

Water-Cooled Chiller Magnetic Bearing Compressor

WMC
Vintage A
145SSC
145DSC
150DSC
250DSC
290DSC

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Parts List Revision History

| Revision | Date | Description |
|----------|---------|---|
| NEW | 08/2007 | New |
| A | 09/2007 | Page 8: Added O-Ring Kits. |
| B | 12/08 | Page 8 - Ref #15 add Cavity to Sensor, Temperature description p/n 300042906. Add Sensor, Temperature Suction p/n 300040130. Add Sensor, Temperature Discharge p/n 300040131. |
| C | 6/09 | Page 6 - Remove All Compressors and add note "Compressor Contact McQuay Parts with the unit GO Number and Serial Number." |
| D | 2/2010 | Page 8 - Added Compr Interface Connector Kit and IGBT Assemblies. Page 16 - Replaced Benshaw dataplate with clearer graphic. |
| E | 10/2011 | Cover page - Added "SC" to models. Added "Vintage A". Pages 4-5 - Added 2 pages for Complete Model Nomenclature. Page 8 - Updated Compressor Note. Page 9 - Added Ref. #s 6, 7, 16, 17 to diagram. Removed Ref. 15. Pages 10-13 - Added 3 pages to correct and expand compressor components. Page 14 - Updated Check Valve part number. Page 15 - Added E20 Flare Nut to diagram and list. Pages 16-27 - Expanded information for Condenser and Evaporator Heads. Page 29 - Expanded information for Operator Interface Panel. Page 30 - Added page for Single Point Connection Box. Page 31 - Updated part numbers for all Communication parts. Pages 32-39 - Added pages and expanded information for Unit Control Box and Power Panels. |
| | | |



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Complete Model Nomenclature

WMC 250D SC 15R NN N B E2609 BE 2RA C4 0440 CC Y A C2209 BLYY 2RAYYY
 Code 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18

C4 1050 CCYY YY A A 134 124 DY 2LEYA SMYDSYYS 0170 Y YY B
 Code 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

- | | |
|--|---|
| <p>02 Size (in nominal tons) 145S= 145 Tons, Single Compressor 145D= 145 Tons, Dual Compressors 150D= 150 Tons, Dual Compressors 250D= 250 Tons, Dual Compressors 290D= 290 Tons, Dual Compressors</p> <p>03 Unit Configuration SC= Vintage A, Single Circuit</p> <p>04 Voltage 13G or 15G= 400V / 50Hz 13R or 15R= 460V / 60Hz</p> <p>05 Always NN</p> <p>06 Always N</p> <p>07 Compressor Model Revision A= Compressor Revision A B= Compressor Revision B</p> <p>08 Evaporator E2209= 22" Diameter, 9 ft. length E2212= 22" Diameter, 12 ft. length E2609= 26" Diameter, 9 ft. length E2612= 26" Diameter, 12 ft. length</p> <p>09 Evaporator Tubes Digit 1 B= 300 Tubes C= 262 Tubes Digit 2 E= 0.025 wall, CU Turbo, EHP</p> <p>10 Evaporator Heads Digit 1 1= 1 pass 2= 2 Pass 3= 3 Pass Digit 2 R= Right Hand Inlet Nozzle L= Left hand Inlet Nozzle Digit 3 A= Standard Victaulic B= Flanged C= Marine Box, Front, Victaulic E= Marine Box, Front, Flanged</p> | <p>11 Evaporator Design Pressure Digit 1 C= 200 PSIG Refrigerant Side Digit 2 1= 150 PSIG Waterside, ASME Code 2= 250 PSIG Waterside, ASME Code 3= 350 PSIG Waterside, ASME Code 4= 150 PSIG Waterside, non-ASME Code 5= 300 PSIG Waterside, non-ASME Code</p> <p>12 Evaporator Leaving Water Temperature Degrees Fahrenheit x 10</p> <p>13 Evaporator Tube Sheet & Head Material Digit 1 C= Carbon Steel Tube Sheet Digit 2 C= Carbon Steel Heads</p> <p>14 Always Y</p> <p>15 Evaporator Model Revision A= Evaporator Revision A</p> <p>16 Condenser C2009= 20" Diameter, 9 ft. length C2012= 20" Diameter, 12 ft. length C2209= 22" Diameter, 9 ft. length C2212= 22" Diameter, 12 ft. length</p> <p>17 Condenser Tubes Digit 1 B= 426 Tubes C= 381 Tubes Digit 2 L= 0.025 wall, CU Turbo, CSL Digits 3-4 Always YY</p> <p>18 Condenser Heads Digit 1 1= 1 pass 2= 2 Pass 3= 3 Pass Digit 2 R= Right Hand Inlet Nozzle L= Left hand Inlet Nozzle Digit 3 A= Standard Victaulic B= Flanged D= Marine Box, Front, Victaulic F= Marine Box, Front, Flanged Digits 4-6 Always YYY</p> |
|--|---|

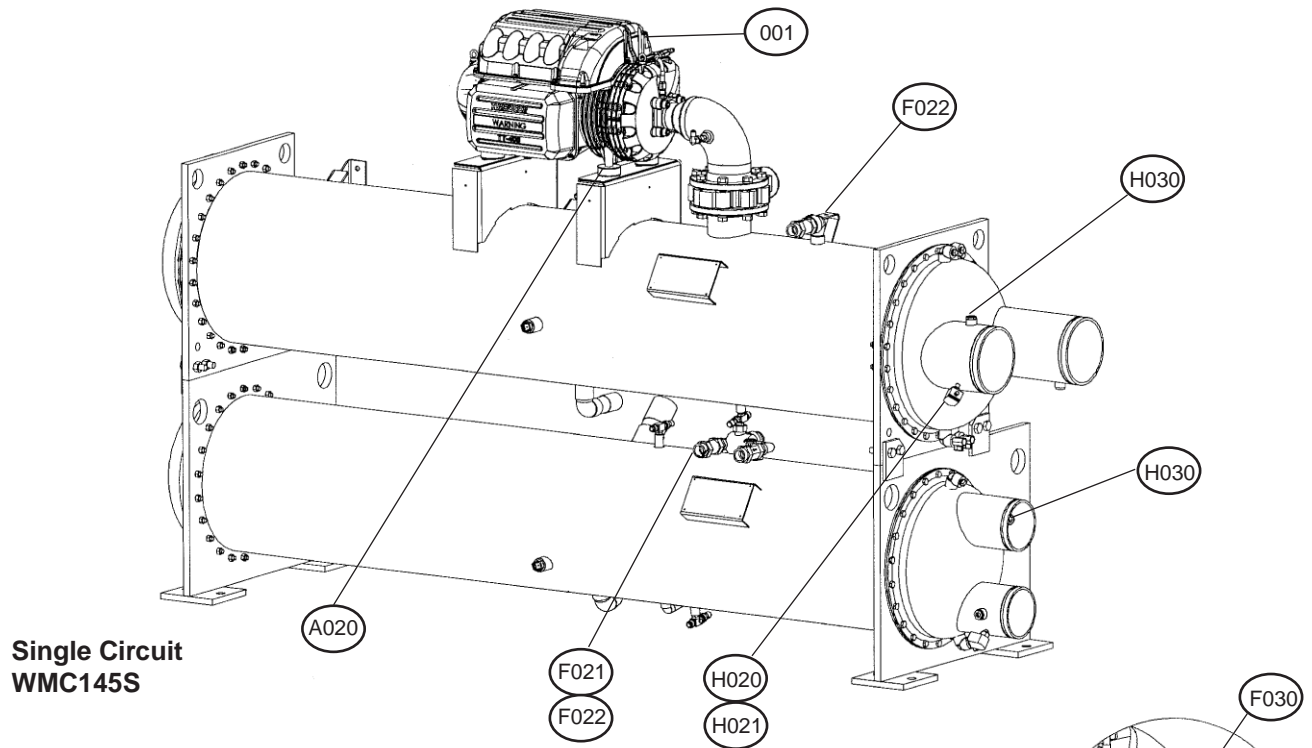
Complete Model Nomenclature

- 19 Condenser Design Pressure**
 Digit 1
 C= 200 PSIG Refrigerant Side
 Digit 2
 1= 150 PSIG Waterside, ASME Code
 2= 250 PSIG Waterside, ASME Code
 3= 350 PSIG Waterside, ASME Code
 4= 150 PSIG Waterside, non-ASME Code
 5= 300 PSIG Waterside, non-ASME
- 20 Condenser Max Leaving Water Temperature**
 Degrees Fahrenheit x 10
- 21 Condenser Tube Sheet & Head Material**
 Digit 1
 C= Carbon Steel Tube Sheet
 Digit 2
 C= Carbon Steel Heads
 Digits 3-4
 Always YY
- 22 Always YY**
- 23 Condenser Model Revision**
 A= Condenser Revision A
- 24 Pressure Vessel Code**
 A= ASME
 J= Australia ASME with documentation
 P= Chinese
 T= Taiwan ASME with documentation
 1= CRN British Columbia
 2= CRN Alberta
 3= CRN Saskatchewan
 4= CRN Manitoba
 5= CRN Ontario
 6= CRN Quebec
 7= CRN New Brunswick
 8= CRN Nova Scotia
 9= CRN Prince Edward Island
 0= CRN Newfoundland
 U= CRN Yukon
- 25 Refrigerant**
 134= Refrigerant 134a
- 26 Refrigerant Weight**
example: 124= 1240 lbs divided by 10
- 27 Expansion Valve**
 DY= Electronic Expansion Valve
 EY= Self=Mfg'd Electronic Expansion Valve
- 28 Controls**
 Digit 1
 2= Microtech II
 Digit 2
 L= Large Controller
 Digit 3
 E= English Language
 Digit 4
 Always Y
 Digit 5
 B= BACnet w/ RS485 and Ethernet
 E= BACnet w/ IP Ethernet
 L= LonMark
 M= ModBus
 S= Serial Port w/RS232
 Y= None
 Digit 6
 A= NEMA 1
- 29 Front End Box Options**
 Digit 1
 S= Single Point
 Digit 2
 M= Unit Mounted VFD
 Digit 3
 Y= Standard Filter
 P= EMI Filter
 Digit 4
 D= Disconnect Switch
 P= Power Block
 Digit 5
 Always S
 Digit 6
 Y= Standard Short Circuit Current Rating
 H= High Short Circuit Current Rating
 Digit 7
 Y= No Ground Fault Protection
 F= With Ground Fault Protection
 Digit 8
 S= Standard Load Balance
- 30 Rated Load Amps**
 Compressor RLA
- 31 Always Y**
- 32 Insulation**
 Digit 1
 H= 3/4" insulation on Evap Shell, Suction Piping, Compressor Inlet, Motor Barrel, plus High Humidity
 3= 1-1/2" insulation on Evap shell; 3/4" insulation on Suction Piping and Compressor Inlet
 Y= No Shell Insulation
 Digit 2
 1= Return Head Insulation
 2= Return and Connection Head Insulation
 Y= No Head Insulation
- 33 Water Flow Indication**
 B= Water Flow Indicator on Evaporator and Condenser

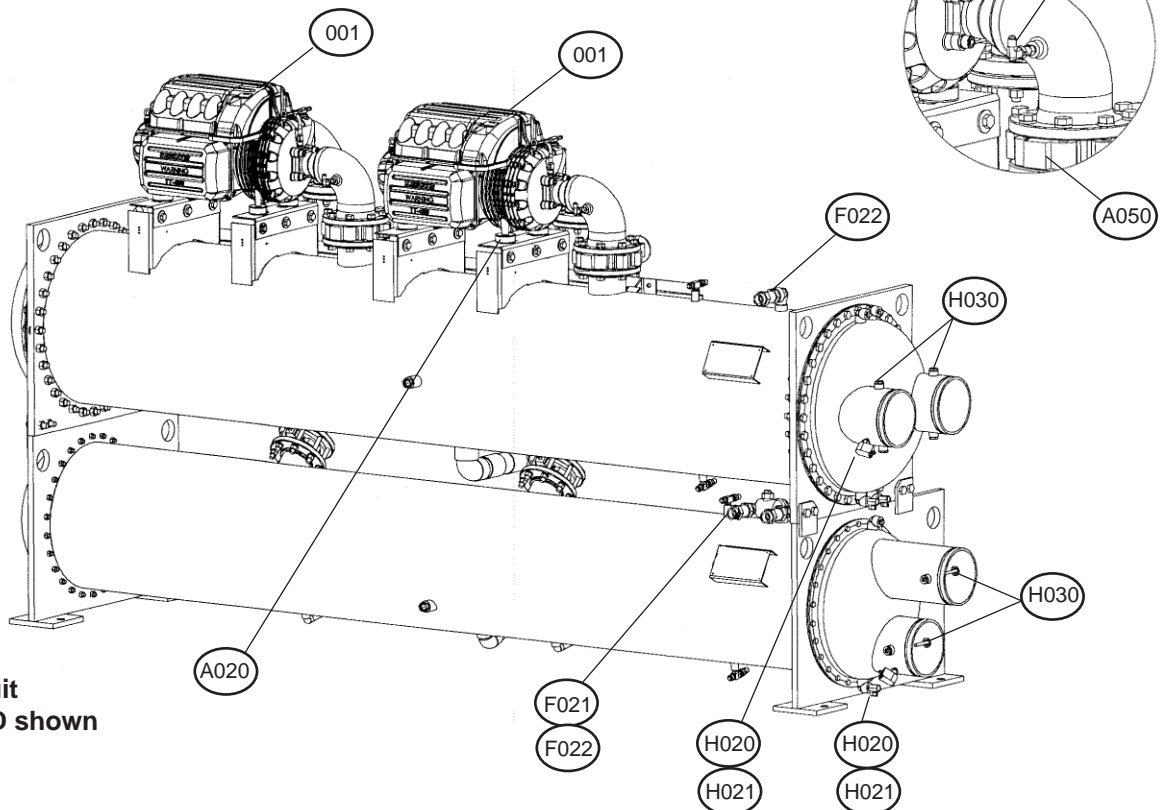
Electrical Legend

| | | | |
|------------------|-----------------------------------|---------------------------|-------------------------------------|
| A | Alarm | LR | Latch Relay |
| B1-B10..... | Analog Input Connections | MA | Contactora Auxillary |
| CAP | Capacitor | MC | Motor Cooling Solenoid |
| CB..... | Circuit Breaker | MCR | Motor Contactor Relay (Starter) |
| CBX | Compressor Box | MHP | Mechanical High Pressure Switch |
| CC | Compressor Controller | NO1-18, NC1-18..... | Digital Output Connections |
| CF..... | Condenser Flow Switch | OC | Oil Cooler Solenoid (120 or 24 VAC) |
| CO | Compressor Off Relay | OL | Overload |
| CP1 & CP2 | Condenser Pump Cycling Relay | OP | Oil Pump Contactor |
| CR | Compressor Relay | PTB..... | Pressure Transducer Board |
| CT..... | Control Transformer | RL..... | Reactor, Line Side |
| CWI..... | Condenser Water Interlocks | SA(Unload), SB(Load)..... | Vane Control Solenoids |
| C1 | Cooling Tower Fan Relay (Stage 1) | SC..... | Signal Converter |
| C2..... | Cooling Tower Fan Relay (Stage 2) | SW1..... | Unit Start/Stop Switch |
| C3..... | Cooling Tower Fan Relay (Stage 3) | SW2..... | Compressor Manual Stop Switch |
| C4..... | Cooling Tower Fan Relay (Stage 4) | SW3..... | Remote Start/Stop Switch |
| EF..... | Evaporator Flow Switch | SW4..... | Mode Switch |
| EP1 & 2 | Evaporator Pump Cycling Relay | SW5..... | Emergency Stop Switch |
| EWI..... | Evaporator Water Interlocks | T1 | Transformer (120VAC) |
| EXV | Electronic Expansion Valve | T2 | Transformer (24VAC) |
| GDB..... | Guardistor Board | T3 | Transformer (24VAC) |
| GFP | Ground Fault Protector | T4 | Transformer (24VAC) |
| HG | Hot Gas Solenoid | T5 | Transformer (24VAC) / Isolation |
| HR1 & 2 | Heater Relay | VC..... | Vane Close Switch |
| ID1 thru 18..... | Digital Input Connections | VO | Vane Open Switch |
| IR2 thru 4..... | Isolation Relay for T2 thru T4 | VR..... | Voltage Relay |
| L1..... | Liquid Injection Solenoid | UC | Unit Controller |

Unit Components



**Single Circuit
WMC145S**



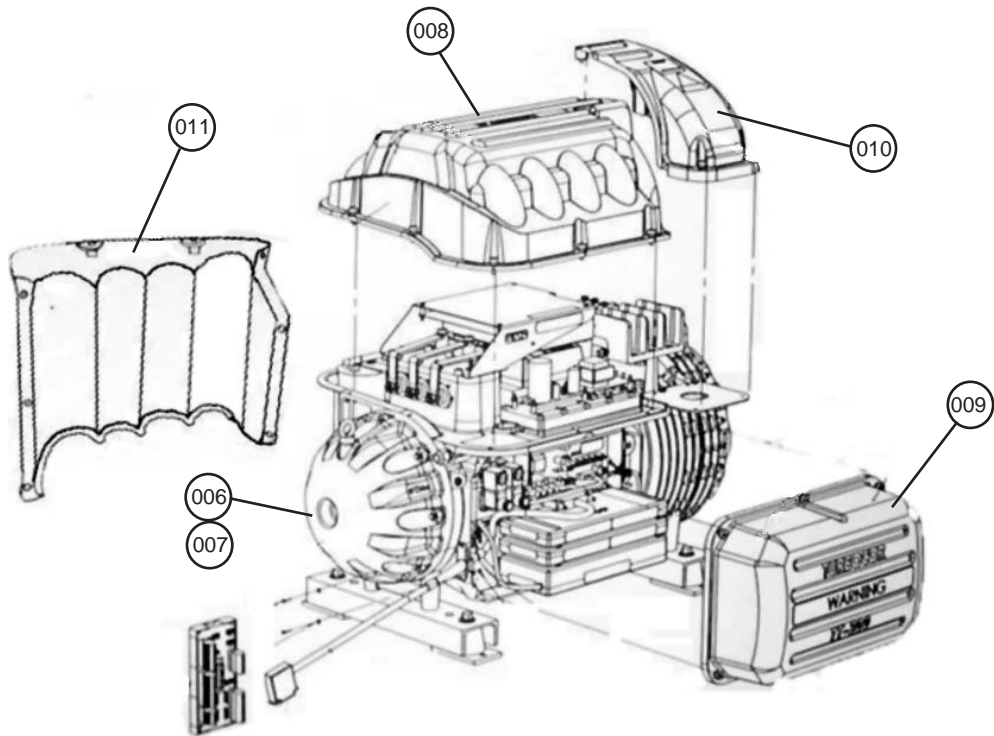
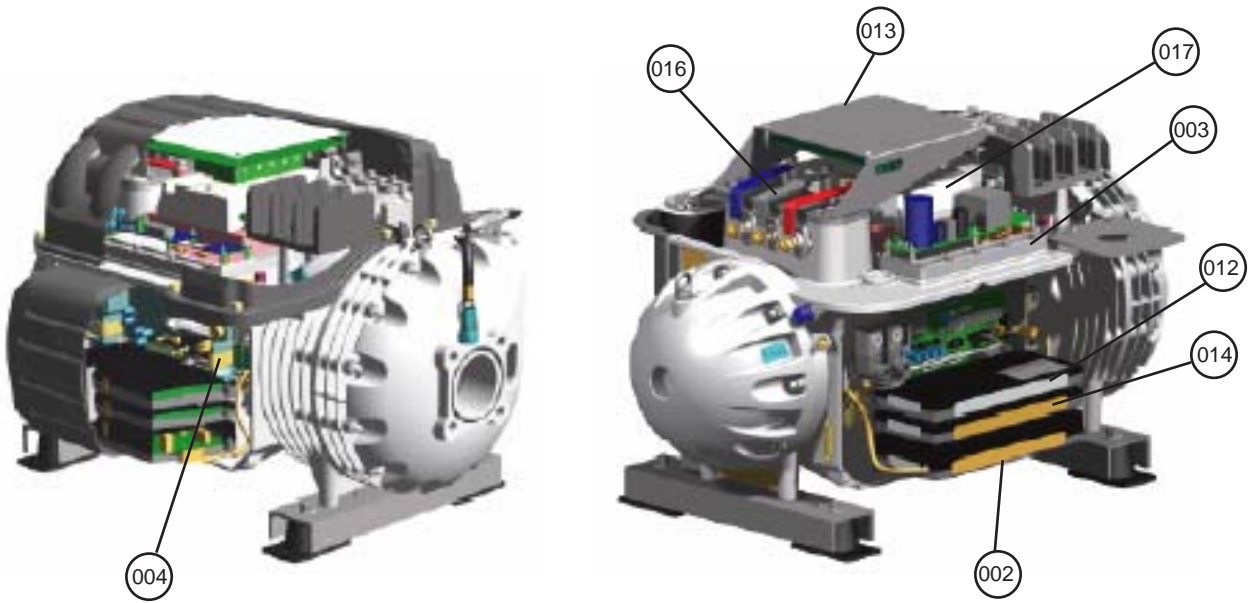
**Dual Circuit
WMC 290D shown**

Unit Components

| Ref. # | Description | Part Number | 145S | 145D | 150D | 250D | 290D |
|--------|---------------------------|-------------|------|------|------|------|------|
| 001 | Compressor | See Note | | | | | |
| A020 | Compressor Isolator | 330527701 | 4 | 8 | 8 | 8 | 8 |
| A050 | Butterfly Valve | 073062103 | 1 | 2 | 2 | 2 | 2 |
| F021 | Shut Off Valve | 735039977 | 1 | 1 | 1 | 1 | 1 |
| F022 | Relief Valve, 200# | 735045817 | 3 | 3 | 3 | 3 | 3 |
| F030 | Relief Valve, 200#, Angle | 735045818 | 1 | 2 | 2 | 2 | 2 |
| H020 | Flow Sensor | 330571401 | 2 | 2 | 2 | 2 | 2 |
| H021 | Cable, Flow Sensor | 330571402 | 2 | 2 | 2 | 2 | 2 |
| H030 | Sensor Well | 047441511 | 6 | 6 | 6 | 6 | 6 |

Note: Contact McQuay Parts with the compressor model, compressor part number, compressor serial number and BMCC revision. On dual compressor units, provide same information on other compressor to ensure BMCC compatibility.

Magnetic Bearing Compressor



Magnetic Bearing Compressor

| Ref. # | Description | Part Number | Quantity per compressor | |
|--------|---|-----------------|-------------------------|----------------------|
| | | | 145D 150D | 145S 250D 290D |
| 002 | Kit, Module, Bearing PWM | 300040127 | 1 | 1 |
| 003 | Kit, DC/DC Converter Assy, 400-460V | 300042897 | 1 | 1 |
| 003 | Kit, DC/DC Converter, 575V | 300048726 | 1 | |
| 004 | Kit, Module, Backplane Assy | 300042899 | 1 | 1 |
| 006 | Kit, End Cap Assy | 300048171 | 1 | 1 |
| 007 | Kit, Insulation Cover, End Bell | 300043829 | 1 | 1 |
| 008 | Kit, Cover, Top Assy | 300040136 | 1 | 1 |
| 009 | Kit, Cover, Service Side Assy | 300040137 | 1 | 1 |
| 010 | Kit, Cover, Mains Input Assy | 300040138 | 1 | 1 |
| 011 | Kit, Cover, Capacitor Assy | 300040139 | 1 | 1 |
| 012 | Kit, Module Serial Driver | 300043064 | 1 | 1 |
| 013 | Kit, Module, Softstart, 400V | 300043853 | 1 | 1 |
| 013 | Kit, Module, Softstart, 460V | 300043245 | 1 | 1 |
| 013 | Kit, Module Softstart, 575V | 300049167 | 1 | |
| 014 | Kit, Bearing Motor Compressor Control (BMCC) | See Note | 1 | |
| 016 | Kit, Input Mains Buss Bars | 100416 | | 1 |
| 017 | Kit, IGBT Manifold Cooling | 300040931 | 1 | |
| 017 | Kit, IGBT Assy Manifold Cooling (w/o DC/DC Converter) | 300043315 | | 1 |
| 017 | Kit, IGBT Assy Manifold Cooling (w/DC/DC Converter) | 300043246 | | 1 |
| NS | Kit, Soft Start Cooling Fan Assembly | 300049137 | 1 | 1 |
| NS | Kit, PCB Assy, Compressor Interface Connector | 300043882 | 1 | 1 |
| NS | Communication Converter Module | 300049169 | 1 | 1 |
| NS | Kit, Terminal Power Block Assy | 300043928 | 1 | |
| NS | Kit, Terminal Power Block Assy | 300043983 | | 1 |
| NS | Kit, Cover Plate Assy | 300049175 | 1 | 1 |
| NS | Kit, Sensor Assy, Temperature, Motor Rotor | 300042906 | 1 | 1 |
| NS | Kit, Temperature Sensor | 300048181 | 1 | 1 |
| NS | Kit, Tube, Connection to IGBT | 300048170 | 1 | 1 |
| NS | Kit, Capacitor, IGBT Snubber | 300043447 | 1 | 1 |
| NS | Kit, Sensor, Pressure Temperature Suction (blue dot) | 300040130 | 1 | 1 |
| NS | Kit, Sensor, Pressure Temperature Discharge (red dot) | 300040131 | 1 | 1 |

Note: Contact McQuay Parts with the compressor model, compressor part number, compressor serial number and BMCC revision. On dual compressor units, provide same information on other compressor to ensure BMCC compatibility.

NS = Not Shown

Magnetic Bearing Compressor

| Ref. # | Description | Part Number | Quantity per compressor | |
|--------|--|-------------|-------------------------|----------------------|
| | | | 145D 150D | 145S 250D 290D |
| NS | Kit, Diode Rectifiers | 300043875 | 1 | |
| NS | Kit, Diode Rectifiers | 300044087 | | 1 |
| NS | Kit, Sensor Heatsink Diode Rectifiers Dual Cooling | 300047204 | | 1 |
| NS | Kit, Service Valve, Suction | 300048174 | 1 | |
| NS | Kit, Service Valve, Discharge | 330619004 | 1 | 1 |
| NS | Kit, Service Valve, Economizer | 300048958 | 1 | |
| NS | Kit, Flange 1", Economizer ¹ | 300048175 | 1 | |
| NS | Kit, Flange Sweat, 3", Suction ² | 300046266 | 1 | 1 |
| NS | Kit, Flange, Suction 3" | 300048959 | 1 | 1 |
| NS | Kit, Flange, Discharge, Brass, for 2-1/8" | 300046267 | 1 | 1 |
| NS | Kit, Flange, Discharge, Steel, 2-1/8" | 331387401 | 1 | 1 |
| NS | Kit, O-Ring, IGBT Assy | 300043869 | 1 | 1 |
| NS | Kit, O-Ring, Ports Connection ³ | 300043968 | 1 | 1 |
| NS | Kit, O-Ring, IGV Assy | 300043877 | 1 | 1 |
| NS | Kit, O-Ring, End Cap Assy | 300043878 | 1 | 1 |
| NS | Kit, O-Ring, Service Side Small O-Rings | 300043879 | 1 | 1 |
| NS | Kit, O-Ring, Cover Plate Assy | 300043880 | 1 | 1 |
| NS | Kit, O-Ring, Suction Port Only | 300048180 | 1 | 1 |
| NS | Kit, Cable Harness, Compressor DC Supply | 200140 | 1 | 1 |
| NS | Kit, Cable Harness Assy, Compressor Interface | 300047144 | 1 | 1 |
| NS | Kit, Cable Harness, Softstart SCR Gate | 300044089 | 1 | 1 |
| NS | Kit, Cable Harness, Mtr Cooling & Coil Assy | 300040132 | 1 | |
| NS | Kit, Cable Harness, Mtr Cooling & Coil Assy | 300048754 | | 1 |
| NS | Kit, Cable Harness, Compressor Controller | 300044030 | 1 | 1 |
| NS | Kit, Cable Harness, Front Bearing Sensor | 300047965 | 1 | 1 |
| NS | Kit, Cable Harness, Rear Bearing Sensor | 300047966 | 1 | 1 |
| NS | Kit, Cable Harness, Motor Driver (IGBT to Backplane) | 300044114 | 1 | 1 |
| NS | Kit, Cable Harness, Softstart AC/DC, Fused | 300040953 | 1 | |
| NS | Kit, Cable Harness, Softstart AC/DC | 300048954 | 1 | |
| NS | Kit, Cable Harness, Softstart AC/DC | 300044098 | 1 | 1 |
| NS | Cable Harness Compressor Controller | 300044030 | 1 | 1 |
| NS | Cable Harness, DC/DC to Backplane | 300047244 | 1 | 1 |

¹ Includes 7/8" Flange, O-Ring, lubrication, and 2 sets of screws/spring washers.

² Includes 3-1/8" Flange, O-Ring, lubrication, and 4 sets of screws/spring washers.

³ Includes O-Rings for Suction, Discharge and Economizer Ports.

NS = Not Shown

Magnetic Bearing Compressor

| Ref. # | Description | Part Number | Quantity per compressor | |
|--------|---|-------------|-------------------------|----------------------|
| | | | 145D 150D | 145S 250D 290D |
| NS | Line Reactor, 140A, 5% | 300047659 | 1 | |
| NS | Line Reactor, 180A, 5% | 300045658 | | 1 |
| NS | Line Reactor, 240A, 5% | 300048177 | | 1 |
| NS | Line Reactor, 140A, 10% | 300044143 | 1 | |
| NS | Line Reactor, 180A, 10% | 331557651 | | 1 |
| NS | EMI/EMC Filter, CE, 185A | 300048760 | 1 | |
| NS | EMI/EMC Filter, UL, 185A | 300048179 | 1 | |
| NS | EMI/EMC Filter 322A, 480V | 300048960 | | 1 |
| NS | Kit, Fuse, Class T, Fast Acting | 300045202 | 1 | |
| NS | Fuse, Slo Nano SMF 0.25A, 125V | 300046528 | 1 | 1 |
| NS | Fuse, Slo Nano SMF 0.5A, 125V ⁴ | 300046529 | 1 | 1 |
| NS | Fuse, Slo Nano SMF 0.2A, 600V, Midget, Time Delay | 300044083 | 1 | 1 |
| NS | Kit, Fuse 2A, 1000V, HVA, 3" | 300045312 | 1 | 1 |
| NS | Kit, Fuses, Softstart ⁴ | 331877106 | 1 | 1 |
| NS | Kit, Fuses, Softstart ⁵ | 300046521 | 1 | 1 |
| NS | Kit, Fuse Nano SMF 0.75A, 125V ⁵ | 300046530 | 1 | 1 |
| NS | Kit, IGV Motor Service | 300048085 | 1 | 1 |
| NS | Kit, Buss Bar Assy and Capacitors, 400V | 300043831 | 1 | |
| NS | Kit, Buss Bar Assy and Capacitors, 460V | 300046429 | 1 | |
| NS | Kit, Buss Bar Assy and Capacitors, 400V | 300047251 | | 1 |
| NS | Kit, Buss Bar Assy and Capacitors, 460V | 300043832 | | 1 |
| NS | Kit, Buss Bar Assembly and Capacitors, 575V | 300049168 | 1 | |
| NS | Kit, Buss Bar Diode | 300048955 | 1 | |
| NS | Kit, Buss Assy Conn Motor IGBT | 300045215 | 1 | |
| NS | Kit, Buss Assy Conn Motor IGBT | 300048961 | | 1 |
| NS | Kit, Suction Strainer, Straight | 300048957 | 1 | |
| NS | Kit, Plunger Assy, Non-return Valve, Discharge 2" | 300043734 | 1 | |
| NS | Kit, Compressor Cooling Strainer | 300046931 | 1 | |
| NS | Kit, Compressor Mounting | 300040125 | 1 | 1 |
| NS | Kit, Screws for Covers, M5, Stainless Steel | 300046932 | 1 | 1 |
| NS | Bluetooth Serial Adapter Kit | 300046950 | 1 | 1 |
| NS | Dielectric Grease | 300045661 | 1 | 1 |

⁴ Used on Softstart Series 20 (Compressor Serial # 071975020) or before.

⁵ Used on Softstart Series 21 (Compressor Serial # 071975030) or later.

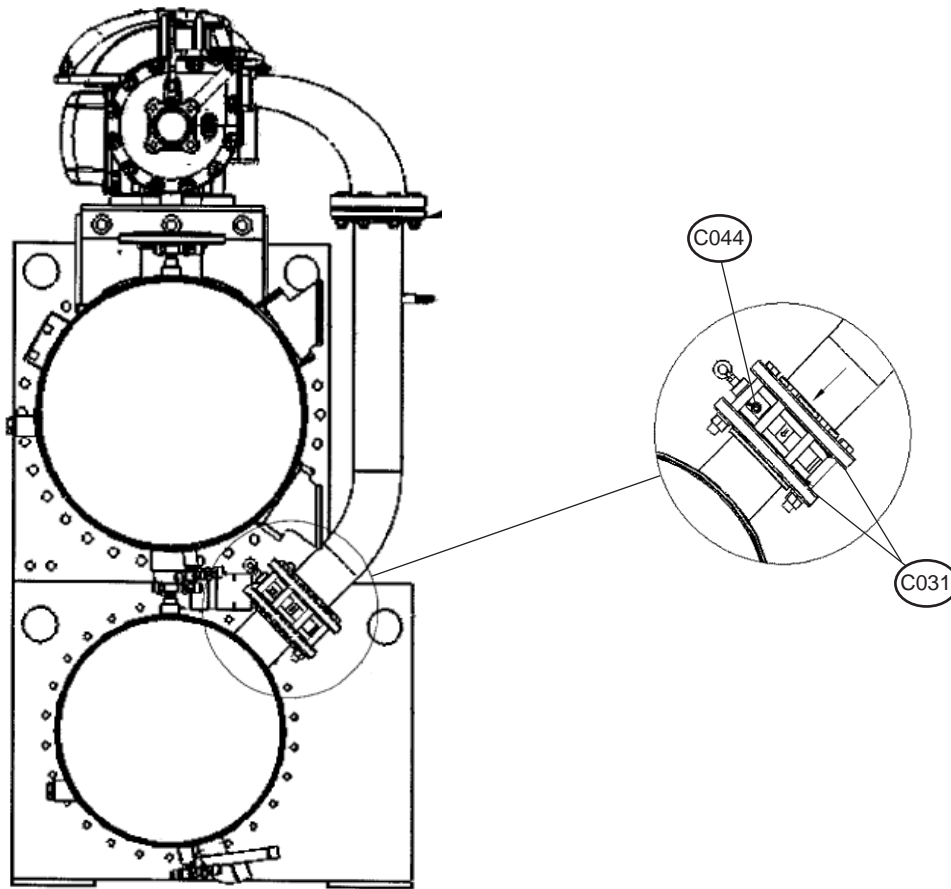
NS = Not Shown

Magnetic Bearing Compressor

| Ref. # | Description | Part Number | Quantity per compressor | |
|--------|--|-------------|-------------------------|----------------------|
| | | | 145D 150D | 145S 250D 290D |
| NS | Kit, Cooling Valves Assy | 300043892 | 1 | |
| NS | Kit, Cooling Valves Assy | 300047112 | | 1 |
| NS | Kit, IGV Housing Assembly and O-Rings | 300043626 | 1 | |
| NS | Kit, IGV Housing Assy and O-Rings (black IGV cone) | 300043627 | | 1 |
| NS | Kit, IGV Housing Assy and O-Rings (gold IGV cone) | 300046822 | | 1 |
| NS | Kit, Bracket Mains Input Plate, 2.0" Diameter | 300049170 | 1 | 1 |
| NS | Kit, Bracket Mains Input Plate, 2.5" Diameter | 300049171 | 1 | 1 |
| NS | Kit, Bracket Mains Input Plate, 3.0" Diameter | 300049172 | 1 | 1 |
| NS | Kit, Bracket Mains Input Plate, 3.5" Diameter | 300049173 | 1 | 1 |
| NS | Kit, Heatsink Cooling Manifold SCR Assy | 300049070 | 1 | |
| NS | Kit, Heatsink Cooling Manifold SCR Assy | 300049174 | | 1 |
| NS | Kit, Hermetic Feedthrough IGV - 4 Pin | 300049176 | 1 | 1 |
| NS | Kit, Hermetic Feedthru, Rear Bearing, 6-Pin | 300043473 | 1 | 1 |
| NS | Kit, Hermetic Feedthru, Front Bearing, 4-Pin | 300046599 | 1 | 1 |
| NS | Kit, Hermetic Feedthru, Bearing Sensor, 9-Pin | 300045720 | 1 | 1 |
| NS | Kit, Hermetic Feedthru High Power | 300045214 | 1 | 1 |

NS = Not Shown

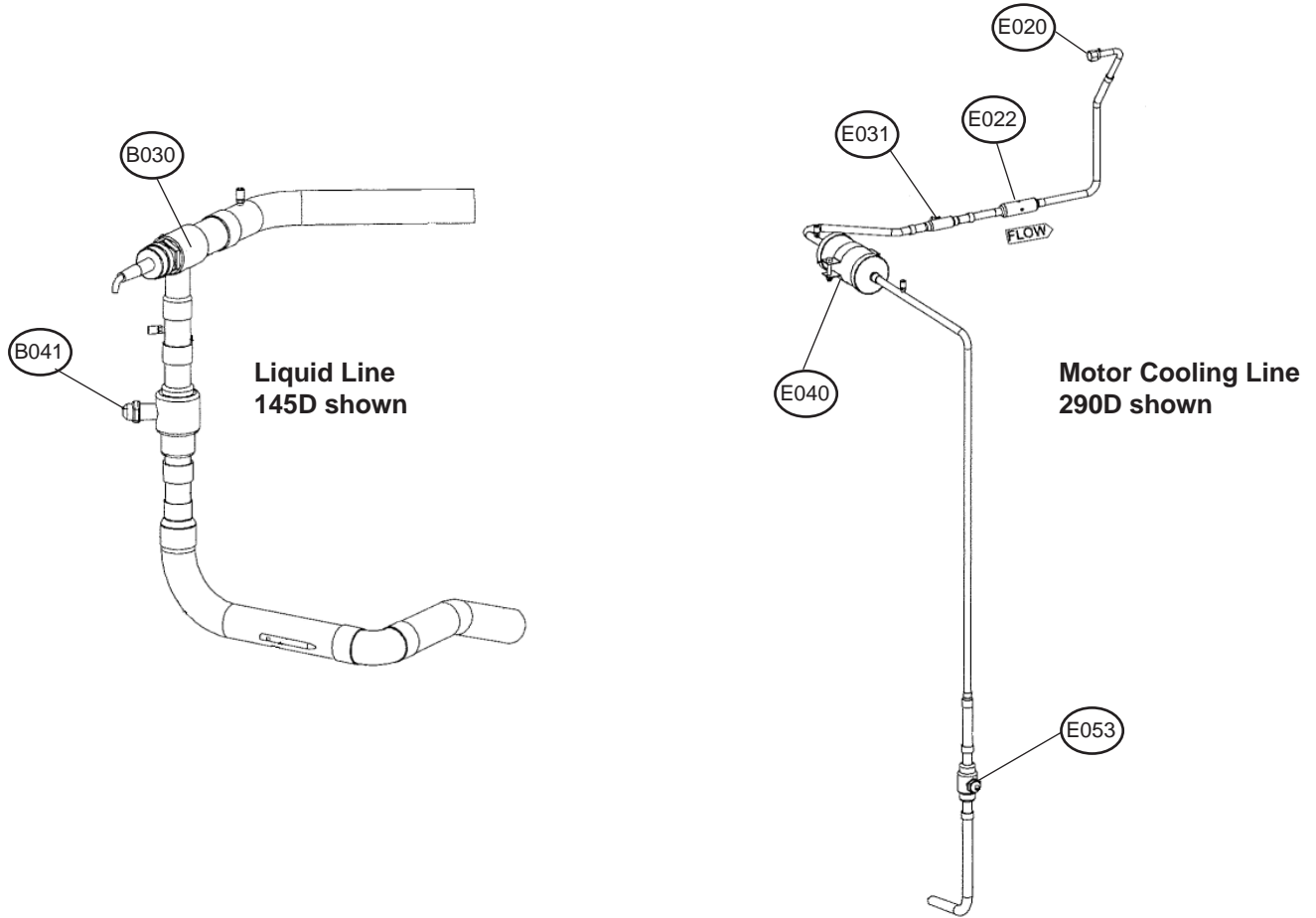
Piping - Discharge



WMC290D shown

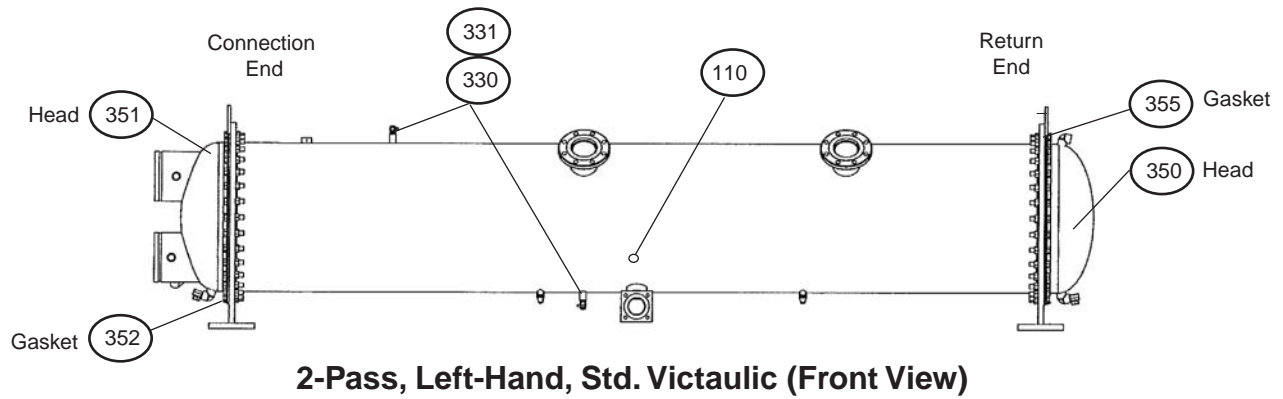
| Ref. # | Description | Part Number | 145S | 145D | 150D | 250D | 290D |
|--------|-----------------|-------------|------|------|------|------|------|
| C031 | Gasket, 6.88 OD | 070199120 | 2 | 6 | 6 | 6 | 6 |
| C044 | Check Valve | 332630201 | 1 | 2 | 2 | 2 | 2 |

Piping - Liquid Line and Motor Cooling



| Ref. # | Description | Part Number | 145S | 145D | 150D | 250D | 290D |
|--------|-------------------------------------|-------------|------|------|------|------|------|
| B030 | Electronic Expansion Valve, 225 Ton | 330386201 | | 1 | | | |
| B030 | Electronic Expansion Valve, 126 Ton | 330386206 | 1 | | 1 | | |
| B030 | Electronic Expansion Valve, 250 Ton | 330386207 | | | | 1 | 1 |
| | | | | | | | |
| B041 | Ball Valve, 1.63 | 330286007 | 1 | 1 | | | |
| B041 | Ball Valve, 1.375 | 330286006 | | | 1 | | |
| B041 | Ball Valve, 2.12 | 330286008 | | | | 1 | 1 |
| | | | | | | | |
| E020 | Flare Nut .375 | 000108300 | | 2 | 2 | | |
| E020 | Flare Nut .500 | 000136100 | 1 | | | 2 | 2 |
| E022 | Strainer | 735030506 | 1 | 2 | 2 | 2 | 2 |
| E031 | Ball Valve, .625 | 330286053 | 1 | | | | |
| E031 | Ball Valve, .625 | 330286003 | | 2 | 2 | 2 | 2 |
| E040 | Filter Drier, .625 | 735028827 | 1 | 2 | 2 | 2 | 2 |
| E053 | Ball Valve, .875 | 330286004 | 1 | 2 | 2 | 2 | 2 |

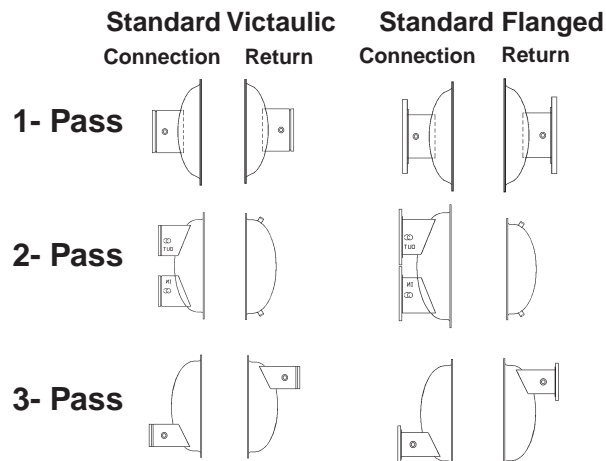
Condenser- Standard Heads



| Ref. # | Description | Part Number | Qty. |
|--------|--------------------------|-------------|------|
| 110 | Sight Glass Clear w/Ball | 350229501 | 1 |
| 330 | Shut-Off Valve | 735039929 | 2 |
| 331 | Cap, Flare | 073243901 | 2 |

| | | | | |
|-----------------|-----------------|-------------------|-------------------|-------------------|
| Code 18: | <u>1</u> | <u>L</u> | <u>A</u> | <u>YYY</u> |
| | # Passes | Connection | Heads | Future Use |
| | 1=1 Pass | L= Left Hand | A= Std. Victaulic | |
| | 2=2 Pass | R= Right Hand | B= Std. Flanged | |
| | 3=3 Pass | | C= Wtr. Bx. Vict. | |
| | | | | D= Wtr. Bx. Flgd. |

Head Types



Condenser - Standard Heads 20 Inch

20 inch, 150 PSI Standard Heads, Victaulic - 1 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|-----------|---------------------------|-------------|-------------|
| 350 / 351 | Assembly, Connection Head | 331153101 | 2 |
| 352 / 355 | Gasket, Connection Head | 070304644 | 2 |
| NS | Screw, H5, 0.50 x 2.5 | 735033851 | 22 per head |
| NS | Nut, 0.50-13 | 735029625 | 22 per head |

NS = Not Shown

20 Inch, 150 PSI Standard Heads, Victaulic and Flanged - 2 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|--------|---------------------------|-------------|-------------|
| 350 | Assembly, Return Head | 332182702 | 1 |
| 351 | Assembly, Connection Head | | |
| | with Flanged Connection | 332187903 | 1 |
| | with Victaulic Connection | 332186103 | 1 |
| 352 | Gasket, Connection Head | 071557803K | 1 |
| 355 | Gasket, Return Head | 070304644 | 1 |
| NS | Screw, H5, 0.50 x 2.5 | 735033851 | 22 per head |
| NS | Nut, 0.50-13 | 735029625 | 22 per head |

NS = Not Shown

20 Inch, 150 PSI Standard Heads, Victaulic and Flanged - 3 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|-----------|---------------------------|-------------|-------------|
| 350 / 351 | Assembly, Connection Head | | |
| | with Flanged Connection | 331158304 | 2 |
| | with Victaulic Connection | 331156504 | 2 |
| 352 / 355 | Gasket, Head | 071557803K | 2 |
| NS | Screw- H5, 0.50 x 2.5 | 735033851 | 22 per head |
| NS | Nut- 0.50-13 | 735029625 | 22 per head |

NS = Not Shown

Condenser - Standard Heads 22 Inch

22 Inch, 150 PSI Standard Heads, Victaulic and Flanged - 2 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|--------|---------------------------|-------------|-------------|
| 350 | Assembly, Return Head | 332182902 | 1 |
| 351 | Assembly, Connection Head | | |
| | with Flanged Connection | 332188103 | 1 |
| | with Victaulic Connection | 332186303 | 1 |
| 352 | Gasket, Connection Head | 071557804K | 1 |
| 355 | Gasket, Return Head | 070304645 | 1 |
| NS | Screw, H5, 0.50 x 2.5 | 735033851 | 26 per head |
| NS | Nut, 0.50-13 | 735029625 | 26 per head |

NS = Not Shown

22 Inch, 300 PSI Standard Heads, Flanged - 2 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|--------|---------------------------|-------------|-------------|
| 350 | Assembly, Return Head | 332166542 | 1 |
| 351 | Assembly, Connection Head | 332171743 | 1 |
| 352 | Gasket, Connection Head | 071557814 | 1 |
| 355 | Gasket, Return Head | 070304614 | 1 |
| NS | Screw- H5, 0.50 x 4.0 | 735033542 | 52 per head |
| NS | Nut- 0.50-13 | 735029629 | 52 per head |

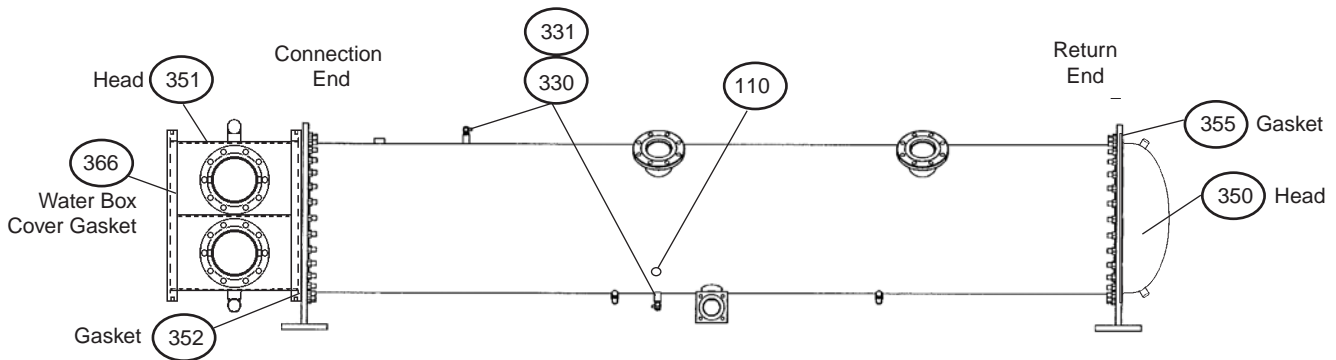
NS = Not Shown

22 inch, 150 PSI Standard Heads, Victaulic - 3 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|-----------|---------------------------|-------------|-------------|
| 350 / 351 | Assembly, Connection Head | 331156704 | 2 |
| 352 / 355 | Gasket, Connection Head | 071557804K | 2 |
| NS | Screw, H5, 0.50 x 2.5 | 735033851 | 26 per head |
| NS | Nut, 0.50-13 | 735029625 | 26 per head |

NS = Not Shown

Condenser- Water Box Heads

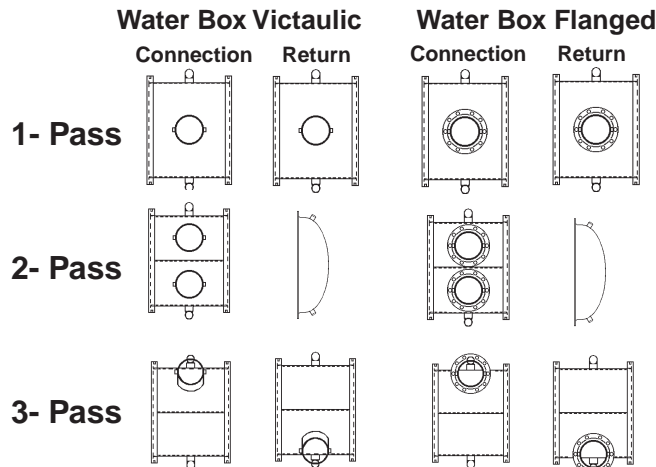


2-Pass, Left-Hand, Water Box Victaulic (Front View)

| Ref. # | Description | Part Number | Qty. |
|--------|--------------------------|-------------|------|
| 110 | Sight Glass Clear w/Ball | 350229501 | 1 |
| 330 | Shut-Off Valve | 735039929 | 2 |
| 331 | Cap. Flare | 073243901 | 2 |

| | | | | |
|-----------------|-----------------|-------------------|-------------------|-------------------|
| Code 18: | <u>1</u> | <u>L</u> | <u>A</u> | <u>YYY</u> |
| | # Passes | Connection | Heads | Future Use |
| | 1=1 Pass | L= Left Hand | A= Std. Victaulic | |
| | 2=2 Pass | R= Right Hand | B= Std. Flanged | |
| | 3=3 Pass | | C= Wtr. Bx. Vict. | |
| | | | D= Wtr. Bx. Flgd. | |

Head Types



Condenser- Water Box Heads 20 Inch

20 Inch, 150 PSI Water Box Heads, Victaulic and Flanged - 2 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|--------|--|-------------|-------------|
| 350 | Assembly, Return Head | 332182702 | 1 |
| 351 | Assembly, Connection Head | | |
| | with Flanged Connection | 331158353 | 1 |
| | with Victaulic Connection | 331156553 | 1 |
| 352 | Gasket, Connection Head | 071557853 | 1 |
| 355 | Gasket, Return Head | 070304644 | 1 |
| 366 | Gasket, Water Box Cover | 333850004 | 1 |
| NS | Screw- H5, 0.50 x 2.5, for Return Head | 735033851 | 22 per head |
| NS | Screw- H5, 0.50 x 3.0, for Water Box | 735033852 | 44 per head |
| NS | Nut- 0.50-13, for Return Head | 735029625 | 22 per head |
| NS | Nut- 0.50-13, for Water Box Head | 735029625 | 44 per head |

NS = Not Shown

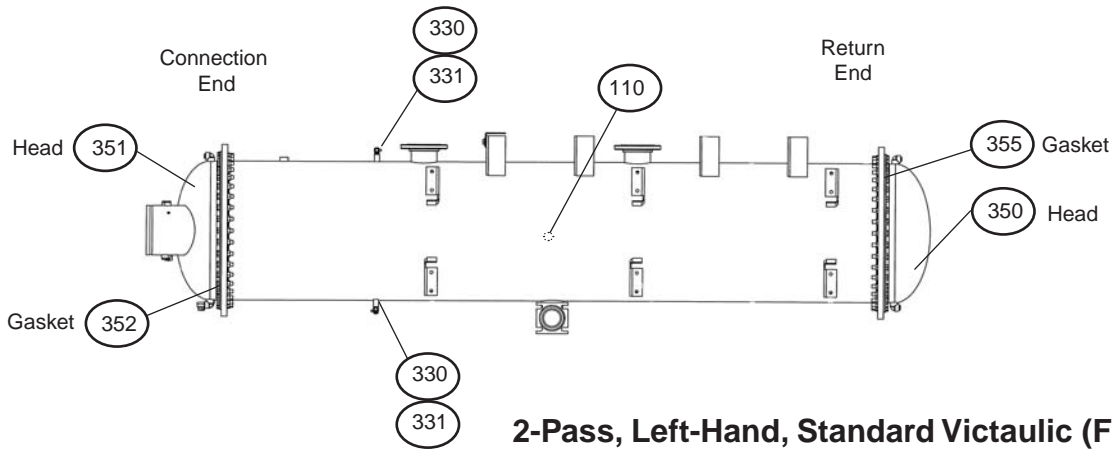
Condenser- Water Box Heads 22 Inch

22 Inch, 150 PSI Water Box Heads, Victaulic and Flanged - 2 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|--------|--|-------------|-------------|
| 350 | Assembly, Return Head | 332182902 | 1 |
| 351 | Assembly, Connection Head | | |
| | with Flanged Connection | 332186353 | 1 |
| | with Victaulic Connection | 332188153 | 1 |
| 352 | Gasket, Connection Head | 071557854 | 1 |
| 355 | Gasket, Return Head | 070304645 | 1 |
| 366 | Gasket, Water Box Cover | 333850005 | 1 |
| NS | Screw- H5, 0.50 x 2.5, for Return Head | 735033851 | 26 per head |
| NS | Screw- H5, 0.50 x 3.5, for Water Box | 735033941 | 52 per head |
| NS | Nut- 0.50-13, for Return Head | 735029625 | 26 per head |
| NS | Nut- 0.50-13, for Water Box Head | 735029625 | 52 per head |

NS = Not Shown

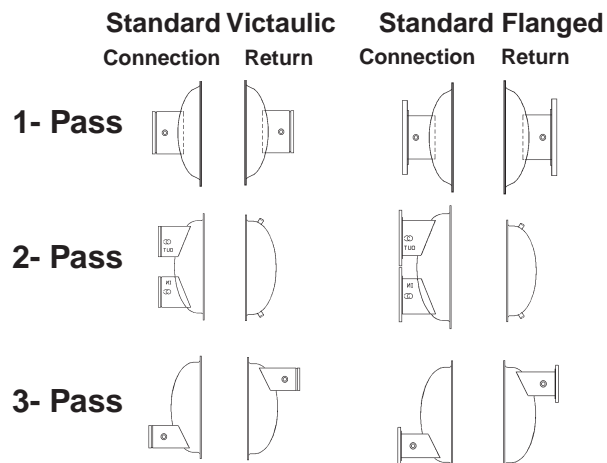
Evaporator- Standard Heads



| Ref. # | Description | Part Number | Qty. |
|--------|--------------------------|-------------|------|
| 110 | Sight Glass Clear w/Ball | 350229501 | 1 |
| 330 | Shut-Off Valve | 735039929 | 2 |
| 331 | Cap. Flare | 073243901 | 2 |

| | | | |
|-----------------|-----------------|-------------------|--|
| Code 10: | <u>1</u> | <u>L</u> | <u>A</u> |
| | # Passes | Connection | Heads |
| | 1=1 Pass | L= Left Hand | A= Std. Victaulic |
| | 2=2 Pass | R= Right Hand | B= Std. Flanged |
| | 3=3 Pass | | C= Wtr. Bx. Vict. D= Wtr. Bx. Flgd. |

Head Types



Evaporator - Standard Heads 22 Inch

22 Inch, 150 PSI Standard Heads, Victaulic - 1 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|-----------|---------------------------|-------------|-------------|
| 350 / 351 | Assembly, Connection Head | 331153301 | 2 |
| 352 / 355 | Gasket, Return Head | 070304645 | 2 |
| NS | Screw, H5, 0.50 x 2.5 | 735033851 | 26 per head |
| NS | Nut, 0.50-13 | 735029625 | 26 per head |

NS = Not Shown

22 Inch, 150 PSI Standard Heads, Victaulic and Flanged - 2 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|--------|---------------------------|-------------|-------------|
| 350 | Assembly, Return Head | 332182902 | 1 |
| 351 | Assembly, Connection Head | | |
| | Flanged Connection | 332184503 | 1 |
| | Victaulic Connection | 332182903 | 1 |
| 352 | Gasket, Connection Head | 071557804K | 1 |
| 355 | Gasket, Return Head | 070304645 | 1 |
| NS | Screw, H5, 0.50 x 2.5 | 735033851 | 26 per head |
| NS | Nut, 0.50-13 | 735029625 | 26 per head |

NS = Not Shown

22 Inch, 150 PSI Standard Heads, Victaulic - 3 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|---------|----------------------------|-------------|-------------|
| 350/351 | Assembly, Head, Connection | 331153304 | 2 |
| 352/355 | Gasket, Head | 071557804K | 2 |
| NS | Screw- H5, 0.50 x 2.5 | 735033851 | 26 per head |
| NS | Nut- 0.50-13 | 735029625 | 26 per head |

NS = Not Shown

Evaporator - Standard Heads 26 Inch

26 Inch, 150 PSI Standard Heads, Victaulic - 1 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|-----------|---------------------------|-------------|-------------|
| 350 / 351 | Assembly, Connection Head | 331153501 | 2 |
| 352 / 355 | Gasket, Return Head | 070304646 | 2 |
| NS | Screw, H5, 0.75 x 3.0 | 735033878 | 32 per head |
| NS | Nut, 0.75-10 | 735029626 | 32 per head |

NS = Not Shown

26 Inch, 150 PSI Standard Heads, Victaulic and Flanged - 2 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|--------|---------------------------|-------------|-------------|
| 350 | Assembly, Return Head | 332183102 | 1 |
| 351 | Assembly, Connection Head | | |
| | Flanged Connection | 332184703 | 1 |
| | Victaulic Connection | 332183103 | 1 |
| 352 | Gasket, Connection Head | 071557805K | 1 |
| 355 | Gasket, Return Head | 070304646 | 1 |
| NS | Screw, H5, 0.75 x 3.0 | 735033878 | 32 per head |
| NS | Nut, 0.75-10 | 735029626 | 32 per head |

NS = Not Shown

26 Inch, 300 PSI Standard Heads, Victaulic and Flanged - 2 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|--------|---------------------------|-------------|-------------|
| 350 | Assembly, Return Head | 332166742 | 1 |
| 351 | Assembly, Connection Head | | |
| | Flanged Connection | 332168343 | 1 |
| | Victaulic Connection | 332166743 | 1 |
| 352 | Gasket, Connection Head | 071557815 | 1 |
| 355 | Gasket, Return Head | 070304615 | 1 |
| NS | Screw, H8, 0.75 x 5.5 | 735033571 | 64 per head |
| NS | Nut, 0.75-10 | 735029628 | 64 per head |

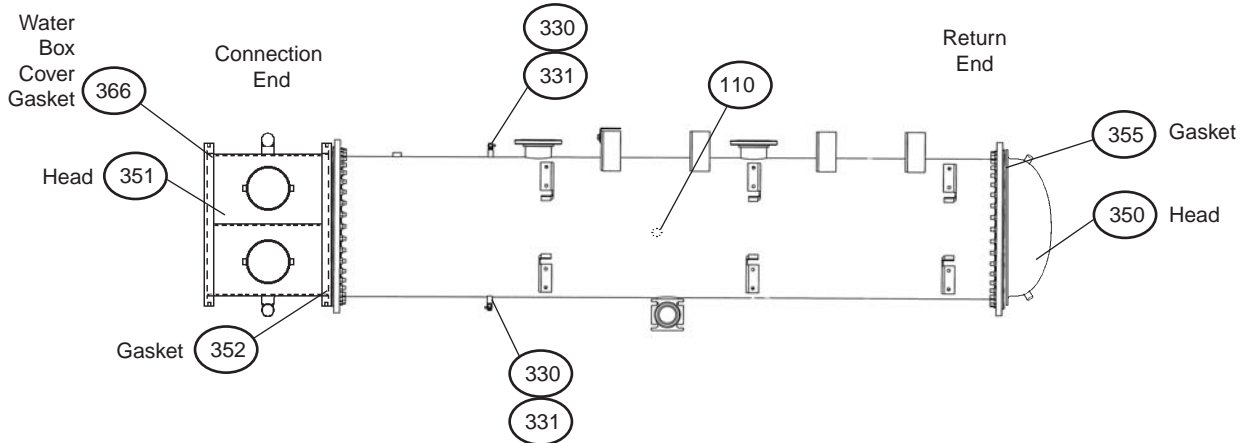
NS = Not Shown

26 Inch, 150 PSI Standard Heads, Victaulic and Flanged - 3 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|---------|----------------------------|-------------|-------------|
| 350/351 | Assembly, Head, Connection | | |
| | with Flanged Connection | 331155104 | 1 |
| | with Victaulic Connection | 331153504 | 1 |
| 352/355 | Gasket, Head | 071557805K | 2 |
| NS | Screw- H5, 0.75 x 3.0 | 735033878 | 32 per head |
| NS | Nut- 0.75-10 | 735029626 | 32 per head |

NS = Not Shown

Evaporator- Water Box Heads

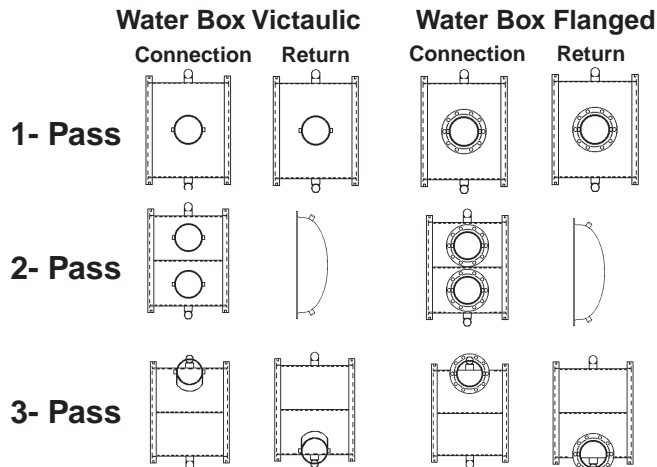


2-Pass, Left-Hand, Water Box Victaulic (Front View)

| Ref. # | Description | Part Number | Qty. |
|--------|--------------------------|-------------|------|
| 110 | Sight Glass Clear w/Ball | 350229501 | 1 |
| 330 | Shut-Off Valve | 735039929 | 2 |
| 331 | Cap. Flare | 073243901 | 2 |

| | | | |
|-----------------|-----------------|-------------------|-------------------|
| Code 10: | 1 | L | A |
| | # Passes | Connection | Heads |
| | 1=1 Pass | L= Left Hand | A= Std. Victaulic |
| | 2=2 Pass | R= Right Hand | B= Std. Flanged |
| | 3=3 Pass | | C= Wtr. Bx. Vict. |
| | | | D= Wtr. Bx. Flgd. |

Head Types



Evaporator- Water Box Heads 22 Inch

22 Inch, 150 PSI Water Box Heads, Victaulic and Flanged - 2 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|--------|--|-------------|-------------|
| 350 | Assembly, Return Head | 332182902 | 1 |
| 351 | Assembly, Connection Head | | |
| | Flanged Connection | 331154953 | 1 |
| | Victaulic Connection | 331153353 | 1 |
| 352 | Gasket, Connection Head | 350296754 | 1 |
| 355 | Gasket, Return Head | 070304645 | 1 |
| 366 | Gasket Water Box Cover | 333850005 | 1 |
| NS | Screw, H5, 0.50 x 2.5, for Return Head | 735033851 | 26 per head |
| NS | Screw, H5, 0.50 x 3.5, for Water Box | 735033941 | 52 per head |
| NS | Nut, 0.50-13, for Return Head | 735029625 | 26 per head |
| NS | Nut, 0.50-13 for Water Box Head | 735029625 | 52 per head |

NS = Not Shown

22 Inch, 150 PSI Standard Heads, Flanged - 3 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|---------|----------------------------|-------------|-------------|
| 350/351 | Assembly, Head, Connection | 331154954 | 2 |
| 352/355 | Gasket, Head | 350296754 | 2 |
| 366 | Gasket, Water Box Cover | 071557804K | 2 |
| NS | Screw- H5, 0.50 x 3.5 | 735033941 | 52 per head |
| NS | Nut- 0.50-13 | 735029625 | 52 per head |

NS = Not Shown

Evaporator- Water Box Heads 26 Inch

26 Inch, 150 PSI Water Box Heads, Victaulic and Flanged - 2 Pass, non-ASME

| Ref. # | Description | Part Number | Qty. |
|--------|--|-------------|-------------|
| 350 | Assembly, Return Head | 332183102 | 1 |
| 351 | Assembly, Connection Head | | |
| | Flanged Connection | 332184753 | 1 |
| | Victaulic Connection | 332183153 | 1 |
| 352 | Gasket, Connection Head | 350296755 | 1 |
| 355 | Gasket, Return Head | 070304646 | 1 |
| 366 | Gasket Water Box Cover | 333850006 | 1 |
| NS | Screw, H5, 0.75 x 3.0, for Return Head | 735033878 | 32 per head |
| NS | Screw, H5, 0.75 x 4.5, for Water Box | 735033969 | 64 per head |
| NS | Nut, 0.75-10, for Return Head | 735029626 | 32 per head |
| NS | Nut, 0.75-10, for Water Box Head | 735029626 | 64 per head |

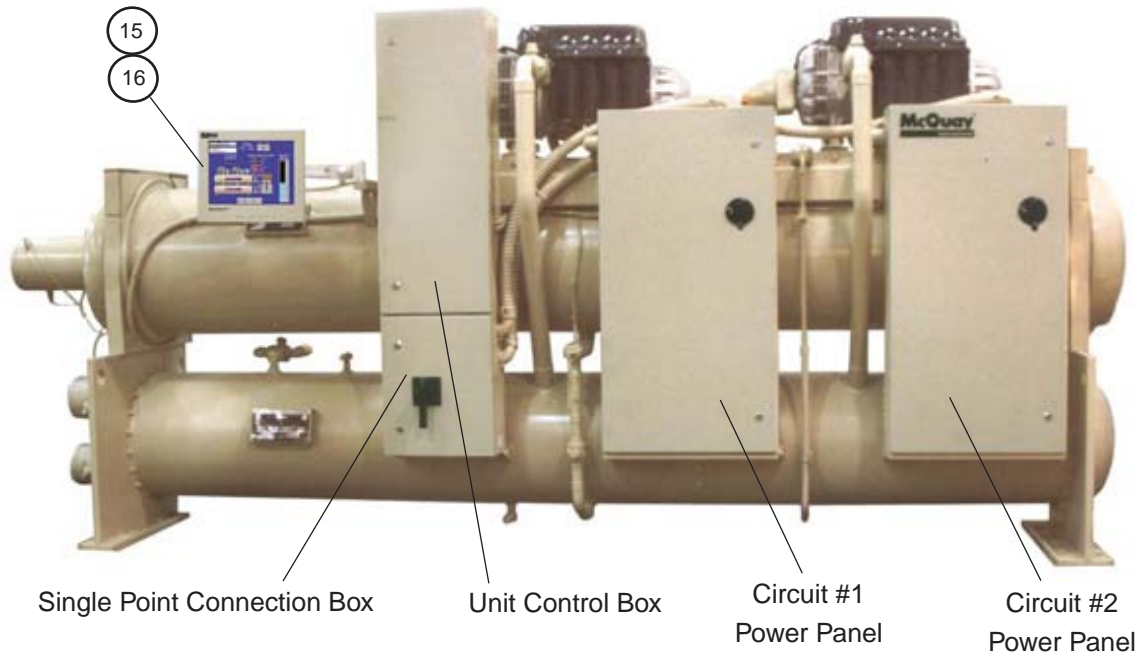
NS = Not Shown

Evaporator Insulation

| Description | Part Number | Quantity |
|------------------------------------|-------------|-------------------------------|
| 22 inch, 9 ft. Evaporator: | | |
| Insulation, 3/4", Evaporator Shell | 047662050 | 68 square ft * |
| Insulation, 3/4", Evaporator Head | 047662050 | 9 square ft per head |
| Insulation, 3/4", Suction | 047662050 | 11 square ft per suction line |
| 22 inch, 12 ft. Evaporator: | | |
| Insulation, 3/4", Evaporator Shell | 047662050 | 90 square ft * |
| Insulation, 3/4", Evaporator Head | 047662050 | 9 square ft per head |
| Insulation, 3/4", Suction | 047662050 | 11 square ft per suction line |
| 26 inch, 9 ft. Evaporator: | | |
| Insulation, 3/4", Evaporator Shell | 047662050 | 77 square ft * |
| Insulation, 3/4", Evaporator Head | 047662050 | 11 square ft per head |
| Insulation, 3/4", Suction | 047662050 | 11 square ft per suction line |
| 26 inch, 12 ft. Evaporator: | | |
| Insulation, 3/4", Evaporator Shell | 047662050 | 103 square ft * |
| Insulation, 3/4", Evaporator Head | 047662050 | 11 square ft per head |
| Insulation, 3/4", Suction | 047662050 | 11 square ft per suction line |

* If Code 32 = 3*, double the quantity for this item.

Unit Controls Operator Interface Panel



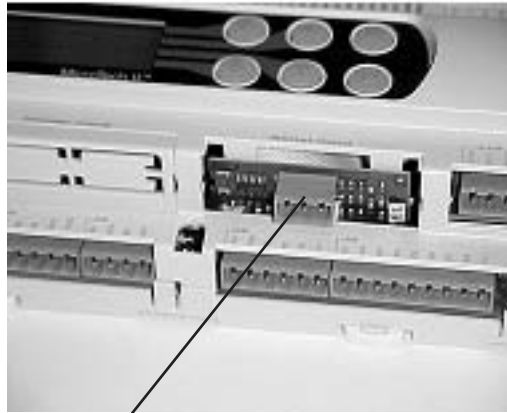
| Ref. No. | Description | Part Number | Qty. |
|----------|---|-------------|------|
| 15 | Operator Interface Panel w/cables, 12" Beige | 330277501 | 1 |
| 15 | Operator Interface Panel w/cables, 15" Beige | 330276501 | 1 |
| 15 | Operator Interface Panel w/cables, 15" Black | 330276502 | 1 |
| | Cable, Power, Operator Interface | 300040768 | 1 |
| | Cable, Serial, Operator Interface | 300043345 | 1 |
| | Cable Kit (includes Power, Serial & VGA cords) | 300043289 | 1 |
| 16 | Support Arm Assy, Beige (includes swivel pin, washers, & nut) | 330815401 | 1 |
| 16 | Support Arm Assy, Black (includes swivel pin, washers, & nut) | 330815411 | 1 |

Unit Controls Single Point Connection Box

| Ref. # | Description | Part Number | Quantity |
|--------|---|-------------|----------|
| | Unit Sizes 145D, 150D | | |
| DS1 | Standard SCCR (Code 29, Digit 6 = Y) | | |
| | 400A Circuit Breaker, Std. SCCR | 300042106 | 1 |
| | Lug | 300042258 | 6 |
| | Operating Shaft | 300042115 | 1 |
| | Operating Mechanism | 300042118 | 1 |
| | Handle | 300040313 | 1 |
| DS1 | High SCCR (Code 29, Digit 6 = H) | 300046378 | 1 |
| | 400A Circuit Breaker, High SCCR | 300046310 | 1 |
| | Lug | 300042258 | 3 |
| | Operating Shaft | 300042115 | 1 |
| | Operating Mechanism | 300042118 | 1 |
| | Handle | 300040313 | 1 |
| | | | |
| | Unit Sizes 250D, 290D | | |
| DS1 | Standard SCCR (Code 29, Digit 6 = Y) | | |
| | 600A Circuit Breaker Assembly, Std. SCCR | 300043264 | 1 |
| | includes: 600A Circuit Breaker, Std. SCCR | 300042108 | 1 |
| | Lug | 300042258 | 3 |
| | Operating Shaft | 300042115 | 1 |
| | Operating Mechanism | 300042118 | 1 |
| | Handle | 300042114 | 1 |
| DS1 | High SCCR (Code 29, Digit 6 = H) | | |
| | 600A Circuit Breaker, High SCCR | 300046487 | 1 |
| | Lug | 300042258 | 3 |
| | Operating Shaft | 300042115 | 1 |
| | Operating Mechanism | 300042118 | 1 |
| | Handle | 300042114 | 1 |
| | | | |
| PD1 | Power Block, 760A | 300047431 | 1 |

Unit Controls

Unit Control Box Communication



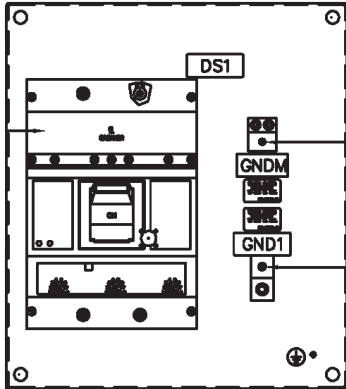
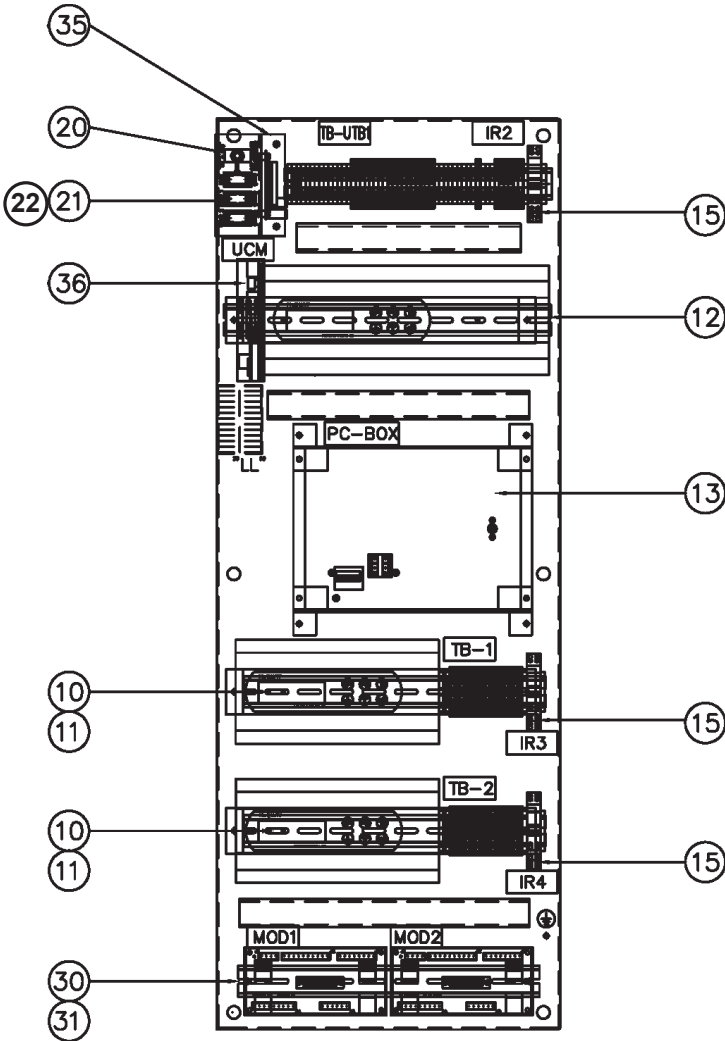
400

401



| Ref. # | Description | Part Number | Qty. |
|--------|---|-------------|------|
| 400 | LonMark Serial Interface | 350147401 | 1 |
| 400 | ModBus RS485 Serial Network Board | 350147402 | 1 |
| 400 | BACnet RS232 Serial Gateway / Modem Board | 330343102 | 1 |
| 400 | BACnet with IP Ethernet | 350147406 | 1 |
| 401 | BACnet MS/TP (RS485) Interface Board | 350147407 | 1 |

Unit Controls Unit Control Box



Unit Controls

Unit Control Box- Size 145S (Single Circuit)

| Ref. # | Schem. | Description | Part Number | Qty. |
|--------|---------------|-------------------------------------|-------------|------|
| 10 | | Circuit Controller, Small MTII | 330268111 | 1 |
| 12 | UC | Unit Controller, Large MTII | 330268311 | 1 |
| 13 | PC | OITS Circuit Board Assy | 330276603 | 1 |
| | | Power Supply for OITS Circuit Board | 330277353 | 1 |
| | | Power Supply for ATX | 333355201 | 1 |
| | | Memory Module | 330276693 | 1 |
| 20 | CB1 | Circuit Breaker, 10A, 250V | 300042182 | 1 |
| 21 | SW1,12 | Rocker Switch, Compressor | 300042181 | 2 |
| 22 | SW5 | Rocker Switch, Emergency Shut-down | 300042962 | 1 |
| 30 | MOD1 | PCB Assy | 300042958 | 1 |
| 31 | CA1 | Capacitor | 300040510 | 1 |
| 35 | EXV | EXV Driver Board | 330277803 | 1 |
| 36 | UCM | Comm Module Card | 330275202 | 1 |
| NS | S05 | Sensor- 30 ft. | 073007303 | 1 |
| NS | S02, S03, S04 | Sensor- 30 ft. | 073007203 | 3 |
| NS | CS01 | Sensor- 30 ft. | 073007203 | 1 |
| NS | | Resistor, 120 Ohm | 300047219 | 1 |

NS = Not Shown

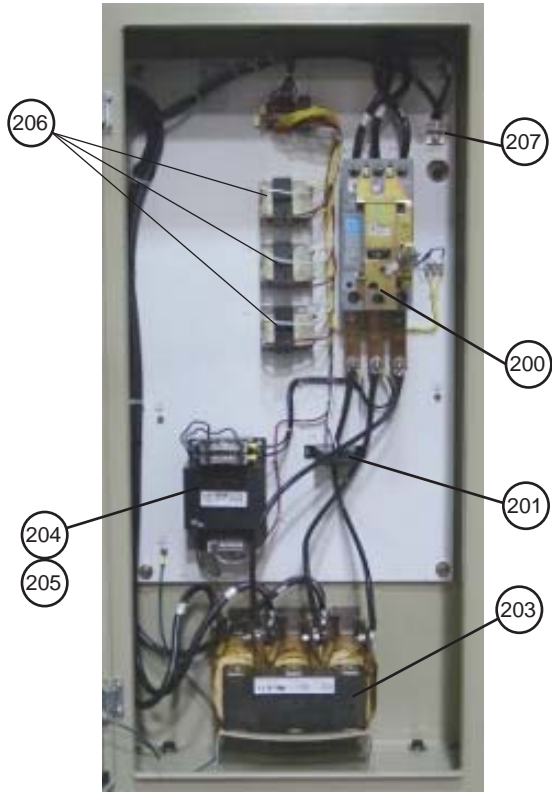
Unit Controls

Unit Control Box - Sizes 145D - 290D (Dual Circuit)

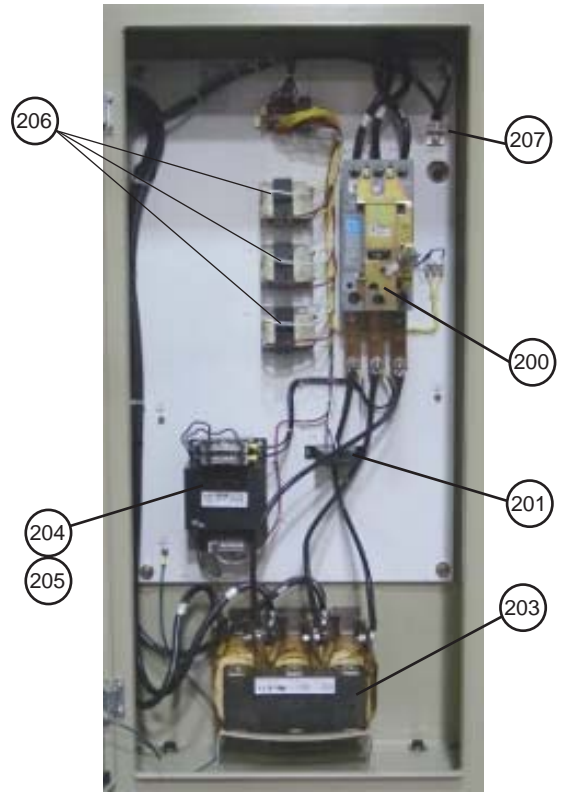
| Ref. # | Schem. | Description | Part Number | Qty. |
|--------|---------------|-------------------------------------|-------------|------|
| 10 | | Circuit Controller, Small MTII | 330268111 | 2 |
| 11 | | Serial Network Board | 350147402 | 1 |
| 12 | UC | Unit Controller, Large MTII | 330268311 | 1 |
| 13 | PC | OITS Circuit Board Assy | 330276603 | 1 |
| | | Power Supply for OITS Circuit Board | 330277353 | 1 |
| | | Power Supply for ATX | 333355201 | 1 |
| | | Memory Module | 330276693 | 1 |
| 15 | IR2, IR3, IR4 | Relay, 2PDT, 10A, 24V | 300043648 | 3 |
| 20 | CB1 | Circuit Breaker, 10A, 250V | 300042182 | 1 |
| 21 | SW1,12 | Rocker Switch, Compressor | 300042181 | 2 |
| 21 | SW22 | Rocker Switch, Unit | 300042181 | 1 |
| 22 | SW5 | Rocker Switch, Emergency Shut-down | 300042962 | 1 |
| 30 | MOD 1, MOD2 | PCB Assy | 300042958 | 2 |
| 31 | CA1, CA2 | Capacitor | 300040510 | 2 |
| 35 | EXV | EXV Driver Board | 330277803 | 1 |
| 36 | UCM | Comm Module Card | 330275202 | 1 |
| NS | S05 | Sensor- 30 ft. | 073007303 | 1 |
| NS | S02, S03, S04 | Sensor- 30 ft. | 073007203 | 3 |
| NS | CS01, CS02 | Sensor- 30 ft. | 073007203 | 2 |
| NS | | Resistor, 120 Ohm | 300047219 | 1 |

NS = Not Shown

Unit Controls Power Panel Diagram



Circuit #1



Circuit #2

Unit Controls Power Panels - Sizes 145D & 150D

| Ref. # | Schem. | Description | Part Number | Qty. per panel |
|--------|---------------|---|-------------|-------------------|
| 200 | CB11, 21 | Compressor Circuit Breaker, Std. SCCR (Code 29, Digit 6 = Y) | | |
| | | Trip, 100A, Circuit Breaker * | 300047220 | 1 |
| | | Trip, 150A, Circuit Breaker * | 300042207 | 1 |
| | | Trip, 175A, Circuit Breaker * | 300042942 | 1 |
| | | Frame, Circuit Breaker | 300042120 | 1 |
| | | Operator, Circuit Breaker | 300042117 | 1 |
| | | Handle, Circuit Breaker, Rotary | 300043800 | 1 |
| | | Shaft, Circuit Breaker | 300042808 | 1 |
| | | Lug, Circuit Breaker | 300040792 | 3 |
| | | Bus Tab, Circuit Breaker | 300042939 | 3 |
| 200 | CB11, 21 | Compressor Circuit Breaker, High SCCR (Code 29, Digit 6 = H) | | |
| | | Circuit Breaker, 70-250A | 300042209 | 1 |
| | | Operator, Circuit Breaker | 300042117 | 1 |
| | | Handle, Circuit Breaker, Rotary | 300043800 | 1 |
| | | Shaft, Circuit Breaker | 300042808 | 1 |
| | | Lug, Circuit Breaker | 300040792 | 3 |
| 201 | CT11,CT21 | Transformer, 0-5V Circuit Monitor | 300042945 | 1 |
| 203 | LR11, 21 | Line Reactor, 140A * | 300042961 | 1 |
| 203 | LR11, 21 | Line Reactor, 156A, 125HP * | 300045391 | 1 |
| 204 | T11,21 | Fuse Puller/Cover | 300043152 | 1 |
| 205 | T11, 21 | 460V Transformer Kit, 750VA, 480V:120V | 300042952 | 1 |
| | | includes: Transformer, 750A | 300047231 | 1 |
| | | Fuse Block | 300043153 | 1 |
| | | Fuse, 8A | 300047232 | 1 |
| | | Fuse, 4A | 300046330 | 1 |
| 205 | T11, 21 | 400V Transformer Kit, 750VA, 400V:120V | 300047217 | 1 |
| | | includes: Transformer, 750A | 300047233 | 1 |
| | | Fuse Block | 300043153 | 1 |
| | | Fuse, 8A | 300047232 | 1 |
| | | Fuse, 4A | 300046330 | 1 |
| 206 | T12-14,T22-24 | Transformer, 120V - 24V | 300042178 | 3 |
| 207 | CTGF11, 21 | Ground Fault Current Transformer (option) | 300043558 | 1 |
| NS | EMI | EMI Filter (option) | 300042960 | 1 |
| NS | GFR11, 21 | Ground Fault Relay (option) | 330315101 | 1 |

* If unable to identify from this information, contact McQuay Parts with the Control Box Serial No. and Control Box Part No.
NS = Not Shown

Unit Controls

Power Panels - Sizes 145S, 250D, 290D

| Ref. # | Schem. | Description | Part Number | Qty. per panel |
|--------|----------|---|-------------|-------------------|
| 200 | CB11, 21 | Compressor Circuit Breaker, Standard SCCR (Code 29, Digit 6 = Y) | | |
| | | Trip, 175A, Circuit Breaker * | 300042942 | 1 |
| | | Trip, 225A, Circuit Breaker * | 300046537 | 1 |
| | | Trip, 250A, Circuit Breaker * | 300042208 | 1 |
| | | Frame, Circuit Breaker | 300042120 | 1 |
| | | Operator, Circuit Breaker | 300042117 | 1 |
| | | Handle, Circuit Breaker, Rotary | 300043800 | 1 |
| | | Shaft, Circuit Breaker | 300042808 | 1 |
| | | Lug, Circuit Breaker | 300040792 | 3 |
| 200 | CB11, 21 | Compressor Circuit Breaker, High SCCR (Code 29, Digit 6 = H) | | |
| | | Trip, 175A, Circuit Breaker * | 300042942 | 1 |
| | | Trip, 225A, Circuit Breaker * | 300046537 | 1 |
| | | Frame, Circuit Breaker | 300042209 | 1 |
| | | Operator, Circuit Breaker | 300042117 | 1 |
| | | Handle, Circuit Breaker, Rotary | 300043800 | 1 |
| | | Shaft, Circuit Breaker | 300042808 | 1 |
| | | Lug, Circuit Breaker | 300040792 | 3 |

* If unable to identify from this information, contact McQuay Parts with the Control Box Serial Number and Control Box Part Number.

Unit Controls

Power Panels - Sizes 145S, 250D, 290D

| Ref. # | Schem. | Description | Part Number | Qty. per panel |
|--------|----------------|--|------------------------|-------------------|
| 201 | CT11,CT21 | Transformer, 0-5V Circuit Monitor | 300042945 | 1 |
| 203 | LR11, 21 | Line Reactor, 156A, 125HP * | 300045391 | 1 |
| 203 | LR11, 21 | Line Reactor, 180A, 150HP * | 300045338 | 1 |
| 204 | T11,21 | Fuse Puller/Cover | 300043152 | 1 |
| 205 | T11, 21 | 460V Transformer Kit, 750VA, 480V:120V includes: Transformer, 750A | 300042952 300047231 | 1 1 |
| | | Fuse Block | 300043153 | 1 |
| | | Fuse, 8A | 300047232 | 1 |
| | | Fuse, 4A | 300046330 | 1 |
| 205 | T11, 21 | 400V Transformer Kit, 750VA, 400V:120V includes: Transformer, 750A | 300047217 300047233 | 1 1 |
| | | Fuse Block | 300043153 | 1 |
| | | Fuse, 8A | 300047232 | 1 |
| | | Fuse, 4A | 300046330 | 1 |
| 206 | T12-14,T22-24 | Transformer, 120V - 24V | 300042178 | 3 |
| | FU11-13, 21-23 | Fuse Assy includes: Fuse, 175A 600V | 300047221 300047432 | 1 3 |
| | | Fuse Block | 300047230 | 1 |
| 207 | CTGF11, 21 | Ground Fault Current Transformer (option) | 300043558 | 1 |
| NS | EMI | EMI Filter (option) | 300047437 | 1 |
| NS | GFR11, 21 | Ground Fault Relay (option) | 330315101 | 1 |

* If unable to identify from this information, contact McQuay Parts with the Control Box Serial Number and Control Box Part Number.

NS = Not Shown

Unit Controls Control Box Label

For all other control components, please contact McQuay Parts with the **Control Box Serial Number** and **Control Box Part Number**. These numbers are located on the Control box rating label (see example below). This label is found inside the panel.

Control Box Serial Number
"S" + Year + ##### + detail#

Control Box Part Number

