Liebert DS Parts Manual

Parts Manual

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Table of Contents

1. Product Description 1
2. Model Number Definition 6
3. Blower/Motor Section 7
3.1. Blower Assembly 8
3.2. Motor Assembly 9
3.2.1. Motor 10
3.2.1.1. Premium Efficiency Motor 10
3.2.1.2. TEFC Motor (Optional) 11
3.2.1.3. ODP Motor 12
3.3. Motor Option VFD 13
4. Coil Section 15
4.1. Standard Coil 15
4.2. Polymeric Coil 15
4.3. Copper/Nickel Coil 16
5. Compressor Section 17
5.1. Scroll Compressor 17
5.1.1. Scroll Compressors 17
5.1.2. Digital Scroll Compressors 20
5.2. 4-Step Semi Compressor 21
5.3. Digital Scroll 24
5.4. Crankcase Heater 25
6. EC Fan 27
6.1. DS053/77 27
6.2. DS105 27
7. Electrical Section 28
7.1. EP Back Panel 28
7.1.1. Fused 28
7.1.2. CB 29
7.2. EP Compressor 30
7.2.1. Fused 30
7.2.2. CB 32
7.3. Controls 33
7.4. Disconnect 34
7.4.1. Single Disconnect 34
7.4.2. Single Disconnect 250A 34
7.4.3. Non Locking Disconnect Assembly 35
7.4.4. Interlocking Disconnect Assembly 36
7.4.5. Dual Disconnect 39
7.4.6. Non Locking Disconnect Assembly 40
7.4.7. Non Locking Dual Disconnect Assembly 40
7.4.8. Interlocking Disconnect Assembly 41
7.5. Display 42
7.6. EP EC Fan 44
7.7. EP Humidifier IR 45
7.7.1. Fused 45
7.7.2. CB 46
7.8. Humidifier SG 47
7.8.1. Fused 47
7.8.2. CB 49
7.9. Motor 50
7.9.1. Fuse 50
7.9.2. CB 52
7.10. EP Pump 54
7.10.1. Fused 54

7.10.2. CB 55
7.11. EP Reheat 56
7.11.1. Fused 56
7.11.2. Fuse Dual Element 57
7.11.3. CB 58
7.12. Analog Input Wires 59
7.13. Compressor OL Alarm 59
7.14. High Temperature Sensor 60
7.15. Low Terminal Voltage 60
7.16. RHT/Hum Lockout 61
7.17. Remote Humidifier Contacts 62
7.18. Smoke Detector 63
7.18.1. Smoke Detector Assembly 64
7.1. T/H Sensor 64
8. Exterior Section 65
8.1. Disconnect 65
8.2. 8-12T 67
8.3. 15-22T 68
8.4. 30T 69
9. Filter Section 71
10. Humidifier Section 72
10.1. No Humidifier No Pump 72
10.2. IR Humidifier Assembly 73
10.2.1. 3 Bulb (028/035/042KW) 73
10.2.2. 3 Bulb (053/070/077/105 KW) 74
10.2.3. 6 Bulb (053/070/077/105 KW) 75
10.3. No Humidifier with Pump 76
10.4. Humidifier IR with Pump 77
10.4.1. 6-12T 77
10.4.2. 15-22T/30T 78
10.5. Humidifier IR without Pump 79
10.5.1. 6-12T 79
10.5.2. 15-22T/30T 80
10.6. SG Humidifier No Pump 81
10.6.1. Isometric View 81
10.6.2. Front View 81
10.6.3. Nortec Assembly 83
10.7. SG Humidifier with Pump 84
10.7.1. Isometric View 84
10.7.2. Front View 84
10.7.3. Pump Condensate Assembly 85
11. Piping Section 86
11.1. DS Semi 86
11.1.1. Semi DS 86
11.1.2. Suction Assembly #2 (178423G1) 87
11.1.3. Suction Assembly #1 (178424G1) 87
11.1.4. Discharge Assembly #2 (182136G1) 88
11.1.5. Discharge Assembly #1 (182137G1) 88
11.1.6. Liquid Assembly #2 (191110G1) 89
11.1.7. Liquid Assembly #1 (191109G1) 89
11.1.8. Suction Assembly #1 (183947G1) 90
11.1.9. Suction Assembly #2 (183946G1) 90
11.1.10. Discharge Assembly #2 (186747G1) 91
11.1.11. Discharge Assembly #1 (186746G1) 91
11.1.12. Liquid Assembly #1 (179963G1) 92
11.1.13. Liquid Assembly #2 (179962G1) 92
11.1.14. WG Semi 93

11.1.15. Suction Assembly #2 (182703G1) 94
11.1.16. Suction Assembly #1 (182702G1) 94
11.1.17. Discharge Assembly #2 (182788G1) 94
11.1.18. Discharge Assembly #1 (182787G1) 95
11.1.19. Liquid Assembly #2 (182670G1) 95
11.1.20. Liquid Assembly #1 (182669G1) 96
11.1.21. Suction Assembly SM2 (300599G1) 96
11.1.22. Suction Assembly SM1 (300616G1) 97
11.1.23. Discharge Assembly #2 (199388G1) 97
11.1.24. Discharge Assembly #1 (199387G1) 98
11.1.25. Liquid Assembly #2 (190589G1) 98
11.1.26. Liquid Assembly #1 (190590G1) 99
11.1.27. Semi Air 100
11.1.28. Suction Assembly #2 (183946G1) 101
11.1.29. Suction Assembly #1 (182702G1) 101
11.1.30. Discharge Assembly #2 (183943G1) 102
11.1.31. Discharge Assembly #1 (183942G1) 102
11.1.32. Liquid Assembly #2 (182670G1) 103
11.1.33. Liquid Assembly # 1 (179963G1) 103
11.1.34. Suction Assembly SM2 (300599G1) 104
11.1.35. Suction Assembly SM1 (300616G1) 104
11.1.36. Discharge Assembly #2 (300617G1) 105
11.1.37. Discharge Assembly #1 (300618G1) 105
11.1.38. Liquid Assembly #2 (190589G1) 106
11.1.39. Liquid Assembly #1 (190590G1) 106
11.2. DS Scroll 107
11.2.1. Scroll WG 107
11.2.2. Suction Assembly #2 (178123G1) 108
11.2.3. Suction Assembly #1 (178124G1) 108
11.2.4. Discharge Assembly #2 (178125G1) 109
11.2.5. Discharge Assembly #1 (178126G1) 110
11.2.6. Liquid Assembly #2 (191110G3) 111
11.2.7. Liquid Assembly #1 (191109G3) 112
11.2.8. Scroll AWG 113
11.2.9. Suction Assembly #2 SCRL SC2 (189301G1) 114
11.2.10. Suction Assembly #1 SCRL SC1 (189302G1) 114
11.2.11. Discharge Assembly #2 SCRL SC2 (189303G1) 115
11.2.12. Discharge Assembly #2 SCRL SC1 (189304G1) 116
11.2.13. Liquid Assembly #2 (185495G1) 117
11.2.14. Liquid Assembly #1 (185494G1) 118
11.2.15. Scroll Air 119
11.2.16. Suction Assembly #2 SCRL AIR (181261G1) 120
11.2.17. Suction Assembly #1 SCRL AIR (181260G1) 121
11.2.18. Discharge Assembly #2 SCRL AIR (183215G1) 122
11.2.19. Discharge Assembly #1 (183216G1) 123
11.2.20. Liquid Assembly #2 (191138G1) 124
11.2.21. Liquid Assembly #1 (191137G1) 125
12. Reheat Section 126
13. Parts Gallery 127
14. Revision Page 133
Ea/

1. Product Description

Designed for Reliability

Because electronic system availability is required 24 hours a day, 365 days a year, the environmental control system must meet the same demands. The Liebert DS is designed with the highest quality components selected for their proven reliability. Microprocessor technology adds automatic sequencing of components to even wear and extend service life. Automatic cleaning cycles can be programmed to match local water conditions. An alarm system and self diagnostics provide rapid troubleshooting and can prevent a problem before it affects the electronic equipment room environment.

Precise Temperature and Humidity Control

The environmental control system must be able to sense and react to temperature and humidity fluctuations far too small for building HVAC systems to control. The Liebert DS is capable of responding to changes as small as ±1°F (°C) and ±1% RH. By analyzing the rate of change in temperature or the moisture content in the environment, the control system anticipates what is going to happen in the room, not simply respond to what has happened.

Year-Round Operation under Any Climate Conditions

Comfort conditioning systems cannot be relied upon 24 hours per day 365 days per year. They are typically designed to operate 10 hours per day, from spring to autumn. Many comfort systems have no provision for winter operation. A precision environmental control system is designed to operate over a wide range of ambient temperatures from as low as –30°F (-34.4°C) up to 120°F (48.9°C).

Designed For Energy Efficiency

Liebert is dedicated to providing maximum energy efficiency in its precision cooling systems without compromising the accuracy and reliability demanded by sensitive electronics. All enhancements to energy efficiency are designed to reduce operating time of key components and increase the Mean Time Between Failure. This is accomplished by taking advantage of alternate sources of cooling without being dependent on their availability or by minimizing compressor operation when heat loads in the conditioned space are lower. Energy savings is also gained through the use of high efficiency components such as advanced digital scroll and 4-step semi-hermetic compressors.

DownFlow Configurations

Designed for use in raised floor applications, such as data centers, the Liebert DS downflow configuration combines top air return with bottom air supply to circulate air underneath the floor.

Quality, Rugged Construction

The durable design of the Liebert DS provides a stable, virtually vibrationless platform for compressor and fan operation.

AutoPhoretic® frame coating — protects frame against corrosion for years of reliable service.

Welded frame — 14 gauge steel provides rugged construction, proven to withstand shipping and handling through ISTA certified ship testing.

Durable powder coated exterior panels — looks good and stays that way.

Slot and tab sheet metal — for consistent, quality construction.

Optional double-skin panels — eliminate insulation in the air stream.

Optional Floorstands — Adjustable standard and seismicrated floorstands allow for installation and connection of the system prior to the installation of the raised floor. Available in heights from 6” to 36” (152 to 914 mm). A field installed turning vane may be specified.

Front access provides space and serviceability

The Liebert DS can be placed adjacent to or in back of other equipment or against a wall or partition. All key components, visible and accessible, from the front of the unit for easy maintenance and removal. Compressors removable from front — isolated from air stream for easier maintenance.

Modular Frame Construction

The unit's modular frame construction allows even more flexibility in meeting specific needs for installation, energy efficiency and other special requirements. Frame can be field separated into three sections — enables unit to fit into small elevators or through other tight spaces.

Blower System

Clean, even air distribution is supplied by large capacity fans, which are statically and dynamically balanced to minimize vibration. Air is drawn evenly and at low velocity through the system, using less fan motor energy and operating more quietly than forced air blowers. Filtered air at the right temperature and humidity is fed positively and evenly into the room.

Electric Panel

The electric panel of the Liebert DS is designed for easy access to critical electrical and control components.

Motors

The Liebert DS features fan motors that are optimized for reliability and energy efficiency. High efficiency open drip proof motor meets NEMA Premium motor standard.

Motor Options

Optional TEFC (totally enclosed fan-cooled) motors — for rugged industrial environments. Optional larger horsepower motors available — for higher air volume or higher static pressures.

Local Monitoring and Control Options

Dual float condensate pump — installed in unit, with secondary float to shutdown unit and trigger alarm if high water detected.

Optional Low Voltage Terminal Package — two extra n/o common alarm contacts, two extra remote shutdown terminals, one main fan auxiliary contact, water sensor signal shuts down unit, and provides dry contact (water sensor not included).

Smoke sensor — senses the return air, shuts down the unit upon detection, and sends visual and audible alarm. Dry contacts are available for a remote customer alarm.

High temperature sensor — alerts users to any high temperature situations within the system. Senses return air temperature and shuts down unit if temperature exceeds 125°F (51.7°C).

Analog input wiring — includes four customer accessible analog inputs for sensors provided by others. The analog inputs accept a 4 to 20 mA signal. Gains for each input are programmable from the front panel.

Compressor overload — activates an audible and visual alarm in the event of a compressor overload.

Main Fan Overload - activates an audible and visual alarm in the event of a motor overload.

A-frame coil

This Liebert designed and manufactured A-Frame coil features a large face area/low face velocity design for precise control of cooling and dehumidification — and is designed to optimize heat transfer and minimize pressure drop.

Dual Refrigeration Circuits for Redundancy

Dual compressors and refrigeration circuits assure reliability and feature automatic sequencing for even wear of components.

Components include — dual compressors and dual refrigeration circuits enabling the system to operate even if one circuit fails.

Pump-down evacuation of refrigerant from compressor crankcase — shields the compressors from the "hard starts" that can shorten their life.

Refrigeration System Features

Each refrigeration circuit includes:

Sight glasses — serve as a means of quick visual inspection to determine if there is moisture in the system and if the system is properly charged.

Refrigerant dehydrators — assure a moisture-free refrigerant system for extended component life.

Expansion valve — externally equalized expansion valves smoothly control refrigerant flow during indoor heat loads and outdoor ambient by controlling evaporator superheat.

Muffler — specially engineered mufflers afford a quiet pulsation free refrigeration system.

Safety controls — each compressor has an automatic reset high pressure switch that locks-out after the third trip. A low pressure transducer protects against coil freezing and low refrigerant pressure.

Dual Cool

Utilizing this option, a conventional air cooled Liebert DS is converted to a dual source cooling system by the addition of a second coil that utilizes a central building chiller supply. Using a modulating control valve and a comparative temperature sensor, the unit can function either as a chilled water system, as a compressorized system — or a combination of both.

During times when the chiller supply is available, compressor operation is eliminated, reducing energy costs. Switchover between the two cooling modes is performed automatically by a microprocessor control and temperature sensor. In addition to energy efficiency, this option can provide increased redundancy and flexibility to the environmental control system.

Humidity Control

Maintaining the correct humidity level in the room is just as important as maintaining proper temperature. Inadequate humidity control can cause static electricity if it’s too dry — or condensation that can corrode circuitry if the air is too moist. Comfort cooling systems can lower room humidity far below acceptable standards for electronic equipment — and they usually have no provisions for adding moisture. The Liebert DS utilizes an integrated humidification system to provide the necessary level of moisture control.

Dehumidification Control

The compressors operate at full capacity during dehumidification. The precision control of the Liebert DS saves energy by tightly regulating compressor operation and avoiding over dehumidification that causes the humidifier to come on when not needed.

Reheat Function

The reheat function of the Liebert DS is primarily used to keep the temperature from going too low during the dehumidification cycle.

Standard Reheat

Three-stage electric reheat — low watt-density, 304 stainless-steel fin-tubular reheat, location maximizes airflow to maximize element life and improve reliability.

Four-Step Semi-Hermetic Compressors

The Liebert DS Four-Step system achieves higher levels of energy efficiency through the integration of two high-efficiency semi-hermetic compressors with capacity control valves, a microprocessor control system and a computer-optimized cooling coil.

The Four-Step system reduces compressor cooling capacity and energy consumption during periods of low room load conditions. This is accomplished by means of a specially designed control system and unloaders on one head of each of the two semi-hermetic compressors. As a result, four distinct stages of cooling are activated to more closely respond to changing room conditions. Reliability is enhanced by fewer and less stressful compressor starts for reduced wear.

Less compressor cycling — means longer life, less energy use.

Temperature control — better than standard 2-step compressor.

Unloading the compressor — changes the system operating point, increases efficiency.

Multiple steps — mean better load tracking.

Efficiency goes up — as evaporation temperature increases and condensing temperature decreases.

Optional crankcase heater — for quick start operation.

New Refrigerants to Meet Government Regulations

Without the ability to utilize newer environmentally friendly refrigerants, your cooling equipment could become obsolete and “out of compliance.” The Montreal Protocol and EPA Clean Air Act require cooling manufacturers to switch to “green” refrigerants by 2010.

R-22 — is standard refrigerant used in Liebert DS.

R-407C — Liebert’s choice for optional “green” refrigerant to meet future environmental standards. This is the best fit for Liebert applications, with near drop-in replacement.

Field converts — from R-22 to R-407C when required.

Digital Scroll Compressors

No other precision air conditioning product line offers as many choices for energy efficiency as the Liebert DS.

The exclusive digital scroll compressor option utilizes the latest control technology to deliver significantly higher energy efficiency.

Provides a variable capacity system — for maximum load tracking, reduced compressor cycling and minimized compressor wear.

Optional crankcase heater — for quick start operation.

Saves energy over single-stage compressors.

Improves reliability by reducing compressor cycling.

Intelligent Communications and Monitoring

Saves Energy — Using Predictive Humidity Control.

Built-in Lead/Lag Functions — for enhanced system reliability.

Wellness Calculation — Alerts service personnel before problems occur.

Unit to Unit Communications — Allows Lead/Lag and optional teamwork settings for maximum flexibility of control.

Additional Views Available with Large Graphic Displays

System View— allows you to see the average operation of the “system” or all units that are working together in Unit to Unit (U2U) Communication mode for Teamwork or Lead/Lag from a centralized location.

Spare Parts List — Critical spare part numbers are saved in unit memory and may be displayed on the Large Graphic Display, speeding identification of parts.

On-line Set-up Assistant — On-line “assistant” for guidance during initial set-up and routine maintenance.

Unit Diary — Free field area within the unit memory where unit maintenance shares history with any authorized users or logged-in service contacts, including record of what others have done.

2. Model Number Definition

Liebert DS Model Number Configuration (Vendavo number)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
D	S	0	3	5	D	A	S	A	S	*	*	*	*	A

Air Distribution
DS = Liebert DS

Nominal kw
028,035,042,053,070,077,105

Air Discharge
V = Upflow
D = Downflow

System Type
A – Air-Cooled
W – Water-Cooled
D – Dual-Cool Chilled Water + Air-Cooled
H – Dual-Cool Chilled Water + Water/Glycol Cooled
K - Glycool

Airflow
S – Forward curved-centrifugal fan
V = Forward curved-centrifugal fan with VFD
1 – EC fan

Power Supply
A- 460V/3ph/60hz
B- 575V/3ph/60hz
C- 208V/3ph/60hz
D- 230V/3ph/60hz
2- 380V/3ph/60hz
M- 380-415V/3ph/50hz

Cooling System
S – Scroll Compressor
D – Digital Scroll Compressor
U – Semi-Hermetic Compressor with 4-step unloading

Configuration String

S - Special

3. Blower / Motor Section

B **Blower Assembly**

D **Package Parts** for your specific unit(s). Please supply the Serial Number(s) and Model Number(s) of the unit(s) for which you need the parts.

M **Motor Assembly**

Due to the complexity of the Drive Package Options for the DS units, you will need to contact the Factory for the Drive

3.1. Blower Assembly

Item	Part Number	Description	028	035	042	053	070	077	105
1	1C29077P2	BLOWER W/H A15-15AX1.19 KEY	1	1	1				
	1C25524P2	BLOWER W/H A15-11AX3.00				2	2	2	3
	160021P1	BLOWER W/H A15-11AX1.19 KEY	1	1	1				
	B-1170	BLOWER W/H A15-15AX2.25				2	2	2	
2	180327P1S	SHAFT TUBULAR FAN 1-3/16 82"DS				1	1	1	
	180327P2S	SHAFT TUBULAR FAN 1-7/16 82"DS				1	1	1	
	183494P1S	SHAFT TUBULAR FAN 1-1/2 105"DS							1
	180844P1S	SHAFT 26.5 X 1.19 W/ KEYWAY	1	1	1				
3	194616P1S	BEARING PILLOW BLK NPL 1-3/16	2	2	2				
	194617P1S	BEARING PILLOW BLK MP 1-3/16				2	2	2	
	194618P1S	BEARING PILLOW BLK MP 1-7/16				2	2	2	
	194619P1S	BEARING PILLOW BLK MP 1-1/2							2
7	136133P1	BUSHING PULLEY B 1-7/16”DIA				1	1	1	
	179161P2	BUSHING PULLEY B 1-3/16" DIA	1	1	1				
	B-1160S	BUSHING PULLEY H 1-3/16"DIA	1	1	1	1	1	1	
	179161P5	BUSHING PULLEY B 1-1/2"							1

3.2. Motor Assembly

Item	Part #	Description	HP	028	035	042	053	070	077	105
1		See Motor on Page 10	-				1	1	1	
3	194573P1	MOTOR BASE AUTO 143-145 DS	2HP	1	1	1				
	194574P1	MOTOR BASE AUTO 182-184 DS	3, 5HP	1	1	1	1	1	1	
	194575P1	MOTOR BASE AUTO 213-215 DS	7.5, 10HP	1	1	1	1	1	1	1
	194576P1	MOTOR BASE AUTO 254-256 DS	15, 20				1	1	1	1
4	136133P3	BUSHING PULLEY B 1-5/8" DIA	-				1	1	1	1
	179161P2	BUSHING PULLEY B 1-3/16" DIA	-	1	1	1				
	179161P5	BUSHING PULLEY B 1-1/2"	-							1
	B-1160S	BUSHING PULLEY H 1-3/16"DIA	-	1	1	1	1	1	1	
13	B02-0190S	SW AIRFLO SENSING	-	1	1	1	1	1	1	1

3.2.1. Motor

3.2.1.1. Premium Efficiency Motor

Part #	Description	HP	Type	028	035	042	053	070	077	105
160632P1S	MOTOR 2.0HP 208-3-60 PE	2HP	ODP PE	1	1	1				
160633P1S	MOTOR 2.0HP 230/460-3-60 PE		ODP PE	1	1	1				
160634P1S	MOTOR 2.0HP 575-3-60 PE		ODP PE	1	1	1				
160635P1S	MOTOR 3.0HP 575-3-60 PE	3HP	ODP PE	1	1	1	1	1	1	
181595P1	MOTOR 3HP 230/460		ODP PE	1	1	1	1	1	1	
181595P2	MOTOR 3HP 208		ODP PE	1	1	1	1	1	1	
160636P1S	MOTOR 5.0HP 575-3-60 PE	5HP	ODP PE	1	1	1	1	1	1	
186496P1	MOTOR 5HP 416-60 ODP STD EFF		ODP PE				1	1	1	
1C30169P1S	MOTOR 5.0HP 230/460-3-60 PE		ODP PE	1	1	1	1	1	1	
1C30169P2S	MOTOR 5.0HP 208-3-60 PE		ODP PE	1	1	1	1	1	1	
160995P1S	MOTOR 7.5HP 575-3-60 PE	7.5HP	ODP PE	1	1	1	1	1	1	
1A22733P1S	MOTOR 7.5HP 230/460-3-60 PE		ODP PE	1	1	1	1	1	1	
1A22733P2S	MOTOR 7.5HP 208-3-60 PE		ODP PE	1	1	1	1	1	1	
132584P1	MOTOR 10.0HP 575-3-60 TEFC	10HP	TEFC PE							1
160285P1	MOTOR 10.0HP 575-3-60 PE		ODP PE				1	1	1	1
1A20755P1S	MOTOR 10.0HP 230/460-3-60 TEF		TEFC PE							1
1A22735P1S	MOTOR 10.0HP 230/460-3-60 PE		ODP PE				1	1	1	1
1A22735P2S	MOTOR 10.0HP 208-3-60 PE		ODP PE				1	1	1	1
B02-0170	MOTOR 10.0HP 380/416-3-60		ODP PE							1
136175P1S	MOTOR 15.0HP 575-3-60 PE	15HP	ODP PE				1	1	1	1
163944P1	MOTOR 15HP 575-3-60 TEFINVD		TEFC PE							1
1A30102P1	MOTOR 15HP 208-230/460 TEFC		TEFC PE							1
1C32993P1S	MOTOR 15.0HP 230/460-3-60 PE		ODP PE				1	1	1	1
1C32993P2S	MOTOR 15.0HP 208-3-60 PE		ODP PE				1	1	1	1
160480P1	MOTOR 20HP 230/460-60 TEFINVD	20HP	TEFC PE							1
160482P1	MOTOR 20HP 208-3-60 TEFINVD		TEFC PE							1
168925P1	MOTOR 20HP 575V PE TEFC E5982		TEFC PE							1

3.2.1.2. TEFC Motor (Optional)

Part #	Description	HP	Type	028	035	042	053	070	077	105
132868P3	MOTOR 2.0HP 190/416-3-50 TEFC	2HP	TEFC	1	1	1				
1A22346P1	MOTOR 2.0HP 575-3-60 TEFC		TEFC	1	1	1				
1C32856P1	MOTOR 2.0HP 380-3-60 TEFC		TEFC	1	1	1				
B-1930	MOTOR 2HP 208-230/460-3-60TEFC		TEFC	1	1	1				
132868P4	MOTOR 3.0HP 190/416-3-50 TEFC	3HP	TEFC	1	1	1	1	1	1	
140829P1	MOTOR 3.0HP 200-3-60 TEFCPREM		TEFC	1	1	1	1	1	1	
1C32857P1	MOTOR 3.0HP 380-3-60 TEFC		TEFC	1	1	1	1	1	1	
B-1960	MOTOR 3.0HP 230/460-3-60 TEFC		TEFC	1	1	1	1	1	1	
B-1970	MOTOR 3.0HP 575-3-60 TEFC		TEFC	1	1	1	1	1	1	
132868P5	MOTOR 5.0HP 190/416-3-50 TEFC	5HP	TEFC	1	1	1	1	1	1	
187115P1	MOTOR 5.0 HP TEFC 380-3-60		TEFC	1	1	1	1	1	1	
1A23987P1	MOTOR 5.0HP 575-3-60 TEFC		TEFC	1	1	1	1	1	1	
B-1980	MOTOR 5.0HP 200-3-60 TEFC		TEFC	1	1	1	1	1	1	
B-1990	MOTOR 5.0HP 230/460-3-60 TEFC		TEFC	1	1	1	1	1	1	
B-2010	MOTOR 7.5HP208-230/460-3-60	7.5HP	TEFC	1	1	1	1	1	1	1
1C32858P1	MOTOR 7.5HP 380-3-60 TEFC		TEFC	1	1	1	1	1	1	1
139492P3	MOTOR 7.5HP 575-3-60 TEFC		TEFC	1	1	1	1	1	1	1
132868P6	MOTOR 7.5HP 190/416-3-50 TEFC		TEFC	1	1	1	1	1	1	1
132584P1	MOTOR 10.0HP 575-3-60 TEFC	10HP	TEFC				1	1	1	
132868P7	MOTOR 10.0HP 190/416-3-50 TEFC		TEFC				1	1	1	1
187116P1	MOTOR 10.0 HP TEFC 380-3-60		TEFC							1
1A20755P1	MOTOR 10.0HP 230/460-3-60 TEFC		TEFC				1	1	1	
163944P1	MOTOR 15HP 575-3-60 TEFINVD	15HP	TEFC				1	1	1	
163947P1	MOTOR 15HP 200/380-415TEFINVD		TEFC				1	1	1	1
187117P1	MOTOR 15.0 HP TEFC 380-3-60		TEFC							1
1A30102P1	MOTOR 15.0HP 208/230/460-3-60		TEFC				1	1	1	1

3.2.1.3. ODP Motor

Part #	Description	HP	Type	028	035	042	053	070	077	105
B-0920	MOTOR 2.0HP 200/380/400-3-50	2HP	ODP	1	1	1	1	1	1	
186377P1	MOTOR 3.0HP PE 416/3/60	3HP	ODP	1	1	1	1	1	1	
306512P1	MOTOR 3HP 190/416-3-50		ODP	1	1	1	1	1	1	
B-0930	MOTOR 3HP190/416-3-50 380-3-60		ODP	1	1	1	1	1	1	
140834P4	MOTOR 3HP 236/466 PE ODP TOSH		ODP-VFD	1	1	1	1	1	1	
187098P2	MOTOR 3HP 380/415/3/50 PE ODP		ODP-VFD	1	1	1	1	1	1	
193507P1	MOTOR 3HP 208-3-60 PE ODP INVD		ODP-VFD	1	1	1	1	1	1	
198837P1	MOTOR 3HP 380-3-60 INVD		ODP-VFD	1	1	1	1	1	1	
1C30169P1S	MOTOR 5.0HP 230/460-3-60 PE	5HP	ODP				1	1	1	
B-0940	MOTOR 5.0HP 200/380/400-3-50		ODP	1	1	1	1	1	1	
305472P3	MOTOR 5.0HP 236/466 PREM ODP		ODP-VFD	1	1	1	1	1	1	
187098P1	MOTOR 5HP 380/415/3/50 PE ODP		ODP-VFD	1	1	1	1	1	1	
198799P1	MOTOR 5.0HP 208/3/60 ODP INVD		ODP-VFD	1	1	1	1	1	1	
198837P2	MOTOR 5HP 380-3-60 INVD		ODP-VFD	1	1	1	1	1	1	
306510P1	MOTOR 7.5 200/380/400/415-3-50	7.5HP	ODP	1	1	1	1	1	1	
306511P1	MOTOR 7.5HP 380-3-60		ODP	1	1	1	1	1	1	
B-2170	MOTOR7.5/190-416-3-50/380-3-60		ODP	1	1	1	1	1	1	
140834P2	MOTOR 7.5HP 236/466 PREM ODP		ODP-VFD	1	1	1	1	1	1	
193367P1	MOTOR 7.5HP 200/380/415-50INVD		ODP-VFD	1	1	1	1	1	1	
197796P1	MOTOR 7.5HP 208/3/60 INVD ODP		ODP-VFD	1	1	1	1	1	1	
198837P3	MOTOR 7.5HP 380-3-60 INVD		ODP-VFD	1	1	1	1	1	1	
155671P1	MOTOR 10.0HP 380/3/60	10HP	ODP				1	1	1	1
B02-0110	MOTOR 10HP 200-380/415-50		ODP				1	1	1	1
163925P1	MOTOR 10HP 230/460-60 INVD		ODP-VFD				1	1	1	
163929P1	MOTOR 10HP 200/380/415-50INVD		ODP-VFD				1	1	1	
198837P4	MOTOR 10HP 380-3-60 INVD		ODP-VFD				1	1	1	
146006P1	MOTOR 15.0HP 380-3-60	15HP	ODP				1	1	1	1
B02-0140	MOTOR 15.0HP 200/380/400-3-50		ODP				1	1	1	1
146006P1	MOTOR 15.0HP 380-3-60	20HP	ODP				1	1	1	1
160074P1S	MOTOR 20HP 208/230/460 190/380		ODP							1

3.3. Motor Option VFD

Item	Part #	Description	HP	028	035	042	053	070	077	105
1	198837P1	MOTOR 3HP 380-3-60 INVD	3HP	1	1	1	1	1	1	
	140834P4	MOTOR 3HP 236/466 PE ODP TOSH		1	1	1	1	1	1	
	187098P2	MOTOR 3HP 380/415/3/50 PE ODP		1	1	1	1	1	1	
	193507P1	MOTOR 3HP 208-3-60 PE ODP INVD		1	1	1	1	1	1	
	305472P3	MOTOR 5.0HP 236/466 PREM ODP	5HP	1	1	1	1	1	1	1
	187098P1	MOTOR 5HP 380/415/3/50 PE ODP		1	1	1	1	1	1	1
	198799P1	MOTOR 5.0HP 208/3/60 ODP INVD		1	1	1	1	1	1	1
	198837P2	MOTOR 5HP 380-3-60 INVD		1	1	1	1	1	1	1
	140834P2	MOTOR 7.5HP 236/466 PREM ODP	7HP	1	1	1	1	1	1	1
	193367P1	MOTOR 7.5HP 200/380/415-50INVD		1	1	1	1	1	1	1
	197796P1	MOTOR 7.5HP 208/3/60 INVD ODP		1	1	1	1	1	1	1
	198837P3	MOTOR 7.5HP 380-3-60 INVD		1	1	1	1	1	1	1
	163929P1	MOTOR 10HP 200/380/415-50INVD	10HP		1	1	1	1	1	1
	198837P4	MOTOR 10HP 380-3-60 INVD			1	1	1	1	1	1
	163925P1	MOTOR 10HP 230/460-60 INVD			1	1	1	1	1	1
2	**Note**: Please contact Liebert Representative for the correct programmed drive.									
3	194574P1	MOTOR BASE AUTO 182-184 DS	3/5HP	1	1	1	1	1	1	
	194575P1	MOTOR BASE AUTO 213-215 DS	7.5/10HP	1	1	1	1	1	1	

Item	Part #	Description	HP	028	035	042	053	070	077	105
4	1A32397P3	BUSHING PULLEY H 1-1/8"	3 and 5HP	1	1	1	1	1	1	
	1A32397P4	BUSHING PULLEY H 1-3/8"	7.5HP	1	1	1	1	1	1	
	179161P4	BUSHING PULLEY B 1-3/8"	10HP				1	1	1	1
	1A32397P4	BUSHING PULLEY H 1-3/8"	7.5HP	1	1	1	1	1	1	
	179161P4	BUSHING PULLEY B 1-3/8"	10HP				1	1	1	1

4. Coil Section

4.1. Standard Coil

Part #	Description	028	035	042	053	070	077	105
190913G2	COIL ASSY DX 15-22T DF DS				1	1	1	
190947G1	COIL ASSY EC 15-22T DFDS 9CKT				1	1	1	
191061G2	COIL ASSY DX 30T DF DS							1
191111G1	COIL ASSY EC 30T DF DS 13 CKT							1
191230G1	COIL ASSY EC 8-12T DS	1	1	1				
191230G2	COIL ASSY DX 8-12T DS	1	1	1				
301705G1	COIL ASSY EC 15-22T DFDS 9CKT				1	1	1	

4.2. Polymeric Coil

Part #	Description	028	035	042	053	070	077	105
190913G2EFC	COIL ASSY DX 15-22T DF DS ECMP				1	1	1	
190947G1EFC	COIL ASSY EC 15-22T DFDS E-CMP				1	1	1	
191061G2EFC	COIL ASSY DX 30T DF DS E-CMP							1
191111G1EFC	COIL ASSY EC 30T DF DS E-CMP							1
191230G1EFC	COIL ASSY EC 8-12T DS ECMP	1	1	1				
191230G2EFC	COIL ASSY DX 8-12T DS ECMP	1	1	1				

Part #	Description	028	035	042	053	070	077	105
301705G1EFC	COIL ASSY EC 15-22T DFDS E-CMP				1	1	1	

4.3. Copper / Nickel Coil

Part #	Description	028	035	042	053	070	077	105
190962G1	COIL EC 15-22T CUNI DS 9CKT				1	1	1	
191111G1E	COIL ASSY EC 30T DF DS E-CT							1
191111G1EFC	COIL ASSY EC 30T DF DS E-CMP							1
191114G1	COIL EC 30T DFDS CUNI 13 CKT							1
191272G1	COIL ASSY EC 59" CUNI DS	1	1	1				
301712G1	COIL EC 15-22T CUNI DS 9CKT				1	1	1	

5. Compressor Section

5.1. Scroll Compressor

5.1.1. Scroll Compressors

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
1	172145P1S	COMP SCRL ZR125KCE-TF5 W/ ROTA	200-230 /3/50-60				2	2		
	169260P1S	COMP SCRL ZR61KCE-TF5 W/ROTO		2	2					
	180408P1	COMP SCRL ZR49KCE-TF5 W/ ROTA		2						
	182024P1S	COMP SCRL ZR144KCE-TF5 W/ ROTA						2	2	
	172143P1S	COMP SCRL ZR94KCE-TF5 W/ ROTA					2			
	180479P1	COMP SCRL ZR81KCE-TF5 W/ ROTA				2				
	189318P1S	COMP SCRL ZR190KCE-TW5 W/ROTA								2
	172139P1S	COMP SCRL ZR72KCE-TF5 W/ ROTA	208-230 /3/50-60		2	2				

Scroll Compressors (continued)

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
1	172139P5	COMP SCRL ZR72KCE-TF7 W/ ROTA	380/3/60			2				
	172145P5	COMP SCRL ZR125KCE-TF7 W/ ROTA						2		
	169260P5	COMP SCRL ZR61KCE-TF7 W/ ROTA			2					
	180408P5	COMP SCRL ZR49KCE-TF7 W/ ROTA		2						
	182024P5	COMP SCRL ZR144KCE-TF7 W/ ROTA							2	
	172143P5S	COMP SCRL ZR94KCE-TF7 W/ ROTA					2			
	189318P5S	COMP SCRL ZR190KCE-TW7 W/ ROTA								2
	172139P2S	COMP SCRL ZR72KCE-TFD W/ROTA	380-420/3/50		2	2				
	172145P2S	COMP SCRL ZR125KCE-TFD W/ ROTA					2	2		
	169260P2S	COMP SCRL ZR61KCE-TFD W/ ROTA		2	2					
	182024P2S	COMP SCRL ZR144KCE-TFD W/ ROTA						2	2	
	180479P2	COMP SCRL ZR81KCE-TFD W/ ROTA				2				
	189318P2	COMP SCRL ZR190KCE-TWD W/ ROTA								2
	172139P2S	COMP SCRL ZR72KCE-TFD W/ROTA	460/3/60		2	2				
	172145P2S	COMP SCRL ZR125KCE-TFD W/ ROTA					2	2		
	169260P2S	COMP SCRL ZR61KCE-TFD W/ ROTA		2	2					
	180408P2	COMP SCRL ZR49KCE-TFD W/ ROTA		2						
	182024P2S	COMP SCRL ZR144KCE-TFD W/ ROTA						2	2	
	172143P2S	COMP SCRL ZR94KCE-TFD W/ ROTA					2			
	189318P2	COMP SCRL ZR190KCE-TWD W/ ROTA								2
	172139P3	COMP SCRL ZR72KCE-TFE W/ ROTA	575/3/60			2				
	172145P3	COMP SCRL ZR125KCE-TFE W/ ROTA						2		
	169260P3	COMP SCRL ZR61KCE 575 W/ROTO			2					
	180408P3	COMP SCRL ZR49KCE-TFE W/ ROTA		2						
	182024P3S	COMP SCRL ZR144KCE-TFE W/ ROTA							2	
	172143P3	COMP SCRL ZR94KCE-TFE W/ ROTA					2			
	189318P3S	COMP SCRL ZR190KCE-TWE W/ ROTA								2

5.1.2. Digital Scroll Compressors

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
1	180652P1	COMP SCDG ZRD125KCE-TF5 W/ROTA	200-230				2	2		
	178013P1	COMP SCDG ZRD61KCE-TF5 W/ROTA		2	2					
	180407P1S	COMP SCDG ZRD72KCE-TF5 W/ROTA			2	2				
	182023P1S	COMP SCDG ZRD94KCE-TF5 W/ROTA					2			
	180406P1S	COMP SCDG ZRD49KCE-TF5 W/ ROTA	208-230	2						
	180652P5	COMP SCDG ZRD125KCE-TF7 W/ROTA	380					2		
	180406P5S	COMP SCDG ZRD49KCE-TF7 W/ ROTA		2						
	178013P5	COMP SCDG ZRD61KCE-TF7 W/ROTA			2					
	180407P5S	COMP SCDG ZRD72KCE-TF7 W/ROTA				2				
	182023P5S	COMP SCDG ZRD94KCE-TF7 W/ROTA					2			
	180652P2S	COMP SCDG ZRD125KCE-TFD W/ROTA	380-420				2	2		
	178013P2S	COMP SCDG ZRD61KCE-TFD W/ROTA		2	2					
	180407P2S	COMP SCDG ZRD72KCE-TFD W/ROTA			2	2				
	180478P2S	COMP SCDG ZRD81KCE-TFD W/ ROTA				2				
	180652P2S	COMP SCDG ZRD125KCE-TFD W/ROTA	460				2	2		
	180406P2S	COMP SCDG ZRD49KCE-TFD W/ ROTA		2						
	178013P2S	COMP SCDG ZRD61KCE-TFD W/ROTA		2	2					
	180407P2S	COMP SCDG ZRD72KCE-TFD W/ROTA			2	2				
	182023P2S	COMP SCDG ZRD94KCE-TFD W/ROTA					2			
	180652P3	COMP SCDG ZRD125KCE-TFE W/ROTA	575					2		
	182023P3S	COMP SCDG ZRD94KCE-TFE W/ROTA					2			

Item	Part #	Description	028	035	042	053	070	077	105
20	P02-0290	VALVE CORE REFRIGERANT	2	2	2	2	2	2	2
27/28	W-0320S	SEAL ROTOLOCK 1"X14" TEFLON	2	2	2				
	W-0330S	SEAL ROTOLOCK 1-1/4"X12"TEFLON				2	2	2	2
39	180970P1	PRESS SW HP SPDTAR C/OUT 400PS	2	2	2	2	2	2	2
40	181388P1	TRANSDUCER 0-150 PSIA 0.5-4.5V	2	2	2	2	2	2	2
53	P-0070S	VALVE SOLND 1/2ODM X 1/2ODF	1	1	1				
	P-0080S	VALVE SOLND 1/2MXF 24V-50/60				1	1		
	P-2870S	VALVE SOLND 5/8MXF 24V-50/60					1	1	1

5.2. 4-Step Semi Compressor

R22 (Mineral Oil Compressor)

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
1	1C18809P1	COMP S/H MINOIL 06DF3132AA3200	200	2	2					
	1C18812P1	COMP S/H MINOIL 06DF3282BA3200							2	
	1C18809P1	COMP S/H MINOIL 06DF3132AA3200	208-230	2	2					
	175024P1S	COMP S/H MINOIL 06DF8252BA3200						2		
	1C18812P1	COMP S/H MINOIL 06DF3282BA3200							2	

R22 (continued)

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
1	1C18809P5	COMP S/H MINOIL 06DF3132AA1300	380	2	2					
	131120P5	COMP S/H MINOIL 06DF8162AA1300				2				
	1C18810P5	COMP S/H MINOIL 06DF8182AA1300					2			
	1C18812P5	COMP S/H MINOIL 06DF3282BA1300							2	
	125680P5	COMP S/H MINOIL 06DF5372BA1300								2
	1C18810P2	COMP S/H MINOIL 06DF8182AA3600	380-420				2			
	1C18810P2	COMP S/H MINOIL 06DF8182AA3600	460				2			
	131120P3	COMP S/H MINOIL 06DF8162AA3100				2				
	175024P3	COMP S/H MINOIL 06DF8252BA3100						2		
	1C18812P3	COMP S/H MINOIL 06DF3282BA3100							2	

R407C (POE Oil Compressor)

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
1	181524P1	COMP S/H POEOIL 06DF3132AA3260	200	2	2					
	181525P1	COMP S/H POEOIL 06DF8162AA3260				2				
	181526P1	COMP S/H POEOIL 06DF8182AA3260					2			
	181527P1	COMP S/H POEOIL 06DF8252BA3260						2		
	181528P1	COMP S/H POEOIL 06DF3282BA3260							2	
	181529P1	COMP S/H POEOIL 06DF5372BA1260								2
	181524P1	COMP S/H POEOIL 06DF3132AA3260	208-230	2	2					
	181525P1	COMP S/H POEOIL 06DF8162AA3260				2				
	181526P1	COMP S/H POEOIL 06DF8182AA3260					2			
	181527P1	COMP S/H POEOIL 06DF8252BA3260						2		
	181528P1	COMP S/H POEOIL 06DF3282BA3260							2	
	181529P1	COMP S/H POEOIL 06DF5372BA1260								2
	181524P5	COMP S/H POEOIL 06DF3132AA1360	380	2	2					
	181525P5	COMP S/H POEOIL 06DF8162AA1360				2				
	181526P5	COMP S/H POEOIL 06DF8182AA1360					2			
	181527P5	COMP S/H POEOIL 06DF8252BA1360						2		
	181528P5	COMP S/H POEOIL 06DF3282BA1360							2	
	181529P5	COMP S/H POEOIL 06DF5372BA1360								2
	181524P2	COMP S/H POEOIL 06DF3132AA3660	380-420	2	2					
	181525P2	COMP S/H POEOIL 06DF8162AA3660				2				
	181526P2	COMP S/H POEOIL 06DF8182AA3660					2			
	181527P2	COMP S/H POEOIL 06DF8252BA3660						2		
	181528P2	COMP S/H POEOIL 06DF3282BA3660							2	
	181529P2	COMP S/H POEOIL 06DF5372BA0660								2

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
	186444P6	COMP S/H POEOIL 06DF5412BA0960	460							2
	181524P2	COMP S/H POEOIL 06DF3132AA3660		2	2					
	181525P2	COMP S/H POEOIL 06DF8162AA3660				2				
	181526P2	COMP S/H POEOIL 06DF8182AA3660					2			
	181527P2	COMP S/H POEOIL 06DF8252BA3660						2		
	181528P2	COMP S/H POEOIL 06DF3282BA3660							2	
	181529P2	COMP S/H POEOIL 06DF5372BA0660								2
	181524P3	COMP S/H POEOIL 06DF3132AA3160	575	2	2					
	181525P3	COMP S/H POEOIL 06DF8162AA3160				2				
	181526P3	COMP S/H POEOIL 06DF8182AA3160					2			
	181527P3	COMP S/H POEOIL 06DF8252BA3160						2		
	181528P3	COMP S/H POEOIL 06DF3282BA3160							2	
	181529P3	COMP S/H POEOIL 06DF5372BA0160								2

Item	Part #	Description	028	035	042	053	070	077	105
12	C-0840	SPRING COMP MTG	8	8	8	8	8	8	8
13	C-0860	SPRING RETAINER MTG	8	8	8	8	8	8	8
39	180970P1	PRESS SW HP SPDTAR C/OUT 400PS							2
	194252P1	SW PRES HI 400 PSI	2	2	2	2	2	2	2
40	181388P1	TRANSDUCER 0-150 PSIA 0.5-4.5V	2	2	2	2	2	2	2
53	C-088AS	GASKET VALVE COMP SERVICE	2	2	2	2			
	C-089AS	GASKET VALVE COMP SERVICE					2	2	2
54	C-087AS	GASKET VALVE COMP SERVICE	2	2	2	2			
	C-088AS	GASKET VALVE COMP SERVICE					2	2	2

5.3. Digital Scroll

Item	Part #	Description	028	035	042	053	070	077	105
1		Digital Scroll Compressor on Page 20							
20	P02-0290	VALVE CORE REFRIGERANT	1	1	1	1	1	1	1
27	W-0320S	SEAL ROTOLOCK 1"X14" TEFLON	2	2	2				2
	W-0330S	SEAL ROTOLOCK 1-1/4" X 12" TEFLON				2	2	2	2
28	W-0330S	SEAL ROTOLOCK 1-1/4" X 12" TEFLON	2	2	2				
	P05-383B	SEAL ROTOLOCK 1-3/4"X12 TEFLON				2	2	2	2
	NOTE: 50Hz 042 will take 4 W-0330S								
39	180970P1	PRESS SW HP SPDTAR C/OUT 400PS	2	2	2	2	2	2	2
40	181388P1	TRANSDUCER 0-150 PSIA 0.5-4.5V	2	2	2	2	2	2	2
	NOTE: 070 Scroll Compressor 575V needs quantity of 4 for 181388P1								
53	P-0070S	VALVE SOLND 1/2ODM X 1/2ODF	1	1	1				
	P-0080S	VALVE SOLND 1/2MXF 24V-50/60				1	1		
	P-2870S	VALVE SOLND 5/8MXF 24V-50/60					1	1	1

5.4. Crankcase Heater

Scroll 8-12T

Scroll 15-30T

Item	Part #	Description	Tonnage	028	035	042	053	070	077	105
150	134142P1S	HEATER C/CASE 240V 70W SCROLL	8-12	2	2	2				
	134142P2S	HEATER C/CASE 480V 70W SCROLL		2	2	2				
	134142P3	HEATER C/CASE 575V 70W SCROLL		2	2	2				
	172147P1	HEATER C/CASE 240V 90W SMT SCR	15-30				2	2	2	2
	172147P2S	HEATER C/CASE 480V 90W SMT SCR					2	2	2	2
	172147P3	HEATER C/CASE 575V 90W SMT SCR					2	2	2	2

Semi-Hermetic 8-12T

Semi-Hermetic 15-30T

Item	Part #	Description	Tonnage	028	035	042	053	070	077	105
140	C06-0010	CRANKCASE HEATER 240V 50W	8-12	2	2	2				
	C06-0020	CRANKCASE HEATER 440//480 50W		2	2	2				
	C06-0030	CRANKCASE HEATER 550V 50W		2	2	2				
	C-0820	CRANKCASE HEATER 480V 75W	15-30				2	2	2	2
	C-0830	CRANKCASE HEATER 575V 75W					2	2	2	2
	C05-0360	CRANKCASE HEATER PKG NO CARR					2	2	2	2
144	C-1310	BRKT CCH CARLYLE 808&313	8-12	4	4	4				
	P-035A	CLIP CRANKCASE HEATER	15-30	2	2	2	2	2	2	2

6. EC Fan

6.1. DS053/77

Item	Part #	Description	053	070	077
1	199195G3A	EC FAN ASSEMBLY 560MM (A) DS	2	2	2
	199195G4A	EC FAN ASSEMBLY 560MM (CD) DS	2	2	2
11	172296P1	SW AIRFLO SENSING .32 IWG OPEN	1	1	1

6.2. DS105

Item	Part #	Description	105
1	300777G1A	EC FAN ASSY (A2M) CW051/60D	3
	300777G2A	EC FAN ASSY (CD) CW051/60D	3
11	172296P1	SW AIRFLO SENSING .32 IWG OPEN	1

7. Electrical Section

7.1. EP Back Panel

7.1.1. Fused

Item	Part #	Description	028	035	042	053	070	077	105
8	136810P1S	FUSEBLOCK BUSS J 600V 30A 2P	1	1	1	1	1	1	1
	195936P2	FUSEBLOCK 2P 250V 30A CLASS R	1	1	1	1	1	1	1
	E-6040	FUSEBLOCK 250V 2P 030A	1	1	1	1	1	1	1
9	136821P2S	FUSE DUAL ELMNT "J" 600V 1.25A	2	2	2	2	2	2	2
	180838P3	FUSE DUAL ELMNT"RK1"250V 2.8A	2	2	2	2	2	2	2
22	136203P1SS	XFMR 400VA 200-240/24V	1	1	1	1	1	1	1
	136203P2S	XFMR 400VA 380-415/2450	1	1	1	1	1	1	1
	136202P1S	XFMR 300VA 460-615/2460	1	1	1				
	136203P3S	XFMR 400VA 460-615/24V60				1	1	1	1

Item	Part #	Description	028	035	042	053	070	077	105
24	180792P1S	TRANSFORMER ISOLATION	1	1	1	1	1	1	1
	318359P1	TOUCH SCREEN DS TRANSFORMER ISOLATION	1	1	1	1	1	1	1
25	136205P1	PWRBLK 2PL 600V 65A	1	1	1	1	1	1	1
39	132487P1S	TERMLSTRIP SECTION 1 POS	13	13	13	13	13	13	13
	-	For Dual Cooling Units	15	15	15	15	15	15	15
40	132487P2	TERMLSTRIP SECTION END BARRIER	3	3	3	3	3	3	3

7.1.2. CB

Item	Part #	Description	028	035	042	053	070	077	105
4	E-362B	TERM LUG MECH #14-2/0 1/4"	1	1	1	1	1	1	1
8	136240P5	CB MCB 2P 240/415V 3A K CURVE	1	1	1	1	1	1	1
	187820P4	CB MCB 2P 415VAC 2A D CURVE	1	1	1	1	1	1	
22	182122P1	XFMR 500VA 200-240/24V	1	1	1	1	1	1	1
	182122P2	XFMR 500VA 380-415/24V	1	1	1	1	1	1	1
24	180792P1S	TRANSFORMER ISOLATION	1	1	1	1	1	1	1

Item	Part #	Description	028	035	042	053	070	077	105
	318359P1	TOUCH SCREEN DS TRANSFORMER ISOLATION	1	1	1	1	1	1	1
25	136205P1	PWRBLK 2PL 600V 65A	1	1	1	1	1	1	1
39	132487P1S	TERMLSTRIP SECTION 1 POS	13	13	13	13	13	13	13
		For Dual Cooling Units	15	15	15	15	15	15	15
40	132487P2	TERMLSTRIP SECTION END BARRIER	3	3	3	3	3	3	3
174	E-3620	GROUND LUG STRIP 13POS SCRTRM	1	1	1	1	1	1	1

7.2. EP Compressor

7.2.1. Fused

Item	Part #	Description	028	035	042	053	070	077	105
111	123273P1S	CONTACTOR 3PL 25/30 NO/NC AUX	2	2	2	2	2		
	123280P1S	CONTACTOR 3PL 30/40 NO/NC AUX					2	2	
	123281P1S	CONTACTOR 3PL 40/50 NO/NC AUX			2	2		2	2
	123282P1S	CONTACTOR 3PL 50/63 NO/NC AUX					2		2
	123283P1S	CONTACTOR 3PL 65/75 NO/NC AUX						2	
	123285P1	CONTACTOR 3PL 75/93 NO/NC AUX							2
112	136811P1	FUSEBLOCK BUSS JP600V 30A 3P	2	2	2	2	2		
	181212P1	FUSEBLOCK J 600V 60A 3P					2	2	2
	195936P3	FUSEBLOCK 3P 250V 30A CLASS R	2						

Item	Part #	Description	028	035	042	053	070	077	105
	195938P3	FUSEBLOCK 3P 250V 60A CLASS R		2	2	2	2		
	195946P1	FUSEBLOCK 3P 250V 100A CLASS R						2	2
	E-1020	FUSEBLOCK 250V 3P 030A	2						
	E-1040	FUSEBLOCK 250V 3P 060A		2	2	2	2		
	E-1041	FUSEBLOCK 250V 3P 100A						2	
113	136821P12S	FUSE DUAL ELMNT "J" 600V 15.0A	6	6					
	136821P13S	FUSE DUAL ELMNT "J" 600V 17.5A	6	6					
	136821P15S	FUSE DUAL ELMNT "J" 600V 25.0A			6	6			
	136821P16S	FUSE DUAL ELMNT "J" 600V 30.0A					6		
	136821P17S	FUSE DUAL ELMNT "J" 600V 35A						6	
	136821P18S	FUSE DUAL ELMNT "J" 600V 40A					6	6	
	136821P20	FUSE DUAL ELMNT "J" 600V 50A							6
	136821P21	FUSE DUAL ELMNT "J" 600V 60A							6
	180838P13	FUSE DUAL ELMNT "RK1" 250V 30A	6						
	180838P14	FUSE DUAL ELMNT "RK1" 250V 35A		6					6
	180838P16	FUSE DUAL ELMNT "RK1" 250V 45A			6				
	180838P17	FUSE DUAL ELMNT "J" 600V 35A				6			
	180838P18	FUSE DUAL ELMNT "RK1" 250V 60A					6		
	180838P20	FUSE DUAL ELMNT "RK1" 250V 80A						6	
	180838P22	FUSE DUAL ELMNT"RK1" 250V 100A							6

7.2.2. CB

Item	Part #	Description	028	035	042	053	070	077	105
111	136232P1	CONTACTOR 3P23IND32RES24/50AUX	2	2	2	2			
	136233P1	CONTACTOR 3P30IND40RES24/50AUX	2				2		
	136234P1	CONTACTOR 3P40IND55RES24 AUX		2	2				2
	136235P1	CONTACTOR 3P60IND75RES24 AUX				2	2		2
112	136241P10S	CB MCB 3P 240/415V 16A K CURVE	2						
	136241P12S	CB MCB 3P 240/415V 25A K CURVE		2	2				
	136241P13	CB MCB 3P 240/415V 32A K CURVE	2		2	2			
	136241P14	CB MCB 3P 240/415V 40A K CURVE							2
	136241P15	CB MCB 3P 240/415V 50A K CURVE		2	2				2
	136241P16S	CB MCB 3P 240/415V 63A K CURVE				2	2		2
	183057G1	CB 3P 240/415V ABB 100A 480VAC							2

7.3. Controls

Item	Part #	Description	028	035	042	053	070	077	105
3	128199P1S	SW AIR DIFFERENTIAL 2PORTS	1	1	1	1	1	1	1
5	417341G3	TOUCH SCREEN PWA ENV GLOBAL FUSE BOARD	1	1	1	1	1	1	1
30	416761G3	PWA ENV ICOM CTRL LARGE	1	1	1	1	1	1	1
31	135409P2S	FUSE GLASS 250V 4AMP .25X1.25	5	5	5	5	5	5	5
	135409P3	FUSE GLASS 250V 6AMP .25X1.25	5	5	5	5	5	5	5
32	135637P5	FUSE KIT QTY 6-4A/2-3A NON-TD	1	1	1	1	1	1	1
	135637P6	FUSE KIT QTY 6-6A/2-3A NON-TD	1	1	1	1	1	1	1
34	180294P1	BRKT MTG INTELLISLOT DS	1	1	1	1	1	1	1
35	416911G2S	PWA INTELLISLOT PWR SPLY DC IN	1	1	1	1	1	1	1
36	200509P1	ENCLOSURE INTELLISLOT 34 PIN	2	2	2	2	2	2	2

7.4. Disconnect

7.4.1. Single Disconnect

7.4.2. Single Disconnect 250A

45 Interlocking Switch Disconnect

7.4.3. Non Locking Disconnect Assembly

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
1	1C18351P1S	SW DISC 600V 3PL 100A	-	1	1	1	1	1	1	1
2	178367P1	STANDOFF DISC K/M DS	380/400/415V	1	1	1	1	1	1	1

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
1	E-2900	SW DISC 240V 3PL 225A	380/400/415V	1	1	1	1	1	1	1
	E-2950	SW DISC 600V 3PL 150A		1	1	1	1	1	1	1
	E02-2890	SW DISC 240V 3PL 100A 120V		1	1	1	1	1	1	1
	E02-2880	SW DISC 480V 3PL 100A 120V		1	1	1	1	1	1	1
	E02-2910	SW DISC 600V 3PL 100A 120V		1	1	1	1	1	1	1
	E02-2900	SW DISC 240V 3PL 225A 120V		1	1	1	1	1	1	1
2	178366P1	STANDOFF DISC GE 225A DS	380/400/415V	1	1	1	1	1	1	1
	178366P3S	STANDOFF DISC GE 100A N/L DS		1	1	1	1	1	1	1

Item	Part #	Description	028	035	042	053	070	077	105
1	159852P1S	LUGS DISC SWT 250A 240V	1	1	1	1	1	1	1
	159852P3	DISC SWT 150AMP 480V-3 65AIC	1	1	1	1	1	1	1
	159852P4	DISC SWT 250AMP 240V-3 65AIC	1	1	1	1	1	1	1
2	182523P1	STANDOFF DISC GE 250A N/L DS	1	1	1	1	1	1	1
11	159852P5	LUGS DISC SWT 250 AMP 240V	1	1	1	1	1	1	1

7.4.4. Interlocking Disconnect Assembly

Item	Part #	Description	Voltage	028	035	042	053	070	077
1	1C18351P1S	SW DISC 600V 3PL 100A	380/400/415V				1	1	1
	1C18351P2	SW DISC 600V 3PL 60A		1	1	1			
2	178367P1	STANDOFF DISC K/M DS		1	1	1	1	1	1
3	1C18354P1	COLLAR LKG DISC W/2 SCREWS KM		1	1	1	1	1	1

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
1	E-2900	SW DISC 240V 3PL 225A	380/400/415V	1	1	1	1	1	1	1
	E-2950	SW DISC 600V 3PL 150A		1	1	1	1	1	1	1
	E02-2890	SW DISC 240V 3PL 100A 120V		1	1	1	1	1	1	1
	E02-2880	SW DISC 480V 3PL 100A 120V		1	1	1	1	1	1	1
	E02-2910	SW DISC 600V 3PL 100A 120V		1	1	1	1	1	1	1
	E02-2900	SW DISC 240V 3PL 225A 120V		1	1	1	1	1	1	1
2	178366P1	STANDOFF DISC GE 225A DS	380/400/415V	1	1	1	1	1	1	1
	178366P3S	STANDOFF DISC GE 100A N/L DS		1	1	1	1	1	1	1

Item	Part #	Description		028	035	042	053	070	077	105

Item	Part #	Description		028	035	042	053	070	077	105
1	159852P1S	LUGS DISC SWT 250A 240V	380/400/415V	1	1	1	1	1	1	1
	159852P4	DISC SWT 250AMP 240V-3 65AIC		1	1	1	1	1	1	1
	159852P3	DISC SWT 150AMP 480V-3 65AIC	480V	1	1	1	1	1	1	1
2	182529P1	STANDOFF DISC GE 250A LOK DS	380/400/415V	1	1	1	1	1	1	1
3	159852P1S	LUGS DISC SWT 250A 240V	380/400/415V	1	1	1	1	1	1	1
	159852P2	HANDLE LOKG ROTARY DISC SW SE		1	1	1	1	1	1	1
	159852P4	DISC SWT 250AMP 240V-3 65AIC		1	1	1	1	1	1	1
	159852P5	LUGS DISC SWT 250 AMP 240V		1	1	1	1	1	1	2
11	159852P1S	LUGS DISC SWT 250A 240V	380/400/415V	1	1	1	1	1	1	1
	159852P2	HANDLE LOKG ROTARY DISC SW SE		1	1	1	1	1	1	1
	159852P4	DISC SWT 250AMP 240V-3 65AIC		1	1	1	1	1	1	1
	159852P5	LUGS DISC SWT 250 AMP 240V		1	1	1	1	1	1	2
12	159852P6	BRKT HANDLE LOKG ROTARY DISC		1	1	1	1	1	1	1

7.4.5. Dual Disconnect

45 Switch Disconnect

Item	Part #	Description	Volts	028	035	042	053	070	077	105
1	E-2900	SW DISC 240V 3PL 225A	380/ 400/ 415V	1	1	1	1	1	1	1
	E-2950	SW DISC 600V 3PL 150A		1	1	1	1	1	1	1
	E02-2890	SW DISC 240V 3PL 100A 120V		1	1	1	1	1	1	1
	E02-2880	SW DISC 480V 3PL 100A 120V		1	1	1	1	1	1	1
	E02-2910	SW DISC 600V 3PL 100A 120V		1	1	1	1	1	1	1
	E02-2900	SW DISC 240V 3PL 225A 120V		1	1	1	1	1	1	1
2	178066P2	STANDOFF DISC 2 GE 225A LOK DS		1	1	1	1	1	1	
	178066P3	STANDOFF DISC 2 GE 100A N/L DS		1	1	1	1	1	1	
	178366P4	STANDOFF DISC GE 100A LOK SD		1	1	1	1	1	1	
	182523P1	STANDOFF DISC GE 250A N/L DS								1
3	E-290A	SW DISC LOKG HANDLE ROTARY		1	1	1	1	1	1	1
	E-288A	SW DISC LOKG HANDLE ROTARY		1	1	1	1	1	1	1

7.4.6. Non Locking Disconnect Assembly

Item	Part #	Description	028	035	042	053	070	077	105
1	1C18351P1S	SW DISC 600V 3PL 100A	1	1	1	1	1	1	1
2	178367P1	STANDOFF DISC K/M DS	1	1	1	1	1	1	1

7.4.7. Non Locking Dual Disconnect Assembly

Item	Part #	Description	028	035	042	053	070	077	105
1	E-2900	SW DISC 240V 3PL 225A	1	1	1	1	1	1	1
	E-2950	SW DISC 600V 3PL 150A	1	1	1	1	1	1	1
	E02-2890	SW DISC 240V 3PL 100A 120V	1	1	1	1	1	1	1
	E02-2880	SW DISC 480V 3PL 100A 120V	1	1	1	1	1	1	1
	E02-2910	SW DISC 600V 3PL 100A 120V	1	1	1	1	1	1	1
	E02-2900	SW DISC 240V 3PL 225A 120V	1	1	1	1	1	1	1
2	182523P1	STANDOFF DISC GE 250A N/L DS	1	1	1	1	1	1	1

7.4.8. Interlocking Disconnect Assembly

Item	Part #	Description	Volts	028	035	042	053	070	077	105
1	1C18351P1S	SW DISC 600V 3PL 100A	380/400/415V				1	1	1	
	1C18351P2	SW DISC 600V 3PL 60A	380/400/415V	1	1	1				
2	178367P1	STANDOFF DISC K/M DS	380/400/415V	1	1	1	1	1	1	1
3	1C18354P1	COLLAR LKG DISC W/2 SCREWS KM	380/400/415V	1	1	1	1	1	1	1

7.5. Display

Standard

Item	Part #	Description	028	035	042	053	070	077	105
1	180633G1	DISPLAY ASSY LRG SM GR GLOBAL	1	1	1	1	1	1	1
	180632G6S	DISPLAY ASSY LRG LRG GR ICOM LED	1	1	1	1	1	1	1
8	181898P1	COUPLER XOVER CAT5E RJ45 F/F	1	1	1	1	1	1	1

Color Touch Display

Item	Part #	Description	Quantity
1	318386G1A	DISPLAY HMI GLOBAL	1
3	318364P1S	BEZEL FRONT LARGE HMI GLOBAL	1
4	318365P1S	CRADLE HMI GLOBAL	1
5	318371P1	GASKET HMI GLOBAL	1

EP EC Fan

Downflow EC Fan High Volt Panel

Item	Part #	Description	053	070	077	105
131	123273P1S	CONTACTOR 3PL 25/30 NO/NC AUX	2	2	2	3
132	136811P1	FUSEBLOCK BUSS JP600V 30A 3P	2	2	2	3
	195936P3	FUSEBLOCK 3P 250V 30A CLASS R	2	2	2	3
133	136821P12S	FUSE DUAL ELMNT "J" 600V 15.0A	2	2	2	3
	180838P9S	FUSE DUAL ELMNT "RK1" 250V 15A	2	2	2	3
910	197310P1	TERMINAL BLOCK 4POS .25QC 4POL	1	1	1	1

7.6. EP Humidifier IR

7.6.1. Fused

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
101	E-0110S	CONTACTOR 3PL 24VCOIL 25/30AMP	-	1	1	1				
	E-011BS	CONTACTOR 2PL 24VCOIL 25/35AMP	-	1	1	1				
	E-0100S	CONTACTOR 3PL 24VCOIL 40/50AMP	-				1	1	1	1
102	E-1020	FUSEBLOCK 250V 3P 030A	-	1	1	1	1	1	1	1
	E-1040	FUSEBLOCK 250V 3P 060A	-				1	1	1	1
	136811P1	FUSEBLOCK BUSS JP600V 30A 3P	-	1	1	1	1	1	1	1
	136810P1S	FUSEBLOCK BUSS J 600V 30A 2P	-	1	1	1				
103	180838P9S	FUSE DUAL ELMNT "RK1" 250V 15A	230V	1	1	1				
	180838P11	FUSE DUAL ELMNT "RK1" 250V 20A	208V	3	3	3				
	136821P12S	FUSE DUAL ELMNT "J" 600V 15.0A	380/460V	1	1	1				
			575V	2	2	2				
	136821P13S	FUSE DUAL ELMNT "J" 600V 17.5A	460/575V				1	1	1	1
	136821P14S	FUSE DUAL ELMNT "J" 600V 20.0A	380V				1	1	1	1
	180838P14	FUSE DUAL ELMNT "RK1" 250V 35A	208V				3	3	3	3

7.6.2. CB

Item	Part #	Description	028	035	042	053	070	077	105
101	136222P1	CONTACTOR 3P23IND/32RES24/50	1	1	1				
	136224P1	CONTACTOR 3P40IND/55RES24				1	1	1	1
102	136241P10S	CB MCB 3P 240/415V 16A K CURVE	1	1	1				
	136241P11	CB MCB 3P 240/415V 20A K CURVE	1	1	1	1	1	1	1
	136241P14	CB MCB 3P 240/415V 40A K CURVE				1	1	1	1

7.7. Humidifier SG

7.7.1. Fused

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
51	E-6040	FUSEBLOCK 250V 2P 030A	208/3/60	1	1	1	1	1	1	1
			230/3/60	1	1	1	1	1	1	1
	195936P2	FUSEBLOCK 2P 250V 30A CLASS R	208/3/60	1	1	1	1	1	1	1
			230/3/60	1	1	1	1	1	1	1
	136810P1S	FUSEBLOCK BUSS J 600V 30A 2P	380/3/60	1	1	1	1	1	1	1
			460/3/60	1	1	1	1	1	1	1
			575/3/60	1	1	1	1	1	1	1
52	136821P4	FUSE DUAL ELMNT "J" 600V 2.5A	380/3/60	1	1	1	1	1	1	1
			460/3/60	1	1	1	1	1	1	1
			575/3/60	1	1	1	1	1	1	1
	180838P4	FUSE DUAL ELMNT"RK1"250V 3.2A	208/3/60	1	1	1	1	1	1	1
			230/3/60	1	1	1	1	1	1	1
58	E-0130S	RELAY 2P2T 24VAC COIL	200/3/50	1	1	1	1	1	1	1
			380/415/3/50	1	1	1	1	1	1	1
101	E-0110S	CONTACTOR 3PL 24VCOIL 25/30AMP	208/3/60	1	1	1				
			230/3/60	1	1	1				
			380/3/60	1	1	1				
			460/3/60	1	1	1	1	1	1	1

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
			575/3/60	1	1	1	1	1	1	1
	E-009FS	CONTACTOR 3PL 24VCOIL 30/40AMP	208/3/60				1	1	1	1
			230/3/60				1	1	1	1
			380/3/60				1	1	1	1
102	136811P1	FUSEBLOCK BUSS JP600V 30A 3P	380/3/60	1	1	1	1	1	1	1
			460/3/60	1	1	1	1	1	1	1
			575/3/60	1	1	1	1	1	1	1
	195936P3	FUSEBLOCK 3P 250V 30A CLASS R	208/3/60	1	1	1				
			230/3/60				1	1	1	1
	E-1020	FUSEBLOCK 250V 3P 030A	208/3/60	1	1	1				
			230/3/60				1	1	1	1
	E-1040	FUSEBLOCK 250V 3P 060A	208/3/60				1	1	1	1
103	136821P12S	FUSE DUAL ELMNT "J" 600V 15.0A	380/3/60	1	1	1				
			460/3/60	1	1	1				
			575/3/60	1	1	1	1	1	1	1
	136821P13S	FUSE DUAL ELMNT "J" 600V 17.5A	460/3/60				1	1	1	1
	136821P14S	FUSE DUAL ELMNT "J" 600V 20.0A	380/3/60				1	1	1	1
	180838P11	FUSE DUAL ELMNT "RK1" 250V 20A	208/3/60	1	1	1				
	180838P13	FUSE DUAL ELMNT "RK1" 250V 30A	230/3/60				1	1	1	1
	180838P14	FUSE DUAL ELMNT "RK1" 250V 35A	208/3/60				1	1	1	1
	180838P9S	FUSE DUAL ELMNT "RK1" 250V 15A	230/3/60	1	1	1				
108	E03-0170S	RELAY 1P2T 24V 50/60HZ	208/3/60	1	1	1	1	1	1	1
			230/3/60	1	1	1	1	1	1	1
			380/3/60	1	1	1	1	1	1	1
			460/3/60	1	1	1	1	1	1	1
			575/3/60	1	1	1	1	1	1	1

7.7.2. CB

Item	Part #	Description	Voltage	028	035	042	053	070	077	105
51	136240P5	CB MCB 2P 240/415V 3A K CURVE	200/3/50	1	1	1	1	1	1	1
			380/415/3/50	2	1	1	1	1	1	1
58	E-0130S	RELAY 2P2T 24VAC COIL	208/3/60	1	1	1	1	1	1	1
			230/3/60	1	1	1	1	1	1	1
			380/3/60	1	1	1	1	1	1	1
			460/3/60	1	1	1	1	1	1	1
			575/3/60	1	1	1	1	1	1	1
101	136222P1	CONTACTOR 3P23IND/32RES24/50	200/3/50	1	1	1				
			380-415/3/50	1	1	1	1	1	1	1
	136223P1	CONTACTOR 3P30IND/40RES24	200/3/50				1	1	1	1
			380/415/3/50				1	1	1	1
108	E03-0170S	RELAY 1P2T 24V 50/60HZ	200/3/50	1	1	1	1	1	1	1
			380/415/3/50	1	1	1	1	1	1	1

7.8. Motor

7.8.1. Fuse

Item	Part #	Description	Type	1/3HP	5HP	7.5HP	10HP	15HP	20HP
131	124501P1S	CONTACTOR 3PL 24VCOIL 15/20AMP	ODP	1	1				
	E-009FS	CONTACTOR 3PL 24VCOIL 30/40AMP				1	1		
	E-009H	CONTACTOR 3PL 24VCOIL 65/75AMP							1
	E-0100S	CONTACTOR 3PL 24VCOIL 40/50AMP				1	1	1	
	E-0110S	CONTACTOR 3PL 24VCOIL 25/30AMP				1	1		
	E-2500	CONTACTOR 3PL 24VCOIL 50/63AMP						1	1
	124501P1S	CONTACTOR 3PL 24VCOIL 15/20AMP	TEFC	1	1				
	E-009FS	CONTACTOR 3PL 24VCOIL 30/40AMP				1	1		
	E-0100S	CONTACTOR 3PL 24VCOIL 40/50AMP					1	1	1
	E-0110S	CONTACTOR 3PL 24VCOIL 25/30AMP				1	1		
	E-2500	CONTACTOR 3PL 24VCOIL 50/63AMP						1	1
	124501P1S	CONTACTOR 3PL 24VCOIL 15/20AMP	VFD	1	1				
	136231P1	CONTACTOR 3P16IND21RES24/50AUX		1	1				
	136232P1	CONTACTOR 3P23IND32RES24/50AUX				1			
	136233P1	CONTACTOR 3P30IND40RES24/50AUX					1		
	E-009FS	CONTACTOR 3PL 24VCOIL 30/40AMP					1		
	E-0110S	CONTACTOR 3PL 24VCOIL 25/30AMP			1	1			

Item	Part #	Description	Type	1/3HP	5HP	7.5HP	10HP	15HP	20HP
	E-0100S	CONTACTOR 3PL 24VCOIL 40/50AMP				1	1		
132	136811P1	FUSEBLOCK BUSS JP600V 30A 3P	ODP/ TEFC	1	1	1	1	1	
	181212P1	FUSEBLOCK J 600V 60A 3P						1	1
	195936P3	FUSEBLOCK 3P 250V 30A CLASS R		1	1	1	1		
	195938P3	FUSEBLOCK 3P 250V 60A CLASS R		1	1	1	1		
	195946P1	FUSEBLOCK 3P 250V 100A CLASS R						1	1
	E-1020	FUSEBLOCK 250V 3P 030A		1	1				
	E-1040	FUSEBLOCK 250V 3P 060A				1	1		
	E-1041	FUSEBLOCK 250V 3P 100A						1	1
	136811P1	FUSEBLOCK BUSS JP600V 30A 3P	VFD	1	1	1	1		
133	136821P12S	FUSE DUAL ELMNT "J" 600V 15.0A	ODP	1	1	1			
	136821P13S	FUSE DUAL ELMNT "J" 600V 17.5A				1	1		
	136821P14S	FUSE DUAL ELMNT "J" 600V 20.0A				1	1		
	136821P15S	FUSE DUAL ELMNT "J" 600V 25.0A					1	1	
	136821P17S	FUSE DUAL ELMNT "J" 600V 35A						1	1
	136821P18S	FUSE DUAL ELMNT "J" 600V 40A						1	
	136821P19	FUSE DUAL ELMNT "J" 600V 45A							3
	136821P20	FUSE DUAL ELMNT "J" 600V 50A							3
	180838P12	FUSE DUAL ELMNT "RK1" 250V 25A			3				
	180838P14	FUSE DUAL ELMNT "RK1" 250V 35A				3			
	180838P16	FUSE DUAL ELMNT "RK1" 250V 45A					3		
	180838P19	FUSE DUAL ELMNT "RK1" 250V 70A						3	
	180838P21	FUSE DUAL ELMNT "RK1" 250V 90A							3
	180838P9S	FUSE DUAL ELMNT "RK1" 250V 15A		1					
	136821P12S	FUSE DUAL ELMNT "J" 600V 15.0A	TEFC	1	1	1			
	136821P13S	FUSE DUAL ELMNT "J" 600V 17.5A				1	1		
	136821P14S	FUSE DUAL ELMNT "J" 600V 20.0A				1	1		
	136821P15S	FUSE DUAL ELMNT "J" 600V 25.0A					1	1	
	136821P17S	FUSE DUAL ELMNT "J" 600V 35A						1	1
	136821P18S	FUSE DUAL ELMNT "J" 600V 40A						1	
	136821P19	FUSE DUAL ELMNT "J" 600V 45A							3
	136821P20	FUSE DUAL ELMNT "J" 600V 50A							3
	180838P12	FUSE DUAL ELMNT "RK1" 250V 25A			3				
	180838P14	FUSE DUAL ELMNT "RK1" 250V 35A				3			
	180838P16	FUSE DUAL ELMNT "RK1" 250V 45A					3		
	180838P19	FUSE DUAL ELMNT "RK1" 250V 70A						3	3
	180838P9S	FUSE DUAL ELMNT "RK1" 250V 15A		1					
	186009P12	FUSE FASTACTING "J" 600V 15.0A		3	3	3			
	186009P12	FUSE FASTACTING "J" 600V 15.0A	VFD	3	3	3			

Item	Part #	Description	Type	1/3HP	5HP	7.5HP	10HP	15HP	20HP
	186009P14	FUSE FASTACTING "J" 600V 20.0A			3		3		
	186009P15	FUSE FASTACTING "J" 600V 25.0A				3	3		
139	124547P1	OVERLOAD RELAY W/B MNT 32A C-H	ODP/ TEFC	1	1	1	1	1	1
	198720P1	MOT OVLD RLY ELEK TRIP 25-45					1		1
	198720P2	MOT OVLD RLY ELEK TRIP 45-90A						1	1
	198884P1	MOT OVLD RLY PASS-THRU 1-4A		1					
	198884P2	MOT OVLD RLY PASS-THRU 3.2-12A		1	1				
	198884P3	MOT OVLD RLY PASS-THRU 6-25A			1	1	1	1	1
	E05-5220	OVERLOAD TRIBLOCK AMB-COMP 60A						1	1
	124547P1	OVERLOAD RELAY W/B MNT 32A C-H	VFD	1	1	1	1		
	198718P1S	MOT OVLD RLY ELEK TRIP 1-4A		1					
	198718P2S	MOT OVLD RLY ELEK TRIP 3.2-12A		1	1	1			
	198718P3S	MOT OVLD RLY ELEK TRIP 6-25A			1	1	1		

7.8.2. CB

Item	Part #	Description	Type	1/3HP	5HP	7.5HP	10HP	15HP	20HP
131	136221P1	CONTACTOR 3P16IND/21RES24/50	ODP/ TEFC	1	1				
	136222P1	CONTACTOR 3P23IND/32RES24/50			1	1			
	136223P1	CONTACTOR 3P30IND/40RES24				1			
	136224P1	CONTACTOR 3P40IND/55RES24					1		
	136231P1	CONTACTOR 3P16IND21RES24/50AUX		1	1				
	136232P1	CONTACTOR 3P23IND32RES24/50AUX			1	1			
	136233P1	CONTACTOR 3P30IND40RES24/50AUX				1	1		
	136234P1	CONTACTOR 3P40IND55RES24 AUX					1	1	
	136235P1	CONTACTOR 3P60IND75RES24 AUX						1	1
	136236P1	CONTACTOR 3P72IND80RES24 AUX							1

Item	Part #	Description	Type	1/3HP	5HP	7.5HP	10HP	15HP	20HP
	136231P1	CONTACTOR 3P16IND21RES24/50AUX	VFD	1	1				
	136232P1	CONTACTOR 3P23IND32RES24/50AUX				1			
	136233P1	CONTACTOR 3P30IND40RES24/50AUX					1		
132	136241P10S	CB MCB 3P 240/415V 16A K CURVE	ODP/ TEFC	1	1				
	136241P11	CB MCB 3P 240/415V 20A K CURVE				1			
	136241P12S	CB MCB 3P 240/415V 25A K CURVE			1		1		
	136241P14	CB MCB 3P 240/415V 40A K CURVE				1		1	
	136241P15	CB MCB 3P 240/415V 50A K CURVE					1		1
	136241P16S	CB MCB 3P 240/415V 63A K CURVE						1	
	183057G1	CB 3P 240/415V ABB 100A 480VAC							1
	136241P10S	CB MCB 3P 240/415V 16A K CURVE	VFD	1	1	1			
	136241P12S	CB MCB 3P 240/415V 25A K CURVE					1		
139	124547P1	OVERLOAD RELAY W/B MNT 32A C-H	ODP	1	1		1	1	1
	198720P1	MOT OVLD RLY ELEK TRIP 25-45					1		
	198720P2	MOT OVLD RLY ELEK TRIP 45-90A						1	1
	198884P2	MOT OVLD RLY PASS-THRU 3.2-12A		1	1				
	198884P3	MOT OVLD RLY PASS-THRU 6-25A			1	1	1	1	
	E05-5220	OVERLOAD TRIBLOCK AMB-COMP 60A						1	1
	124547P1	OVERLOAD RELAY W/B MNT 32A C-H	TEFC	1	1	1	1	1	1
	198720P1	MOT OVLD RLY ELEK TRIP 25-45					1		1
	198720P2	MOT OVLD RLY ELEK TRIP 45-90A						1	1
	198884P2	MOT OVLD RLY PASS-THRU 3.2-12A		1	1				
	198884P3	MOT OVLD RLY PASS-THRU 6-25A			1	1	1	1	
	E05-5220	OVERLOAD TRIBLOCK AMB-COMP 60A						1	1
	124547P1	OVERLOAD RELAY W/B MNT 32A C-H	VFD	1	1	1	1		
	198718P2S	MOT OVLD RLY ELEK TRIP 3.2-12A		1	1				
	198718P3S	MOT OVLD RLY ELEK TRIP 6-25A				1	1		
174	E-3620	GROUND LUG STRIP 13POS SCRTRM	VFD	1	1	1	1		

7.9. EP Pump

7.9.1. Fused

Item	Part #	Description	028	035	042	053	070	077	105
51	136810P1S	FUSEBLOCK BUSS J 600V 30A 2P	1	1	1	1	1		1
	E-6040	FUSEBLOCK 250V 2P 030A	1	1	1	1	1		1
	195936P2	FUSEBLOCK 2P 250V 30A CLASS R	1	1	1	1	1		1
52	136821P4	FUSE DUAL ELMNT "J" 600V 2.5A	2	2	2	2	2	2	2
	180838P4	FUSE DUAL ELMNT"RK1"250V 3.2A	2	2	2	2	2	2	2
58	E-0130S	RELAY 2P2T 24VAC COIL	1	1	1	1	1	1	1
59	132487P1S	TERMLSTRIP SECTION 1 POS	2	2	2	2	2	2	2
60	132487P2	TERMLSTRIP SECTION END BARRIER	1	1	1	1	1	1	1

7.9.2. CB

Item	Part #	Description	028	035	042	053	070	077	105
51	136240P5	CB MCB 2P 240/415V 3A K CURVE	1	1	1	1	1		1
58	E-0130S	RELAY 2P2T 24VAC COIL	1	1	1	1	1	1	1
59	132487P1S	TERMLSTRIP SECTION 1 POS	2	2	2	2	2	2	2
60	132487P2	TERMLSTRIP SECTION END BARRIER	1	1	1	1	1	1	1

7.10. EP Reheat

7.10.1. Fused

Item	Part #	Description	028	035	042	053	070	077	105
71	E-011AS	CONTACTOR 2PL 24VCOIL 2030AMP	1	1	1	1	1	1	1
	E-011BS	CONTACTOR 2PL 24VCOIL25/35AMP				1	1	1	1
	E-011CS	CONTACTOR 2PL 24VCOIL 40/50AMP				1	1	1	1
	Note: 3 Stage three (3) contactors.								
72	E-011AS	CONTACTOR 2PL 24VCOIL 2030AMP	1	1	1	1	1	1	1
	E-011BS	CONTACTOR 2PL 24VCOIL25/35AMP				1	1	1	1
	E-011CS	CONTACTOR 2PL 24VCOIL 40/50AMP				1	1	1	1
	E-0110S	CONTACTOR 3PL 24VCOIL 25/30AMP	1	1	1	1	1	1	1
	123273P1S	CONTACTOR 3PL 25/30 NO/NC AUX	1	1	1	1	1	1	1
	123280P1S	CONTACTOR 3PL 30/40 NO/NC AUX							1
	123281P1S	CONTACTOR 3PL 40/50 NO/NC AUX				1	1	1	1
73	129629P1	FUSEBLOCK 250V 2P 060A				1	1	1	1
	136810P1S	FUSEBLOCK BUSS J 600V 30A				1	1	1	1
	136811P1	FUSEBLOCK BUSS JP600V 30A 3P	1	1	1	1	1	1	1
	181212P1	FUSEBLOCK J 600V 60A 3P				1	1	1	1
	195936P3	FUSEBLOCK 3P 250V 30A CLASS R				2	2	2	
	195938P2	FUSEBLOCK 2P 250V 60A CLASS R				1	1	1	1
	195938P3	FUSEBLOCK 3P 250V 60A CLASS R	1	1	1	2	2	2	2
	E-1020	FUSEBLOCK 250V 3P 030A				2	2	2	

Item	Part #	Description	028	035	042	053	070	077	105
	E-1040	FUSEBLOCK 250V 3P 060A	1	1	1	2	2	2	2
74		Fuse Dual Element on Page 57							
81	166806G2	GROUND CURRENT DETECTOR ASSY BSC	1	1	1	1	1	1	1

7.10.2. Fuse Dual Element

Item	Part #	Description	8.3KW	10KW	15KW	20KW	25KW	30KW
74	136821P12S	FUSE DUAL ELMNT "J" 600V 15.0A		1				
	136821P13S	FUSE DUAL ELMNT "J" 600V 17.5A	1	1	1			
	136821P14S	FUSE DUAL ELMNT "J" 600V 20.0A	1	1	1			
	136821P15S	FUSE DUAL ELMNT "J" 600V 25.0A	1	1	1			
	136821P16S	FUSE DUAL ELMNT "J" 600V 30.0A	1	1	1	1		
	136821P17S	FUSE DUAL ELMNT "J" 600V 35A		1		1	1	
	136821P18S	FUSE DUAL ELMNT "J" 600V 40A				1		
	136821P19	FUSE DUAL ELMNT "J" 600V 45A					3	3
	136821P20	FUSE DUAL ELMNT "J" 600V 50A			3		3	3
	136821P21	FUSE DUAL ELMNT "J" 600V 60A						3
	180838P13	FUSE DUAL ELMNT "J" 600V 60A			6			
	180838P14	FUSE DUAL ELMNT "RK1" 250V 35A		3	6			
	180838P16	FUSE DUAL ELMNT "RK1" 250V 45A					6	
	180838P17	FUSE DUAL ELMNT "RK1" 250V 50A	2		3			6
	180838P18	FUSE DUAL ELMNT "RK1" 250V 60A	2	2			6	6
	Note: 3 Stage uses three (3) or six (6) fuses while 1 Stage uses two (2).							

7.10.3. CB

Item	Part #	Description	Type	028	035	042	053	070	077	105
71	136222P1	CONTACTOR 3P23IND/32RES24/50	1STG				1	1	1	1
			3STG	3	3	3	3	3	3	3
	136223P1	CONTACTOR 3P30IND/40RES24	3STG							3
	136227P1	CONTACTOR 3P32IND/50RES24	1STG				1	1	1	1
			3STG				3	3	3	3
	Note: 3 Stage uses three (3) contactors.									
72	136222P1	CONTACTOR 3P23IND/32RES24/50	-	1	1	1	1	1	1	1
	136223P1	CONTACTOR 3P30IND/40RES24	-							1
	136227P1	CONTACTOR 3P32IND/50RES24	-				1	1	1	1
	136232P1	CONTACTOR 3P23IND32RES24/50AUX	-	1	1	1	1	1	1	1
	136233P1	CONTACTOR 3P30IND40RES24/50AUX	-				1	1	1	1
73	136240P13	CB MCB 2P 240/415V 32A K CURVE	-				1	1	1	
	136240P14	CB MCB 2P 240/415V 40A K CURVE	-							1
	136240P16	CB MCB 2P 240/415V 63A K CURVE	-				1	1	1	1
	136241P11	CB MCB 3P 240/415V 20A K CURVE	-	1	1	1				
	136241P13	CB MCB 3P 240/415V 32A K CURVE	-	1	1	1	1	1	1	
	136241P14	CB MCB 3P 240/415V 40A K CURVE	-	1	1	1				1
	136241P15	CB MCB 3P 240/415V 50A K CURVE	-	1	1	1	1	1	1	
	136241P16S	CB MCB 3P 240/415V 63A K CURVE	-				1	1	1	1
81	166806G2	GROUND CURRENT DETECTOR ASSY BSC	-	1	1	1	1	1	1	1

7.11. Analog Input Wires

Item	Part #	Description	028	035	042	053	070	077	105
101	132487P1S	TERMLSTRIP SECTION 1 POS	1	1	1	1	1	1	1
102	132487P2	TERMLSTRIP SECTION END BARRIER	1	1	1	1	1	1	1

7.12. Compressor OL Alarm

Item	Part #	Description	028	035	042	053	070	077	105
60	124547P1	OVERLOAD RELAY W/B MNT 32A C-H	2	2	2	2	2	2	2

7.13. High Temperature Sensor

Item	Part #	Description	028	035	042	053	070	077	105
21	181090P1	HIGH TEMPERATURE SENSOR	1	1	1	1	1	1	1

7.14. Low Terminal Voltage

Item	Part #	Description	028	035	042	053	070	077	105
30	132487P1S	TERMLSTRIP SECTION 1 POS	3	3	3	3	3	3	3

Item	Part #	Description	028	035	042	053	070	077	105
31	132487P2	TERMLSTRIP SECTION END BARRIER	1	1	1	1	1	1	1
34	E-0130S	RELAY 2P2T 24VAC COIL	1	1	1	1	1	1	1
36	303342P1S	CONTACT AUX NO/NC 600V HONGMEI	1	1	1	1	1	1	1
38	E-2440S	RELAY 3P2T 24VAC 125V MAXLOAD	1	1	1	1	1	1	1

7.15. RHT/Hum Lockout

Item	Part #	Description	028	035	042	053	070	077	105
80	E-0130S	RELAY 2P2T 24VAC COIL	1	1	1	1	1	1	1
83	132487P1S	TERMLSTRIP SECTION 1 POS	2	2	2	2	2	2	2

7.16. Remote Humidifier Contacts

Item	Part #	Description	028	035	042	053	070	077	105
91	132487P1S	TERMLSTRIP SECTION 1 POS	2	2	2	2	2	2	2
93	E-0130S	RELAY 2P2T 24VAC COIL	1	1	1	1	1	1	1

7.17. Smoke Detector

Item	Part #	Description	028	035	042	053	070	077	105
1	124502P2	PWA SMOKE DET CNTL 24VDC 2CONN	1	1	1	1	1	1	1
	416721G2	PWA SMOKE DETECTOR CNTL 2 CONN	1	1	1	1	1	1	1
2		Smoke Detector Assembly on Page 64							
4	F02-8790	TUBE SAMPLING SMOKE DETECTOR	1	1	1	1	1	1	1

Item	Part #	Description	028	035	042	053	070	077	105
6	S04-0420	TUBING VINYL CLEAR 3/4ID (ATY SHLD BE 8FT)	1	1	1	1	1	1	1
10	P15-0210	ADAPTER HSE NYLON 1/2MPX3/4BRB	1	1	1	1	1	1	1
11	1A17971P1	ELL NYLON 1/2MPT X 3/4BARB	1	1	1	1	1	1	1
13	132487P1S	TERMLSTRIP SECTION 1 POS	2	2	2	2	2	2	2

7.17.1. Smoke Detector Assembly

Item	Part #	Description	028	035	042	053	070	077	105
9	180976G1	SMOKE DETEC ENCLO ASSY 731L DS	1	1	1	1	1	1	1

7.1. T/H Sensor

Item	Part #	Description	Type	028	035	042	053	070	077	105
1	181518G1	SENSOR T/H INTERNAL D DS	T/H Terminal	1	1	1	1	1	1	
	181518G7	SENSOR T/H INTERNAL D DS 30T								1
	181518G8	SENSOR T/H INTERNAL V DS 8-22		1	1	1	1	1	1	
	181518G9	SENSOR T/H INTERNAL V DS 30T								1
	181465G1S	SENSOR T/H ASSY REMOTE ICOM	T/H Remote	1	1	1	1	1	1	1

8. Exterior Section

8.1. Disconnect

GE Locking Disconnect

Standard Panels

Item	Part #	Description	28	35	42	53	70	77	105
1	181014P1	ACCNT PNL CHSEL 59" SNGL DISC	1	1	1				
	181366P1	ACCNT PNL CHSEL 59" DUAL DISC	1	1	1				
	181367P1	ACCNT PNL CHSEL 59" NO DISC	1	1	1				
	300397P1	ACCNT PNL CHSEL 82" SNGL DISC				1	1	1	
	300397P2	ACCNT PNL CHSEL 82" SNGL DISC				1	1	1	
	300428P1	ACCNT PNL CHSEL 82" 250A DISC				1	1	1	
	300428P2	ACCNT PNL CHSEL 82" 250A DISC				1	1	1	
	300426P1	ACCNT PNL CHSEL 82" NO DISC				1	1	1	
	300602G1	ACCNT PNL CHSEL 82" SNGL DISC							1
	300603G1	ACCNT PNL CHSEL 105" NO DISC							1
	300605G1	ACCNT PNL CHSEL 105" DUAL DISC							1
	300606G1	ACCNT PNL CHSEL 105" 250A DISC							1
5	179746P1	DISCONNECT BEZEL GLOBAL	1	1	1	1	1	1	1
7	1C18707P1	PLATE DISC K/M	1	1	1	1	1	1	1
12	E-288B	SW DISC LOKG RING CATCH	1	1	1	1	1	1	1

KM Locking Disconnect

Standard Panels

Item	Part #	Description	28	35	42	53	70	77	105
1	181014P1	ACCNT PNL CHSEL 59" SNGL DISC	1	1	1				
	181366P1	ACCNT PNL CHSEL 59" DUAL DISC	1	1	1				
	181367P1	ACCNT PNL CHSEL 59" NO DISC	1	1	1				
	300397P1	ACCNT PNL CHSEL 82" SNGL DISC							1
	300397P2	ACCNT PNL CHSEL 105" NO DISC							1
	300428P1	ACCNT PNL CHSEL 105" DUAL DISC							1
	300428P2	ACCNT PNL CHSEL 105" 250A DISC							1
	300426P1	ACCNT PNL CHSEL 82" NO DISC				1	1	1	
	300602G1	ACCNT PNL CHSEL 82" SNGL DISC							1
	300603G1	ACCNT PNL CHSEL 105" NO DISC							1
	300605G1	ACCNT PNL CHSEL 105" DUAL DISC							1
	300606G1	ACCNT PNL CHSEL 105" 250A DISC							1
2	1C18352P1S	HANDLE DISC SWT/FACEPLATE K/M	1	1	1	1	1	1	1
4	1A18353P1S	SHAFT EXTENSION K/M DISC SWT	1	1	1	1	1	1	1
	Note: Dual Disconnect Quantity is **2**								
5	179746P1	DISCONNECT BEZEL GLOBAL	1	1	1	1	1	1	1
7	1C18707P1	PLATE DISC K/M	1	1	1	1	1	1	1
12	E-288B	SW DISC LOKG RING CATCH	1	1	1	1	1	1	1

8.2. 8-12T

Note: Please contact our Parts Representative with Model and Serial Numbers for panel information.

Standard Panels

Item	Part #	Description	28	35	42
1	303749G1	PANEL ASSY REAR RIGHT DS	1	1	1
	307504G1	PANEL ASSY REAR RIGHT DS	1	1	1
2	181018G2	PANEL ASSY CHISEL FRONT RHT DS	1	1	1
	307501G2	PANEL ASSY CHISEL FRONT RHT DS	1	1	1
3	303747G1	END PANEL RIGHT SIDE D DS	1	1	1
4	303749G2	PANEL ASSY REAR LEFT DS	1	1	1
	307504G2	PANEL ASSY REAR LEFT DS	1	1	1
5	303749G1	PANEL ASSY REAR RIGHT DS	1	1	1
6	307504G1	PANEL ASSY REAR RIGHT DS	1	1	1
	180915G1	PANEL ASSY FRONT COMP 13" DS	1	1	1
	307538G1	PANEL ASSY FRONT COMP 13" DS	1	1	1
	180548G1	PANEL ASSY FRONT COMP 26" DS	1	1	1
	307521G1	PANEL ASSY FRONT COMP 26" DS	1	1	1
7	178113G1	PANEL ASSY LEFT END PANEL DS	1	1	1
	307530G1	PANEL ASSY LEFT ENDPANEL DS	1	1	1
8	305405G1	PANEL ASSY BACK COMP 13” DS	1	1	1
	307541G1	PANEL ASSY BACK COMP 13" DS	1	1	1
	303761G1	PANEL ASSY BACK COMP 26" DS	1	1	1
	307536G1	PANEL ASSY BACK COMP 26" DS	1	1	1

Double Skin Panels

Item	Part #	Description	28	35	42
1	178106P1	LINER PANEL REAR DS	2	2	2
2	300496P1	LINER PANEL FRONT DS	2	2	2
4	178106P1	LINER PANEL REAR DS	2	2	2
5	178106P1	LINER PANEL REAR DS	2	2	2
6	180547P1	LINER PANEL COMP 26" DS	2	2	2
	180916P1	LINER FRT/BK COMP 13" DS	2	2	2
7	178110P1	LINER ENDPANEL LEFT DS	1	1	1
8	180547P1	LINER PANEL COMP 26" DS	2	2	2
	180916P1	LINER FRT/BK COMP 13" DS	2	2	2

8.3. 15-22T

Standard Panels

Item	Part #	Description	53	70	77
1	181018G2	PANEL ASSY CHISEL FRONT RHT DS	2	2	2
	307501G2	PANEL ASSY CHISEL FRONT LFT DS	2	2	2
2	181025G1	PANEL ASSY FRONT CENTER 82"DS	1	1	1
	307543G1	PANEL ASSY FRONT CENTER 82"DS	1	1	1
3	303747G1	END PANEL RIGHT SIDE D DS	1	1	1
4	303749G2	PANEL ASSY REAR LEFT DS	2	2	2
	307504G2	PANEL ASSY REAR LEFT DS	2	2	2
5	307546G1	PANEL ASSY REAR CENTER 82" DS	1	1	1
	303759G1	PANEL ASSY REAR CENTER 82" DS	1	1	1
6	180548G1	PANEL ASSY FRONT COMP 26" DS	1	1	1
	180548G3	PANEL ASSY FRONT COMP 15" DS	1	1	1
	307560G1	PANEL ASSY FRONT COMP 15"DS	1	1	1
	307521G1	PANEL ASSY FRONT COMP 26" DS	1	1	1

Item	Part #	Description	53	70	77
7	178113G1	PANEL ASSY LEFT END PANEL DS	1	1	1
	307530G1	PANEL ASSY LEFT ENDPANEL DS	1	1	1
8	305407G1	PANEL ASSY BACK COMP 15" DS	1	1	1
	307562G1	PANEL ASSY BACK COMP 15" DS	1	1	1
	303761G1	PANEL ASSY BACK COMP 26" DS	1	1	1
	307536G1	PANEL ASSY BACK COMP 26" DS	1	1	1

Double Skin Panels

Item	Part #	Description	053	070	077
1	300496P1	LINER PANEL FRONT DS	2	2	2
2	180543P1	LINER PANEL FRT CENTER 82" DS	1	1	1
	300501P1	LINER PANEL FRT CENTER 82" DS	1	1	1
4	178106P1	PANEL ASSY REAR LEFT DS	2	2	2
5	178923P1	LINER REAR CENTER 82" DS	1	1	1
6	180547P1	LINER PANEL COMP 26" DS	2	2	2
7	181986P1	LINER FRT/BK COMP 15" DS	2	2	2
	180547P1	LINER PANEL COMP 26" DS	2	2	2
8	180547P1	LINER PANEL COMP 26" DS	1	1	1
	180916P1	LINER FRT/BK COMP 13" DS	1	1	1

8.4. 30T

Item	Part #	Description	105
1	181018G2	PANEL ASSY CHISEL FRONT RHT DS	1
	307501G2	PANEL ASSY CHISEL FRONT RHT DS	1

Item	Part #	Description	105
2	181025G1	PANEL ASSY FRONT CENTER 82”DS	1
	307543G1	PANEL ASSY FRONT CENTER 82"DS	1
3	303747G1	END PANEL RIGHT SIDE D DS	1
4	303749G2	PANEL ASSY REAR LEFT DS	1
	307504G2	PANEL ASSY REAR LEFT DS	1
5	181025G2	PANEL ASSY REAR CENTER 82” DS	1
6	180548G1	PANEL ASSY FRONT COMP 26” DS	1
	307521G1	PANEL ASSY FRONT COMP 26" DS	1
7	178113G1	PANEL ASSY LEFT END PANEL DS	2
	307530G1	PANEL ASSY LEFT ENDPANEL DS	1
8	303761G1	PANEL ASSY BACK COMP 26" DS	1
	307536G1	PANEL ASSY BACK COMP 26" DS	1

Double Skin Panels

Item	Part #	Description	105
1	300496P1	LINER PANEL FRONT DS	2
2	180543P1	LINER PANEL FRT CENTER 82" DS	1
	300501P1	LINER PANEL FRT CENTER 82" DS	1
4	178106P1	PANEL ASSY REAR LEFT DS	2
5	178923P1	LINER REAR CENTER 82" DS	1
6	180547P1	LINER PANEL COMP 26" DS	2
	307521G1	PANEL ASSY FRONT COMP 26" DS	1
7	178110P1	LINER ENDPANEL LEFT DS	1

9. Filter Section

Item	Part #	Description	Type	028	035	042	053	070	077	105
6	178024P1S	FILTER 4" 25X16 M8 45% SC	STD 4”	5	5	5	7	7	7	9
	195544P1	FILTER 25X16X4 MERV 8	OPT 4”	5	5	5	7	7	7	9
	178026P1S	FILTER 4" 25X16 M11 65% HC	OPT 2”	5	5	5	7	7	7	9
9	180991P1	FILTER 2" 25X16 M7 40% SC	-	5	5	5	7	7	7	9`

10. Humidifier Section

10.1. No Humidifier No Pump

Item	Part #	Description	028	035	042	053	070	077	105
4	180842P1	BRKT DRAIN LINE	1	1	1	1	1	1	1
5	P15-0170	HOSE DRAIN .75 ID STRAIGHT	2	2	2	2	2	2	2
6	P02-0260S	ADAPTER POLY 3/4FPTX3/4HOSE	1	1	1	1	1	1	1
10	149376P1	HOSE DRAIN .75 ID TRAP	1	1	1	1	1	1	1
11	P15-0140S	UNION NYLON 3/4BARBX3/4BARB	1	1	1	1	1	1	1

10.2. IR Humidifier Assembly

10.2.1. 3 Bulb (028/035/042KW)

Item	Part #	Description	028	035	042
1	H-002AS	LAMP I/R LINEAR/QRTZ 1600W208V	3	3	3
	H-0020S	LAMP I/R LINEAR/QRTZ 1600W240V	3	3	3
	H13-0010S	LAMP I/R LINEAR/QRTZ 1600W277V	3	3	3
9	180654P1	PAN HUM IR SHORT DS	1	1	1
10	F-600C	REFLECTOR SINGLE	1	1	1
	124578P1S	REFLECTOR INFRA-RED HUMIDIFIER	1	1	1
13	1C18003G2S	STANDPIPE ASSY w/ NUT	1	1	1
	1C18003G4S	STANDPIPE ASSY W/O NUT	1	1	1
14	185108P1S	VALV SOLND/STRANR/FLWREG .5GPM	1	1	1
20	F-6090S	COVER END BLOCK	2	2	2
23	R13-0090S	SAFETY SWT THERM 120F TR	1	1	1
27	1C19981G2S	ALARM HIGH WATER SYS3	1	1	1
	179859G1	ALARM HIGH WATER C3000	1	1	1
27.4	1C18661P2	BRKT HUM MTG LIQ LEV SW DX	1	1	1
27.5	1A18660P1S	SW LEVEL LIQUID GEMS LS-7	1	1	1
32	009-0265S	HUM SOCKET ASSY 3 5POS	1	1	1
	009-0268S	HUM SOCKET ASSY 3 3POS	1	1	1
	009-0261S	HUM SOCKET ASSY 3 5POS RIGHT	1	1	1
	009-0262S	HUM SOCKET ASSY 3 5POS LEFT	1	1	1

10.2.2. 3 Bulb (053/070/077/105 KW)

Item	Part #	Description	053	070	077	105
1	H-0030S	LAMP I/R LINEAR/QRTZ 3800W570V	3	3	3	3
	151187P1S	LAMP I/R LINEAR/QRTZ 3200W240V	3	3	3	3
	151187P2S	LAMP I/R LINEAR/QRTZ 3200W277V	3	3	3	3
7	F-602C	REFLECTOR 575 V DOUBLE	1	1	1	1
9	186604P1	PAN HUMIDIFIER DS	1	1	1	1
	160159P1	PAN HUMIDIFIER (LONG)	1	1	1	1
10	1C18003G2S	STANDPIPE ASSY w/ NUT	1	1	1	1
	1C18003G4S	STANDPIPE ASSY W/O NUT	1	1	1	1
11	185108P1S	VALV SOLND/STRANR/FLWREG .5GPM	1	1	1	1
17	F-6090S	COVER END BLOCK	2	2	2	2
19	R13-0090S	SAFETY SWT THERM 120F TR	1	1	1	1
27	009-0265S	HUM SOCKET ASSY 3 5POS	2	2	2	2
	009-0268S	HUM SOCKET ASSY 3 3POS	1	1	1	1
	009-0261S	HUM SOCKET ASSY 3 5POS RIGHT	1	1	1	1
	009-0262S	HUM SOCKET ASSY 3 5POS LEFT	1	1	1	1
	009-0297	HUM SOCKET ASSY 2-5POS 1-2PL	1	1	1	1
27.1	H-014AS	SOCKET BUSBAR PORCELAIN	1	1	1	1
27.2	H-0370S	BUSBAR HUMIDIFIER HI-VOLT	1	1	1	1
29	009-0262S	HUM SOCKET ASSY 3 5POS LEFT	1	1	1	1
29.1	H-014AS	SOCKET BUSBAR PORCELAIN	1	1	1	1
29.2	H-0370S	BUSBAR HUMIDIFIER HI-VOLT	1	1	1	1

Item	Part #	Description	053	070	077	105
32	1C19981G2S	ALARM HIGH WATER SYS3	1	1	1	1
35	189050P1	BAFFLE SIDE HUMIDIFIER	1	1	1	1

10.2.3. 6 Bulb (053/070/077/105 KW)

Item	Part #	Description	053	070	077	105
1	H-002AS	LAMP I/R LINEAR/QRTZ 1600W208V	6	6	6	6
	H-0020S	LAMP I/R LINEAR/QRTZ 1600W240V	6	6	6	6
9	160158G1S	PAN HUMIDIFIER	1	1	1	1
	186606G1	PAN WELDMENT HUMID ASSY DS	1	1	1	1
10	F-602C	REFLECTOR 575 V DOUBLE	1	1	1	1
	F-601CS	REFLECTOR DOUBLE	1	1	1	1
13	1C18003G2S	STANDPIPE ASSY w/ NUT	1	1	1	1
14	185108P1S	VALV SOLND/STRANR/FLWREG .5GPM	1	1	1	1
20	F-6090S	COVER END BLOCK	2	2	2	2
23	R13-0090S	SAFETY SWT THERM 120F TR	2	2	2	2
27	1C19981G2S	ALARM HIGH WATER SYS3	1	1	1	1
	179859G1	ALARM HIGH WATER C3000	1	1	1	1
27.4	183699P1	BRKT HUM MTG LIQ LEV SW DS	1	1	1	1
27.5	1A18660P1S	SW LEVEL LIQUID GEMS LS-7	1	1	1	1
33	009-0265S	HUM SOCKET ASSY 3 5POS	1	1	1	1
33.1	H-014AS	SOCKET BUSBAR PORCELAIN	1	1	1	1

Item	Part #	Description	053	070	077	105
33.2	H-0370S	BUSBAR HUMIDIFIER HI-VOLT	1	1	1	1
34	009-0297	HUM SOCKET ASSY 2-5POS 1-2PL	1	1	1	1
34.1	H-014AS	SOCKET BUSBAR PORCELAIN	1	1	1	1
34.2	H-0370S	BUSBAR HUMIDIFIER HI-VOLT	1	1	1	1
35	189050P1	BAFFLE SIDE HUMIDIFIER	1	1	1	1

10.3. No Humidifier with Pump

Item	Part #	Description	028	035	042	053	070	077	105
1	1A19271P1	PUMP CONDENSATE 208/230/1/60DF	1	1	1	1	1	1	1
	1A19271P2S	PUMP CONDENSATE 460/1/60DF	1	1	1	1	1	1	1
2	178339P1	BRKT PUMP CONDENSATE	2	2	2	2	2	2	2
4	180842P1	BRKT DRAIN LINE	1	1	1	1	1	1	1
5	P15-0170	HOSE DRAIN .75 ID STRAIGHT	2	2	2	2	2	2	2

10.4. Humidifier IR with Pump

10.4.1. 6-12T

Item	Part #	Description	028	035	042
3	035-0342	MANUAL RESET SAFETY	1	1	1
10	1A19271P1S	PUMP CONDENSATE 208/230/1/60DF	1	1	1
	1A19271P2S	PUMP CONDENSATE 460/1/60DF	1	1	1
11	178339P1	BRKT PUMP CONDENSATE	2	2	2
12	180842P1	BRKT DRAIN LINE	1	1	1
15	P-5400S	ADAPTER SWIVL3/4FPTX3/4HO MA R 000004	1	1	1
18	149376P1	HOSE DRAIN .75 ID TRAP	1	1	1
	1C19070P1	HOSE DRAIN RUBBER .75 ID TRAP	1	1	1
19	1A16207P1	TEE BARB 3/4X3/4X3/4	1	1	1
32	P15-0170	HOSE DRAIN .75 ID STRAIGHT	2	2	2
35	P15-0170	HOSE DRAIN .75 ID STRAIGHT	2	2	2

10.4.2. 15-22T/30T

Item	Part #	Description	053	070	077	105
3	035-0342	MANUAL RESET SAFETY	1	1	1	1
10	1A19271P2S	PUMP CONDENSATE 460/1/60DF	1	1	1	1
	1A19271P1S	PUMP CONDENSATE 208/230/1/60DF	1	1	1	1
	Note: 1A19271P1S Condensate Pump requires a step down XFMR for 575V units.					
11	178339P1	BRKT PUMP CONDENSATE	2	2	2	2
12	180842P1	BRKT DRAIN LINE	1	1	1	1
15	P-5400S	ADAPTER SWIVL3/4FPTX3/4HO MA R 000004	1	1	1	1
18	149376P1	HOSE DRAIN .75 ID TRAP	1	1	1	1
	196112P1	HOSE TRAP 0.75 OFFSET SGH DS				1
	P-5500S	HOSE DRAIN .75 ID TRAP				1
19	1A16207P1	TEE BARB 3/4X3/4X3/4	1	1	1	1
35	P15-0170	HOSE DRAIN .75 ID STRAIGHT	2	2	2	2

10.5. Humidifier IR without Pump

10.5.1. 6-12T

Item	Part #	Description	028	035	042
12	180842P1	BRKT DRAIN LINE	1	1	1
15	P-5400S	ADAPTER SWIVL3/4FPTX3/4HO MA R 000004	1	1	1
16	P02-0260S	ADAPTER POLY 3/4FPTX3/4HOSE	1	1	1
18	149376P1	HOSE DRAIN .75 ID TRAP	1	1	1
	1C19070P1	HOSE DRAIN RUBBER .75 ID TRAP	1	1	1
19	1A16207P1	TEE BARB 3/4X3/4X3/4	1	1	1
32/35	P15-0170	HOSE DRAIN .75 ID STRAIGHT	2	2	2

10.5.2. 15-22T/30T

Item	Part #	Description	053	070	077	105
12	180842P1	BRKT DRAIN LINE	1	1	1	1
15	P-5400S	ADAPTER SWIVL3/4FPTX3/4HO MA R 000004	1	1	1	1
18	149376P1	HOSE DRAIN .75 ID TRAP	1	1	1	1
	P-5500S	HOSE DRAIN .75 ID TRAP				1
	196112P1	HOSE TRAP 0.75 OFFSET SGH DS				1
19	1A16207P1	TEE BARB 3/4X3/4X3/4	1	1	1	1
23	P02-0260S	ADAPTER POLY 3/4FPTX3/4HOSE	1	1	1	1
33/34	P15-0170	HOSE DRAIN .75 ID STRAIGHT	2	2	2	2

10.6. SG Humidifier No Pump

10.6.1. Isometric View

10.6.2. Front View

Item	Part #	Description	8-12T	15-22T	30T
1	-	Nortec Assembly on Page 83	-	-	-
3	121968P1	CLAMP HOSE WORM DRIVE 1.06-02"	4	4	4
	P02-0020	CLAMP HOSE WORM DRIVE .75-1.75		4	
6	192006P1	TUBE FORM CU 1/4 WTR		1	1

Item	Part #	Description	8-12T	15-22T	30T
	192496G1	SUPPLY LINE ASSY SG HUMIDIFIER		1	
9	136395P1	ADAPT POLYP 1-1/4 MPT 1-1/4 HB	1	1	1
12	P-229A	CLAMP INSULATED METAL 1/4"	3	3	4
17	P15-0150S	CLAMP WIRE	2	4	2
18	196112P1	HOSE TRAP 0.75 OFFSET SGH DS			1
	149376P1	HOSE DRAIN .75 ID TRAP	1	1	
19	126411P1	TEE BARB X COMP 3/4X3/4X3/8	1	1	1
45	124216P2	CLAMP HOSE WORM DRIVE .31X1.25	7	7	7
49	196144P1	TUBE FORM CU 1/4 WTR SG N DS			1
	192755P2	TUBE FORM CU 1/4 WTR SG N DS		1	
	196573P1	TUBE FORM CU 1/4" WTR DS SG		1	
63	196111P11S	HOSE DRN 1.25 SGH CUP/MANIFOLD			1
	196062P1	HOSE DRAIN 1.25 CUP/MANIFOLD	1		
	193342P1	HOSE DRAIN 1.25 CUP/TEE NOR		1	
64	195804P1	HOSE U-TRAP DS SGH 1.56" L	1	1	1

10.6.3. Nortec Assembly

Item	Part #	Description	Voltage	Quantity
1	163814P1	CYLNDR 303 20#/HR 208-240/3	200/230V	1
	163814P4	CYLNDR 312 20#/HR 380-575/3	400/575V	1
2	163843P1S	SGH DRAIN VALVE W/COIL KIT	-	1
6	194919P1S	SGH FILL VALVE W/COIL KIT	-	1
9	192760P1S	HUM MAIN PC BOARD	-	1
10	195075P1S	SGH HIGH VOLTAGE TERMINAL BLK	-	1

10.7. SG Humidifier with Pump

10.7.1. Isometric View

10.7.2. Front View

Item	Part #	Description	8-12T	15-22T	30T
7	-	Nortec Assembly 83	-	-	-
3	121968P1	CLAMP HOSE WORM DRIVE 1.06-02"	2	2	2
	P02-0020	CLAMP HOSE WORM DRIVE .75-1.75		2	
6	192006P1	TUBE FORM CU 1/4 WTR		1	1

Item	Part #	Description	8-12T	15-22T	30T
	192496G1	SUPPLY LINE ASSY SG HUMIDIFIER	1	1	
10	-	Pump Condensate Assembly on Page 85	-	-	-
11	178339P1	BRKT PUMP CONDENSATE DS		1	1
	192496G1	BRKT PUMP CONDENSATE DS	1	1	1
12	P-229A	CLAMP INSULATED METAL 1/4"	3	3	4
17	P15-0150S	CLAMP WIRE	5	7	5
18	196112P1	HOSE TRAP 0.75 OFFSET SGH DS			1
	149376P1	HOSE DRAIN .75 ID TRAP	1	1	
19	126411P1	TEE BARB X COMP 3/4X3/4X3/8	1	1	1
45	124216P2S	CLAMP HOSE WORM DRIVE .31X1.25	5	5	5

10.7.3. Pump Condensate Assembly

Item	Part #	Description	8-12T	15-22T	30T
1	1A19271P1S	PUMP CONDENSATE 208/230/1/60DF	1	1	1
	1A19271P2S	PUMP CONDENSATE 460/1/60DF	1	1	1
2	E05-4600	XFMR 500VA 60 575-230	1	1	1

11. Piping Section

11.1. DS Semi

11.1.1. Semi DS

FRONT 8/10/12T

FRONT 20/22T

FRONT 8/10/12T		
Item	Part #	Description
2	178423G1	Suction Assembly #2 on Page 87
3	178424G1	Suction Assembly #1 on Page 87
4	182136G1	Discharge Assembly #2 on Page 88
5	182137G1	Discharge Assembly #1 on Page 88
6	191110G1	Liquid Assembly #2 on Page 89
7	191109G1	Liquid Assembly #1 on Page 89

FRONT 20/22T		
Item	Part #	Description
2	183947G1	Suction Assembly #1 on Page 90
3	183946G1	Suction Assembly #2 on Page 90
4	186747G1	Discharge Assembly #2 on Page 91
5	186746G1	Discharge Assembly #1 on Page 91
6	179963G1	Liquid Assembly #1 on Page 92
7	179962G1	Liquid Assembly #2 on Page 92

11.1.2. Suction Assembly #2 (178423G1)

Item	Part #	Description	Quantity
1	C-0910	VALVE COMP SERV 7/8SWT	1

11.1.3. Suction Assembly #1 (178424G1)

Item	Part #	Description	Quantity
1	C-0910	VALVE COMP SERV 7/8SWT	1

11.1.4. Discharge Assembly #2 (182136G1)

Item	Part #	Description	Quantity
1	C-0930	VALVE COMP SERV 5/8SWT	1
2	123575P1	MUFFLER DISCHARGE 5/8"OD HIEFF	1
6	W-0093S	VALVE CHECK 5/8" OD	1
8	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1

11.1.5. Discharge Assembly #1 (182137G1)

Item	Part #	Description	Quantity
1	C-0930	VALVE COMP SERV 5/8SWT	1
2	123575P1	MUFFLER DISCHARGE 5/8"OD HIEFF	1
6	W-0093S	VALVE CHECK 5/8" OD	1
8	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1

11.1.6. Liquid Assembly #2 (191110G1)

Item	Part #	Description	Quantity
1	180908P1S	FILTER/DRIER 164-S 1/2"ODF	1
2	179863P1	INDICATOR LIQ 1/2ODM X 1/2ODF	1
3	P-0070S	VALVE SOLND 1/2ODM X 1/2ODF	1
	P-0080S	VALVE SOLND 1/2MXF 24V-50/60	1
7	178157P2	VALVE EXP 1/2X1/2/1/4 ODF 6T	1
	180723P2	VALVE EXP 1/2X1/2/1/4 ODF 8T	1

11.1.7. Liquid Assembly #1 (191109G1)

Item	Part #	Description	Quantity
1	180908P1S	FILTER/DRIER 164-S 1/2"ODF	1
2	179863P1	INDICATOR LIQ 1/2ODM X 1/2ODF	1
3	P-0070S	VALVE SOLND 1/2ODM X 1/2ODF	1
	P-0080S	VALVE SOLND 1/2MXF 24V-50/60	1
4	178157P2	VALVE EXP 1/2X1/2/1/4 ODF 6T	1
	180723P2	VALVE EXP 1/2X1/2/1/4 ODF 8T	1

11.1.8. Suction Assembly #1 (183947G1)

Item	Part #	Description	Quantity
1	C-0890	VALVE COMP SERV SUCTN 1-1/8SWT	1

11.1.9. Suction Assembly #2 (183946G1)

Item	Part #	Description	Quantity
1	C-0890	VALVE COMP SERV SUCTN 1-1/8SWT	1

11.1.10. Discharge Assembly #2 (186747G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1
2	123575P4	MUFFLER DISCHARGE 1-1/8"OD HI	1
7	1C23493P1	VALVE CHECK 1-1/8" OD	1
9	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1

11.1.11. Discharge Assembly #1 (186746G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1
2	123575P4	MUFFLER DISCHARGE 1-1/8"OD HI	1
7	1C23493P1	VALVE CHECK 1-1/8" OD	1
9	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1

11.1.12. Liquid Assembly #1 (179963G1)

Item	Part #	Description	Quantity
1	180910P1S	FILTER/DRIER 305-S 5/8"ODF	1
	P-2890S	FILTER/DRIER 5/8ODF SLDR	1
2	179869P1	INDICATOR LIQ 5/8ODM X 5/8 ODF	1
3	P-2870S	VALVE SOLND 5/8MXF 24V-50/60	1
4	180957P2	VLV EXP 5/8X5/8X1/4ODF 11T	1

11.1.13. Liquid Assembly #2 (179962G1)

Item	Part #	Description	Quantity
1	180910P1S	FILTER/DRIER 305-S 5/8"ODF	1
2	179869P1	INDICATOR LIQ 5/8ODM X 5/8 ODF	1
3	P-2870S	VALVE SOLND 5/8MXF 24V-50/60	1
4	180957P2	VLV EXP 5/8X5/8X1/4ODF 11T	1

11.1.14. WG Semi

FRONT 20/22T

FRONT 30T

FRONT 20/22T		
Item	Part #	Description
2	182703G1	Suction Assembly #2 on Page 94
3	182702G1	Suction Assembly #1 on Page 94
4	182788G1	Discharge Assembly #2 on Page 94
5	182787G1	Discharge Assembly #1 on Page 95
6	182670G1	Liquid Assembly #2 on Page 95
7	182669G1	Liquid Assembly #1 on Page 96

FRONT 30T		
Item	Part #	Description
2	300599G1	Suction Assembly SM2 on Page 96
3	300616G1	Suction Assembly SM1 on Page 97
4	199388G1	Discharge Assembly #2 on Page 97
5	199387G1	Discharge Assembly #1 on Page 98
6	190589G1	Liquid Assembly #2 on Page 98
7	190590G1	Liquid Assembly #1 on Page 99

11.1.15. Suction Assembly #2 (182703G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1

11.1.16. Suction Assembly #1 (182702G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1

11.1.17. Discharge Assembly #2 (182788G1)

Item	Part #	Description	Quantity
1	C-0870	VALVE COMP SERV DISCH 7/8SWT	1
2	123575P2	MUFFLER DISCHARGE 7/8"OD HIEFF	1
7	W-0090	VALVE CHECK 7/8" OD	1
9	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1

11.1.18. Discharge Assembly #1 (182787G1)

Item	Part #	Description	Quantity
1	C-0870	VALVE COMP SERV DISCH 7/8SWT	1
2	123575P2	MUFFLER DISCHARGE 7/8"OD HIEFF	1
7	W-0090	VALVE CHECK 7/8" OD	1
9	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1

11.1.19. Liquid Assembly #2 (182670G1)

Item	Part #	Description	Quantity
1	180909P1	FILTER/DRIER 164-S 1/2"ODF	1
2	179863P1	INDICATOR LIQ 1/2ODM X 1/2ODF	1
3	P-0080S	VALVE SOLND 1/2MXF 24V-50/60	1
4	180723P2	VALVE EXP 1/2X1/2/1/4 ODF 8T	1

11.1.20. Liquid Assembly #1 (182669G1)

Item	Part #	Description	Quantity
1	180909P1	FILTER/DRIER 164-S 1/2"ODF	1
2	179863P1	INDICATOR LIQ 1/2ODM X 1/2ODF	1
3	P-0080S	VALVE SOLND 1/2MXF 24V-50/60	1
4	180723P2	VALVE EXP 1/2X1/2/1/4 ODF 8T	1

11.1.21. Suction Assembly SM2 (300599G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1
	1A18898P1	VALVE COMP SERV 1-3/8ID	1

11.1.22. Suction Assembly SM1 (300616G1)

Item	Part #	Description	Quantity
1	1A18898P1	VALVE COMP SERV 1-3/8ID	1

11.1.23. Discharge Assembly #2 (199388G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1
2	123575P4	MUFFLER DISCHARGE 1-1/8"OD HI	1
10	1C23493P1S	VALVE CHECK 1-1/8" OD	1
11	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1

11.1.24. Discharge Assembly #1 (199387G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1
2	123575P4	MUFFLER DISCHARGE 1-1/8"OD HI	1
10	1C23493P1S	VALVE CHECK 1-1/8" OD	1
11	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1

11.1.25. Liquid Assembly #2 (190589G1)

Item	Part #	Description	Quantity
1	180910P1S	FILTER/DRIER 305-S 5/8"ODF	1
	P-2890S	FILTER/DRIER 5/8ODF SLDR	1
2	179869P1	INDICATOR LIQ 5/8ODM X 5/8 ODF	1
3	P-2870S	VALVE SOLND 5/8MXF 24V-50/60	1
4	183604P4	VLV EXP 5/8X1-1/8X1/4ODF 15T	1

11.1.26. Liquid Assembly #1 (190590G1)

Item	Part #	Description	Quantity
1	180910P1S	FILTER/DRIER 305-S 5/8"ODF	1
	P-2890S	FILTER/DRIER 5/8ODF SLDR	1
2	179869P1	INDICATOR LIQ 5/8ODM X 5/8 ODF	1
3	P-2870S	VALVE SOLND 5/8MXF 24V-50/60	1
4	183604P4	VLV EXP 5/8X1-1/8X1/4ODF 15T	1

11.1.27. Semi Air

FRONT 15-22T

FRONT 30T

FRONT 15-12T		
Item	Part #	Description
2	183946G1	Suction Assembly #2 on Page 101
3	182702G1	Suction Assembly #1 on Page 101
4	183943G1	Discharge Assembly #2 on Page 102
5	183942G1	Discharge Assembly #1 on Page 102
6	182670G1	Liquid Assembly #2 on Page 103
7	179963G1	Liquid Assembly # 1 on Page 103

FRONT 30T		
Item	Part #	Description
2	300599G1	Suction Assembly SM2 on Page 104
3	300616G1	Suction Assembly SM1 on Page 104
4	300617G1	Discharge Assembly #2 on Page 105
5	300618G1	Discharge Assembly #1 on Page 105
6	190589G1	Liquid Assembly #2 on Page 106
7	190590G1	Liquid Assembly #1 on Page 106

11.1.28. Suction Assembly #2 (183946G1)

Item	Part #	Description	Quantity
1	C-0890	VALVE COMP SERV SUCTN 1-1/8SWT	1

11.1.29. Suction Assembly #1 (182702G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1
	C-0890	VALVE COMP SERV SUCTN 1-1/8SWT	1

11.1.30. Discharge Assembly #2 (183943G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1
2	123575P4	MUFFLER DISCHARGE 1-1/8"OD HI	1
6	1C23493P1S	VALVE CHECK 1-1/8" OD	1
8	187933G2	VALVE ACC BODY 1/4 EXT 1" BEAD	1

11.1.31. Discharge Assembly #1 (183942G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1
2	123575P4	MUFFLER DISCHARGE 1-1/8"OD HI	1
6	1C23493P1S	VALVE CHECK 1-1/8" OD	1
8	187933G2	VALVE ACC BODY 1/4 EXT 1" BEAD	1

11.1.32. Liquid Assembly #2 (182670G1)

Item	Part #	Description	Quantity
1	180909P1	FILTER/DRIER 164-S 1/2"ODF	1
	180910P1S	FILTER/DRIER 305-S 5/8"ODF	1
	P-2890S	FILTER/DRIER 5/8ODF SLDR	1
2	179863P1	INDICATOR LIQ 1/2ODM X 1/2ODF	1
	179869P1	INDICATOR LIQ 5/8ODM X 5/8 ODF	1
3	P-0080S	VALVE SOLND 1/2MXF 24V-50/60	1
	P-2870S	VALVE SOLND 5/8MXF 24V-50/60	1
	180957P1	VLV EXP 5/8X5/8X1/4ODF 11T	1
	180957P2	VLV EXP 5/8X5/8X1/4ODF 11T	1
	180723P1	VALVE EXP 1/2X1/2/1/4 ODF 8T	1
4	180723P2	VALVE EXP 1/2X1/2/1/4 ODF 8T	1

11.1.33. Liquid Assembly # 1 (179963G1)

Item	Part #	Description	Quantity
1	180909P1	FILTER/DRIER 304-S 1/2"ODF	1
	180910P1S	FILTER/DRIER 305-S 5/8"ODF	1
	P-2890S	FILTER/DRIER 5/8ODF SLDR	1
2	179863P1	INDICATOR LIQ 1/2ODM X 1/2ODF	1
	179869P1	INDICATOR LIQ 5/8ODM X 5/8 ODF	1

Item	Part #	Description	Quantity
3	P-0080S	VALVE SOLND 1/2MXF 24V-50/60	1
	P-2870S	VALVE SOLND 5/8MXF 24V-50/60	1
4	180957P2	VLV EXP 5/8X5/8X1/4ODF 11T	1
	180723P2	VALVE EXP 1/2X1/2/1/4 ODF 8T	1
	191053P2	VALVE EXP 1/2X5/8X1/4 ODF 8T	1

11.1.34. Suction Assembly SM2 (300599G1)

Item	Part #	Description	Quantity
1	1A18898P1	VALVE COMP SERV 1-3/8ID	1

11.1.35. Suction Assembly SM1 (300616G1)

Item	Part #	Description	Quantity
1	1A18898P1	VALVE COMP SERV 1-3/8ID	1
	C-0890	VALVE COMP SERV SUCTN 1-1/8SWT	1

11.1.36. Discharge Assembly #2 (300617G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1
2	123575P4	MUFFLER DISCHARGE 1-1/8"OD HI	1
6	1C23493P1S	VALVE CHECK 1-1/8" OD	1
8	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1

11.1.37. Discharge Assembly #1 (300618G1)

Item	Part #	Description	Quantity
1	C-0880	VALVE COMP SERV 1-1/8SWT	1
2	123575P4	MUFFLER DISCHARGE 1-1/8"OD HI	1
6	1C23493P1S	VALVE CHECK 1-1/8" OD	1
8	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1

11.1.38. Liquid Assembly #2 (190589G1)

Item	Part #	Description	Quantity
1	180910P1S	FILTER/DRIER 305-S 5/8"ODF	1
	P-2890S	FILTER/DRIER 5/8ODF SLDR	1
2	179869P1	INDICATOR LIQ 5/8ODM X 5/8 ODF	1
3	P-2870S	VALVE SOLND 5/8MXF 24V-50/60	1
4	183604P4	VLV EXP 5/8X1-1/8X1/4ODF 15T	1

11.1.39. Liquid Assembly #1 (190590G1)

Item	Part #	Description	Quantity
1	180910P1S	FILTER/DRIER 305-S 5/8"ODF	1
	P-2890S	FILTER/DRIER 5/8ODF SLDR	1
2	179869P1	INDICATOR LIQ 5/8ODM X 5/8 ODF	1
3	P-2870S	VALVE SOLND 5/8MXF 24V-50/60	1
4	183604P4	VLV EXP 5/8X1-1/8X1/4ODF 15T	1

11.2. DS Scroll

11.2.1. Scroll WG

Item	Part #	Description
2	178123G1	Suction Assembly #2 SCRL on Page 108
3	178124G1	Suction Assembly #1 SCRL on Page 108
4	178125G1	Discharge Assembly #2 SCRL on Page 109
5	178126G1	Discharge Assembly #1 SCRL on Page 110
6	191110G3	Liquid Assembly #2 on Page 111
7	191109G3	Liquid Assembly # 1 on Page 112

11.2.2. Suction Assembly #2 (178123G1)

Item	Part #	Description	028	035	042	053	070	077	105
1	151141P2	VALVE ROTOLOCK 7/8"X1-1/4"-12	1	1	1	1	1	1	

11.2.3. Suction Assembly #1 (178124G1)

Item	Part #	Description	028	035	042	053	070	077	105
1	151141P2	VALVE ROTOLOCK 7/8"X1-1/4"-12	1	1	1	1	1	1	

11.2.4. Discharge Assembly #2 (178125G1)

Item	Part #	Description	028	035	042	053	070	077	105
1	151141P1	VALVE ROTOLOCK 5/8"X1"-14UNS	1	1	1	1	1	1	
2	W-0093S	VALVE CHECK 5/8" OD	1	1	1	1	1	1	

11.2.5. Discharge Assembly #1 (178126G1)

Item	Part #	Description	028	035	042	053	070	077	105
1	151141P1	VALVE ROTOLOCK 5/8"X1"-14UNS	1	1	1	1	1	1	
2	W-0093S	VALVE CHECK 5/8" OD	1	1	1	1	1	1	

11.2.6. Liquid Assembly #2 (191110G3)

Item	Part #	Description	028	035	042	053	070	077	105
1	180908P1S	FILTER/DRIER 164-S 1/2"ODF	1	1	1	1	1	1	
2	179863P1	INDICATOR LIQ 1/2ODM X 1/2ODF	1	1	1	1	1	1	
3	P-0080S	VALVE SOLND 1/2MXF 24V-50/60	1	1	1	1	1	1	
4	180723P2	VALVE EXP 1/2X1/2/1/4 ODF 8T	1	1	1	1	1	1	

11.2.7. Liquid Assembly #1 (191109G3)

Item	Part #	Description	028	035	042	053	070	077	105
1	180908P1S	FILTER/DRIER 164-S 1/2"ODF	1	1	1	1	1	1	
2	179863P1	INDICATOR LIQ 1/2ODM X 1/2ODF	1	1	1	1	1	1	
3	P-0080S	VALVE SOLND 1/2MXF 24V-50/60	1	1	1	1	1	1	
4	180723P2	VALVE EXP 1/2X1/2/1/4 ODF 8T	1	1	1	1	1	1	

11.2.8. Scroll AWG

FRONT RIGHT SIDE

Item	Part #	Description
2	189301G1	Suction Assembly #2 SCRL SC2 on Page 114
3	189302G1	Suction Assembly #1 SCRL SC1 on Page 114
4	189303G1	Discharge Assembly #2 SCRL SC2 on Page 115
5	189304G1	Discharge Assembly #1 SCRL SC1 on Page 116
6	185495G1	Liquid Assembly #2 on Page 117
7	185494G1	Liquid Assembly # 1 on Page 118

11.2.9. Suction Assembly #2 SCRL SC2 (189301G1)

Item	Part #	Description	105
1	182132P5	VALVE ROTOLOCK 1-3/4-12X 1-3/8	1

11.2.10. Suction Assembly #1 SCRL SC1 (189302G1)

Item	Part #	Description	105
1	182132P5	VALVE ROTOLOCK 1-3/4-12X 1-3/8	1

11.2.11. Discharge Assembly #2 SCRL SC2 (189303G1)

Item	Part #	Description	105
1	134136P1	VALVE ROTOLOCK 1-1/4-12X1-1/8	1
3	1C23493P1S	VALVE CHECK 1-1/8" OD	1
7	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1
	P02-0270	VALVE ACCESS BODY 1/4X SWT	1

11.2.12. Discharge Assembly #2 SCRL SC1 (189304G1)

Item	Part #	Description	105
1	134136P1	VALVE ROTOLOCK 1-1/4-12X1-1/8	1
3	1C23493P1S	VALVE CHECK 1-1/8" OD	1
7	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1
	P02-0270	VALVE ACCESS BODY 1/4X SWT	1

11.2.13. Liquid Assembly #2 (185495G1)

Item	Part #	Description	105
1	P-2890S	FILTER/DRIER 5/8ODF SLDR	1
2	179869P1	INDICATOR LIQ 5/8ODM X 5/8 ODF	1
3	P-2870S	VALVE SOLND 5/8MXF 24V-50/60	1
4	183604P4	VLV EXP 5/8X1-1/8X1/4ODF 15T	1

11.2.14. Liquid Assembly #1 (185494G1)

Item	Part #	Description	105
1	P-2890S	FILTER/DRIER 5/8ODF SLDR	1
2	179869P1	INDICATOR LIQ 5/8ODM X 5/8 ODF	1
3	P-2870S	VALVE SOLND 5/8MXF 24V-50/60	1
4	183604P4	VLV EXP 5/8X1-1/8X1/4ODF 15T	1

11.2.15. Scroll Air

Item	Part #	Description
2	181261G1	Suction Assembly #2 SCRL AIR on Page 120
3	181260G1	Suction Assembly #1 SCRL AIR on Page 121
4	183215G1	Discharge Assembly #2 SCRL AIR on Page 122
5	183216G1	Discharge Assembly #1 SCRL AIR on Page 123
6	191138G1	Liquid Assembly #2 on Page 123
7	191137G1	Liquid Assembly # 1 on Page 125

11.2.16. Suction Assembly #2 SCRL AIR (181261G1)

Item	Part #	Description	028	035	042	053	070	077	105
1	151141P2	VALVE ROTOLOCK 7/8"X1-1/4"-12	1	1	1	1	1	1	

11.2.17. Suction Assembly #1 SCRL AIR (181260G1)

Item	Part #	Description	028	035	042	053	070	077	105
1	151141P2	VALVE ROTOLOCK 7/8"X1-1/4"-12	1	1	1	1	1	1	

11.2.18. Discharge Assembly #2 SCRL AIR (183215G1)

Item	Part #	Description	028	035	042	053	070	077	105
1	151141P1	VALVE ROTOLOCK 5/8"X1"-14UNS	1	1	1	1	1	1	
2	W-0093S	VALVE CHECK 5/8" OD	1	1	1	1	1	1	
6	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1	1	1	1	1	1	
	P02-0270	VALVE ACCESS BODY 1/4X SWT	1	1	1	1	1	1	

11.2.19. Discharge Assembly #1 (183216G1)

Item	Part #	Description	028	035	042	053	070	077	105
1	151141P1	VALVE ROTOLOCK 5/8"X1"-14UNS	1	1	1	1	1	1	
2	W-0093S	VALVE CHECK 5/8" OD	1	1	1	1	1	1	
6	187933G2	VALVE ACC BODY 1/4 EXT1" BEAD	1	1	1	1	1	1	
	P02-0270	VALVE ACCESS BODY 1/4X SWT	1	1	1	1	1	1	

11.2.20. Liquid Assembly #2 (191138G1)

Item	Part #	Description	028	035	042	053	070	077	105
1	180908P1S	FILTER/DRIER 164-S 1/2"ODF	1	1	1	1	1	1	
2	179863P1	INDICATOR LIQ 1/2ODM X 1/2ODF	1	1	1	1	1	1	
3	P-0070S	VALVE SOLND 1/2ODM X 1/2ODF	1	1	1	1	1	1	

11.2.21. Liquid Assembly #1 (191137G1)

Item	Part #	Description	028	035	042	053	070	077	105
1	180908P1S	FILTER/DRIER 164-S 1/2"ODF	1	1	1	1	1	1	
2	179863P1	INDICATOR LIQ 1/2ODM X 1/2ODF	1	1	1	1	1	1	
3	P-0070S	VALVE SOLND 1/2ODM X 1/2ODF	1	1	1	1	1	1	

12. Reheat Section

Item	Part #	Description	028	035	042	053	070	077	105
1	148367P1S	HEATER 03.3KW 208V SS 304 S/F	3	3	3				
	148367P2S	HEATER 03.3KW 230V SS 304 S/F	3	3	3				
	148367P3S	HEATER 03.3KW 400V SS 304 S/F	3	3	3				
	148367P4S	HEATER 03.3KW 460V SS 304 S/F	3	3	3				
	148367P5S	HEATER 03.3KW 575V SS 304 S/F	3	3	3				
	148367P6S	HEATER 05.0KW 208V SS 304 S/F	3	3	3	3	3	3	
	148367P7S	HEATER 05.0KW 230V SS 304 S/F	3	3	3	3	3	3	
	148367P8S	HEATER 05.0KW 400V SS 304 S/F	3	3	3	3	3	3	
	148367P9S	HEATER 05.0KW 460V SS 304 S/F	3	3	3	3	3	3	
	148367P10S	HEATER 05.0KW 575V SS 304 S/F	3	3	3	3	3	3	
	148367P15	HEATER 06.6KW 575V SS 304 S/F							3
	148367P16S	HEATER 08.3KW 208V SS 304 S/F				3	3	3	
	148367P17S	HEATER 08.3KW 230V SS 304 S/F				3	3	3	
	148367P18S	HEATER 08.3KW 400V SS 304 S/F				3	3	3	
	148367P19S	HEATER 08.3KW 460V SS 304 S/F				3	3	3	
	148367P20S	HEATER 08.3KW 575V SS 304 S/F				3	3	3	
	148367P41S	HEATER 09.5KW 208V SS 304 S/F				3	3	3	3
	148367P45S	HEATER 10.0KW 575V SS 304 S/F				3	3	3	3
5	R-0970S	SAFETY SWT THERM. 115F	2	2	2	2	2	2	2
15	181482P1S	SAFETY SWT THERM 150F MANRESET	1	1	1	1	1	1	1

13. Parts Gallery

Blower Section

1A32397P2	**1C29077P2**	Motors	**179582P1**
180327P2S	**194616P1S**	184179P1	**B02-0190S**
179161P2			

Coil Section

Coil

Compressor Section

C-1310	Compressor	**172147P1**	**C-0820**
180715G1	**C-088AS**	**C-087AS**	**180970P1**

172145P1S	W-0330S/ W-0320S	C-860	181388P1
P-0070S	P02-0290	C-0840	

EC Fan

199195G3A	172296P1

Electrical Section

128199P1S	135409P2S	136811P1	136821P12S
180294P1	200509P1	416761G1	416891G1
416911G2	1C18351P1S	E-0110S	E-009FS
123273P1S	E-011AS		181898P1

180633G1	180632G2	E03-0170S	F02-8790
136810P1S	136811P1	136821P2	166806G2
E-3620	E-2440S	E-362B	181518G1
181465G1S	181090P1	180792P1S	136241P10S
136240P5	136232P1	136223P1	136222P1
136205P1	182122P1	135637P6	132487P2
124547P1	136233P1	416721G2	132487P1S
318386G1A	318364P1S	318365P1S	318371P1

Exterior Section

1C18354P1	178109G1Z42L	178109G2Z42L	178113G1Z42L
180548G1Z42L	180548G4Z42L	1A18353P1Z42L	180915G2Z42L
181012P1Z42L	181018G1Z42L	181018G2Z42L	181025G1Z42L
181025G2Z42L	182749P1Z42L	179746P1	E02-2890
E-288A	1C18352P1S	1C18707P1	1A18353P1S
E-288B			

Filter Section

Filter

Humidifier Section

1A16207P1	1A19271P1S	121968P1	124216P2S
126411P1	136395P1	149376P1	163814P1
178339P1	192006P1	195804P1	196111P11S
196112P1	196144P1	180842P1	178339P1
H-0360S	H-0370S	F-6090S	E05-4600
1C18337P1	H-002AS	035-0342	121968P1
P15-0140S	P15-0150S	P15-0170	P-229A

P-5400S	160158G1S	F-600C	R13-0090S
H-014AS	1C18003G2S	1A18660P1S	

Piping Section

180908P1S	179863P1	123575P1	151141P1
P02-0270	C-0890	C-0930	178157P2
P-0070S	W-0093S		

Reheat Section

Heater	181482P1	R-0970

14. Revision Page

Revision Date	Modification	Details
08/2016	All Sections	Changed Part Numbers.
03/2016	Electrical – Display Section	Added Color Touch Display
Mar-2012	Exterior Section	Modified Part Numbers and added double skin panels
Oct-2011	All Sections	Updated the manual based on new BOM
Sept-2010	Humidifier Section	Added Steam Generating Humidifier with and without Pumps.
	Electrical Section	Added eHumidifier SG 8-30T.
Aug-2010	Main Page	Changed product image.
Jun-2010	Added VFD information	Modified Blower/Motor and Electrical Section based on VFD BOM.
Sep-2009	Humidifier Section (Infrared 053/070/077)	Added 6-Bulb option.
	Model Definition Number	Updated model definition.
Apr-2009	Humidifier Section (Infrared)	Modified Humidifier Pan's 028/035/042 quantities (from 2 to 1).
		Added Pan Humidifier to 053/070/077KW, 3Bulb and 6Bulb).
Feb-2009	Humidifier Section (Infrared)	Added part number 180653G1 (Pan Humidifier).
Oct-2008	Piping Section Expansion Valves	Changed 180957P1 to 1809573P2 and 183604P1 to 183604P3/183604P4.
	Blower Section Bearings	Changed part numbers from 181174P1 to 194616P1; 182504P1 to 194618P1; 181175P1 to 194617P1; 183784P1 to 194619P1.
Sep-2008	Piping Section Expansion Valves	Removed 178157P1 and 180723P1. Added 178157P2 and 180723P2 to Expansion Valves chart.
	Exterior Section Panels	Modified panel parts. Incorporated Standard (Z42L, Z43L, and Z35L) and Double-Skin (Z42LDS, Z43LDS, and Z35LDS) parts identification.
		Removed 181012G2 from Rear and Front Returns.