

THERMAFLO

ENGINEERING COMPANY


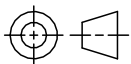
Electric Temperature

&

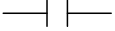





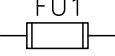

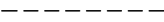



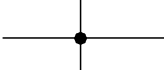
Pump Control Panel

MODEL: EC-800-EN-PM6

ELECTRICAL SCHEMATICS


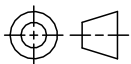
 THERMAFLO ENGINEERING COMPANY	<small>Since 1986</small>	<small>CHK'D BY</small> AS	<small>TITLE</small> ThermaFlo Engineering Co.				
		<small>DRAWN BY</small> MWB	<small>SUBTITLE</small> Electrical Temp. & Pump Control Panel				
<small>MANUFACTURERS of STEAM FIRED SPECIALTY EQUIPMENT</small>		<small>FILE NAME</small> S03343-1.dwg	<small>DATE ISSUED</small> 05/26/10	<small>SCALE</small> N.T.S.	<small>DRAWING NUMBER</small> S03343-1	<small>REV</small> 0	<small>SHEET</small> TITLE
 <small>DO NOT SCALE DRAWING</small>	<small>DRAWING TYPE</small> ELECTRICAL SCHEMATICS	<small>COPYRIGHT ©2004 SOLVERE LLC, BELMONT, NC, USA. ALL RIGHTS RESERVED. DESIGNS ARE OF A PROPRIETARY NATURE AND SHALL NOT BE REPRODUCED.</small>					

SYMBOLS LEGEND:

RTD	RESISTANCE TEMPERATURE DEVICE		NORMALLY OPEN CONTACT
	TERMINAL BLOCK		NORMALLY CLOSED CONTACT
	SOLENOID VALVE		PRESSURE SWITCH NORMALLY OPEN CONTACT
	PILOT LIGHT		FU1 FUSE
CR-1			WIRED BY OTHERS (EXTERNAL TO PANEL)
	CONTROL RELAY		PANEL WIRING
	PUMP MOTOR		WIRING CONNECTION

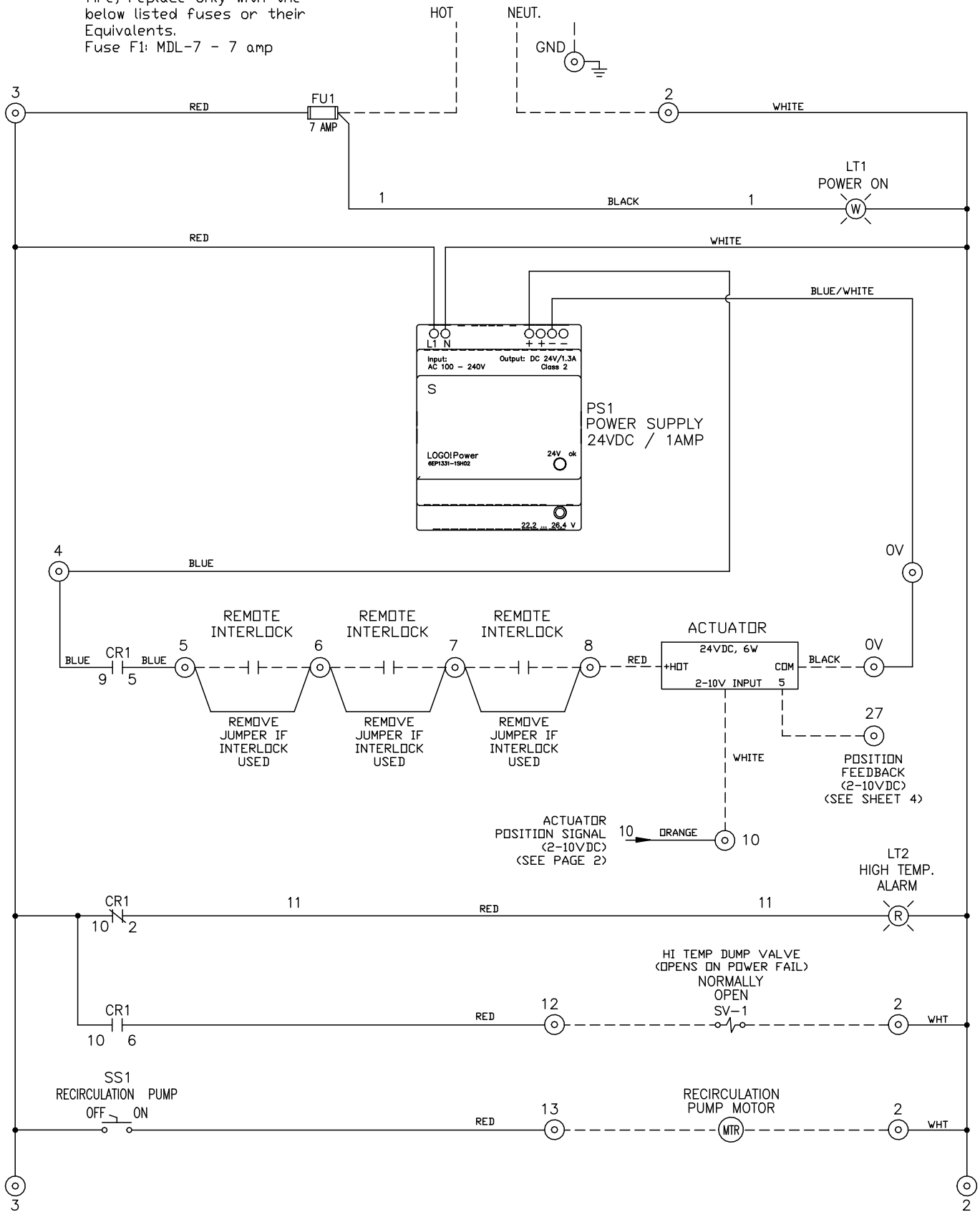
NOTES:

1. Panel wiring to be 18 AWG
Field wiring to be 14 GA THHN or larger.
2. Wire numbers are the same as terminal numbers except where noted.
3. Controller to be programmed such that the Alarm Switch opens on High Temperature.

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	MANUFACTURERS of STEAM FIRED SPECIALTY EQUIPMENT	DRAWN BY MWB	SUBTITLE Electrical Temp. & Pump Control Panel			
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WARNING: To reduce risk of fire, replace only with the below listed fuses or their Equivalents.
Fuse F1: MDL-7 - 7 amp

120VAC 1 Phase 60hz



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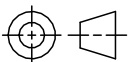
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SUBTITLE

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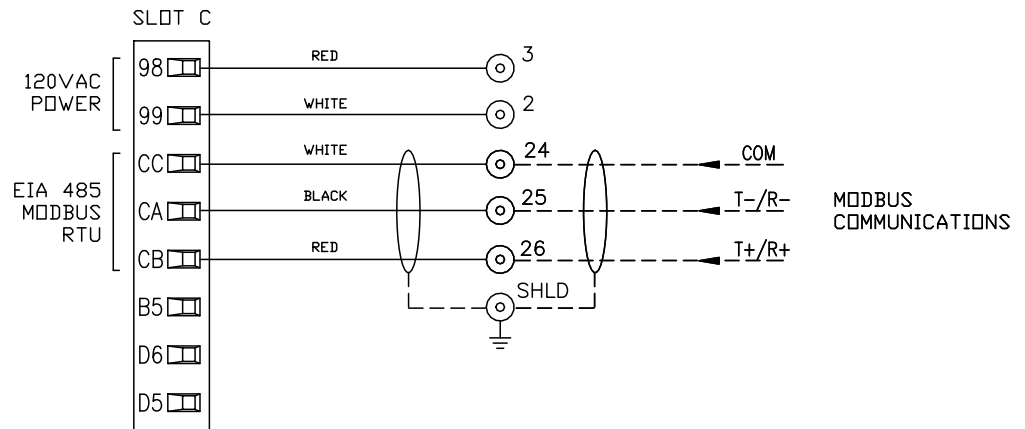
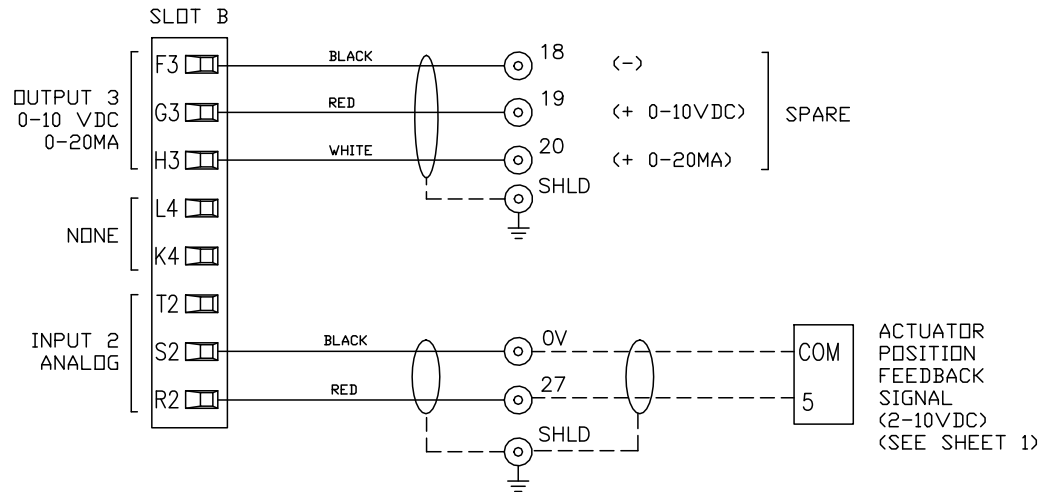
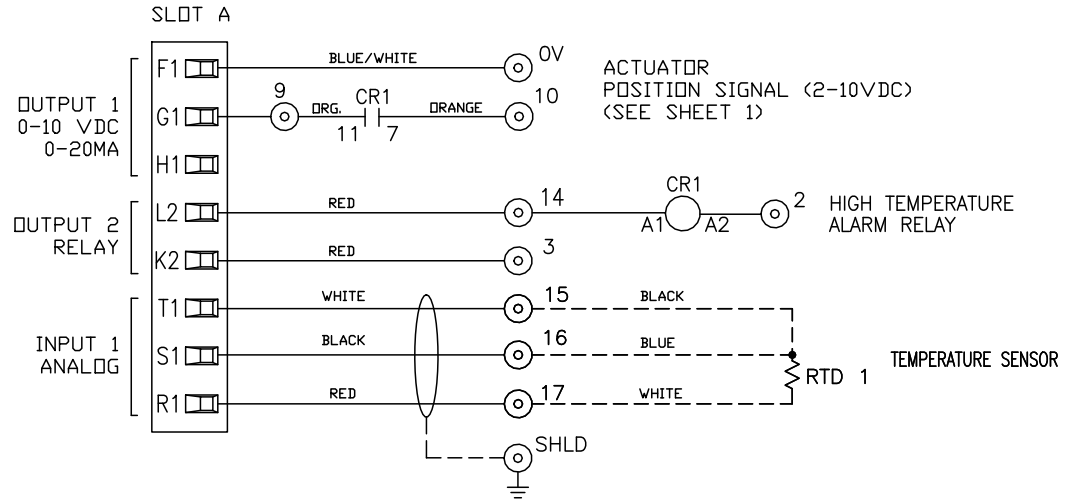
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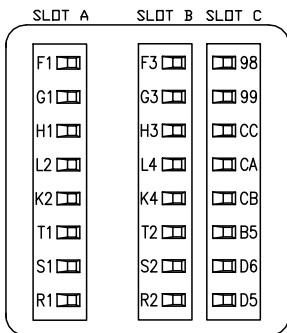
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WATLOW CONTROLLER PM6C1FJ-1RF AAAA



WATLOW CONTROLLER SLOT LOCATIONS



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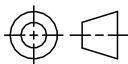
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WATLOW CONTROLLER PM6C1FJ-1RFAAAA

PIN DESCRIPTIONS

SLOT A

OUTPUT 1 0-10 VDC 0-20MA	F1	VOLTS- / CURRENT-
	G1	VOLTS+
	H1	CURRENT+
OUTPUT 2 RELAY	L2	NORMALLY OPEN
	K2	COMMON
INPUT 1 ANALOG	T1	RTD+ / CURRENT +
	S1	RTD- / CURRENT- / VOLTS-
	R1	RTD+ / THERMOCOUPLE+ / VOLTS+

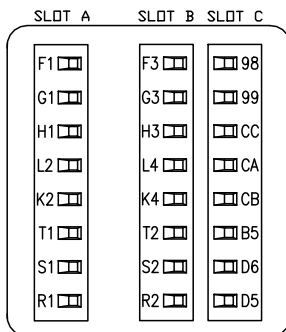
SLOT B

OUTPUT 3 0-10 VDC 0-20MA	F3	VOLTS- / CURRENT-
	G3	VOLTS+
	H3	CURRENT+
NONE	L4	
	K4	
INPUT 2 ANALOG	T2	RTD+ / CURRENT +
	S2	RTD- / CURRENT- / VOLTS-
	R2	RTD+ / THERMOCOUPLE+ / VOLTS+

SLOT C

120VAC POWER	98	POWER - 120VAC HOT
	99	POWER - 120VAC NEUTRAL
EIA 485 MODBUS RTU	CC	COMMON
	CA	T-/R-
	CB	T+/R+
	B5	
	D6	
	D5	

WATLOW CONTROLLER SLOT LOCATIONS



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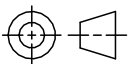
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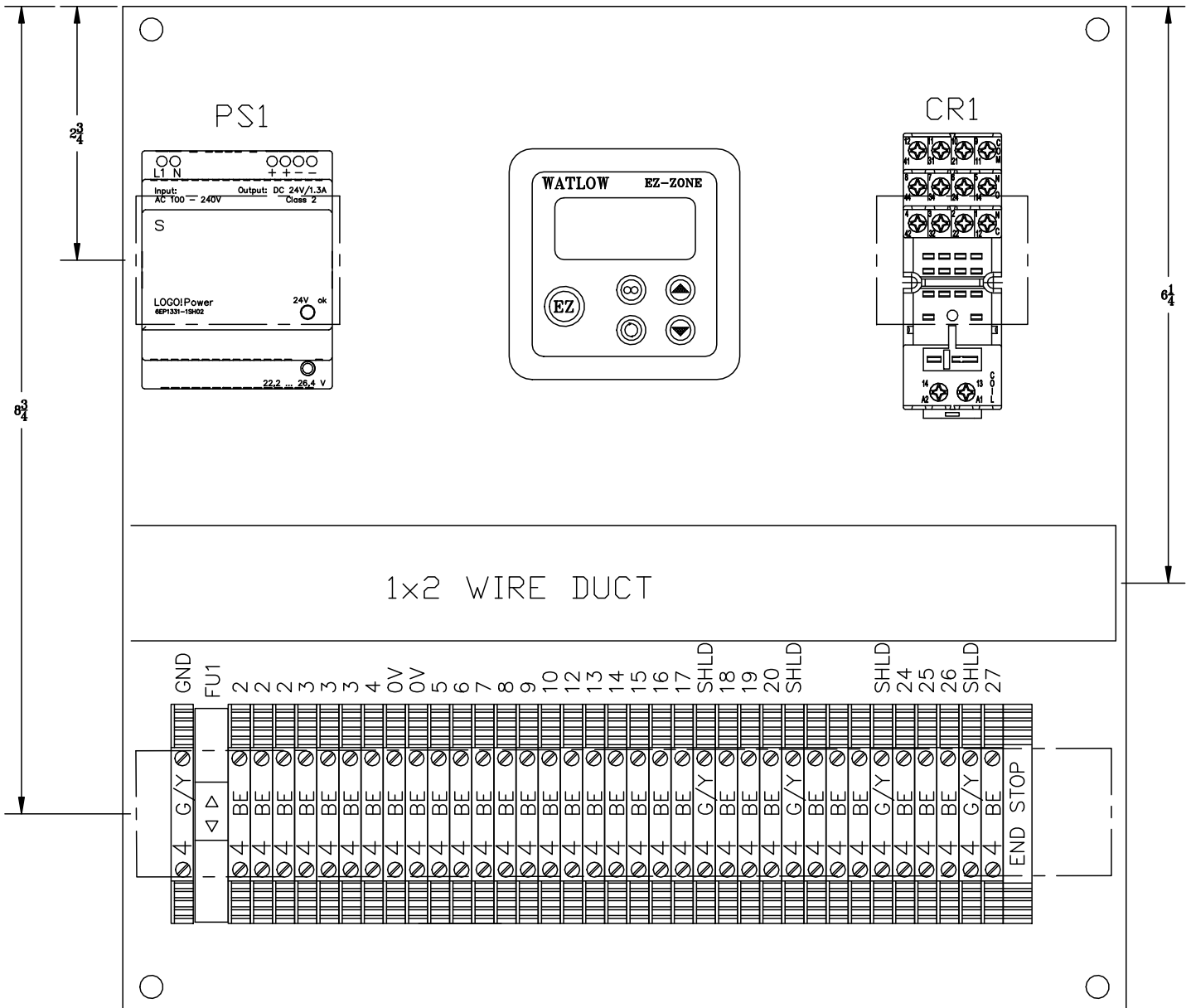
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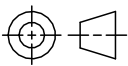
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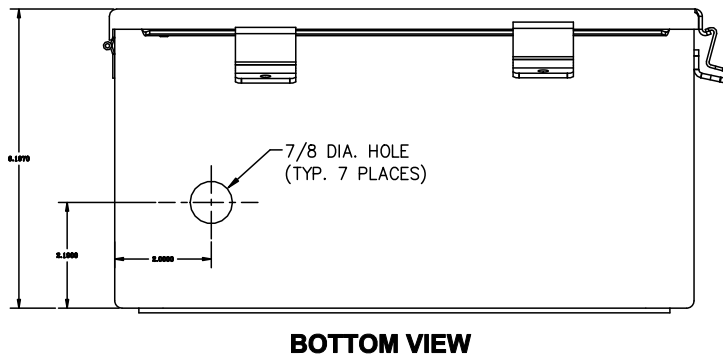
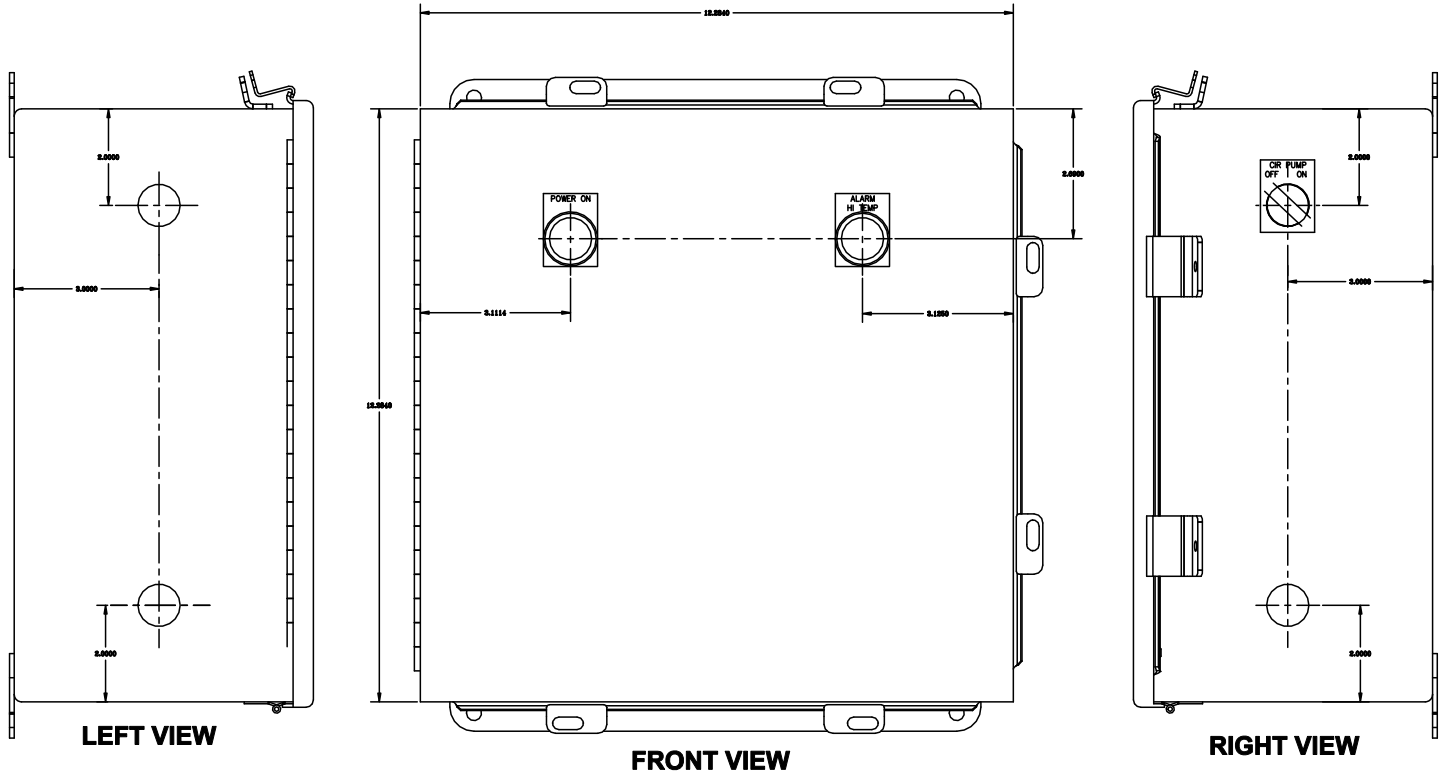
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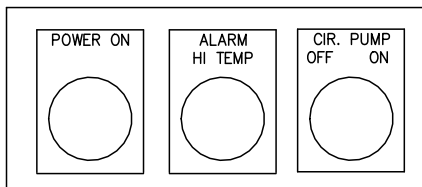
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LEGEND PLATES



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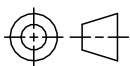
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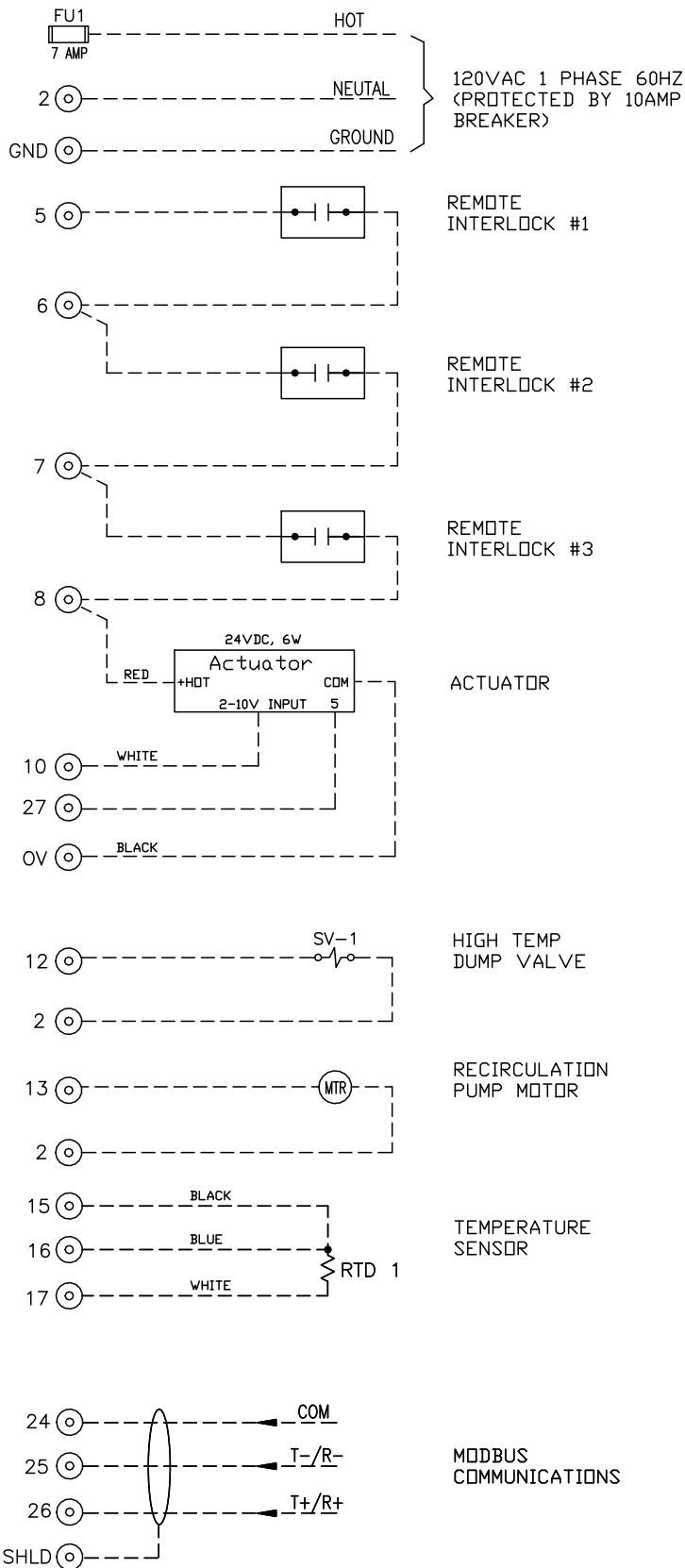
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CONTROL PANEL EXTERNAL CONNECTIONS



NOTE

⊙ CONTROL PANEL TERMINAL BLOCK SYMBOL

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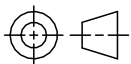
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