

# REPLACEMENT PARTS MANUAL

## MEGA-TEC® Wall Mount Air Conditioner

Models:

W090AEB W090AEC W090AEE W090AEV W090AEQ  
 W090APB W090APC W090APE W090APV W090APQ  
 W120APB W120APC W120APE W120APN W120APV W120APQ  
 W120AEB W120AEC W120AEE W120AEN W120AEV W120AEQ  
 W150APB W150APC W150APE W150APN W150APV W150APQ  
 W150AEB W150AEC W150AEE W150AEN W150AEV W150AEQ

### Contents

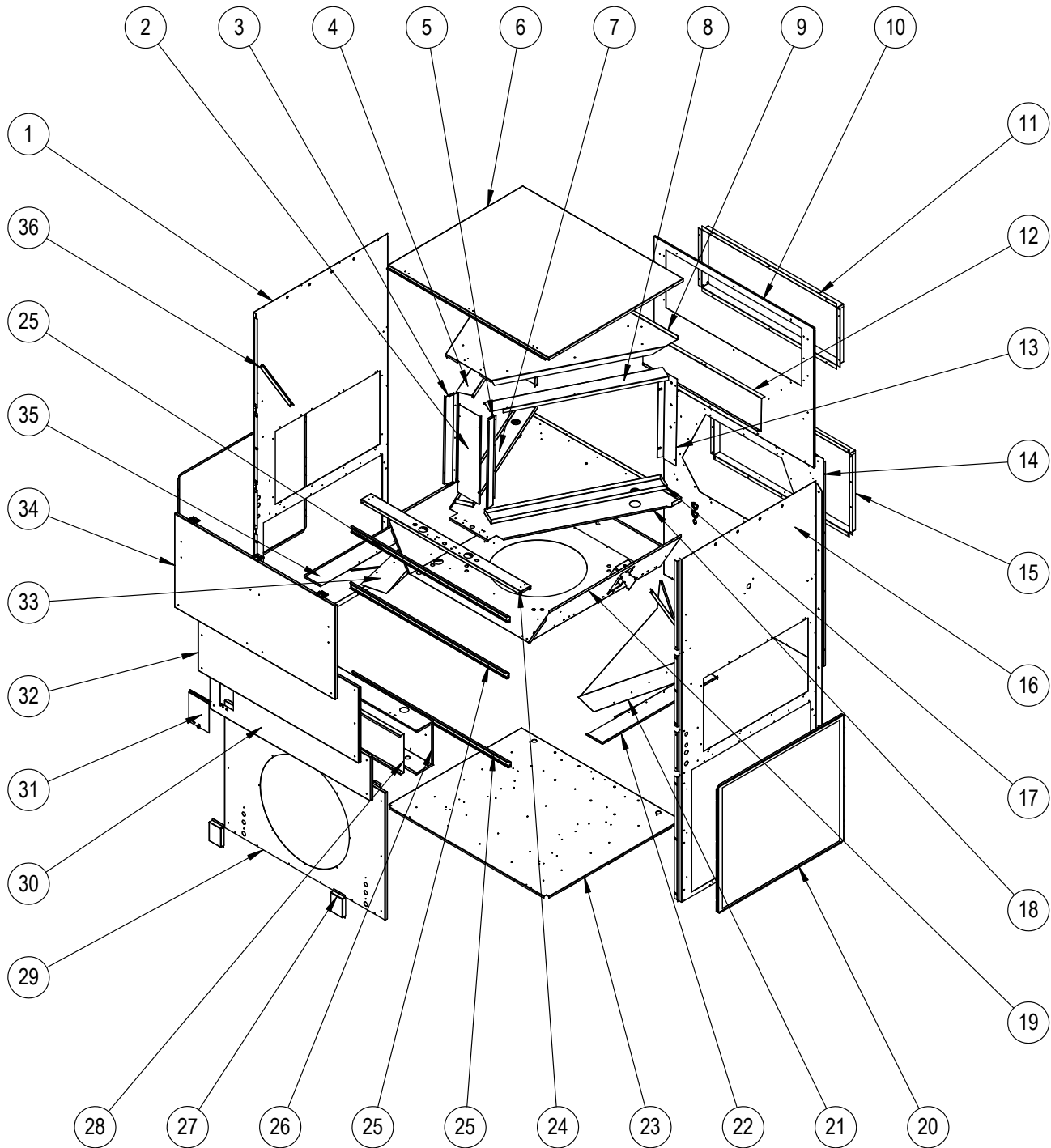
Description	Page	Description	Page
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♦ Usage List .....	3	♦ Usage List .....	23
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Control Panel – B & E Voltage		➤ Revised and/or additional pages may be issued from time to time.	
♦ Layout View .....	14	➤ A complete and current manual consists of pages shown in the following contents section.	
♦ Usage List .....	15		
♦ Usage List .....	16	<b>Important</b>	
♦ Usage List .....	17	➤ Contact the installing and/or local Bard distributor for all parts requirements. Make sure to have the complete model and serial number available from the unit rating plates.	
Control Panel – C, N, Q & V Voltage			
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♦ Usage List .....	20		
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Bard Manufacturing Company, Inc.  
 Bryan, Ohio 43506  
 www.bardhvac.com

Manual: 2110-1451V  
 Supersedes: 2110-1451U  
 Date: 9-3-24

# CABINET COMPONENTS



SEXP-897

This drawing to be used for reference for pages 3 and 4

# CABINET COMPONENTS

Dwg No.	Part Number	Description	W090A****E	W120A****E	W150A****E	W090A****B	W120A****B	W150A****B
1	501-1038-* ①	Left Side Assembly (Economizer)	X	X	X			
1	501-1118 ②	Left Side Assembly (Economizer)	X	X	X			
1	501-1041-* ①	Left Side Assembly (Non-Economizer)				X	X	X
1	501-1116 ②	Left Side Assembly (Non-Economizer)				X	X	X
2	113-723	Evaporator Front Fill	X	X	X	X	X	X
3	141Y488	Left Front Evaporator Bracket	X	X	X	X	X	X
4	137X909	Filter Channel - RH	X	X	X	X	X	X
5	141X488	Right Front Evaporator Bracket	X	X	X	X	X	X
6	507-379-* ①	Top	X	X	X	X	X	X
6	507-401 ②	Top	X	X	X	X	X	X
7	523-160	Left Drain Pan	X	X	X	X	X	X
8	137Y909	Filter Channel - LH	X	X	X	X	X	X
9	137-905	Evaporator Top Fill	X	X	X	X	X	X
10	509-400	Upper Back	X	X	X	X	X	X
10	509-463 ②	Upper Back	X	X	X	X	X	X
11	111-293	Supply Air Frame	X	X	X	X	X	X
12	137-914	Insulation Shield	X	X	X	X	X	X
13	541-483	RH Rear Evaporator Support	X	X	X	X	X	X
NS	541-484	LH Rear Evaporator Support	X	X	X	X	X	X
14	509-401	Lower Back (Economizer)	X	X	X			
14	509-465 ②	Lower Back (Economizer)	X	X	X			
14	509-403	Lower Back (Non-Economizer)				X	X	X
14	509-464 ②	Lower Back (Non-Economizer)				X	X	X
15	111-294	Return Air Frame	X	X	X	X	X	X
16	S501-1037-* ①	Right Side Assembly (Economizer)	X	X	X			
16	S501-1119 ②	Right Side Assembly (Economizer)	X	X	X			
16	S501-1042-* ①	Right Side Assembly (Non-Economizer)				X	X	X
16	S501-1117 ②	Right Side Assembly (Non-Economizer)				X	X	X
17	523-159	Right Drain Pan	X	X	X	X	X	X
18	521-577	Evaporator Partition	X	X	X	X	X	X
19	521-646	Blower Partition (Economizer)	X	X	X			
19	521-647	Blower Partition (Non-Economizer)				X	X	X
20	118-123-* ①	Side Grille	2	2	2	2	2	2
20	118-152 ②	Side Grille	2	2	2	2	2	2
21	537-908-8	RH Internal Deflector (Economizer)	X	X	X			
21	135X391	RH Internal Deflector (Non-Economizer)				X	X	X
22	137X906	RH Condensor Partition	X	X	X	X	X	X
22	137X1003 ②	RH Condensor Partition	X	X	X	X	X	X
22	121-581	Condensor Partition (Non-Economizer)				X	X	X
22	121-634 ②	Condensor Partition (Non-Economizer)				X	X	X
23	527-570	Base Assembly	X	X	X	X	X	X
23	527-602 ②	Base Assembly	X	X	X	X	X	X
24	141-481	Evaporator Partition Front Support ③	X	X	X	X	X	X
24	141-562	Evaporator Partition Front Support ④	X	X	X	X	X	X
25	135-390-* ①	Service Panel Rain Channel	3	3	3	3	3	3
25	135-411 ②	Service Panel Rain Channel	3	3	3	3	3	3

*Continued on page 4*

- ① Exterior cabinet parts are manufactured with various paint color options. To ensure the proper paint color is received, include the complete model and serial number of the unit for which cabinet parts are being ordered.
- ② Cabinet components are manufactured from stainless steel Code "S"

# CABINET COMPONENTS

Dwg No.	Part Number	Description	W090A****E	W120A****E	W150A****E	W090A****B	W120A****B	W150A****B
<i>Continued from page 3</i>								
26	517-420	Control Panel Box (Economizer)	X	X	X			
26	517-439 ②	Control Panel Box (Economizer)	X	X	X			
26	517-435	Control Panel Box (Non-Economizer)				X	X	X
26	517-440 ②	Control Panel Box (Non-Economizer)				X	X	X
27	S157-031-* ①	Refrigerant Service Port Cover	X	X	X	X	X	X
27	S157-032 ②	Refrigerant Service Port Cover	X	X	X	X	X	X
28	133-300	Inner Control Panel Cover (230V)		X	X		X	X
28	133-312	Inner Control Panel Cover (460V)	X	X	X	X	X	X
28	133-313	Inner Control Panel Cover (230V)	X	X	X	X	X	X
28	133-314	Inner Control Panel Cover (575V)	X	X	X	X	X	X
29	S553-715-* ①	Condenser/Fan Access Panel	X	X	X	X	X	X
29	S553-753 ②	Condenser/Fan Access Panel	X	X	X	X	X	X
NS	167-030-* ①	Venturi Ring	X	X	X	X	X	X
NS	167-031 ②	Venturi Ring	X	X	X	X	X	X
30	533-299-* ①	Control Panel Access Panel	X	X	X	X	X	X
30	533-343 ②	Control Panel Access Panel	X	X	X	X	X	X
31	S153-716-* ①	Circuit Breaker Access Panel	X	X	X	X	X	X
31	S153-719 ②	Circuit Breaker Access Panel	X	X	X	X	X	X
32	S553-714-* ①	Blower Access Service Panel	X	X	X	X	X	X
32	S553-752 ②	Blower Access Service Panel	X	X	X	X	X	X
33	537-919-8	LH Internal Deflector (Economizer)	X	X	X			
33	135Y391	LH Internal Deflector (Non-Economizer)				X	X	X
34	S553-713-* ①	Air Filter/Evaporator Access Door	X	X	X	X	X	X
34	S553-751 ②	Air Filter/Evaporator Access Door	X	X	X	X	X	X
35	137Y906	LH Condensor Partition	X	X	X	X	X	X
35	137Y1003 ②	LH Condensor Partition	X	X	X	X	X	X
36	113-733	Evap Door Hinge Arm	2	2	2	2	2	2
NS	113-732	Evap Door Arm Bracket	2	2	2	2	2	2
NS	113X726	Evap Door Support Guide - LH Side	X	X	X	X	X	X
NS	113Y726	Evap Door Support Guide - RH Side	X	X	X	X	X	X
NS	113-750-* ①	Rain Flashing	X	X	X	X	X	X
NS	113-791 ②	Rain Flashing	X	X	X	X	X	X
NS	113-748	Lifting Bracket	2	2	2	2	2	2
NS	113-846 ②	Lifting Bracket	2	2	2	2	2	2
NS	400-0426	Front Door Lifting Handle	2	2	2	2	2	2
NS	143-231	Rear Cover Plates (Lower Back)	2	2	2	2	2	2
NS	143-233 ②	Rear Cover Plates (Lower Back)	2	2	2	2	2	2
NS	5252-033	Bard Nameplate	X	X	X	X	X	X

① Exterior cabinet parts are manufactured with various paint color options. To ensure the proper paint color is received, include the complete model and serial number of the unit for which cabinet parts are being ordered.

② Cabinet components are manufactured from stainless steel Code "S"

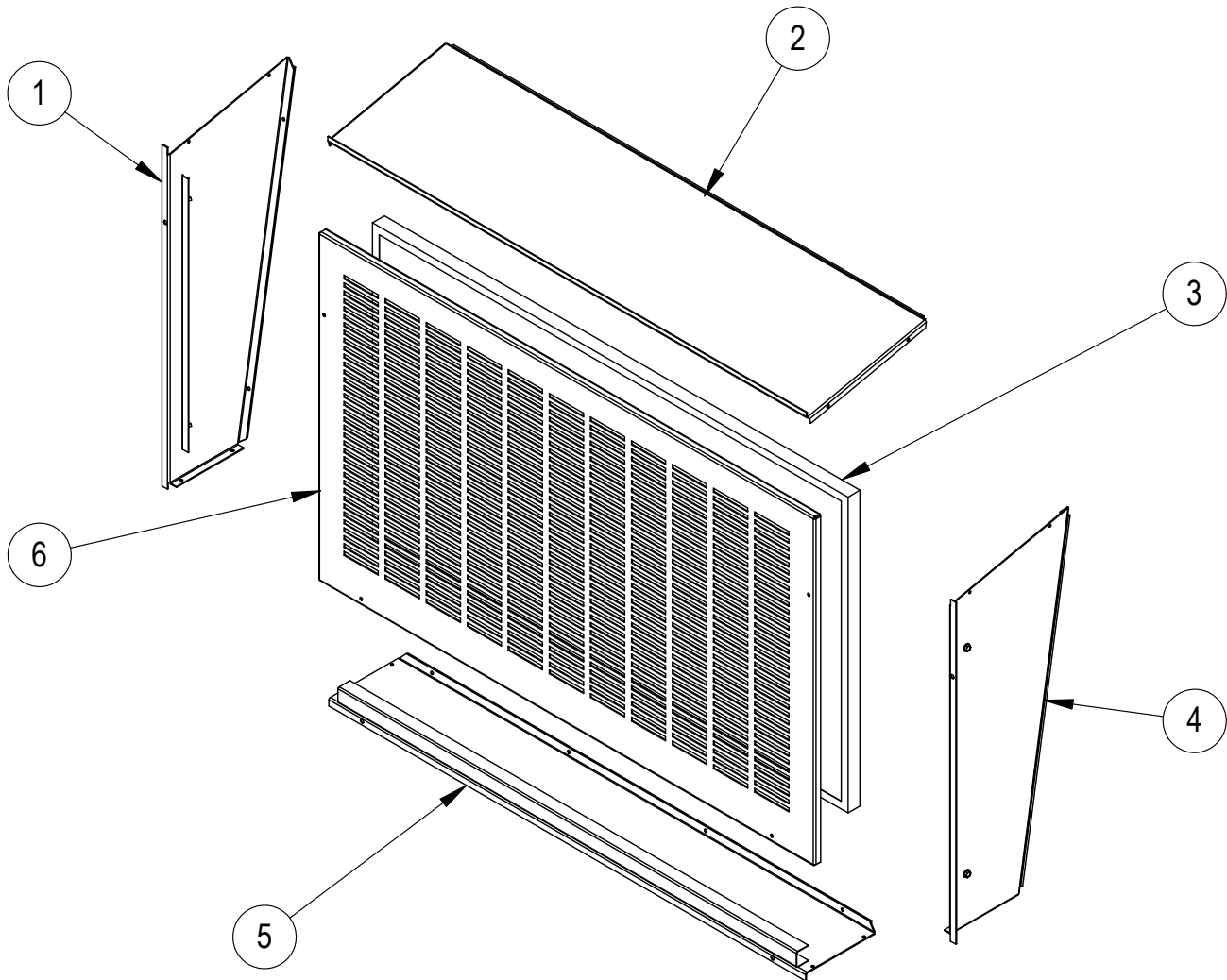
NS – Not Shown

**Refer to drawing on page 2**

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# ECONOMIZER INTAKE HOODS

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SEXP-899 A

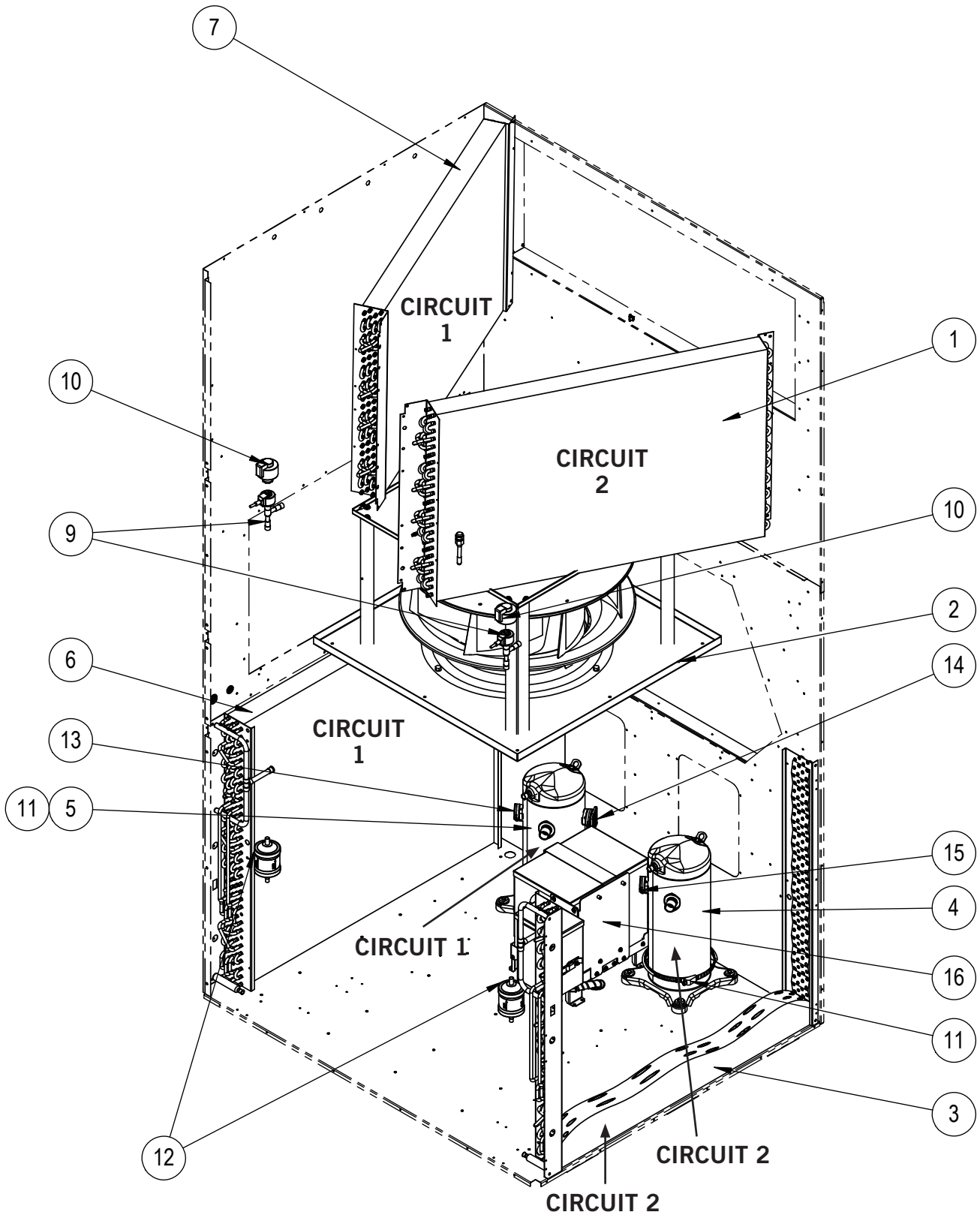
## ECONOMIZER INTAKE HOODS

Dwg No.	Part Number	Description	W090A****E	W120A****E	W150A****E
1	501-1039-*BX ①	Economizer Hood Left Side Assembly (includes Side Filter Angle)	X	X	X
1	501-1120BX ②	Economizer Hood Left Side Assembly (includes Side Filter Angle)	X	X	X
2	507-380-*BX ①	Economizer Top Assembly	X	X	X
2	507-402BX ②	Economizer Top Assembly	X	X	X
3	7003-081	Mist Eliminator	X	X	X
4	501-1040-*BX ①	Economizer Hood Right Side Assembly (includes Side Filter Angle)	X	X	X
4	501-1121BX ②	Economizer Hood Right Side Assembly (includes Side Filter Angle)	X	X	X
5	527-571-*BX ①	Economizer Hood Base Assembly (includes Mist Eliminator Support)	X	X	X
5	527-603BX ②	Economizer Hood Base Assembly (includes Mist Eliminator Support)	X	X	X
6	119-122-*BX ①	Economizer Grille	X	X	X
6	119-153BX ②	Economizer Grille	X	X	X

① Exterior cabinet parts are manufactured with various paint color options. To ensure the proper paint color is received, include the complete model and serial number of the unit for which cabinet parts are being ordered.

② Components are manufactured from stainless steel Code "S"

# SYSTEM COMPONENTS



SEXP-898 C

# SYSTEM COMPONENTS

Dwg. Circuit				W090A*B	W090A*C	W090A*E	W090A*V	W090A*Q	W120A*B	W120A*C	W120A*E	W120A*N	W120A*V	W120A*Q	W150A*B	W150A*C	W150A*E	W150A*N	W150A*V	W150A*Q
No.	①	Part Number	Description																	
1	2	917-0351BX	Right Evaporator Coil (Green Hydrophillic Coated) ②	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1	2	917-0362BX	Right Evaporator Coil (Phenolic Coated) ②	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
1	2	917-0466BX	Right Evaporator Coil (Green Hydrophillic Coated) ③	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1	2	917-0468BX	Right Evaporator Coil (Phenolic Coated) ③	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
2	--	8620-363	Indoor Blower Assembly Replacement Kit	X		X		X		X		X		X		X		X		X
2	--	8620-364	Indoor Blower Assembly Replacement Kit		X		X		X		X		X		X		X		X	
3	2	5051-220BX	Right Condenser Coil	X	X	X	X	X	X	X	X	X	X	X						
3	2	5054-220BX	Right Condenser Coil (Phenolic Coated)	O	O	O	O	O	O	O	O	O	O	O						
3	2	917-0420	Right Condenser Coil												X	X	X	X	X	X
4	2	8000-333	1-Stage Compressor (ZP42K5E-TF5-130)	X		X														
4	2	8000-334	1-Stage Compressor (ZP42K5E-TFD-130)		X		X													
4	2	8000-420	1-Stage Compressor (ZP42K5E-TFE-130)				X													
4	2	8000-429	1-Stage Compressor (ZP57K5E-TF5-130)					X												
4	2	8000-430	1-Stage Compressor (ZP57K5E-TFD-130)						X											
4	2	8000-431	1-Stage Compressor (ZP57K5E-TFE-130)							X					X					
4	2	8000-404	1-Stage Compressor (ZP67KCE-TF5-250)												X		X			
4	2	8000-405	1-Stage Compressor (ZP67KCE-TFD-130)													X			X	
4	2	8000-418	1-Stage Compressor (ZP67KCE-TFE-130)																X	X
4	2	8000-460	1-Stage Compressor (ZP61K5E-TF7-130)									X								
4	2	8000-461	1-Stage Compressor (ZP67KCE-TF7-130)										X					X		
5	1	8000-383	2-Stage Compressor (ZPS40K6E-TF5-130)	X		X														
5	1	8000-384	2-Stage Compressor (ZPS40K6E-TFD-130)		X		X													
5	1	8000-445	2-Stage Compressor (ZPS40K6E-TFE-130)				X													
5	1	8000-397	2-Stage Compressor (ZPS60K5E-TF5-130)					X												
5	1	8000-399	2-Stage Compressor (ZPS60K5E-TFD-130)						X											
5	1	8000-432	2-Stage Compressor (ZPS60K5E-TFE-130)							X					X					
5	1	8000-446	2-Stage Compressor (ZPS67KCE-TF5-130)												X		X			
5	1	8000-447	2-Stage Compressor (ZPS67KCE-TFD-250)													X			X	
5	1	8000-448	2-Stage Compressor (ZPS67KCE-TFE-130)																X	X
5	1	8000-460	1-Stage Compressor (ZP61K5E-TF7-130)									X								
5	1	8000-461	1-Stage Compressor (ZP67KCE-TF7-130)										X					X		
6	1	5051-219BX	Left Condenser Coil	X	X	X	X	X	X	X	X	X	X	X						
6	1	5054-219BX	Left Condenser Coil (Phenolic Coated)	O	O	O	O	O	O	O	O	O	O	O						
6	1	917-0419	Left Condenser Coil												X	X	X	X	X	X
7	1	917-0352BX	Left Evaporator Coil (Green Hydrophillic Coated) ②	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7	1	917-0363BX	Left Evaporator Coil (Phenolic Coated) ②	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7	1	917-0467BX	Left Evaporator Coil (Green Hydrophillic Coated) ③	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7	1	917-0469BX	Left Evaporator Coil (Phenolic Coated) ③	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
9	--	5651S245	Electronic Expansion Valve	2	2	2	2													
9	--	5651S248	Electronic Expansion Valve					2	2	2	2	2	2	2	2	2	2	2	2	2
10	--	5651-246	EEV Cable and Stator	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11	--	8605-017	Compressor Crankcase Heater	2		2			2		2				2		2			
11	--	8605-018	Compressor Crankcase Heater		2		2			2		2	2			2		2	2	
11	--	8605-021	Compressor Crankcase Heater				2							2						2
12	--	5201-022	Refrigerant Filter Drier	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
13	1	3000-1606	LH Compressor Power Plug	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14	1	3000-1604	LH Compressor Staging Solenoid Plug	X	X	X	X	X	X	X		X	X	X	X	X			X	X
15	2	3000-1605	RH 1-Stage Compressor Power Plug	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16	--	910-2185	575V Transformer/Junction Box Assy. (see page 30)					X						X						X
NS	--	7004-065	Air Filter 2" MERV 8 (20 x 24 x 2)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
NS	--	7004-066	Air Filter 2" MERV 11 (20 x 24 x 2) ④	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
NS	--	7004-067	Air Filter 2" MERV 13 (20 x 24 x 2) ④	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

NS – Not Shown

X – Standard Components

① MEGA-TEC Series wall-mounted air conditioners have two separate refrigeration circuits: Circuit 1 is the two stage system located on the left side of the unit and circuit 2 is the single stage system on the right side.

O – Optional Components

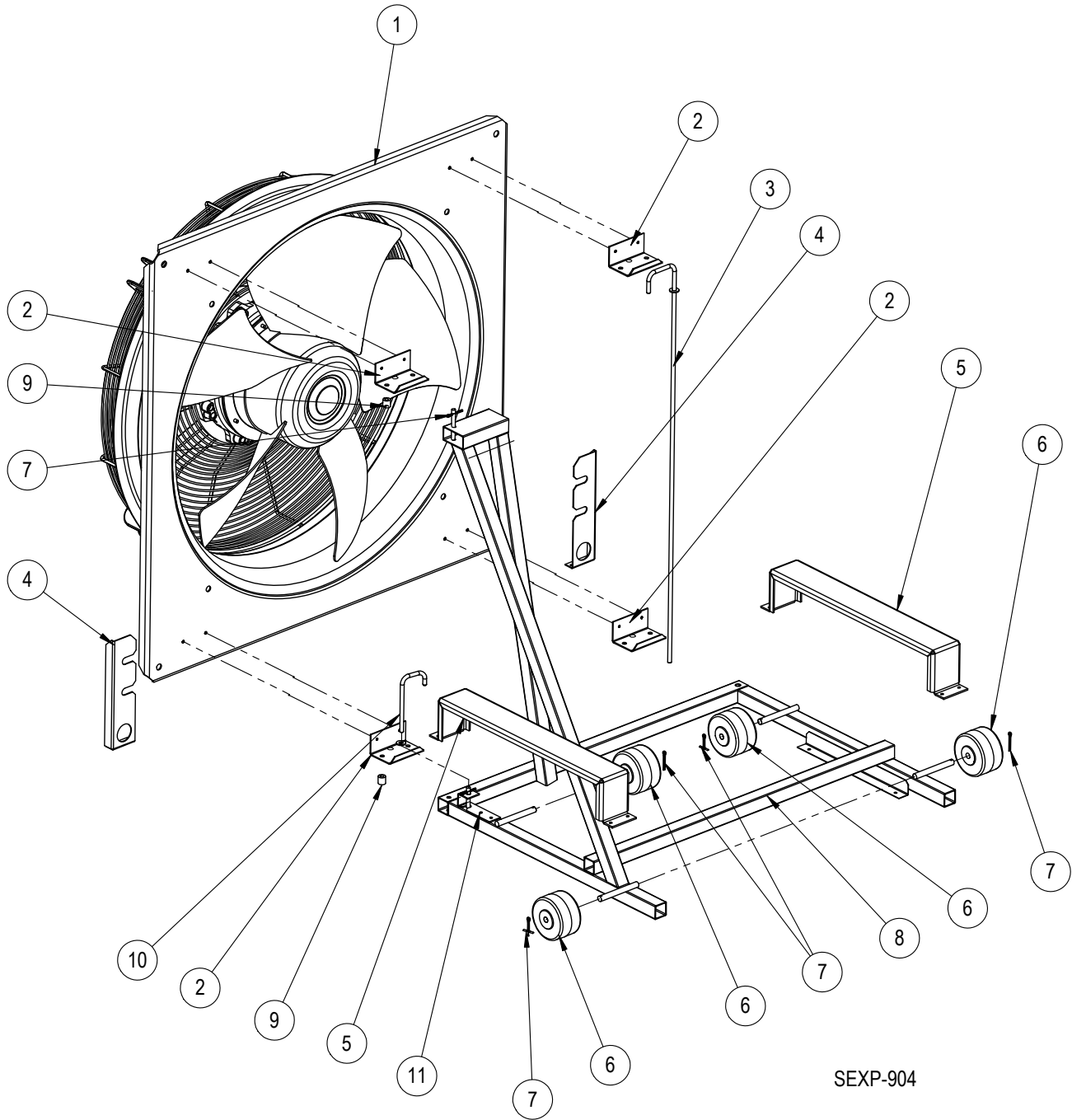
② Unit serial number before D22

③ Unit serial number after D22

④ Optional on these models

**NOTE:** Refrigerant pressure switches, transducers and system temperature sensors can be found on pages 12 and 13.

# FAN SYSTEM COMPONENTS



SEXP-904

# FAN SYSTEM COMPONENTS

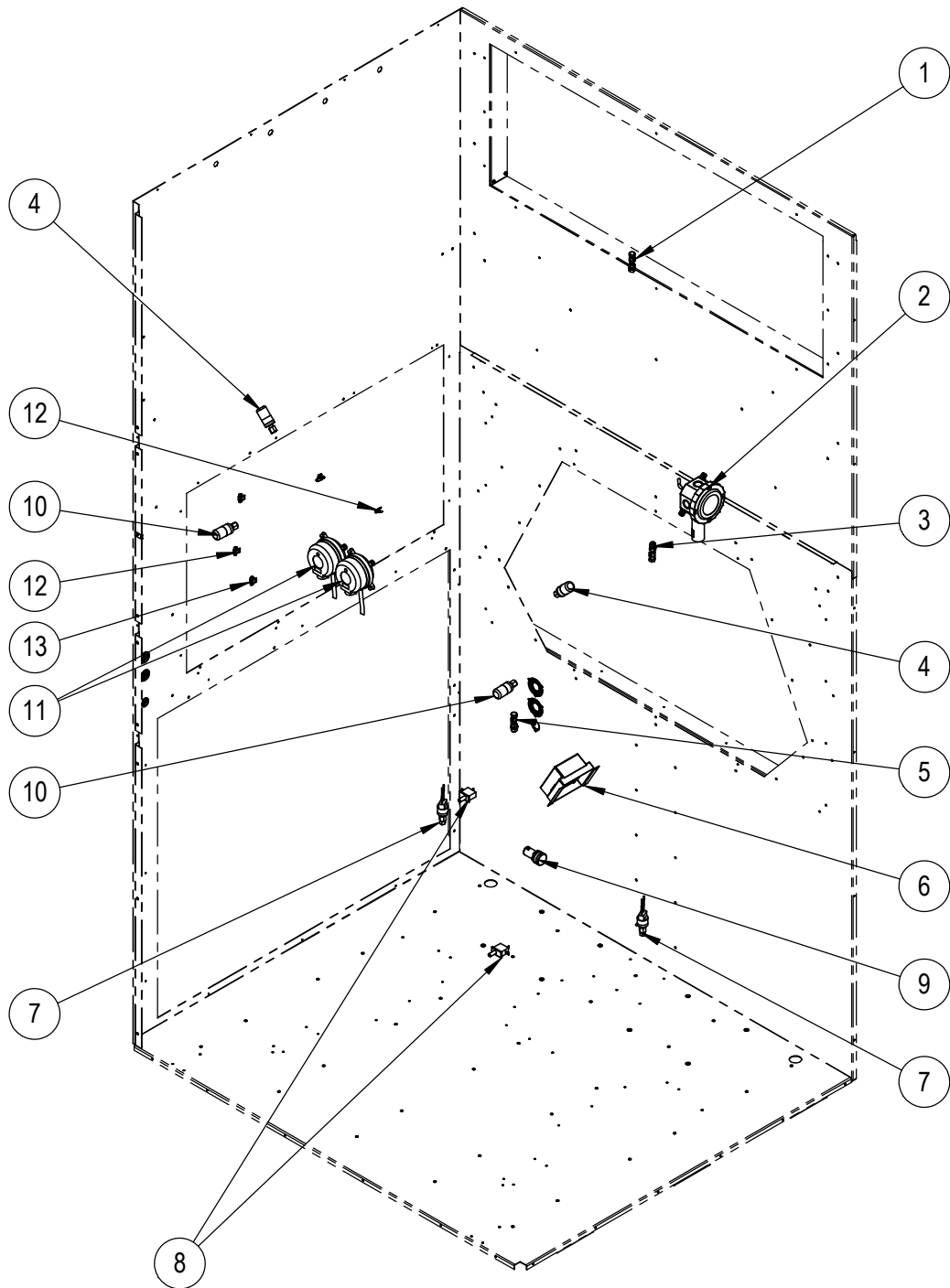
Dwg No.	Part Number	Description	W090A*B	W120A*B	W150A*B	W090A*C	W120A*C	W150A*C	W090A*E	W120A*E	W150A*E	W120A*N	W150A*N	W090A*V	W120A*V	W150A*V	W090A*Q	W120A*Q	W150A*Q
1	S922-0001-001	Fan & Motor Assembly (includes Dwg. No. 2, 3 & 10)	X	X	X				X	X	X								
1	S922-0001-003 ①	Coated Fan & Motor Assembly (includes Dwg. No. 2, 3 & 10)	X	X	X				X	X	X								
1	922-0016-001BX	Fan & Motor Assembly (includes Dwg. No. 2, 3 & 10)				X	X	X				X	X	X	X	X	X	X	X
1	922-0016-002BX ①	Coated Fan & Motor Assembly (includes Dwg. No. 2, 3 & 10)				X	X	X				X	X	X	X	X	X	X	X
2	113-737	Fan Hinge Bracket	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2	113-898 ①	Fan Hinge Bracket	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
3	5401-008	Anti-Pivot Rod	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	113X729	RH Gauge Port Bracket	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	113X836 ①	RH Gauge Port Bracket	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	113-735	Wheel Retention Rail	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
5	113-840 ①	Wheel Retention Rail	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6	1171-035	Plastic Wheel, 3" Diameter	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
7	1012-353	Cotter Pin	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
8	8200-056	Fan Slide Welded Frame	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	8200-058 ①	Fan Slide Welded Frame	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9	5451-029	Nylon Sleeve	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10	5401-007	Fan Stop Rod	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11	113-752	Fan Safety Lock Bracket	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11	113-839 ①	Fan Safety Lock Bracket	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12	113Y729	LH Gauge Port Bracket	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12	113Y836 ①	LH Gauge Port Bracket	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NS	113-738	Wheel Guide Angle	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
NS	113-841 ②	Wheel Guide Angle	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
NS	113-736	Fan Attachment Angle	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
NS	113-842 ②	Fan Attachment Angle	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

① Used with stainless steel cabinet option

NS – Not Shown

# SENSORS AND PERIPHERAL DEVICES

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SEXP-905

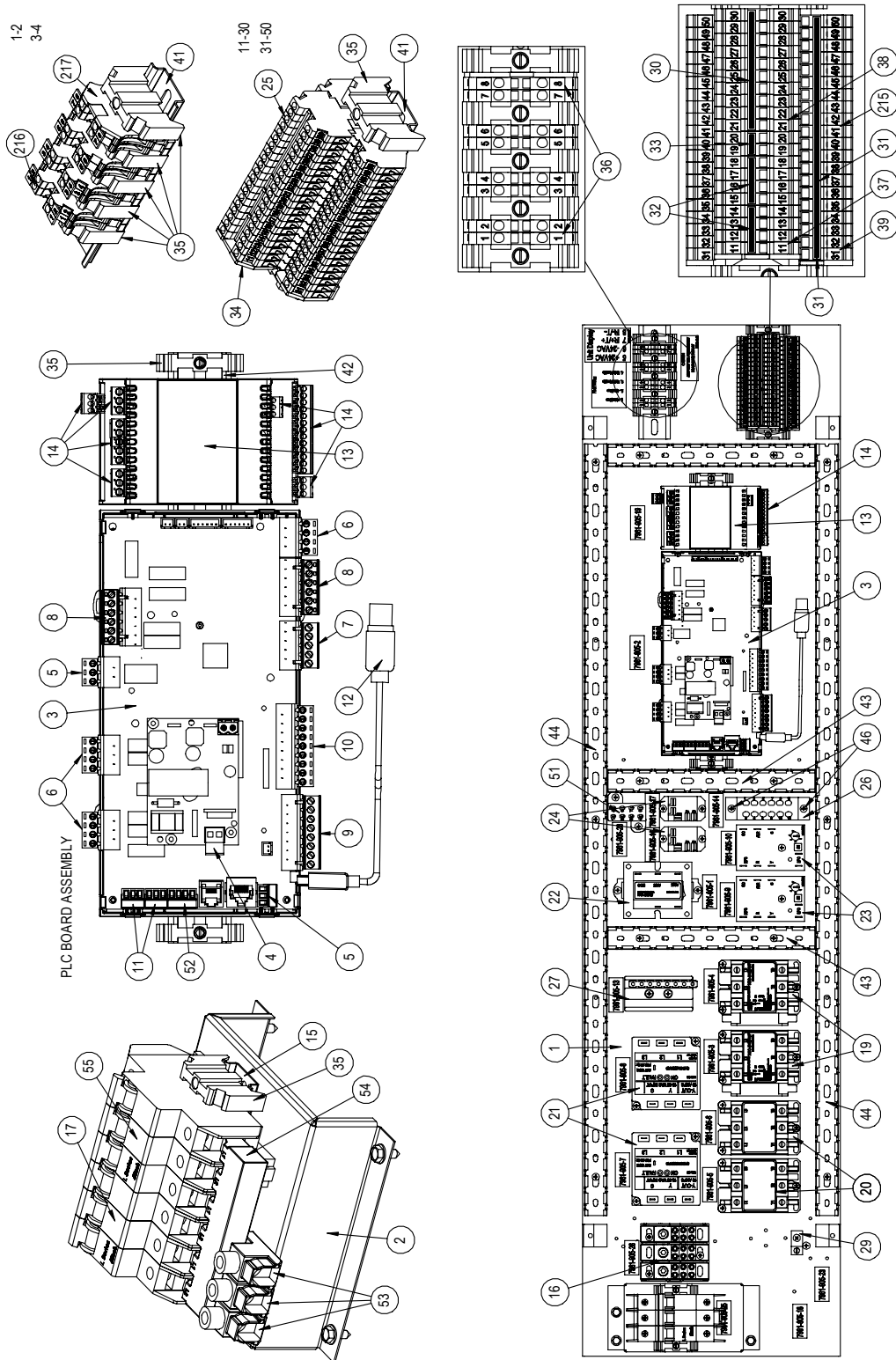
## SENSORS AND PERIPHERAL DEVICES

Dwg No.	Part Number	Description	W090A****E	W120A****E	W150A****E	W090A****B	W120A****B	W150A****B
1	8620-296	Supply Air Sensor (910-2052 SAT)	X	X	X	X	X	X
2	8301-089	Temp and Humidity Sensor	X	X	X	X	X	X
3	8620-296	Return Air Sensor (910-2054 RAT)	X	X	X	X	X	X
4	8406-158	Low Pressure Transducer (Blue)	2	2	2	2	2	2
5	8620-296	Mixed Air Sensor (910-2053 MAT)	X	X	X			
6	8301-091	Dust Sensor	X	X	X			
NS	8612-064	Dust Sensor Board	X	X	X			
7	8406-142	High Pressure Switch	2	2	2	2	2	2
8	8406-156	Door Switch	2	2	2	2	2	2
9	8611-199	Dirty Filter Light	X	X	X	X	X	X
10	8406-157	Liquid Line Pressure Transducer (Red)	2	2	2	2	2	2
11	8301-104	Filter Switch w/Adjustment	X	X	X	X	X	X
11	8301-104	Blower Fail Switch w/Adjustment	X	X	X	X	X	X
12	8620-296	Suction Line Temperature Sensor (910-2084 ST1)	X	X	X	X	X	X
12	8620-296	Suction Line Temperature Sensor (910-2076 ST2)	X	X	X	X	X	X
13	8620-310	Liquid Line Temperature Sensor (910-2086 LLT1)	X	X	X	X	X	X
13	8620-310	Liquid Line Temperature Sensor (910-2077 LLT2)	X	X	X	X	X	X

NS – Not Shown

# CONTROL PANEL - B (230V/208V) & E (220V/200V) VOLTAGES

SEXP-992 B



This drawing to be used for reference for pages 15, 16 and 17

## CONTROL PANEL – B (230V/208V) & E (220V/200V) VOLTAGES

Dwg No.	Part Number	Description	W090APB0Z W090APE0Z	W090APB09	W090APB18 W090APE18	W090AEB18	W090AEE18
1	117-404	Control Sub Panel	X	X	X	X	X
2	113-814	Circuit Breaker Riser	X	X	X		
2	113-734	Circuit Breaker Riser				X	X
3	8301-112-002*	UPC3-C2 MEGA-TEC	X	X	X	X	X
4	8611-183	2-Pin Circuit Board Connector	X	X	X	X	X
5	8611-147	3-Pin Circuit Board Connector	2	2	2	2	2
6	8611-148	4-Pin Circuit Board Connector	3	3	3	3	3
7	8611-217	5-Pin Circuit Board Connector	X	X	X	X	X
8	8611-218	6-Pin Circuit Board Connector	2	2	2	2	2
9	8611-185	8-Pin Circuit Board Connector	X	X	X	X	X
10	8611-149	9-Pin Circuit Board Connector	X	X	X	X	X
11	8611-192	3-Pin Circuit Board Connector	2	2	2	2	2
12	8301-075	USB Micro Cable Female to Male	X	X	X	X	X
13	8301-081	C.PCOE Expansion PLC Board	X	X	X	X	X
14	8611-226	Terminal Block Kit for C.PCOE	X	X	X	X	X
15	8611-240	35MM DIN Rail 3"	X	X	X	X	X
16	8607-070	Power Terminal Block		X	X		
17	8615-110	Circuit Breaker 60A 3-Pole	X	X	X	X	X
19	8401-037	Contactorm 3-Pole 30 Amp	2	2	2	2	2
20	8401-035	Contactorm 25 Amp 3-Pole		X	2	2	2
21	8201-174BX	3 Phase Line Monitor 50/60 HZ	2	2	2	2	2
22	8407-065	Transformer 208/240-24 75VA	X	X	X	X	X
23	8201-171BX	Compressor Control Module	2	2	2	2	2
24	8201-130	Relay, SPDT, Pilot Duty	2	2	2	2	2
25	8607-058	Double Level Terminal Block	20	20	20	20	20
26	8607-060	Terminal Block Insul. 12-Position	X	X	X	X	X
27	8607-061	Terminal Block 16-Position	X	X	X	X	X
29	8611-006	Terminal	X	X	X	X	X
30	8611-203	Jumper 10-Position	X	X	X	X	X
31	8611-224	Jumper 20-Position	X	X	X	X	X
32	8611-195	Jumper 4-Position	2	2	2	2	2
33	8611-194	Jumper 2-Position	X	X	X	X	X
34	8611-221	End Cover	X	X	X	X	X
35	8611-144	End Clamp for DIN Rail	11	11	11	11	11
36	8607-056	Terminal Designation (1-10)	2	2	2	2	2
37	8607-055	Terminal Designation (11-20)	2	2	2	2	2
38	8607-054	Terminal Designation (21-30)	2	2	2	2	2
39	8607-053	Terminal Designation (31-40)	2	2	2	2	2
41	8611-223	35MM DIN Rail 5"	2	2	2	2	2
42	8611-228	35MM DIN Rail 13"	X	X	X	X	X
43	8611-229-0902	3-1/4" X 1" Cable Duct X 9.13"	3	3	3	3	3
44	8611-229-3400	3-1/4" X 1" Cable Duct X 34"	2	2	2	2	2
51	8607-072	Terminal Block 8-Position	X	X	X	X	X
52	8611-255	4-Pin Circuit Board Connector	X	X	X	X	X
53	8615-088	Jumper Bar Main Lugs				3	3
54	8615-090	Two Circuit Bus Bar 3-Pole				X	X
55	8615-109	Circuit Breaker 50A 3-Pole				X	X
215	8607-059	Terminal Designation (41-50)	2	2	2	2	2
216	8611-150	Terminal Block	8	8	8	8	8
217	8611-151	End Cap	4	4	4	4	4

\* Replacement part will have a letter attached to the end of the part number to designate software version (Example: 8301-112-002A). A software upgrade of all PLCs onsite (units and controllers) should accompany any PLC replacement. Latest revisions of software, change log and instructions are available on the Bard website at <http://www.bardhvac.com/software-download/>

Wiring diagram reference listed under **ELECTRIC HEAT COMPONENTS** on pages 22 – 25.

## CONTROL PANEL – B (230V/208V) & E (220V/200V) VOLTAGES

Dwg No.	Part Number	Description	W120APB0Z W120APE0Z	W120APB09	W120APB18 W120APE18	W120AEB18	W120AEE18
1	117-404	Control Sub Panel	X	X	X	X	X
2	113-734	Circuit Breaker Riser	X	X	X	X	X
3	8301-112-002*	UPC3-C2 MEGA-TEC	X	X	X	X	X
4	8611-183	2-Pin Circuit Board Connector	X	X	X	X	X
5	8611-147	3-Pin Circuit Board Connector	2	2	2	2	2
6	8611-148	4-Pin Circuit Board Connector	3	3	3	3	3
7	8611-217	5-Pin Circuit Board Connector	X	X	X	X	X
8	8611-218	6-Pin Circuit Board Connector	2	2	2	2	2
9	8611-185	8-Pin Circuit Board Connector	X	X	X	X	X
10	8611-149	9-Pin Circuit Board Connector	X	X	X	X	X
11	8611-192	3-Pin Circuit Board Connector	2	2	2	2	2
12	8301-075	USB Micro Cable Female to Male	X	X	X	X	X
13	8301-081	C.PCOE Expansion PLC Board	X	X	X	X	X
14	8611-226	Terminal Block Kit for C.PCOE	X	X	X	X	X
15	8615-090	35MM DIN Rail 3"	X	X	X	X	X
16	8615-088	Jumper Bar Main Lugs	3	3	3	3	3
17	8615-108	Circuit Breaker 40A 3-Pole	2	2	2		2
17	8615-110	Circuit Breaker 60A 3-Pole				2	2
19	8401-037	Contacto 3-Pole 30 Amp	2	2	2	2	2
20	8401-035	Contacto 25 Amp 3-Pole		X	2	2	2
21	8201-174BX	3 Phase Line Monitor 50/60 HZ	2	2	2	2	2
22	8407-065	Transformer 208/240-24 75VA	X	X	X	X	X
23	8201-171BX	Compressor Control Module	2	2	2	2	2
24	8201-130	Relay, SPDT, Pilot Duty	2	2	2	2	2
25	8607-058	Double Level Terminal Block	20	20	20	20	20
26	8607-060	Terminal Block Insul. 12-Position	X	X	X	X	X
27	8607-061	Terminal Block 16-Position	X	X	X	X	X
29	8611-006	Terminal	2	2	2	2	2
30	8611-203	Jumper 10-Position	X	X	X	X	X
31	8611-224	Jumper 20-Position	X	X	X	X	X
32	8611-195	Jumper 4-Position	2	2	2	2	2
33	8611-194	Jumper 2-Position	X	X	X	X	X
34	8611-221	End Cover	X	X	X	X	X
35	8611-144	End Clamp for DIN Rail	11	11	11	11	11
36	8607-056	Terminal Designation (1-10)	2	2	2	2	2
37	8607-055	Terminal Designation (11-20)	2	2	2	2	2
38	8607-054	Terminal Designation (21-30)	2	2	2	2	2
39	8607-053	Terminal Designation (31-40)	2	2	2	2	2
41	8611-223	35MM DIN Rail 5"	3	3	3	3	3
42	8611-228	35MM DIN Rail 13"	X	X	X	X	X
43	8611-229-0902	3-1/4" X 1" Cable Duct X 9.13"	3	3	3	3	3
44	8611-229-3400	3-1/4" X 1" Cable Duct X 34"	2	2	2	2	2
51	8607-072	Terminal Block 8-Position	X	X	X	X	X
52	8611-255	4-Pin Circuit Board Connector	X	X	X	X	X
53	8615-088	Jumper Bar Main Lugs		3	3	3	3
54	8615-090	Two Circuit Bus Bar 3-Pole		X	X	X	X
215	8607-059	Terminal Designation (41-50)	2	2	2	2	2
216	8611-150	Terminal Block	8	8	8	8	8
217	8611-151	End Cap	4	4	4	4	4

\* Replacement part will have a letter attached to the end of the part number to designate software version (Example: 8301-112-002A). A software upgrade of all PLCs onsite (units and controllers) should accompany any PLC replacement. Latest revisions of software, change log and instructions are available on the Bard website at <http://www.bardhvac.com/software-download/>

Wiring diagram reference listed under **ELECTRIC HEAT COMPONENTS** on pages 22 – 25.

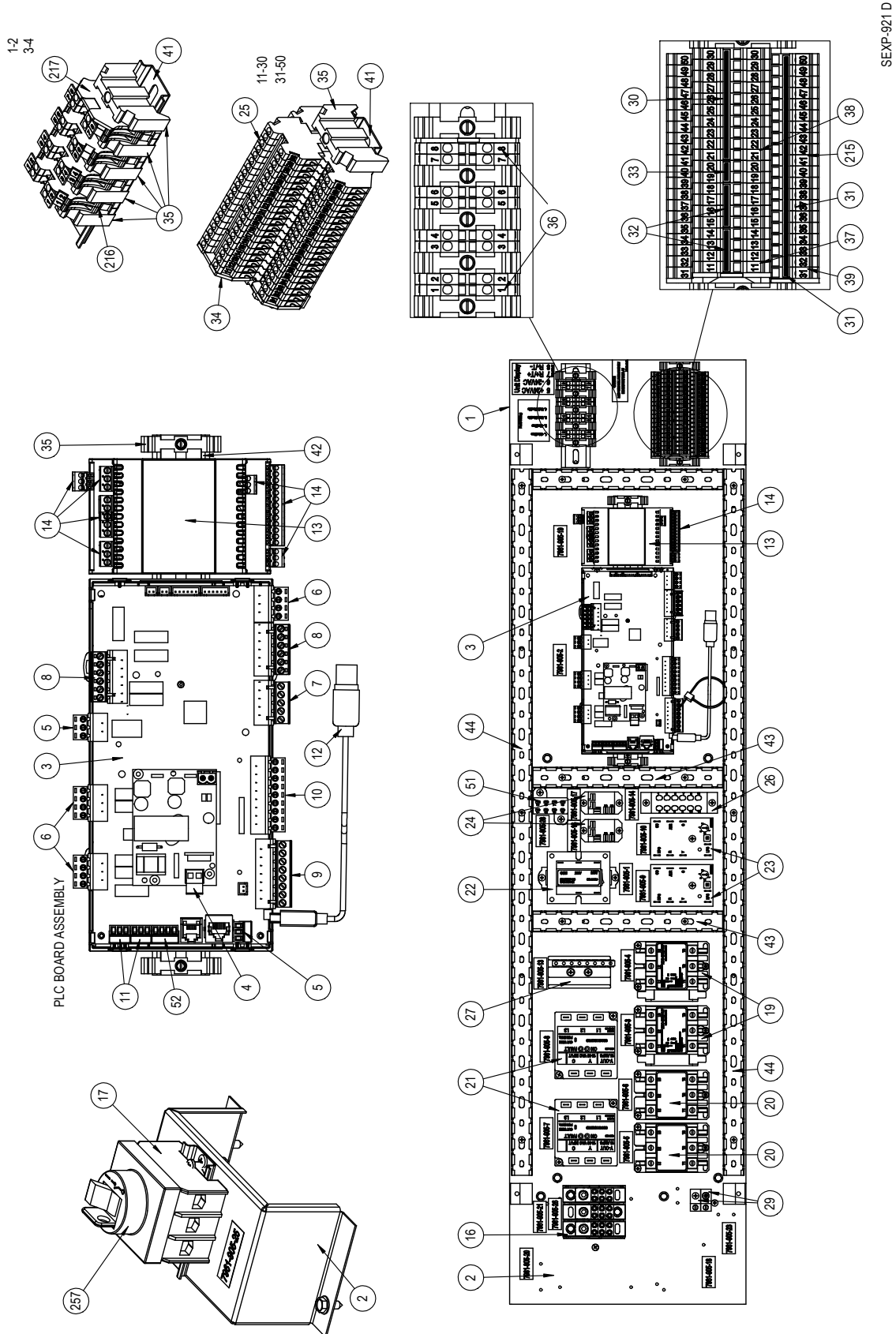
## CONTROL PANEL – B (230V/208V) & E (220V/200V) VOLTAGES

Dwg No.	Part Number	Description	W150APB0Z W150APE0Z	W150APB09	W150APB18	W150APE18	W150AEB18	W150AEE18
1	117-404	Control Sub Panel	X	X	X	X	X	X
2	113-734	Circuit Breaker Riser	X	X	X	X	X	X
3	8301-112-002*	UPC3-C2 MEGA-TEC	X	X	X	X	X	X
4	8611-183	2-Pin Circuit Board Connector	X	X	X	X	X	X
5	8611-147	3-Pin Circuit Board Connector	2	2	2	2	2	2
6	8611-148	4-Pin Circuit Board Connector	3	3	3	3	3	3
7	8611-217	5-Pin Circuit Board Connector	X	X	X	X	X	X
8	8611-218	6-Pin Circuit Board Connector	2	2	2	2	2	2
9	8611-185	8-Pin Circuit Board Connector	X	X	X	X	X	X
10	8611-149	9-Pin Circuit Board Connector	X	X	X	X	X	X
11	8611-192	3-Pin Circuit Board Connector	2	2	2	2	2	2
12	8301-075	USB Micro Cable Female to Male	X	X	X	X	X	X
13	8301-081	C.PCOE Expansion PLC Board	X	X	X	X	X	X
14	8611-226	Terminal Block Kit for C.PCOE	X	X	X	X	X	X
15	8611-240	35MM DIN Rail 3"	X	X	X	X	X	X
16	8607-070	Power Terminal Block		X	X	X		
17	8615-109	Circuit Breaker 50A 3-Pole	X	X	X	X		
17	8615-110	Circuit Breaker 60A 3-Pole					2	2
19	8401-037	Contactors 3-Pole 30 Amp	2	2	2	2	2	2
20	8401-035	Contactors 25 Amp 3-Pole		X	2	2	2	2
21	8201-174BX	3 Phase Line Monitor 50/60 HZ	2	2	2	2	2	2
22	8407-065	Transformer 208/240-24 75VA	X	X	X	X	X	X
23	8201-171BX	Compressor Control Module	2	2	2	2	2	2
24	8201-130	Relay, SPDT, Pilot Duty	2	2	2	2	2	2
25	8607-058	Double Level Terminal Block	20	20	20	20	20	20
26	8607-060	Terminal Block Insul. 12-Position	X	X	X	X	X	X
27	8607-061	Terminal Block 16-Position	X	X	X	X	X	X
29	8611-006	Terminal	X	X	X	X	X	X
30	8611-203	Jumper 10-Position	X	X	X	X	X	X
31	8611-224	Jumper 20-Position	X	X	X	X	X	X
32	8611-195	Jumper 4-Position	2	2	2	2	2	2
33	8611-194	Jumper 2-Position	X	X	X	X	X	X
34	8611-221	End Cover	X	X	X	X	X	X
35	8611-144	End Clamp for DIN Rail	11	11	11	11	11	11
36	8607-056	Terminal Designation (1-10)	2	2	2	2	2	2
37	8607-055	Terminal Designation (11-20)	2	2	2	2	2	2
38	8607-054	Terminal Designation (21-30)	2	2	2	2	2	2
39	8607-053	Terminal Designation (31-40)	2	2	2	2	2	2
41	8611-223	35MM DIN Rail 5"	2	2	2	2	2	2
42	8611-228	35MM DIN Rail 13"	X	X	X	X	X	X
43	8611-229-0902	3-1/4" X 1" Cable Duct X 9.13"	3	3	3	3	3	3
44	8611-229-3400	3-1/4" X 1" Cable Duct X 34"	2	2	2	2	2	2
51	8607-072	Terminal Block 8-Position	X	X	X	X	X	X
52	8611-255	4-Pin Circuit Board Connector	X	X	X	X	X	X
53	8615-088	Jumper Bar Main Lugs		3	3	3	3	3
54	8615-090	Two Circuit Bus Bar 3-Pole		X	X	X	X	X
55	8615-108	Circuit Breaker 40A 3-Pole	X	X	X	X		
215	8607-059	Terminal Designation (41-50)	2	2	2	2	2	2
216	8611-150	Terminal Block	8	8	8	8	8	8
217	8611-151	End Cap	4	4	4	4	4	4

\* Replacement part will have a letter attached to the end of the part number to designate software version (Example: 8301-112-002A). A software upgrade of all PLCs onsite (units and controllers) should accompany any PLC replacement. Latest revisions of software, change log and instructions are available on the Bard website at <http://www.bardhvac.com/software-download/>

Wiring diagram reference listed under **ELECTRIC HEAT COMPONENTS** on pages 22 – 25.

# CONTROL PANEL - C (460V), N (400V), Q (575V) & V (415/380V) VOLTAGES



SEXP-921 D

This drawing to be used for reference for pages 19, 20 and 21

## CONTROL PANEL – C (460V), N (400V), Q (575V) & V (415/380V) VOLTAGES

Dwg No.	Part Number	Description	W090APC0Z	W090APC09	W090APC18	W090APQ0Z	W090APQ09	W090APQ18	W090APQ36	W090APV0Z	W090APV09	W090APV18	W090AEC18	W090AEV18	W090AEQ18
1	117-404	Control Sub Panel	X	X	X	X	X	X	X	X	X	X	X	X	X
2	113-808	Circuit Breaker Riser	X	X	X	X	X	X	X	X	X	X	X	X	X
3	8301-112-002*	UPC3-C2 MEGA-TEC	X	X	X	X	X	X	X	X	X	X	X	X	X
4	8611-183	2-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X
5	8611-147	3-Pin Circuit Board Connector	2	2	2	2	2	2	2	2	2	2	2	2	2
6	8611-148	4-Pin Circuit Board Connector	3	3	3	3	3	3	3	3	3	3	3	3	3
7	8611-217	5-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X
8	8611-218	6-Pin Circuit Board Connector	2	2	2	2	2	2	2	2	2	2	2	2	2
9	8611-185	8-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X
10	8611-149	9-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X
11	8611-192	3-Pin Circuit Board Connector	2	2	2	2	2	2	2	2	2	2	2	2	2
12	8301-075	USB Micro Cable Female to Male	X	X	X	X	X	X	X	X	X	X	X	X	X
13	8301-081	C.PCOE Expansion PLC Board	X	X	X	X	X	X	X	X	X	X	X	X	X
14	8611-226	Terminal Block Kit for C.PCOE	X	X	X	X	X	X	X	X	X	X	X	X	X
16	8607-070	Power Terminal Block 3-Pole	X	X	X	X	X	X	X	X	X	X	X	X	X
17	8615-095	600V 40A Toggle Disconnect	X	X	X	X	X	X	X	X	X	X	X	X	X
19	8401-037	Contactors 3-Pole 30 Amp	2	2	2	2	2	2	2	2	2	2	2	2	2
20	8401-035	Contactors 3-Pole 25 Amp		1	2		1	2	2		1	2	2	2	2
21	8201-174BX	3 Phase Line Monitor 50/60 HZ	2	2	2	2	2	2	2	2	2	2	2	2	2
22	8407-072	Transformer 460-24 75VA	X	X	X	X	X	X	X	X	X	X	X	X	X
23	8201-171BX	Compressor Control Module	2	2	2	2	2	2	2	2	2	2	2	2	2
24	8201-130	Relay, SPDT, Pilot Duty	2	2	2	2	2	2	2	2	2	2	2	2	2
25	8607-058	Double Level Terminal Block	20	20	20	20	20	20	20	20	20	20	20	20	20
26	8607-060	Terminal Block Insul. 12-Position	X	X	X	X	X	X	X	X	X	X	X	X	X
27	8607-061	Terminal Block 16-Position	X	X	X	X	X	X	X	X	X	X	X	X	X
29	8611-006	Terminal	2	2	2	2	2	2	2	2	2	2	2	2	2
30	8611-203	Jumper 10-Position	X	X	X	X	X	X	X	X	X	X	X	X	X
31	8611-224	Jumper 20-Position	X	X	X	X	X	X	X	X	X	X	X	X	X
32	8611-195	Jumper 4-Position	2	2	2	2	2	2	2	2	2	2	2	2	2
33	8611-194	Jumper 2-Position	X	X	X	X	X	X	X	X	X	X	X	X	X
34	8611-221	End Cover	X	X	X	X	X	X	X	X	X	X	X	X	X
35	8611-144	End Clamp for DIN Rail	11	11	11	11	11	11	11	11	11	11	11	11	11
36	8607-056	Terminal Designation (1-10)	2	2	2	2	2	2	2	2	2	2	2	2	2
37	8607-055	Terminal Designation (11-20)	2	2	2	2	2	2	2	2	2	2	2	2	2
38	8607-054	Terminal Designation (21-30)	2	2	2	2	2	2	2	2	2	2	2	2	2
39	8607-053	Terminal Designation (31-40)	2	2	2	2	2	2	2	2	2	2	2	2	2
41	8611-223	35MM DIN Rail 5"	2	2	2	2	2	2	2	2	2	2	2	2	2
42	8611-228	35MM DIN Rail 13"	X	X	X	X	X	X	X	X	X	X	X	X	X
43	8611-229-0902	3-1/4" X 1" Cable Duct X 9.13"	3	3	3	3	3	3	3	3	3	3	3	3	3
44	8611-229-3400	3-1/4" X 1" Cable Duct X 34"	2	2	2	2	2	2	2	2	2	2	2	2	2
51	8607-072	Terminal Block 8-Position	X	X	X	X	X	X	X	X	X	X	X	X	X
52	8611-255	4-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X
215	8607-059	Terminal Designation (41-50)	2	2	2	2	2	2	2	2	2	2	2	2	2
216	8611-150	Terminal Block	8	8	8	8	8	8	8	8	8	8	8	8	8
217	8611-151	End Cap	4	4	4	4	4	4	4	4	4	4	4	4	4
257	8615-096	Switch Cover Plate	X	X	X	X	X	X	X	X	X	X	X	X	X

\* Replacement part will have a letter attached to the end of the part number to designate software version (Example: 8301-112-002A). A software upgrade of all PLCs onsite (units and controllers) should accompany any PLC replacement. Latest revisions of software, change log and instructions are available on the Bard website at <http://www.bardhvac.com/software-download/>

Wiring diagram reference listed under **ELECTRIC HEAT COMPONENTS** on pages 22 – 25.

# CONTROL PANEL – C (460V), N (400V), Q (575V) & V (415/380V) VOLTAGES

Dwg No.	Part Number	Description	W120APCOZ	W120APCO9	W120APC18	W120APN0Z	W120APN09	W120APN18	W120APQ0Z	W120APQ09	W120APQ18	W120APQ36	W120APV0Z	W120APV09	W120APV18	W120AEC18	W120AEN18	W120AEQ18	W120AEV18
1	117-404	Control Sub Panel	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	113-808	Circuit Breaker Riser	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	8301-112-002*	UPC3-C2 MEGA-TEC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	8611-183	2-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	8611-147	3-Pin Circuit Board Connector	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6	8611-148	4-Pin Circuit Board Connector	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7	8611-217	5-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	8611-218	6-Pin Circuit Board Connector	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
9	8611-185	8-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	8611-149	9-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11	8611-192	3-Pin Circuit Board Connector	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
12	8301-075	USB Micro Cable Female to Male	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13	8301-081	C.PCOE Expansion PLC Board	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14	8611-226	Terminal Block Kit for C.PCOE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16	8607-070	Power Terminal Block 3-Pole	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17	8615-095	600V 40A Toggle Disconnect	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X
17	8615-094	600V 60A Toggle Disconnect													X			X	
19	8401-037	Contactors 3-Pole 30 Amp	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20	8401-035	Contactors 3-Pole 25 Amp		1	2		1	2		1	2	2		1	2	2	2	2	2
21	8201-174BX	3 Phase Line Monitor 50/60 HZ	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
22	8407-072	Transformer 460-24 75VA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23	8201-171BX	Compressor Control Module	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
24	8201-130	Relay, SPDT, Pilot Duty	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
25	8607-058	Double Level Terminal Block	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
26	8607-060	Terminal Block Insul. 12-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27	8607-061	Terminal Block 16-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
29	8611-006	Terminal	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
30	8611-203	Jumper 10-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
31	8611-224	Jumper 20-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
32	8611-195	Jumper 4-Position	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
33	8611-194	Jumper 2-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
34	8611-221	End Cover	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
35	8611-144	End Clamp for DIN Rail	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
36	8607-056	Terminal Designation (1-10)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
37	8607-055	Terminal Designation (11-20)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
38	8607-054	Terminal Designation (21-30)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
39	8607-053	Terminal Designation (31-40)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
41	8611-223	35MM DIN Rail 5"	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
42	8611-228	35MM DIN Rail 13"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
43	8611-229-0902	3-1/4" X 1" Cable Duct X 9.13"	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
44	8611-229-3400	3-1/4" X 1" Cable Duct X 34"	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
51	8607-072	Terminal Block 8-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
52	8611-255	4-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
215	8607-059	Terminal Designation (41-50)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
216	8611-150	Terminal Block	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
217	8611-151	End Cap	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
257	8615-096	Switch Cover Plate	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

\* Replacement part will have a letter attached to the end of the part number to designate software version (Example: 8301-112-002A).  
 A software upgrade of all PLCs onsite (units and controllers) should accompany any PLC replacement. Latest revisions of software, change log and instructions are available on the Bard website at <http://www.bardhvac.com/software-download/>

Wiring diagram reference listed under **ELECTRIC HEAT COMPONENTS** on pages 22 – 25.

Refer to drawing on page 18

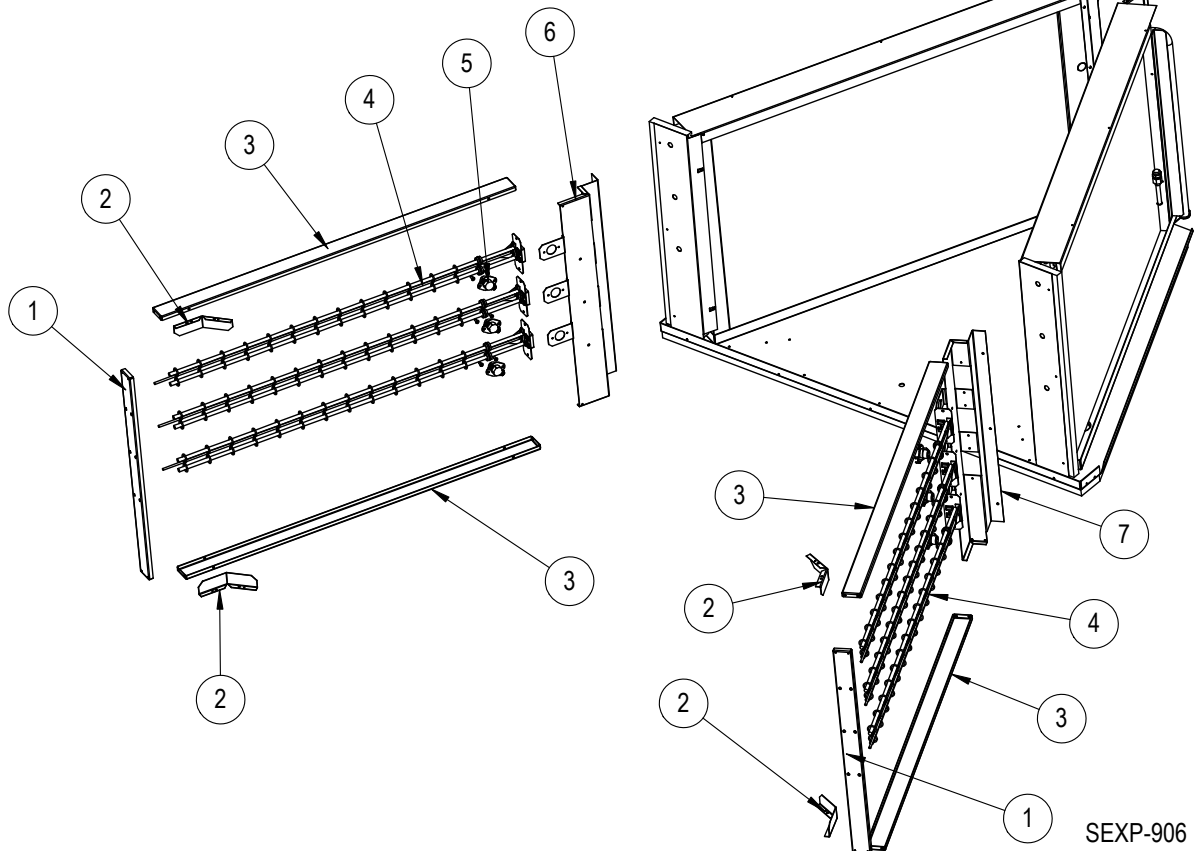
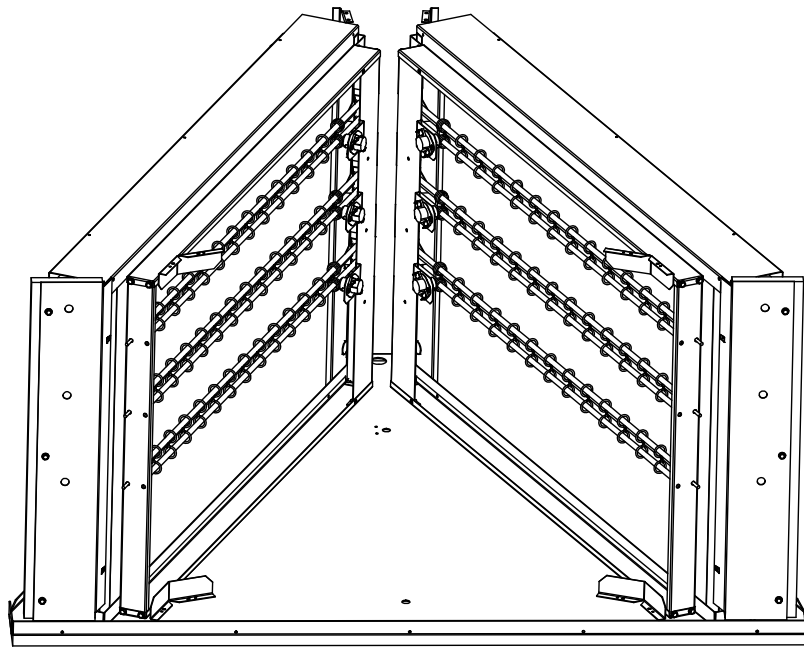
## CONTROL PANEL – C (460V), N (400V), Q (575V) & V (415/380V) VOLTAGES

Dwg No.	Part Number	Description	W150APC0Z	W150APC09	W150APC18	W150APN0Z	W150APN09	W150APN18	W150APQ0Z	W150APQ09	W150APQ18	W150APQ36	W150APV0Z	W150APV09	W150APV18	W150AEC18	W150AEN18	W150AEQ18	W150AEV18
1	117-404	Control Sub Panel	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	113-808	Circuit Breaker Riser	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	8301-112-002*	UPC3-C2 MEGA-TEC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	8611-183	2-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5	8611-147	3-Pin Circuit Board Connector	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6	8611-148	4-Pin Circuit Board Connector	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7	8611-217	5-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	8611-218	6-Pin Circuit Board Connector	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
9	8611-185	8-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10	8611-149	9-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11	8611-192	3-Pin Circuit Board Connector	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
12	8301-075	USB Micro Cable Female to Male	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13	8301-081	C.PCOE Expansion PLC Board	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14	8611-226	Terminal Block Kit for C.PCOE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16	8607-070	Power Terminal Block 3-Pole	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17	8615-095	600V 40A Toggle Disconnect	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19	8401-037	Contactors 3-Pole 30 Amp	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20	8401-035	Contactors 3-Pole 25 Amp		1	2		1	2		1	2	2		1	2	2	2	2	2
21	8201-174BX	3 Phase Line Monitor 50/60 HZ	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
22	8407-072	Transformer 460-24 75VA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23	8201-171BX	Compressor Control Module	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
24	8201-130	Relay, SPDT, Pilot Duty	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
25	8607-058	Double Level Terminal Block	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
26	8607-060	Terminal Block Insul. 12-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27	8607-061	Terminal Block 16-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
29	8611-006	Terminal	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
30	8611-203	Jumper 10-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
31	8611-224	Jumper 20-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
32	8611-195	Jumper 4-Position	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
33	8611-194	Jumper 2-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
34	8611-221	End Cover	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
35	8611-144	End Clamp for DIN Rail	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
36	8607-056	Terminal Designation (1-10)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
37	8607-055	Terminal Designation (11-20)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
38	8607-054	Terminal Designation (21-30)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
39	8607-053	Terminal Designation (31-40)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
41	8611-223	35MM DIN Rail 5"	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
42	8611-228	35MM DIN Rail 13"	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
43	8611-229-0902	3-1/4" X 1" Cable Duct X 9.13"	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
44	8611-229-3400	3-1/4" X 1" Cable Duct X 34"	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
51	8607-072	Terminal Block 8-Position	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
52	8611-255	4-Pin Circuit Board Connector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
215	8607-059	Terminal Designation (41-50)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
216	8611-150	Terminal Block	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
217	8611-151	End Cap	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
257	8615-096	Switch Cover Plate	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

\* Replacement part will have a letter attached to the end of the part number to designate software version (Example: 8301-112-002A). A software upgrade of all PLCs onsite (units and controllers) should accompany any PLC replacement. Latest revisions of software, change log and instructions are available on the Bard website at <http://www.bardhvac.com/software-download/>

Wiring diagram reference listed under **ELECTRIC HEAT COMPONENTS** on pages 22 – 25.

# ELECTRIC HEAT COMPONENTS



SEXP-906

This drawing to be used for reference for pages 23, 24 and 25

# ELECTRIC HEAT COMPONENTS

Dwg No.	Part Number	Description	W090APB0Z	W090APB09	W090APB18	W090AEB18	W090APC0Z	W090APC09	W090APC18	W090AEC18	W090APE0Z	W090APE09	W090APE18	W090AEE18	W090APV0Z	W090APV09	W090APV18	W090AEV18	W090APQ0Z	W090APQ09	W090APQ18	W090APQ36	W090AEQ18	
1	113-759	Heater Assembly Frame, Rear		X	2	2		X	2	2		X	2	2		X	2	2		X	2	2		2
1	113-905	Heater Assembly Frame, Rear																						2
2	113-770	Heater Package Guides		2	4	4		2	4	4		2	4	4		2	4	4		2	4	4		4
3	113-758	Heater Assembly Frame Top/Bottom		2	4	4		2	4	4		2	4	4		2	4	4		2	4	4		4
4	8604-151	Heater Element, 3KW, 208/240V, 2-Term	3	6	6							3	6	6										
4	8604-152	Heater Element, 3KW, 460V, 2-Term					3	6	6						3	6	6							
4	8604-153	Heater Element, 3KW, 575V, 2-Term																	3	6				6
4	8604-161	Heater Element, 6KW, 575V, 2-Term																						6
5	8402-190	Limit Control	3	6			3	6																
5	8402-192	Limit Control									3	6				3	6							
5	8402-198	Limit Control																	3	6				
5	8402-215	Limit Control			6				6				6				6							6
5	8402-216	Limit Control																						6
6	113X756	Right Heater Frame Front			X	X			X	X			X	X			X	X			X			X
6	113X904	Right Heater Frame Front																						X
7	113Y756	Left Heater Frame Front		X	X	X		X	X	X		X	X	X		X	X	X		X	X			X
7	113Y904	Left Heater Frame Front																						X
NS	4212-200	Wiring Diagram	X								X													
NS	4212-201	Wiring Diagram		X								X												
NS	4212-202	Wiring Diagram			X								X											
NS	4212-210	Wiring Diagram				X								X										
NS	4212-300	Wiring Diagram					X								X									
NS	4212-301	Wiring Diagram						X								X								
NS	4212-302	Wiring Diagram							X	X							X	X						
NS	4212-700	Wiring Diagram																	X					
NS	4212-701	Wiring Diagram																		X				
NS	4212-702	Wiring Diagram																			X	X		X

NS – Not Shown

# ELECTRIC HEAT COMPONENTS

Dwg No.	Part Number	Description	W120APB0Z	W120APB09	W120APB18	W120AEB18	W120APC0Z	W120APC09	W120APC18	W120AEC18	W120APE0Z	W120APE09	W120APE18	W120AEE18	W120APN0Z	W120APN09	W120APN18	W120AEN18	W120APV0Z	W120APV09	W120APV18	W120AEV18	W120APQ0Z	W120APQ09	W120APQ18	W120APQ36	W120AEQ18	
1	113-759	Heater Assembly Frame, Rear		X	2	2		X	2	2		X	2	2		X	2	2		X	2	2		X	2	2	2	2
2	113-770	Heater Package Guides		2	4	4		2	4	4		2	4	4		2	4	4		2	4	4		2	4	4	4	4
3	113-758	Heater Assembly Frame Top/Bottom		2	4	4		2	4	4		2	4	4		2	4	4		2	4	4		2	4	4	4	4
4	8604-151	Heater Element, 3KW, 208/240V, 2-Term	3	6	6							3	6	6														
4	8604-152	Heater Element, 3KW, 460V, 2-Term						3	6	6					3	6	6			3	6	6						
4	8604-153	Heater Element, 3 KW, 575V, 2-Term																						3	6	6	6	
5	8402-190	Limit Control	3	6	6		3	6	6						3	6												
5	8402-192	Limit Control									3	6								3	6							
5	8402-198	Limit Control											6									6			3	6	6	
5	8402-215	Limit Control																6				6					6	
6	113X756	Right Heater Frame Front			X	X			X	X			X	X			X	X			X	X			X	X	X	
7	113Y756	Left Heater Frame Front		X	X	X		X	X	X		X	X	X		X	X	X		X	X	X		X	X	X	X	
NS	4212-200	Wiring Diagram	X								X																	
NS	4212-201	Wiring Diagram		X								X																
NS	4212-202	Wiring Diagram			X	X							X	X														
NS	4212-300	Wiring Diagram					X												X									
NS	4212-301	Wiring Diagram						X												X								
NS	4212-302	Wiring Diagram							X	X											X	X						
NS	4212-304	Wiring Diagram													X													
NS	4212-305	Wiring Diagram														X												
NS	4212-306	Wiring Diagram															X	X										
NS	4212-700	Wiring Diagram																					X					
NS	4212-701	Wiring Diagram																						X				
NS	4212-702	Wiring Diagram																							X	X	X	

NS – Not Shown

Refer to drawing on page 22

# ELECTRIC HEAT COMPONENTS

Dwg No.	Part Number	Description	W150APB0Z	W150APB09	W150APB18	W150AEB18	W150APC0Z	W150APC09	W150APC18	W150AEC18	W150APE0Z	W150APE09	W150APE18	W150AEE18	W150APN0Z	W150APN09	W150APN18	W150AEN18	W150APV0Z	W150APV09	W150APV18	W150AEV18	W150APQ0Z	W150APQ09	W150APQ18	W150APQ36	W150AEQ18	
1	113-759	Heater Assembly Frame, Rear	X	2	2		X	2	2		X	2	2		X	2	2		X	2	2		X	2	2	2	2	
2	113-770	Heater Package Guides		2	4	4		2	4	4		2	4	4		2	4	4		2	4	4		2	4	4	4	
3	113-758	Heater Assembly Frame Top/Bottom		2	4	4		2	4	4		2	4	4		2	4	4		2	4	4		2	4	4	4	
4	8604-151	Heater Element, 3KW, 208/240V, 2-Term		3	6	6						3	6	6														
4	8604-152	Heater Element, 3KW, 460V, 2-Term						3	6	6					3	6	6			3	6	6						
4	8604-153	Heater Element, 3 KW, 575V, 2-Term																						3	6	6	6	
5	8402-190	Limit Control		3	6			3	6						3	6												
5	8402-192	Limit Control										3	6							3	6							
5	8402-198	Limit Control												6									3	6	6			
5	8402-215	Limit Control				6				6			6					6				6					6	
6	113X756	Right Heater Frame Front			X	X			X	X			X	X			X	X			X	X			X	X	X	
7	113Y756	Left Heater Frame Front		X	X	X		X	X	X		X	X	X		X	X	X		X	X	X		X	X	X	X	
NS	4212-200	Wiring Diagram	X								X																	
NS	4212-201	Wiring Diagram		X								X																
NS	4212-210	Wiring Diagram			X								X															
NS	4212-215	Wiring Diagram				X																						
NS	4212-216	Wiring Diagram													X													
NS	4212-300	Wiring Diagram					X												X									
NS	4212-301	Wiring Diagram						X												X								
NS	4212-302	Wiring Diagram							X	X											X	X						
NS	4212-304	Wiring Diagram													X													
NS	4212-305	Wiring Diagram														X												
NS	4212-306	Wiring Diagram															X	X										
NS	4212-700	Wiring Diagram																					X					
NS	4212-701	Wiring Diagram																						X				
NS	4212-702	Wiring Diagram																							X	X	X	

NS – Not Shown

Refer to drawing on page 22

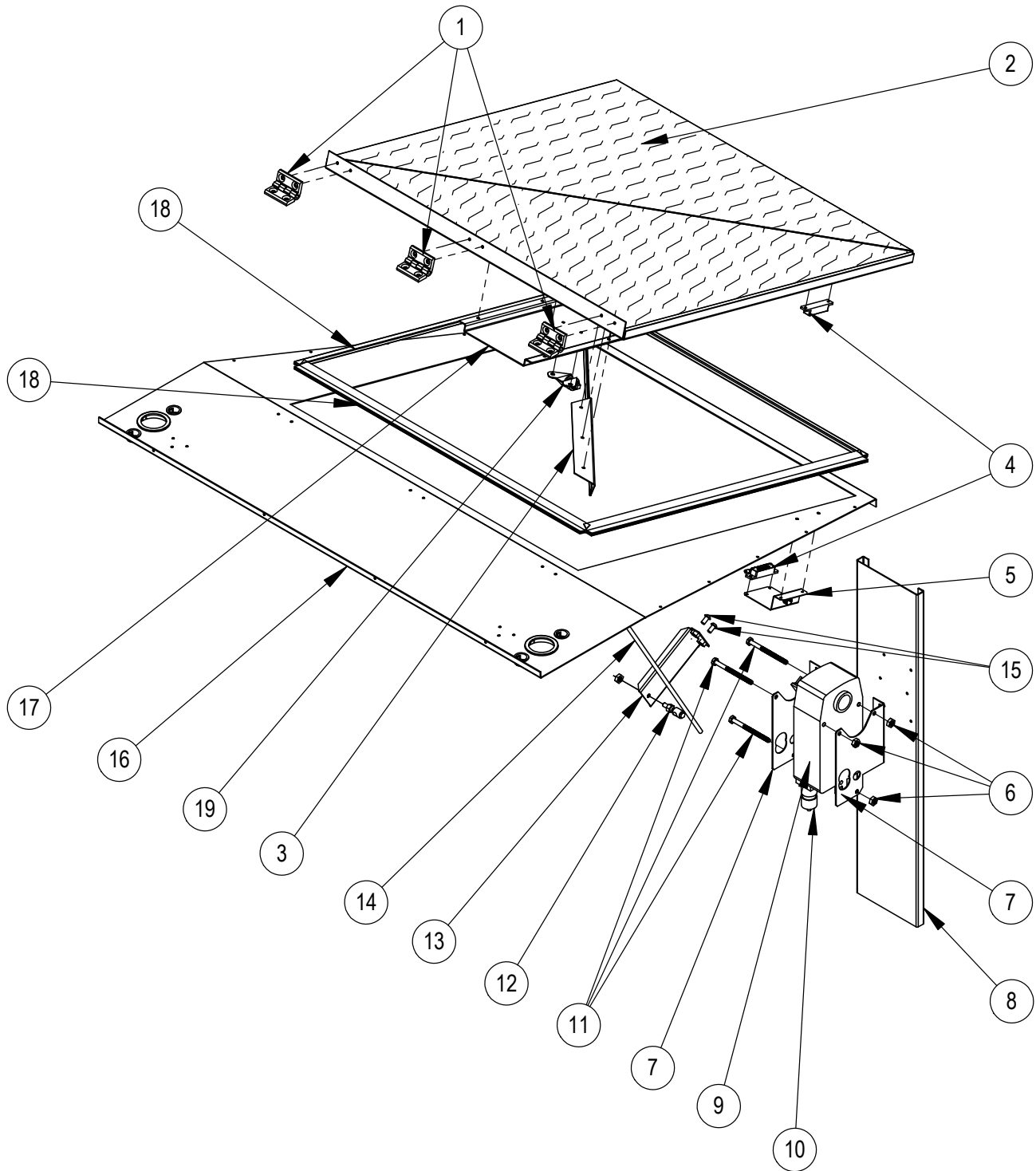


## RIGHT AND LEFT INTAKE DAMPER ASSEMBLIES

Dwg. No.	Part Number	Description	W090A	W120A	W150A
			****E	****E	****E
1	135-388	Recessed Actuator Box		2	
2	1012-201	1/4"-20 Steel Keps Nut		4	
3	8602-040	BKP-24 Butterfly Pivot		8	
4	137-904	Intake Partition		2	
5	1921-067-0900	9" Damper Blade Seal		4	
6	8406-150	Blade Switch		2	
7	1921-067-3012	30-3/4" Damper Blade Seal		4	
8	141-486	Damper Blade Support		2	
9	8602-042	1/4" X 6" Rod		2	
10	139-396	Damper Blade		2	
11	8602-008	Ball Joint		2	
12	1012-174	1/4"-20 x 3-1/4" Bolt		4	
13	8602-078	Crank Arm		2	
14	910-2082	Direct Coupled Actuator w/Crank Arm (Right Side)		X	
14	910-2083	Direct Coupled Actuator w/Crank Arm (Left Side)		X	
14	8602-098	Actuator Only		X	
15	113-727	Actuator Mounting Bracket		2	
16	113-730	Hinge Bracket		2	
17	1012-343	1/4"-28 x 1/2" Bolt		6	
18	1012-348	1/2" x 3/4" Nylon Flat Washer		2	

**NOTE:** Quantities listed above are totals for both right and left intake damper assemblies.

# EXHAUST DAMPER ASSEMBLY



SEXP-901 A

# EXHAUST DAMPER ASSEMBLY

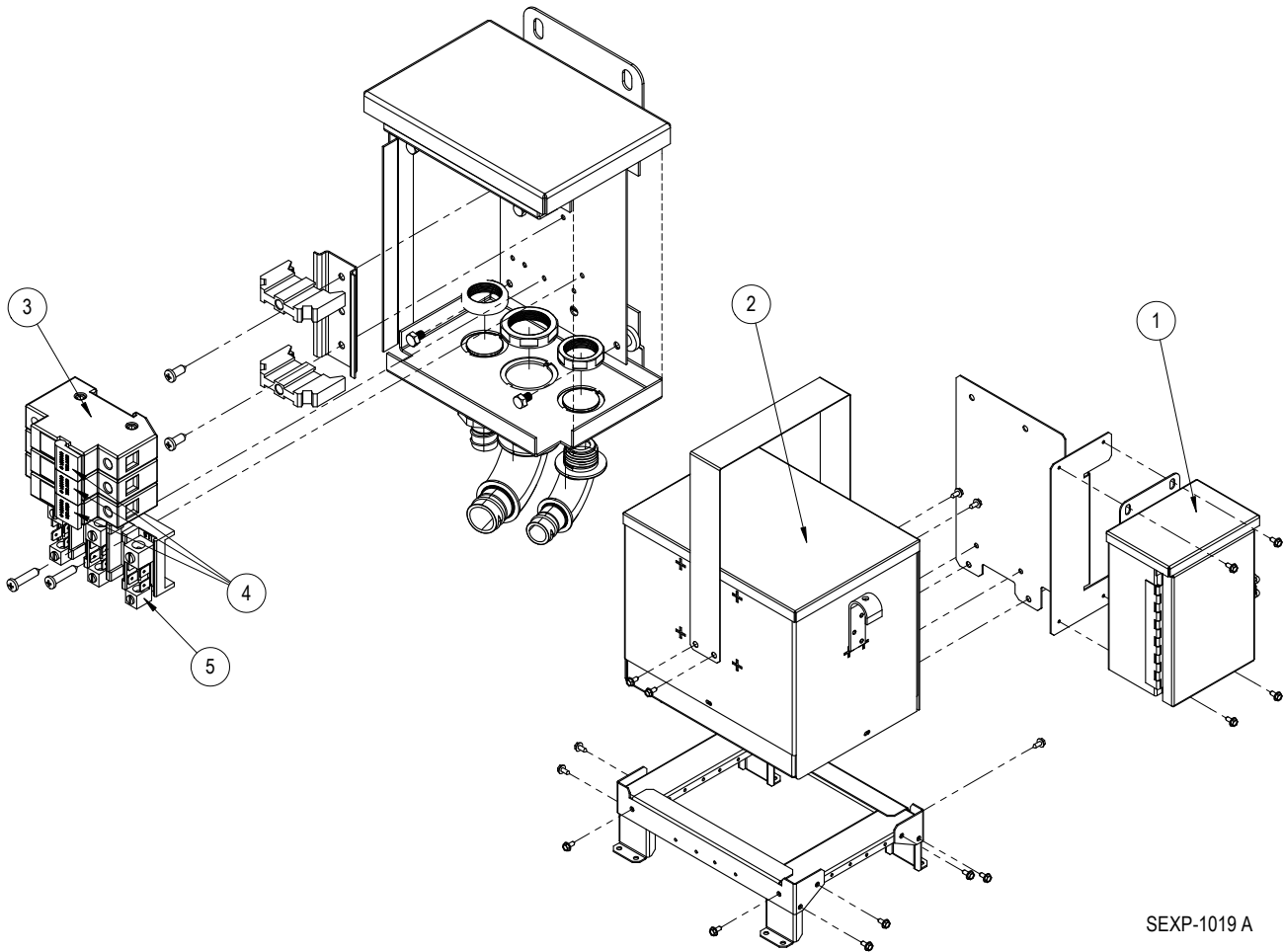
Dwg. No.	Part Number	Description	W090A ****E	W120A ****E	W150A ****E	W090A ****B	W120A ****B	W150A ****B
1	5400-010	Hinges	3					
2	139-475BX	Exhaust Damper Blade w/Bracket and Insulation	X					
2	139-476BX ①	Exhaust Damper Blade w/Bracket and Insulation	X					
3	141-601BX	Exhaust Damper Blade Stiffening Angle	2					
3	141-603BX ①	Exhaust Damper Blade Stiffening Angle	2					
4	8406-150	Blade Switch	X					
5	113-743	Blade Switch Bracket	X					
5	113-900 ①	Blade Switch Bracket	X					
6	1012-201	1/4"-20 Steel Keps Nut	3					
6	1012-365 ①	1/4"-20 Steel Keps Nut	3					
7	113-728	Actuator Mounting Bracket	2					
7	113-844 ①	Actuator Mounting Bracket	2					
8	141-485	Actuator Mounting Plate	X					
8	141-543 ①	Actuator Mounting Plate	X					
9	8602-093	Actuator 2-10V 88 IN/LB	X					
10	8602-100	Terminal Strip Cover	X					
11	1012-174	1/4"-20 x 3-1/4" Bolt	3					
11	1012-366 ①	1/4"-20 x 3-1/4" Bolt	3					
12	8602-008	Ball Joint	X					
13	139-399	Actuator Arm	2					
13	139-438 ①	Actuator Arm	2					
14	8602-097	1/4" x 16-5/8" Rod	X					
NS	1012-348	1/2" x 3/4" Nylon Flat Washer	2					
15	1012-351	1/4"-20 X 1/2" BTNHD Cap Screw	2					
16	121-655BX	Condenser Partition (Economizer)	X					
16	121-656BX ①	Condenser Partition (Economizer)	X					
16	S121-581	Condenser Partition (Non-Economizer)					X	
16	521-634 ①	Condenser Partition (Non-Economizer)					X	
17	141-487	Exhaust Actuator Support	X					
17	141-544 ①	Exhaust Actuator Support	X					
18	1921-067-2513	25-13/16" Damper Blade Seal	4					
19	8602-040	Butterfly Pivot	X					

① Used with stainless steel cabinet option

NS – Not Shown

# 575V TRANSFORMER ASSEMBLY

## 910-2185 575V Transformer/Junction Box Assembly



SEXP-1019 A

Dwg No.	Part Number	Description	W090A * Q	W120A * Q	W150A * Q
1	8614-063	Junction Box w/Hinged Cover	X	X	X
2	8407-079	Transformer 3PH 600V/460V 6 kVA	2	2	2
3	8614-062	3-Pole Fuse Holder	X	X	X
4	8614-070	8 Amp Class CC Fuse	3	3	3
5	8607-014	3 Terminal Block 240V	X	X	X