

NOTES:

1. FOR 180, 200, 215, 230 TON UNITS ONLY.
2. FOR COOLING ONLY UNITS ICE MAKING / PROCESS COOLING ONLY.
3. FOR 80, 180, 200 TON HEAT PUMP UNITS ONLY.
4. FOR PARTIAL HEAT RECOVERY ONLY.

- 6B2 SWITCH;
PHR HIGH WATER TEMPERATURE
6E50-6 SUBMERSION HEATER;
PHR ENTERING WATER PIPING HEATER
6E50-7 SUBMERSION HEATER;
PHR ENTERING WATER PIPING HEATER
6E50-8 SUBMERSION HEATER;
PHR BP HEATER
6B54 THERMOSTAT;
ANTIFREEZE HEATER, PHR
6E50-4 SUBMERSION HEATER;
PHR LEAVING WATER PIPING HEATER
6E50-5 SUBMERSION HEATER;
PHR LEAVING WATER PIPING HEATER
6X7 TERMINAL BLOCK;
PHR HEATER JUNCTION BOX

PHR DETAIL

COOLING ONLY UNIT / ACSA 140T-230T

UNLESS OTHERWISE SPECIFIED
- REMOVE ALL BURRS AND SHARP CORNERS
- WELD SYMBOLS TO BE IN ACCORDANCE
WITH ANSI/AWS A2.4
- ALL DIMENSIONS ARE IN MILLIMETERS.

ALL
DIMENSIONS = ±

ANGLES = ± °

HOLE DIA = ±

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THIRD ANGLE PROJECTION

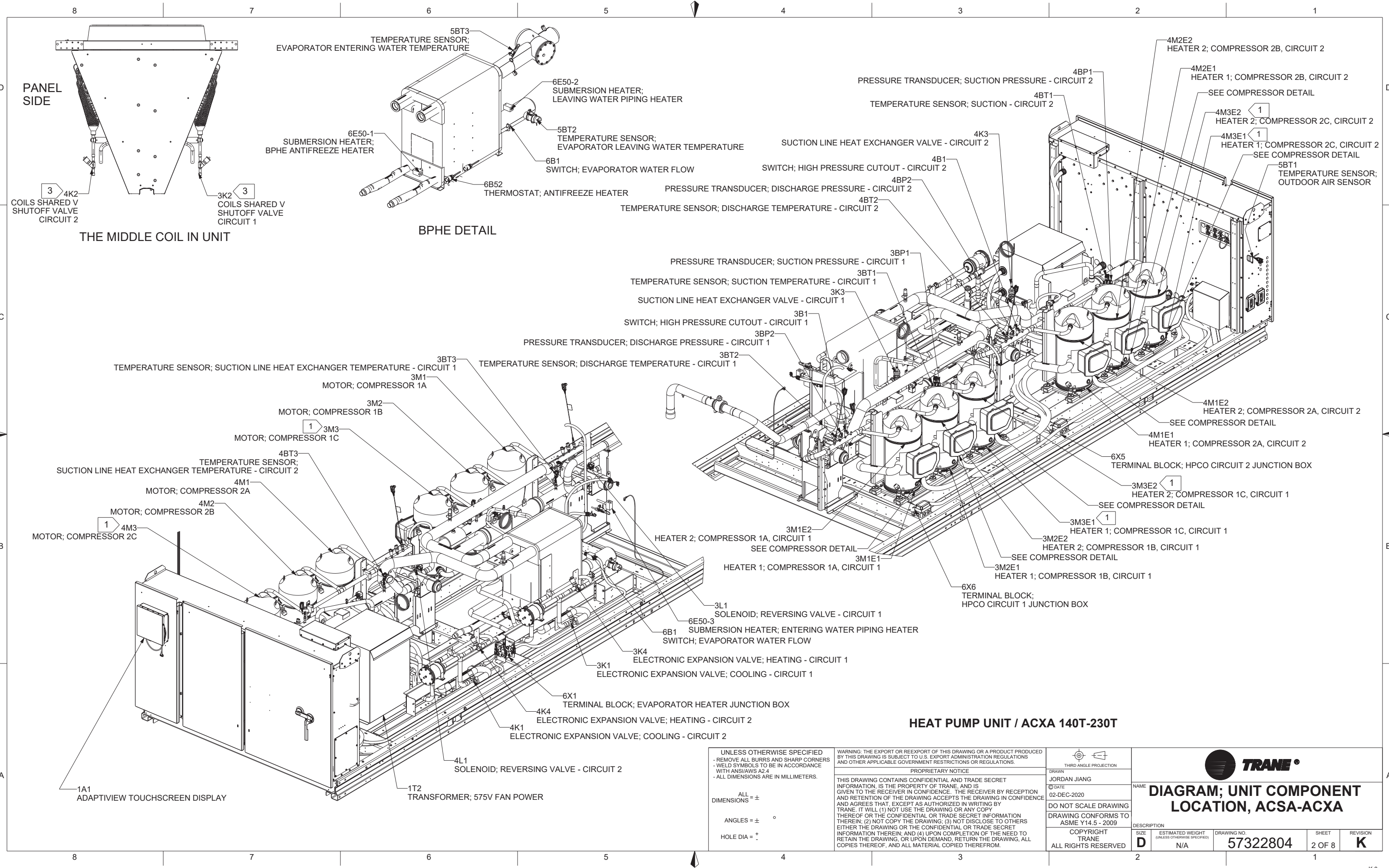
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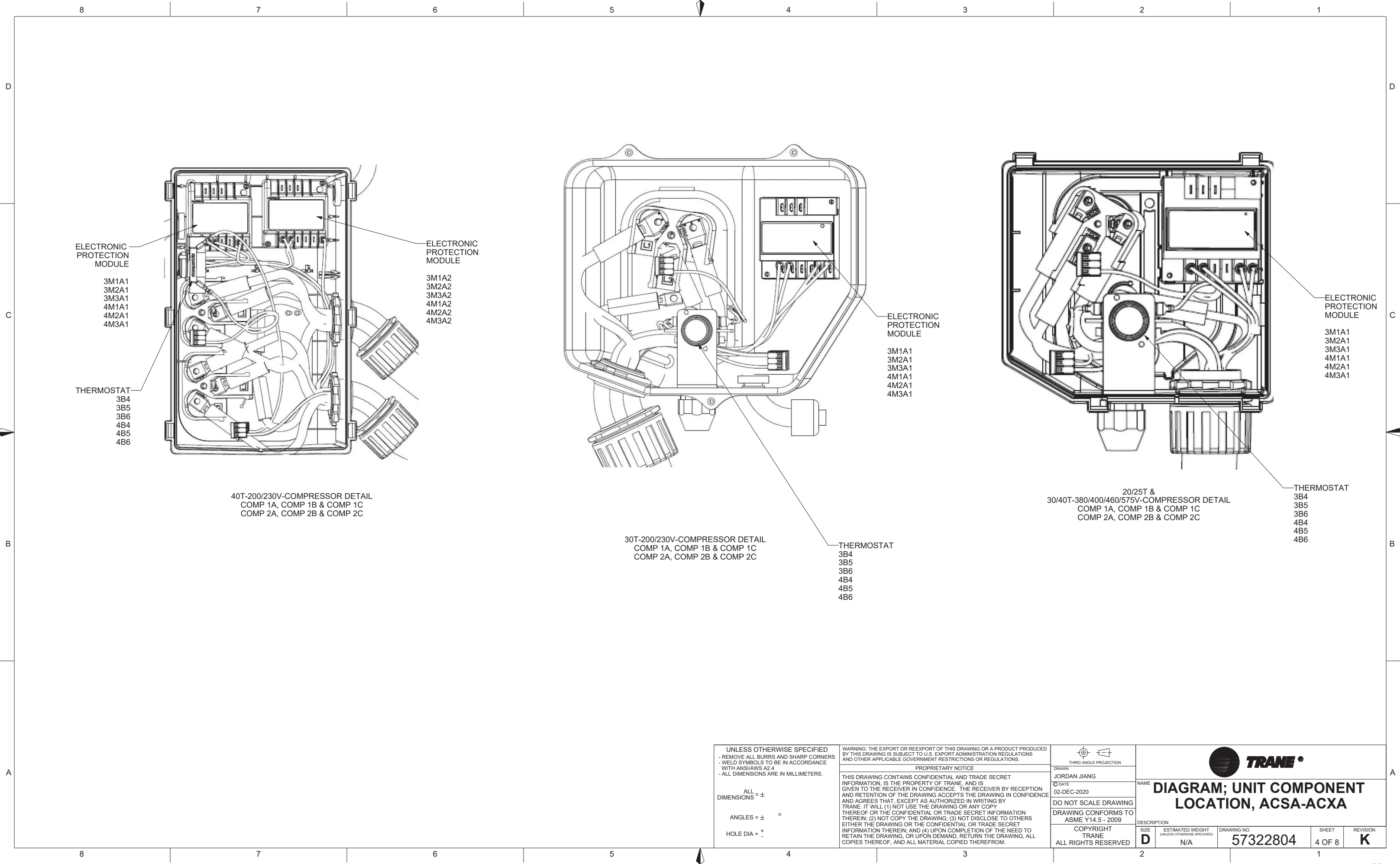
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DIAGRAM; UNIT COMPONENT
LOCATION, ACSA-ACXA

SIZE	ESTIMATED WEIGHT (UNLESS OTHERWISE SPECIFIED)	DRAWING NO.	SHEET	REVISION
D	N/A	57322804	1 OF 8	K





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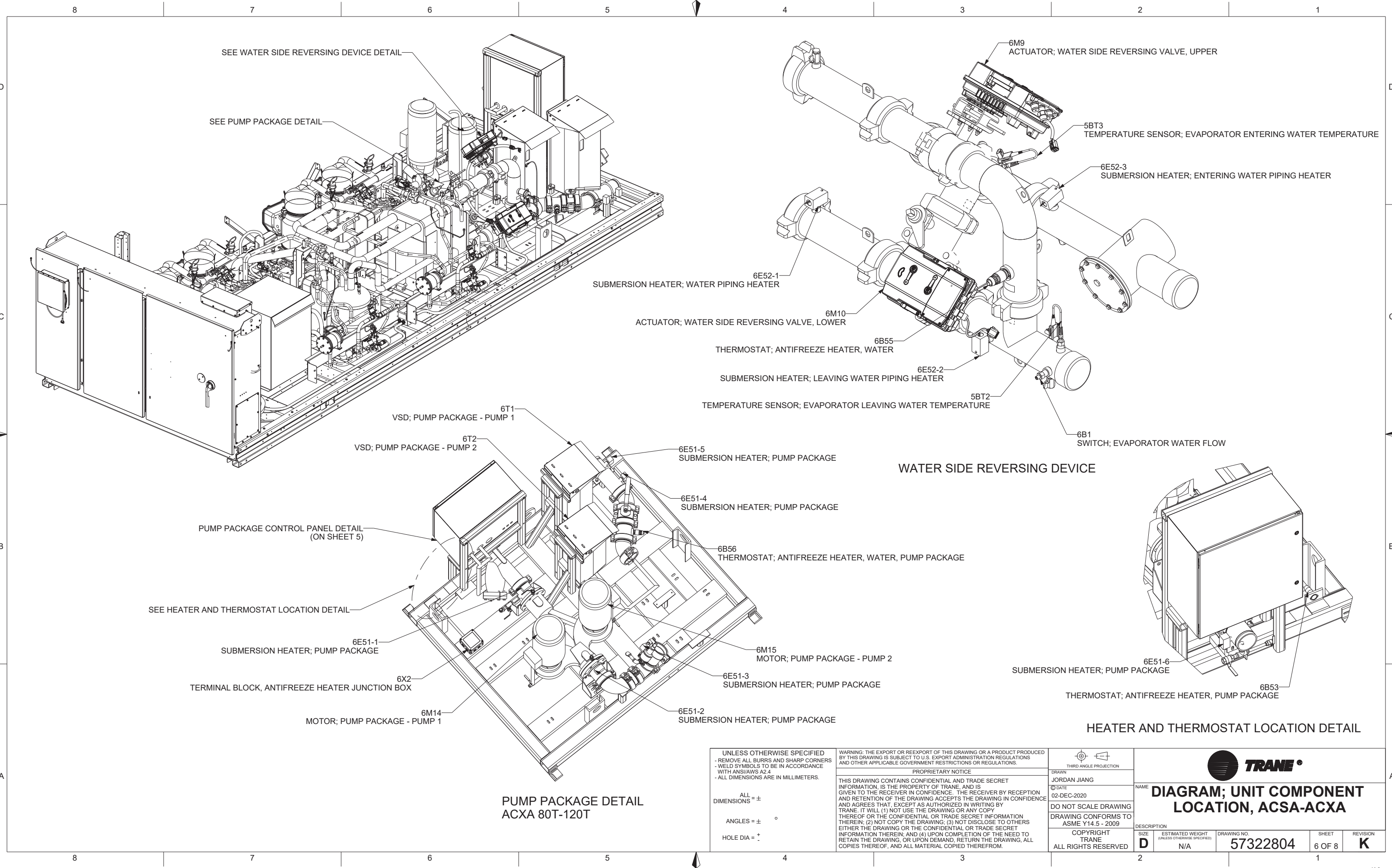
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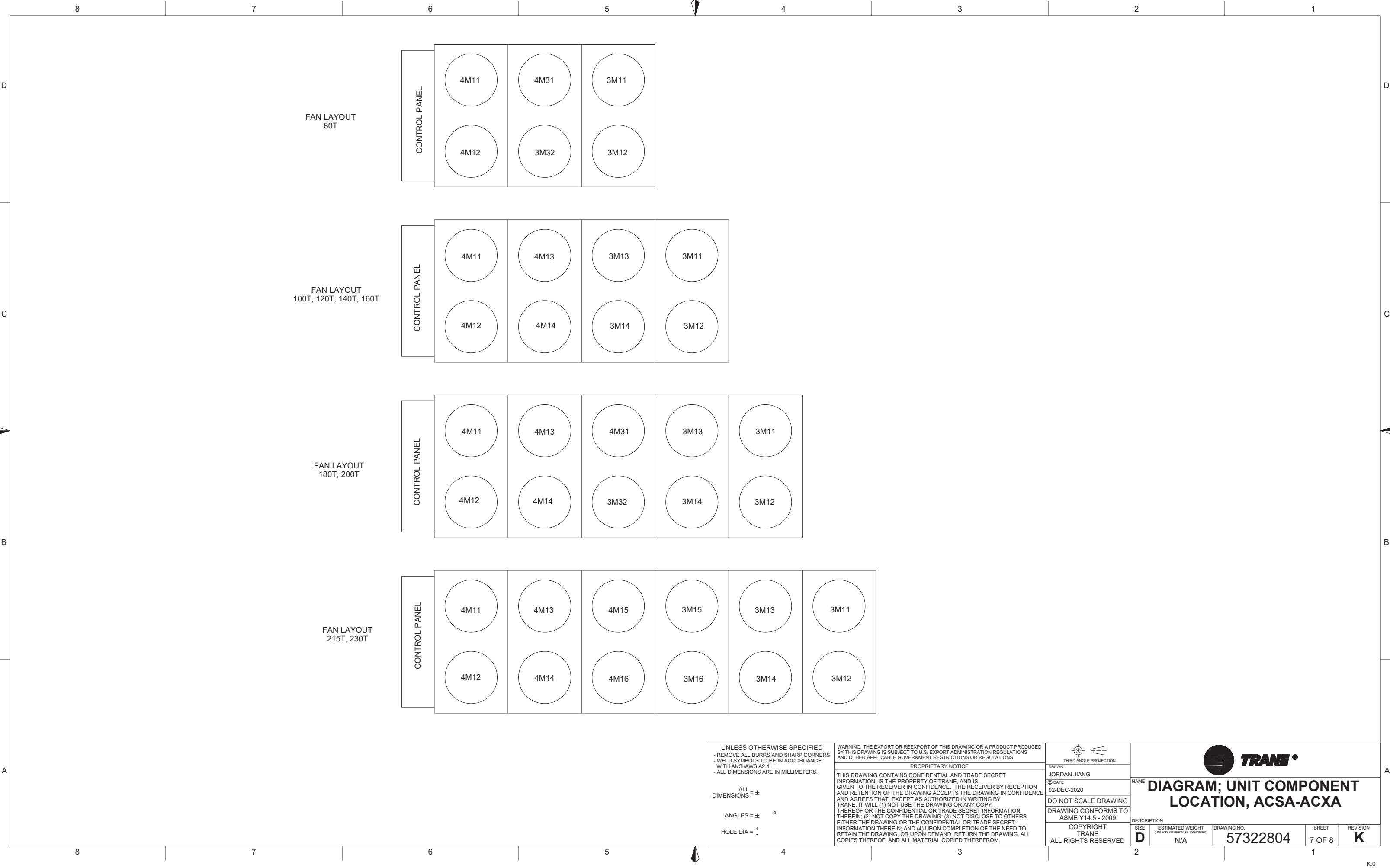
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DRAWING NO.		SHEET	REVISION
57322804		6 OF 8	K



8		7		6		5		4		3		2		1	
DEVICE	DESCRIPTION	DEVICE	DESCRIPTION	DEVICE	DESCRIPTION	DEVICE	DESCRIPTION	DEVICE	DESCRIPTION						
1A1	ADAPTIVIEW TOUCHSCREEN DISPLAY	4K2	COILS SHARED V SHUTOFF VALVE - CIRCUIT 2	6F21	FUSE; CLASS J - PUMP PACKAGE - L2										
1T2	TRANSFORMER; CONDENSER FAN POWER, 200V/230V/575V	4K3	SUCTION LINE HEAT EXCHANGER VALVE - CIRCUIT 2	6F22	FUSE; CLASS J - PUMP PACKAGE - L3										
3B1	SWITCH; HIGH PRESSURE CUTOUT - CIRCUIT 1	4K4	ELECTRONIC EXPANSION VALVE; HEATING - CIRCUIT 2	6K50	MODULE; EVAPORATOR PUMP VSD CONTROL										
3B4	THERMOSTAT; COMPRESSOR 1A JUNCTION BOX	4K5	ECONOMIZER INJECTION VALVE - COMPRESSOR 2A	6K51	MODULE; EVAPORATOR PUMP VSD FAULT										
3B5	THERMOSTAT; COMPRESSOR 1B JUNCTION BOX	4K6	ECONOMIZER INJECTION VALVE - COMPRESSOR 2B	6K52	MODULE; EVAPORATOR PUMP VSD SPEED CONTROL										
3B6	THERMOSTAT; COMPRESSOR 1C JUNCTION BOX	4K7	ELECTRONIC EXPANSION VALVE; ECONOMIZER - CIRCUIT 2	6M10	ACTUATOR; WATER SIDE REVERSING VALVE, LOWER										
3BP1	PRESSURE TRANSDUCER; SUCTION PRESSURE - CIRCUIT 1	4K8	ELECTRONIC EXPANSION VALVE 2; HEATING - CIRCUIT 2	6M14	MOTOR; PUMP PACKAGE - PUMP 1										
3BP2	PRESSURE TRANSDUCER; DISCHARGE PRESSURE - CIRCUIT 1	4L1	SOLENOID; REVERSING VALVE - CIRCUIT 2	6M14E1	MOTOR HEATER; PUMP PACKAGE - PUMP 1										
3BP3	PRESSURE TRANSDUCER; ECONOMIZER DISCHARGE PRESSURE - CIRCUIT 1	4M1	MOTOR; COMPRESSOR 2A	6M15	MOTOR; PUMP PACKAGE - PUMP 2										
3BT1	TEMPERATURE SENSOR; SUCTION TEMPERATURE - CIRCUIT 1	4M11	MOTOR; CONDENSER FAN - CIRCUIT 2	6M15E1	MOTOR HEATER; PUMP PACKAGE - PUMP 2										
3BT2	TEMPERATURE SENSOR; DISCHARGE TEMPERATURE - CIRCUIT 1	4M12	MOTOR; CONDENSER FAN - CIRCUIT 2	6M5	ACTUATOR, MODULATION VALVE PHR BYPASS CIRCUIT 1										
3BT3	TEMPERATURE SENSOR; SUCTION LINE HEAT EXCHANGER TEMPERATURE - CIRCUIT 1	4M13	MOTOR; CONDENSER FAN - CIRCUIT 2	6M6	ACTUATOR, MODULATION VALVE PHR CONTROL CIRCUIT 1										
3BT4	TEMPERATURE SENSOR; DISCHARGE TEMPERATURE - COMPRESSOR 1A	4M14	MOTOR; CONDENSER FAN - CIRCUIT 2	6M7	ACTUATOR, MODULATION VALVE PHR BYPASS CIRCUIT 2										
3BT5	TEMPERATURE SENSOR; DISCHARGE TEMPERATURE - COMPRESSOR 1B	4M15	MOTOR; CONDENSER FAN - CIRCUIT 2	6M8	ACTUATOR, MODULATION VALVE PHR CONTROL CIRCUIT 2										
3BT6	TEMPERATURE SENSOR; ECONOMIZER DISCHARGE TEMPERATURE - CIRCUIT 1	4M16	MOTOR; CONDENSER FAN - CIRCUIT 2	6M9	ACTUATOR; WATER SIDE REVERSING VALVE, UPPER										
3K1	ELECTRONIC EXPANSION VALVE; COOLING - CIRCUIT 1	4M1A1	ELECTRONIC PROTECTION MODULE, COMPRESSOR 2A, CIRCUIT 2	6T1	VSD; PUMP PACKAGE - PUMP 1										
3K2	COILS SHARED V SHUTOFF VALVE - CIRCUIT 1	4M1A2	ELECTRONIC PROTECTION MODULE, COMPRESSOR 2A, CIRCUIT 2	6T2	VSD; PUMP PACKAGE - PUMP 2										
3K3	SUCTION LINE HEAT EXCHANGER VALVE - CIRCUIT 1	4M1E1	HEATER 1; COMPRESSOR 2A, CIRCUIT 2	6X1	TERMINAL BLOCK; EVAPORATOR HEATER JUNCTION BOX										
3K4	ELECTRONIC EXPANSION VALVE; HEATING - CIRCUIT 1	4M1E2	HEATER 2; COMPRESSOR 2A, CIRCUIT 2	6X2	TERMINAL BLOCK, ANTIFREEZE HEATER JUNCTION BOX										
3K5	ECONOMIZER INJECTION VALVE - COMPRESSOR 1A	4M2	MOTOR; COMPRESSOR 2B	6X3	TERMINAL BLOCK; MOTOR HEATER JUNCTION BOX										
3K6	ECONOMIZER INJECTION VALVE - COMPRESSOR 1B	4M2A1	ELECTRONIC PROTECTION MODULE, COMPRESSOR 2B, CIRCUIT 2	6X4	TERMINAL BLOCK; PUMP PACKAGE										
3K7	ELECTRONIC EXPANSION VALVE; ECONOMIZER - CIRCUIT 1	4M2A2	ELECTRONIC PROTECTION MODULE, COMPRESSOR 2B, CIRCUIT 2	6X5	TERMINAL BLOCK; HPCO CIRCUIT 2 JUNCTION BOX										
3K8	ELECTRONIC EXPANSION VALVE 2; HEATING - CIRCUIT 1	4M2E1	HEATER 1; COMPRESSOR 2B, CIRCUIT 2	6X6	TERMINAL BLOCK; HPCO CIRCUIT 1 JUNCTION BOX										
3L1	SOLENOID; REVERSING VALVE - CIRCUIT 1	4M2E2	HEATER 2; COMPRESSOR 2B, CIRCUIT 2	6X7	TERMINAL BLOCK; PHR HEATER JUNCTION BOX										
3M1	MOTOR; COMPRESSOR 1A	4M3	MOTOR; COMPRESSOR 2C												
3M11	MOTOR; CONDENSER FAN - CIRCUIT 1	4M31	MOTOR; CONDENSER FAN - CIRCUIT 2												
3M12	MOTOR; CONDENSER FAN - CIRCUIT 1	4M3A1	ELECTRONIC PROTECTION MODULE, COMPRESSOR 2C, CIRCUIT 2												
3M13	MOTOR; CONDENSER FAN - CIRCUIT 1	4M3A2	ELECTRONIC PROTECTION MODULE, COMPRESSOR 2C, CIRCUIT 2												
3M14	MOTOR; CONDENSER FAN - CIRCUIT 1	4M3E1	HEATER 1; COMPRESSOR 2C, CIRCUIT 2												
3M15	MOTOR; CONDENSER FAN - CIRCUIT 1	4M3E2	HEATER 2; COMPRESSOR 2C, CIRCUIT 2												
3M16	MOTOR; CONDENSER FAN - CIRCUIT 1	5BT1	TEMPERATURE SENSOR; OUT DOOR AIR SENSOR												
3M1A1	ELECTRONIC PROTECTION MODULE, COMPRESSOR 1A, CIRCUIT 1	5BT2	TEMPERATURE SENSOR; EVAPORATOR LEAVING WATER TEMPERATURE												
3M1A2	ELECTRONIC PROTECTION MODULE, COMPRESSOR 1A, CIRCUIT 1	5BT3	TEMPERATURE SENSOR; EVAPORATOR ENTERING WATER TEMPERATURE												
3M1E1	HEATER 1; COMPRESSOR 1A, CIRCUIT 1	6B1	SWITCH; EVAPORATOR WATER FLOW												
3M1E2	HEATER 2; COMPRESSOR 1A, CIRCUIT 1	6B2	SWITCH; PHR HIGH WATER TEMPERATURE												
3M2	MOTOR; COMPRESSOR 1B	6B3	SWITCH; PHR WATER FLOW												
3M2A1	ELECTRONIC PROTECTION MODULE, COMPRESSOR 1B, CIRCUIT 1	6B52	THERMOSTAT; ANTIFREEZE HEATER												
3M2A2	ELECTRONIC PROTECTION MODULE, COMPRESSOR 1B, CIRCUIT 1	6B53	THERMOSTAT; ANTIFREEZE HEATER, PUMP PACKAGE												
3M2E1	HEATER 1; COMPRESSOR 1B, CIRCUIT 1	6B54	THERMOSTAT; ANTIFREEZE HEATER, PHR												
3M2E2	HEATER 2; COMPRESSOR 1B, CIRCUIT 1	6B55	THERMOSTAT; ANTIFREEZE HEATER, WATER												
3M3	MOTOR; COMPRESSOR 1C	6B56	THERMOSTAT; ANTIFREEZE HEATER, WATER, PUMP PACKAGE												
3M32	MOTOR; CONDENSER FAN - CIRCUIT 1	6BT1	TEMPERATURE SENSOR; PHR ENTERING WATER TEMPERATURE												
3M3A1	ELECTRONIC PROTECTION MODULE, COMPRESSOR 1C, CIRCUIT 1	6BT2	TEMPERATURE SENSOR; PHR LEAVING WATER TEMPERATURE												
3M3A2	ELECTRONIC PROTECTION MODULE, COMPRESSOR 1C, CIRCUIT 1	6E50-1	SUBMERSION HEATER; BPHE ANTIFREEZE HEATER												
3M3E1	HEATER 1; COMPRESSOR 1C, CIRCUIT 1	6E50-2	SUBMERSION HEATER; EVAPORATOR SHELL ANTIFREEZE HEATER												
3M3E2	HEATER 2; COMPRESSOR 1C, CIRCUIT 1	6E50-3	SUBMERSION HEATER; EVAPORATOR SHELL ANTIFREEZE HEATER												
3M41	MOTOR; VENTILATION FAN 1	6E50-4	SUBMERSION HEATER; PHR LEAVING WATER PIPING HEATER												
4B1	SWITCH; HIGH PRESSURE CUTOUT - CIRCUIT 2	6E50-5	SUBMERSION HEATER; PHR LEAVING WATER PIPING HEATER												
4B4	THERMOSTAT; COMPRESSOR 2A JUNCTION BOX	6E50-6	SUBMERSION HEATER; PHR ENTERING WATER PIPING HEATER												
4B5	THERMOSTAT; COMPRESSOR 2B JUNCTION BOX	6E50-7	SUBMERSION HEATER; PHR ENTERING WATER PIPING HEATER												
4B6	THERMOSTAT; COMPRESSOR 2C JUNCTION BOX	6E50-8	SUBMERSION HEATER; PHR BP HEATER												
4BP1	PRESSURE TRANSDUCER; SUCTION PRESSURE - CIRCUIT 2	6E51-1	SUBMERSION HEATER; PUMP PACKAGE												
4BP2	PRESSURE TRANSDUCER; DISCHARGE PRESSURE - CIRCUIT 2	6E51-2	SUBMERSION HEATER; PUMP PACKAGE												
4BP3	PRESSURE TRANSDUCER; ECONOMIZER DISCHARGE PRESSURE - CIRCUIT 2	6E51-3	SUBMERSION HEATER; PUMP PACKAGE												
4BT1	TEMPERATURE SENSOR; SUCTION - CIRCUIT 2	6E51-4	SUBMERSION HEATER; PUMP PACKAGE												
4BT2	TEMPERATURE SENSOR; DISCHARGE TEMPERATURE - CIRCUIT 2	6E51-5	SUBMERSION HEATER; PUMP PACKAGE												
4BT3	TEMPERATURE SENSOR; SUCTION LINE HEAT EXCHANGER TEMPERATURE - CIRCUIT 2	6E51-6	SUBMERSION HEATER; PUMP PACKAGE												
4BT4	TEMPERATURE SENSOR; DISCHARGE TEMPERATURE - COMPRESSOR 2A	6E52-1	SUBMERSION HEATER; WATER PIPING HEATER												
4BT5	TEMPERATURE SENSOR; DISCHARGE TEMPERATURE - COMPRESSOR 2B	6E52-2	SUBMERSION HEATER; LEAVING WATER PIPING HEATER												
4BT6	TEMPERATURE SENSOR; ECONOMIZER DISCHARGE TEMPERATURE - CIRCUIT 2	6E52-3	SUBMERSION HEATER; ENTERING WATER PIPING HEATER												
4K1	ELECTRONIC EXPANSION VALVE; COOLING - CIRCUIT 2	6F20	FUSE; CLASS J - PUMP PACKAGE - L1												

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**DIAGRAM; UNIT COMPONENT
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