

Appendix A - Heater Specifications

HCQ8-208-1-004-01

Model Number	Heater Assembly	HCQ8
System		Indirect heating using near infrared heating elements.
Performance	Heater Power	8 kW
	Temperature Limit	Up to 200°C, depending on operating conditions.
	Temperature	±1.0°C, depending on operating conditions.
	Flow rate	From 3.75 LPM up to 35 LPM (See Figure #2)*
	Heat-up Time	Over 2½°C /min. (See Figure #1)
	Pressure rating	50psig Working
Components And Construction	Heater Housing	100% PTFE
	Temperature sensors	Type "J" thermocouples
	Heating element	IR. Halogen lamps
	Wetted surfaces	GE® type 214 quartz
	Inlet/Outlet	3/4 " Quartz Male Flare Connection
	Cooling Vent Outlet	1/2" PFA Male Flare Connection
	Wire Leads	12FT Standard
Safety Devices		Media over-temperature safety for Heat Transfer Vessel T/C Heat chamber over-temperature safety switch N ₂ /CDA Cooling pressure/flow detection switch Media leakage detection safety unit (Optional)
Power Supply		208 VAC Single phase 38.5A
Cooling Gas		1.75-3.5 SCFM (Required) at 15-40 psig, Ultra pure N ₂ /CDA @ ¼"OD Compression tube connection.

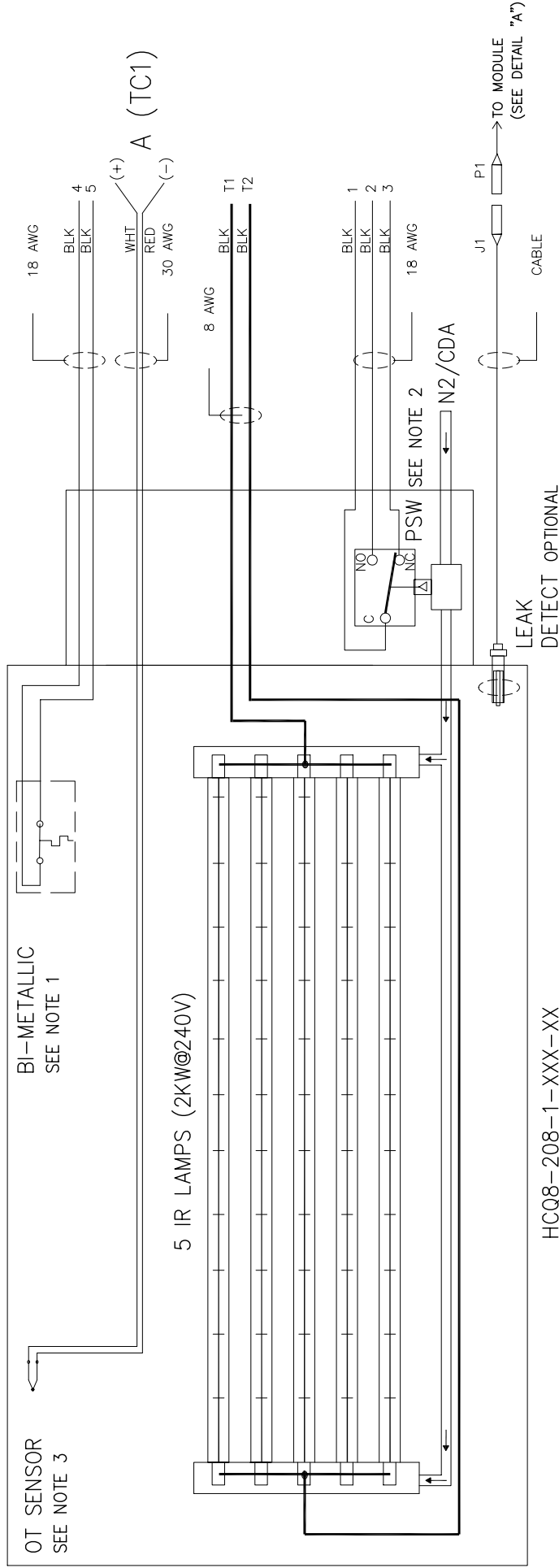
*** Warning:** If media flow through heater unit drops below 1.75 LPM; the housing temperature of heater unit will exceed 65°C.

Spare parts List

Component	Part Number	Notes
IR lamp Subassembly	8417	

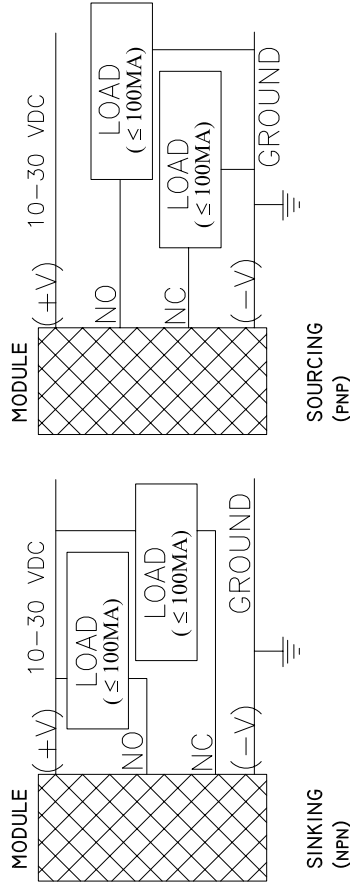
Notes

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HCQ8-208-1-XXX-XX

DETAIL "A"



- NOTES:
- 1- BI-METALLIC THERMAL SWITCH
120/240V, 6/4A
OPENS @ 185°C/365°F
 - 2- PSW (PRESSURE SWITCH)
250V, 7A
 - 3- OT SENSOR
1-TYPE 'J' T/C, SHIELDED
INSULATION THERMAL RATING 260°C
TIN COPPER OVER-BRAID
 - 4- 8kW @ 208V, 1Ø, 50/60 Hz, 39FLA
 - 5- WIRE CONTAINMENT
3/4" COMPRESSION

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DRAWN BY: MCC DATE: 01/29/02 DESIGNER: DATE:

DESCRIPTION: FACILITIES DWG, ELECTRICAL, HCQ-IR

HCQ8-208-1-XXX-XX

APPROVED BY:

SCALE:

DRAWING No.

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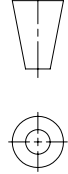
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REV.	BY	DATE	DESCRIPTION OF CHANGE
4	MAC	10/20/06	REMOVED WIRE CONTAINMENT METRIC REFERENCE
3	MAC	05/09/06	UPDATED NOTES
2	MAC	04/11/06	UPDATED NOTES FORMAT
1	MAC	03/03/06	UPDATED FORMAT
PCN: -			
MATERIAL: -			

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UNLESS NOTED
TOLERANCES ARE:
0.00 = ±.XX
0.000 = ±.XXX
ANGLES = ±1°

INCHES
(mm)



3rd ANGLE PROJECTION