225 Amp over-current protection provided at machine hook-up terminals
Machine Interrupting Rating 35kA

1.3 SPARE PARTS

The most common replacement parts are listed below. For items not listed please contact Trebor.

PART NO.	DESCRIPTION	RECOMMENDED SPARE QTY.
98003412	Fuse, 3 Amp, CCMR	3
98003413	Fuse, 5 Amp, CCMR	1
98003546	SSR,90A,4-32VDC IN,48-660V OUT,IDEC	4
AE112	Gasket, SSR, Thermobond	4
Heating Module	See System Requirements for part number.	1
AF174	Over-pressure Burst Fitting	1

Please specify system Model Number and Serial Number when ordering spare parts. Consult factory for other parts not shown above.

1.4 WIRING SCHEMATIC

See system label for schematic number(s). See attached fold out sheets.