

GENERAL NOTES:

1. REFER TO CGAM REFRESH ELECTRICAL SCHEMATIC FOR SPECIFIC ELECTRICAL CONNECTION INFORMATION AND NOTES PERTAINING TO WIRING INSTALLATION.
2. ALL FIELD WIRING MUST BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE AND LOCAL REQUIREMENTS. WIRE REPRESENTED BY DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS.
3. ALL CUSTOMER CONTROL CIRCUIT WIRING MUST BE COPPER CONDUCTORS ONLY AND HAVE A MINIMUM INSULATION RATING OF 300 VOLTS. EXCEPT AS NOTED, ALL CUSTOMER WIRING CONNECTIONS ARE MADE TO CIRCUIT BOARD MOUNTED BOX LUGS WITH A WIRE RANGE OF 14 TO 18 AWG OR DIN RAIL MOUNTED SPRING FORCE TERMINALS.
- 4 SINGLE SOURCE POWER IS PROVIDED AS STANDARD ON THESE PRODUCTS, FIELD CONNECTIONS ARE MADE TO 1X1, OR 1Q2.
- 5 FIELD CONNECTIONS ARE ONLY MADE IN A CUSTOMER PROVIDED PUMP (PTYP=NONE). THESE CONNECTIONS WILL BE MADE BY THE FACTORY WHEN THE PUMP IS PROVIDED BY THE FACTORY (PTYP=DHHP).
- 6 CUSTOMER SUPPLIED POWER 115/60/1 OR 220/50/1 TO POWER RELAYS. MAX. FUSE SIZE IS 20 AMPS. GROUND ALL CUSTOMER SUPPLIED POWER SUPPLIES AS REQUIRED BY APPLICABLE CODES. GREEN GROUND SCREWS ARE PROVIDED IN UNIT CONTROL PANEL.
- 7 WIRED TO NEXT UNIT. 22 AWG SHIELDED COMMUNICATION WIRE EQUIVALENT TO HELIX LF22P0014216 RECOMMENDED. THE SUM TOTAL OF ALL INTERCONNECTED CABLE SEGMENTS NOT TO EXCEED 4500 FEET. CONNECTION TOPOLOGY SHOULD BE DAISY CHAIN. REFER TO BUILDING AUTOMATION SYSTEM (BAS) COMMUNICATION INSTALLATION LITERATURE FOR END OF LINE TERMINATION RESISTOR REQUIREMENTS.
- 8 WIRED TO TRACER OR OTHER TRANE REMOTE DEVICE. 22 AWG SHIELDED COMMUNICATION WIRE EQUIVALENT TO HELIX LF22P0014216 RECOMMENDED. THE SUM TOTAL OF ALL INTERCONNECTED CABLE SEGMENTS NOT TO EXCEED 4500 FEET. CONNECTION TOPOLOGY SHOULD BE DAISY CHAIN. REFER TO BUILDING AUTOMATION SYSTEM (BAS) COMMUNICATION INSTALLATION LITERATURE FOR END OF LINE TERMINATION RESISTOR REQUIREMENTS.
- 9 WIRED TO CUSTOMER CHILLED WATER SET POINT 2-10V OR 4-20mA.
- 10 WIRED TO CUSTOMER EXTERNAL DEMAND LIMIT 2-10V OR 4-20mA.
- 11 WIRED TO CUSTOMER 2-10V OR 4-20mA % CAPACITY ANNUNCIATOR.
- 12 CUSTOMER SUPPLIED POWER 115/60/1 TO CONVENIENCE OUTLET. MAX FUSE SIZE IS 20A. GROUND ALL CUSTOMER SUPPLIED POWER SUPPLIES AS REQUIRED BY APPLICABLE CODES. GREEN GROUND SCREWS ARE PROVIDED IN UNIT CONTROL PANEL.
- 13 ALL UNIT POWER WIRING MUST BE 600 VOLT COPPER CONDUCTORS ONLY AND HAVE A MINIMUM TEMPERATURE INSULATION RATING OF 90 DEGREE C. REFER TO UNIT NAMEPLATE FOR MINIMUM CIRCUIT AMPACITY AND MAXIMUM OVERCURRENT PROTECTION DEVICE. PROVIDE AN EQUIPMENT GROUND IN ACCORDANCE WITH APPLICABLE ELECTRIC CODES. REFER TO WIRE RANGE TABLE FOR LUG SIZES.
- 14 UNIT PROVIDED DRY CONTACTS FOR THE CONDENSER/CHILLED WATER PUMP CONTROL. RELAYS ARE RATED FOR 7.2 AMPS RESISTIVE, 2.88 AMPS PILOT DUTY, OR 1/3 HP, 7.2 FLA AT 120 VOLTS 60 HZ, CONTACTS ARE RATED FOR 5 AMPS GENERAL PURPOSE DUTY 240 VOLTS.
- 15 CUSTOMER SUPPLIED CONTACTS FOR ALL LOW VOLTAGE CONNECTIONS MUST BE COMPATABLE WITH DRY CIRCUIT 24 VOLTS DC FOR A 12 mA RESISTIVE LOAD. SILVER OR GOLD PLATED CONTACTS RECOMMENDED.
- 16 FIELD CONNECTIONS ARE ONLY MADE IN A CUSTOMER PROVIDED PUMP. THESE CONNECTIONS WILL BE MADE BY THE FACTORY WHEN THE PUMP IS PROVIDED BY THE FACTORY. CUSTOMER SUPPLIED POWER 115V, 60Hz, 1PH.
- 17 CUSTOMER SUPPLIED 3 PHASE POWER.
- 18 OPTIONAL FIELD ASSIGNED PROGRAMMABLE RELAYS (STAT=PRLY). CLASS 1 FIELD WIRED MODULE, RELAY AT 120V: 7.2A RESISTIVE 2.88A PILOT DUTY, 1/2HP 7.2FLA; AT 240VAC: 5 AMPS GENERAL PURPOSE.
- 19 WIRED TO CUSTOMER 0-10 VDC PUMP SPEED SIGNAL.
- 20 WHEN FACTORY PROVIDED PUMP IS NOT SELECTED. CUSTOMER MUST SUPPLY SUITABLE PUMP SYSTEM. REFER TO PUMP MANUFACTURER FOR WIRING REQUIREMENTS.
- 21 THE CONTACTS FOR AUTO STOP AND EMERGENCY STOP SWITCHES ARE JUMPERED AT THE FACTORY BY JUMPERS W2 & W3 TO ENABLE UNIT OPERATION. IF REMOTE CONTROL IS DESIRED, REMOVED THE JUMPERS AND CONNECT TO THE DESIRED CONTROL CIRCUIT.
- 22 1A44, LONTALK MODULE USED WHEN (COMM = LCJ).
- 23 1T5, 1T6, AND 1T7 ARE WIRED TO 1A45 AND ARE LOOSE FOR FIELD INSTALLATION. INSTALLING CONTRACTOR TO LOOP EACH CURRENT TRANSFORMER AROUND INCOMING WIRING IN ACCORDANCE WITH VERIS MODEL #E23C6-12 INSTALLATION INSTRUCTIONS. BE MINDFUL OF PHASING AND THE DIRECTION THE ARROWS ARE POINTING ON THE CURRENT TRANSFORMERS.

FUSE REPLACEMENT TABLE					
FUSE	VOLTAGE	HERTZ(HZ)	CLASS	AMPS	NOTES
1F1	ALL	60	CC	10	FUSE, COMPRESSOR CRANKCASE HEATER
1F2	ALL	60	CC	10	
1F5-1F6	200	60	CC	10	FUSE, CONTROL POWER TRANSFORMER, PRIMARY
	230	60	CC	10	
	380	60	CC	5	
	460	60	CC	5	
	575	60	CC	5	
1F7	200	60	CC	10	FUSE, THIRD PHASE, PHASE PROTECTION MONITOR
	230	60	CC	10	
	380	60	CC	5	
	460	60	CC	5	
	575	60	CC	5	
1F11	ALL	60	CC	10	FUSE, CONTROL POWER TRANSFORMER, SECONDARY, 115V
1F14-16	200, 230 380, 460	60	CC	30	FUSE, INVERTER, FAN (FAST ACTING EXCEPT 575V)
1F17-19	575	60	CC	6	
1F38-40 1F44-46	ALL	60	CC	30	FUSE, FAST ACTING, ATM-R-30
FACTORY PROVIDED PUMP INVERTER FUSE					
1F32-34	200, 230	60	CC	30	3.7KW VSD
	460, 575		CC	25	5.5KW VSD
	200, 230		J	60	7.5KW VSD
	460, 575		CC	30	
	460, 575		J	40	

DRAWN BY: JESSICA YUAN

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REPLACES:

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DIAGRAM
UNIT FIELD WIRING

CGAM REFRESH

DRAWING NUMBER

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CAD: CREO SCHEMATICS