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# REPLACEMENT PARTS MANUAL

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## 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

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### General Notes

- Revised and/or additional pages may be issued from time to time.
- A complete and current manual consists of pages shown in the following contents section.

### Important

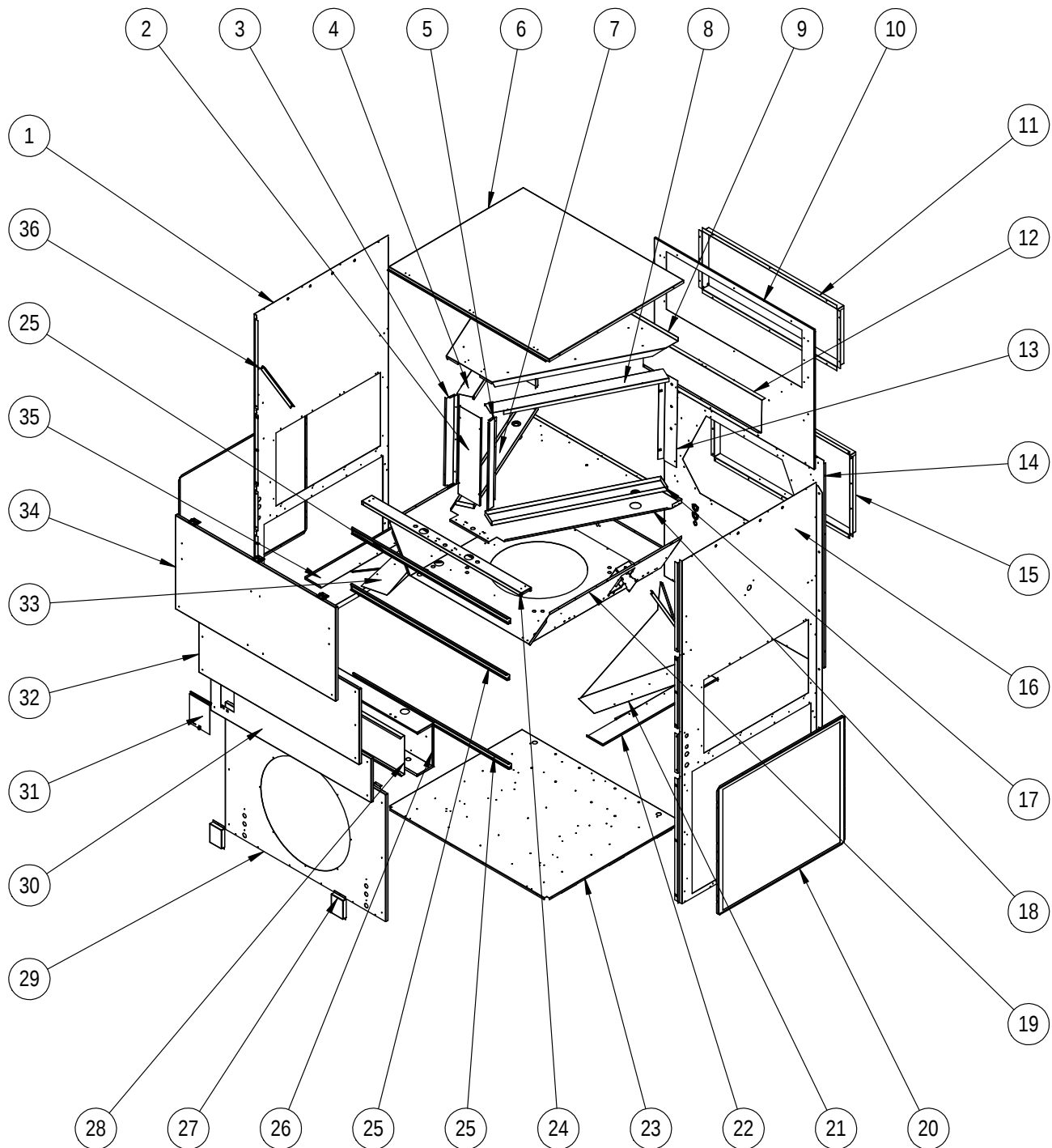
- Contact the installing and/or local Bard distributor for all parts requirements. Make sure to have the complete model and serial number available from the unit rating plates.



Bard Manufacturing Company, Inc.  
Bryan, Ohio 43506  
www.bardhvac.com

Manual: 2110-1451P  
Supersedes: 2110-1451O  
Date: 7-20-22

# 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      | 521-578       | Blower Partition (Economizer)          | X          | X          | X          |            |            |            |
| 19      | 521-580       | 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          |            |            |
| 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          |

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

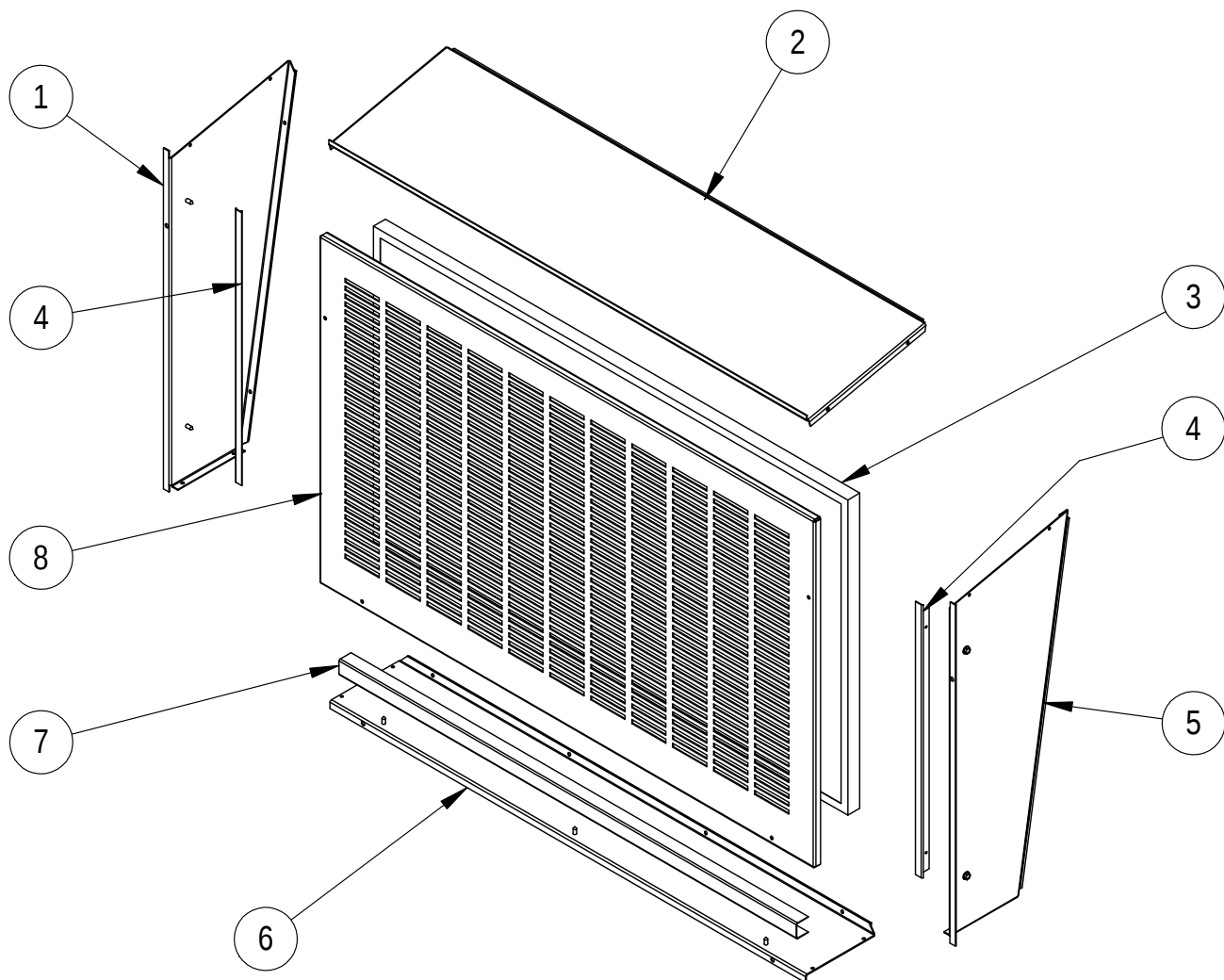
NS – Not Shown

**Refer to drawing on page 2**

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## ECONOMIZER INTAKE HOODS

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SEXP-899

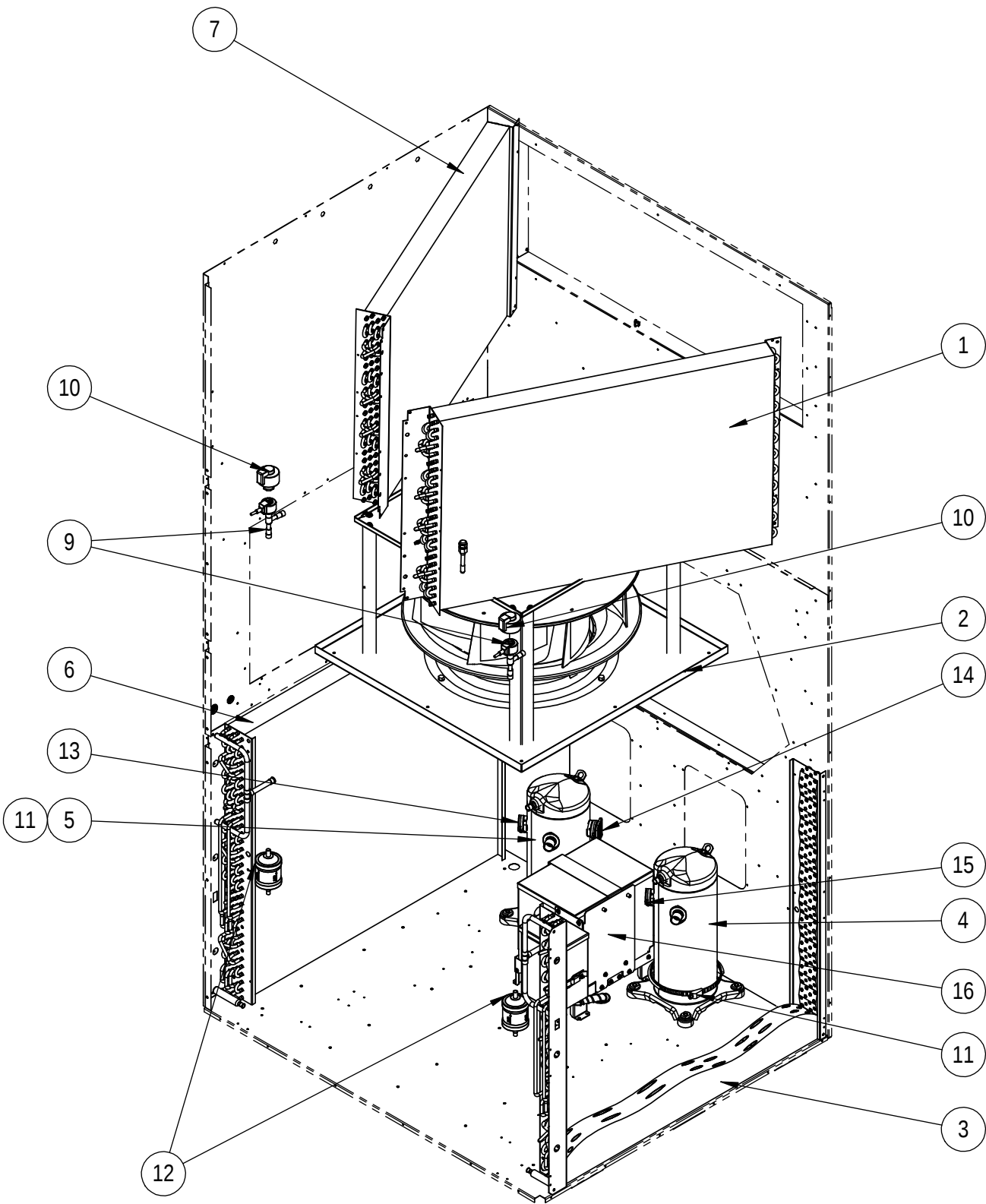
## ECONOMIZER INTAKE HOODS

| Dwg No. | Part Number  | Description             | W090A ***E | W120A ***E | W150A ***E |
|---------|--------------|-------------------------|------------|------------|------------|
| 1       | 101-1039-* ① | Left Side               | X          | X          | X          |
| 1       | 101-1120 ②   | Left Side               | X          | X          | X          |
| 2       | 107-380-* ①  | Econ Hood Top           | X          | X          | X          |
| 2       | 107-402 ②    | Econ Hood Top           | X          | X          | X          |
| 3       | 7003-081     | Mist Eliminator         | X          | X          | X          |
| 4       | 105-1342     | Side Filter Angle       | X          | X          | X          |
| 4       | 105-1525 ②   | Side Filter Angle       | X          | X          | X          |
| 5       | 101-1040-* ① | Right Side              | X          | X          | X          |
| 5       | 101-1121 ②   | Right Side              | X          | X          | X          |
| 6       | 127-571-* ①  | Econ Hood Bottom        | X          | X          | X          |
| 6       | 127-603 ②    | Econ Hood Bottom        | X          | X          | X          |
| 7       | 113-725      | Mist Eliminator Support | X          | X          | X          |
| 7       | 113-901 ②    | Mist Eliminator Support | X          | X          | X          |
| 8       | 119-122-* ①  | Front Grille            | X          | X          | X          |
| 8       | 119-153 ②    | Front Grille            | X          | X          | X          |

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② Components are manufactured from stainless steel Code "S"

# SYSTEM COMPONENTS



SEXP-898 C

# SYSTEM COMPONENTS

| Dwg.<br>No. | Part Number   | Description                                         | 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 |
|-------------|---------------|-----------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1           | 917-0351BX    | Right Evaporator Coil (Green Hydrophillic Coated) ① | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       |
| 1           | 917-0362BX    | Right Evaporator Coil (Phenolic Coated) ①           | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       |
| 1           | 917-0466BX    | 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           | 917-0468BX    | Right Evaporator Coil (Phenolic Coated) ②           | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       |
| 2           | S5154-008-001 | Indoor Blower Assembly                              | X       |         | X       |         | X       |         | X       |         | X       | X       | X       | X       |         | X       |         | X       |         |
| 2           | S5154-009-001 | Indoor Blower Assembly                              |         | X       |         | X       | X       |         | X       |         | X       | X       | X       |         | X       |         | X       | X       | X       |
| 3           | 5051-220BX    | Right Condenser Coil                                | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       |         |         |         |         |         |         |
| 3           | 5054-220BX    | Right Condenser Coil (Phenolic Coated)              | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       |         |         |         |         |         |         |
| 3           | 917-0420      | Right Condenser Coil                                |         |         |         |         |         |         |         |         |         |         |         | X       | X       | X       | X       | X       | X       |
| 4           | 8000-333      | 1-Stage Compressor (ZP42K5E-TF5-130)                | X       |         | X       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 4           | 8000-334      | 1-Stage Compressor (ZP42K5E-TFD-130)                |         | X       |         | X       |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 4           | 8000-420      | 1-Stage Compressor (ZP42K5E-TFE-130)                |         |         |         |         | X       |         |         |         |         |         |         |         |         |         |         |         |         |
| 4           | 8000-429      | 1-Stage Compressor (ZP57K5E-TF5-130)                |         |         |         |         |         | X       |         | X       |         |         |         |         |         |         |         |         |         |
| 4           | 8000-430      | 1-Stage Compressor (ZP57K5E-TFD-130)                |         |         |         |         |         |         | X       |         |         | X       |         |         |         |         |         |         |         |
| 4           | 8000-431      | 1-Stage Compressor (ZP57K5E-TFE-130)                |         |         |         |         |         |         |         |         |         |         | X       |         |         |         |         |         |         |
| 4           | 8000-404      | 1-Stage Compressor (ZP67KCE-TF5-130)                |         |         |         |         |         |         |         |         |         |         |         | X       |         | X       |         |         |         |
| 4           | 8000-405      | 1-Stage Compressor (ZP67KCE-TFD-130)                |         |         |         |         |         |         |         |         |         |         |         |         | X       |         |         | X       |         |
| 4           | 8000-418      | 1-Stage Compressor (ZP67KCE-TFE-130)                |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         | X       | X       |
| 4           | 8000-460      | 1-Stage Compressor (ZP61K5E-TF7-130)                |         |         |         |         |         |         |         |         | X       |         |         |         |         |         |         |         | X       |
| 4           | 8000-461      | 1-Stage Compressor (ZP67KCE-TF7-130)                |         |         |         |         |         |         |         |         |         |         |         |         |         |         | X       |         |         |
| 5           | 8000-383      | 2-Stage Compressor (ZPS40K6E-TF5-130)               | X       |         | X       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 5           | 8000-384      | 2-Stage Compressor (ZPS40K6E-TFD-130)               |         | X       |         | X       |         |         |         |         |         |         |         |         |         |         |         |         |         |
| 5           | 8000-445      | 2-Stage Compressor (ZPS40K6E-TFE-130)               |         |         |         |         | X       |         |         |         |         |         |         |         |         |         |         |         |         |
| 5           | 8000-397      | 2-Stage Compressor (ZPS60K5E-TF5-130)               |         |         |         |         |         | X       |         | X       |         |         |         |         |         |         |         |         |         |
| 5           | 8000-399      | 2-Stage Compressor (ZPS60K5E-TFD-130)               |         |         |         |         |         |         | X       |         |         | X       |         |         |         |         |         |         |         |
| 5           | 8000-432      | 2-Stage Compressor (ZPS60K5E-TFE-130)               |         |         |         |         |         |         |         |         |         |         | X       |         |         |         |         |         |         |
| 5           | 8000-446      | 2-Stage Compressor (ZPS67KCE-TF5-250)               |         |         |         |         |         |         |         |         |         |         |         | X       |         | X       |         |         |         |
| 5           | 8000-447      | 2-Stage Compressor (ZPS67KCE-TFD-250)               |         |         |         |         |         |         |         |         |         |         |         |         | X       |         |         | X       |         |
| 5           | 8000-448      | 2-Stage Compressor (ZPS67KCE-TFE-130)               |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         | X       |
| 5           | 8000-460      | 1-Stage Compressor (ZP61K5E-TF7-130)                |         |         |         |         |         |         |         |         | X       |         |         |         |         |         | X       |         |         |
| 5           | 8000-461      | 1-Stage Compressor (ZP67KCE-TF7-130)                |         |         |         |         |         |         |         |         |         |         |         |         |         |         | X       |         |         |
| 6           | 5051-219BX    | Left Condenser Coil                                 | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       |         |         |         |         |         |         |
| 6           | 5054-219BX    | Left Condenser Coil (Phenolic Coated)               | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       |         |         |         |         |         |         |
| 6           | 917-0419      | Left Condenser Coil                                 |         |         |         |         |         |         |         |         |         |         |         | X       | X       | X       | X       | X       | X       |
| 7           | 917-0352BX    | Left Evaporator Coil (Green Hydrophillic Coated) ①  | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       |
| 7           | 917-0363BX    | Left Evaporator Coil (Phenolic Coated) ①            | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       | O       |
| 7           | 917-0467BX    | 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           | 917-0469BX    | Left Evaporator Coil (Phenolic Coated) ②            | 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       | 2       |         |         |         |         |         |         |         |         |         |         |         |         |
| 9           | 5651S248      | Electronic Expansion Valve                          |         |         |         |         |         | 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          | 3000-1606     | LH Compressor Power Plug                            | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       | X       |
| 14          | 3000-1604     | LH Compressor Staging Solenoid Plug                 | X       | X       | X       | X       | X       | X       | X       |         |         | X       | X       | X       | X       | X       |         | X       | X       |
| 15          | 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) ③               | 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) ③               | 4       | 4       | 4       | 4       | 4       | 4       | 4       | 4       | 4       | 4       | 4       | 4       | 4       | 4       | 4       | 4       | 4       |

NS – Not Shown

① – Unit serial number before D22

② – Unit serial number after D22

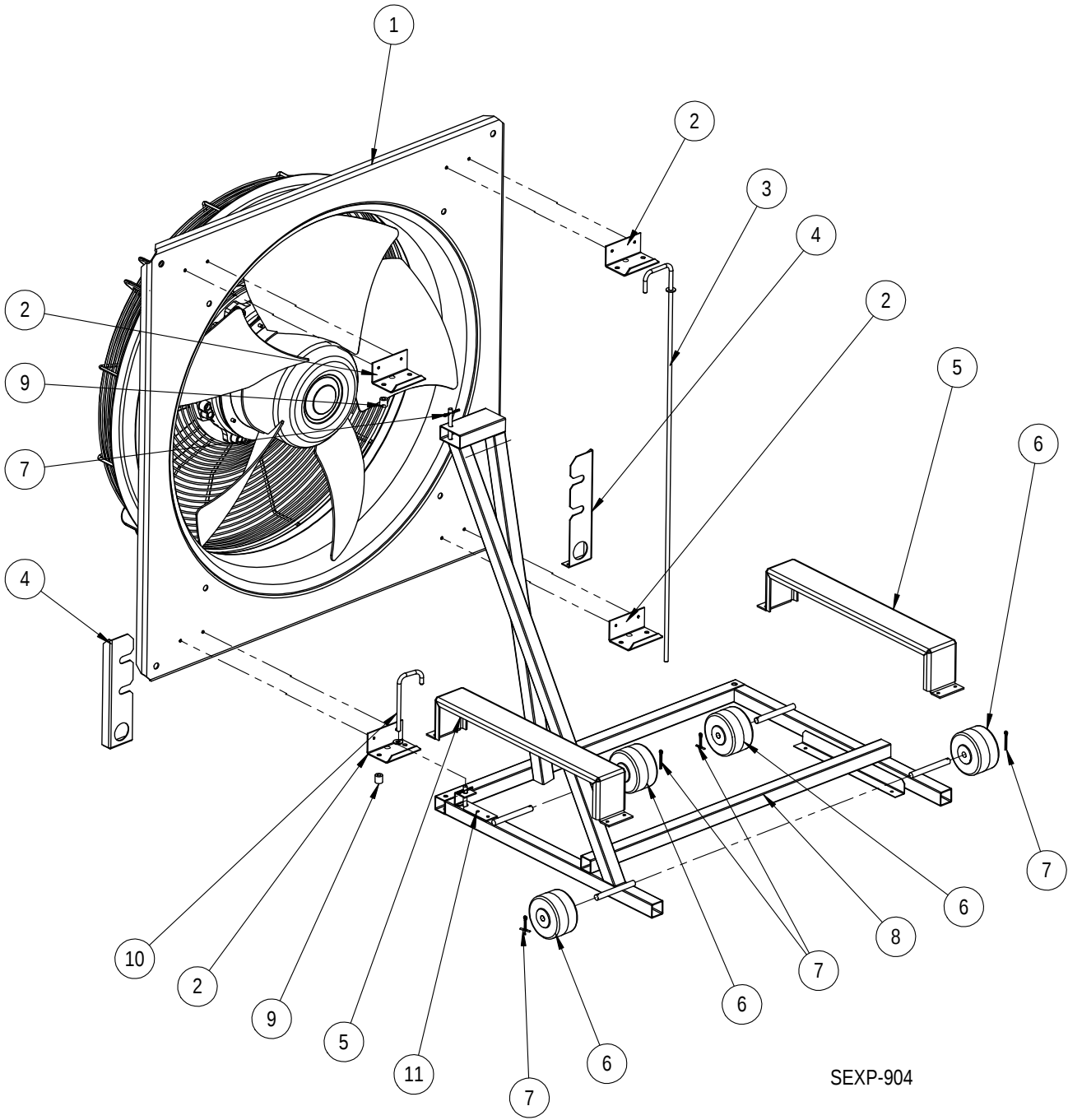
③ – Optional on these models

X – Standard Components

O – Optional Components

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

# FAN SYSTEM COMPONENTS



SEXP-904

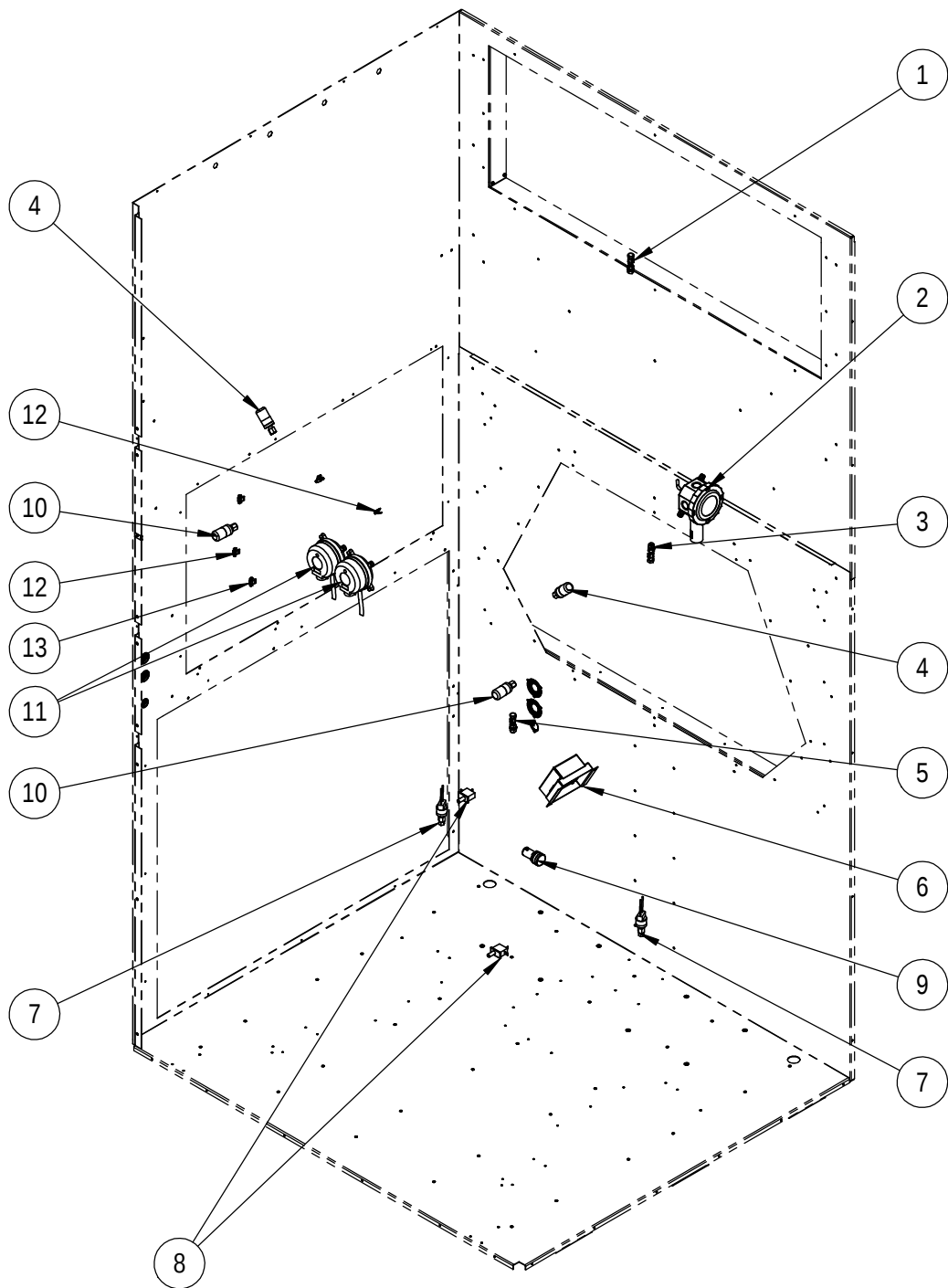
# FAN SYSTEM COMPONENTS

| 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<br>(includes Dwg. No. 2, 3 & 10)        | X       | X       | X       |         |         |         | X       | X       | X       |         |         |         |         |         |         |         |         |
| 1       | S922-0001-003 ① | Coated Fan & Motor Assembly<br>(includes Dwg. No. 2, 3 & 10) | X       | X       | X       |         |         |         | X       | X       | X       |         |         |         |         |         |         |         |         |
| 1       | S922-0002-001   | Fan & Motor Assembly<br>(includes Dwg. No. 2, 3 & 10)        |         |         |         | X       | X       | X       |         |         |         | X       | X       | X       | X       | X       | X       | X       | X       |
| 1       | S922-0002-003 ① | Coated Fan & Motor Assembly<br>(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



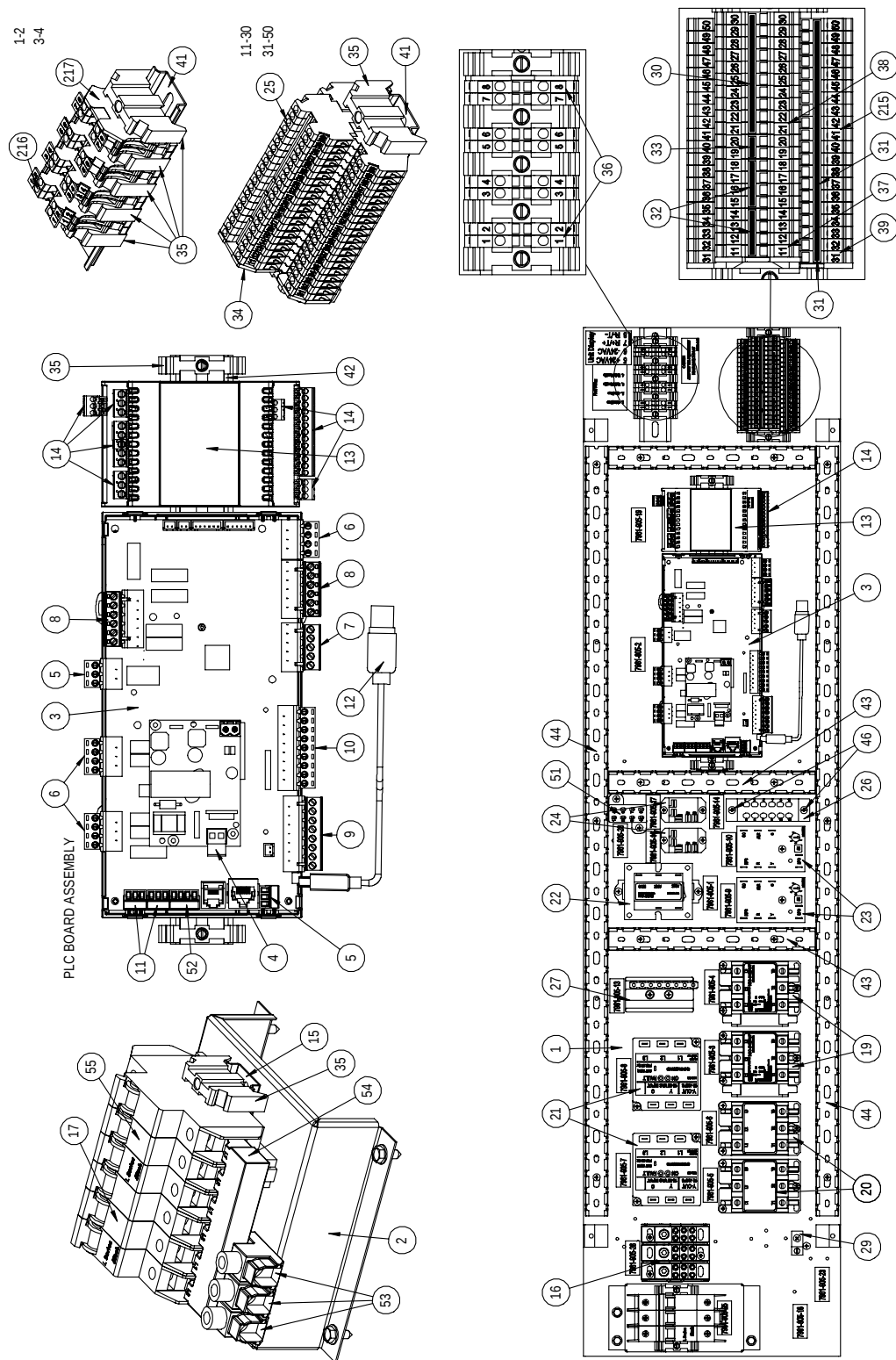
SEXP-905

## 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<br>W090APE0Z | W090APB09 | W090APB18<br>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       | 8301-099-002* | 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      | Contacto 3-Pole 30 Amp            | 2                      | 2         | 2                      | 2         | 2         |
| 20      | 8401-035      | Contacto 25 Amp 3-Pole            |                        | X         | 2                      | 2         | 2         |
| 21      | 8201-126      | 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: 8301-099-002A). 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<br>W120APE0Z | W120APB09 | W120APB18<br>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       | 8301-099-002* | 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      | Contactor 3-Pole 30 Amp           | 2                      | 2         | 2                      | 2         | 2         |
| 20      | 8401-035      | Contactor 25 Amp 3-Pole           |                        | X         | 2                      | 2         | 2         |
| 21      | 8201-126      | 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: 8301-099-002A). 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.

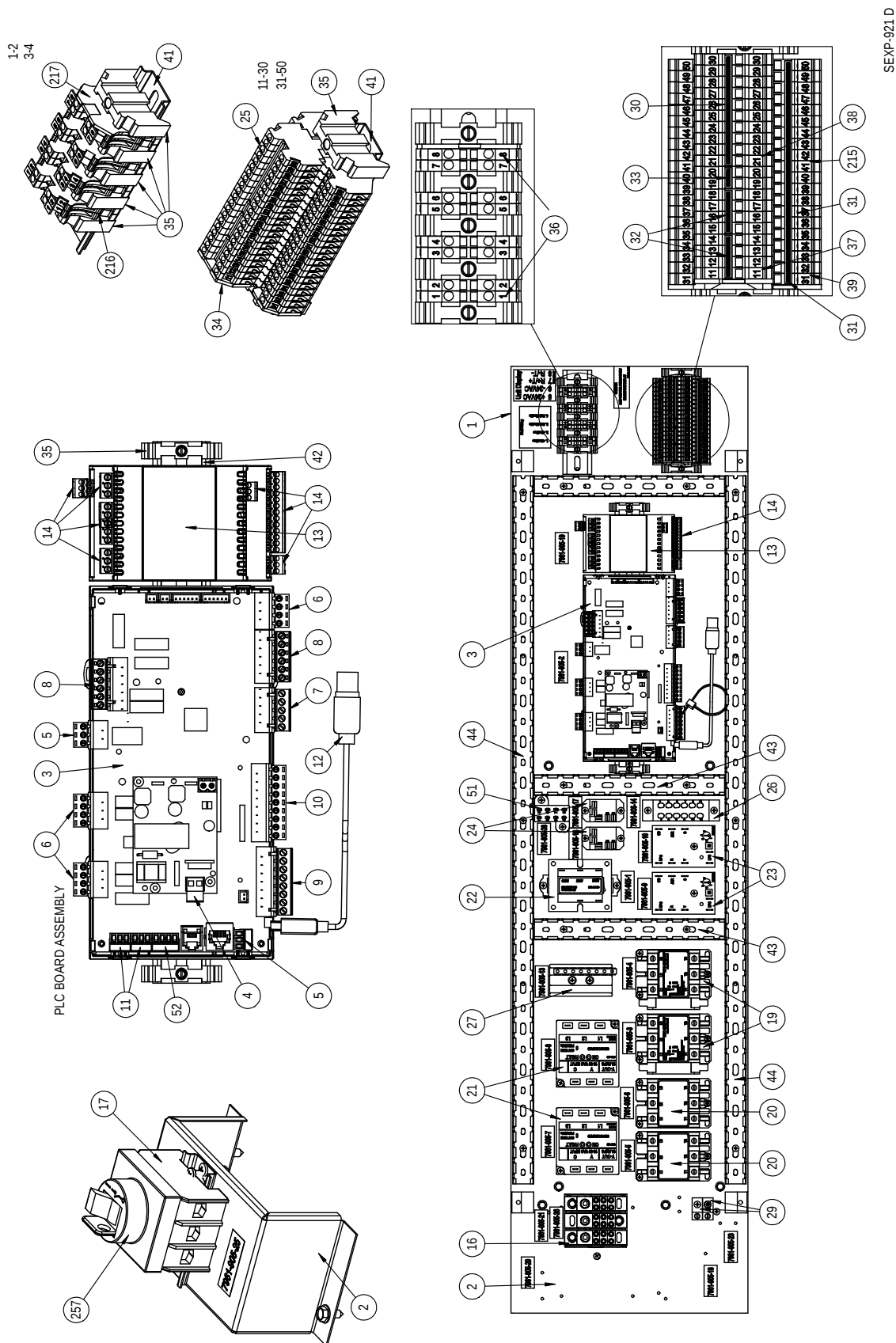
## CONTROL PANEL – B (230V/208V) & E (220V/200V) VOLTAGES

| Dwg No. | Part Number   | Description                       | W150APB0Z<br>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       | 8301-099-002* | 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      | Contactor 3-Pole 30 Amp           | 2                      | 2         | 2         | 2         | 2         | 2         |
| 20      | 8401-035      | Contactor 25 Amp 3-Pole           |                        | X         | 2         | 2         | 2         | 2         |
| 21      | 8201-126      | 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: 8301-099-002A). 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



## 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       | 8301-099-002* | 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      | Contactor 3-Pole 30 Amp           | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         |
| 20      | 8401-041      | Contactor 40 Amp 3-Pole           |           | 1         | 2         |           | 1         | 2         | 2         |           | 1         | 2         | 2         | 2         | 2         |
| 21      | 8201-126      | 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: 8301-099-002A).  
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                       | W120APC0Z | W120APC09 | 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       | 8301-099-002* | 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      | Contactor 3-Pole 30 Amp           | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         |
| 20      | 8401-041      | Contactor 40 Amp 3-Pole           |           | 1         | 2         |           | 1         | 2         |           | 1         | 2         | 2         |           | 1         | 2         | 2         | 2         | 2         | 2         |
| 21      | 8201-126      | 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: 8301-099-002A).  
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.

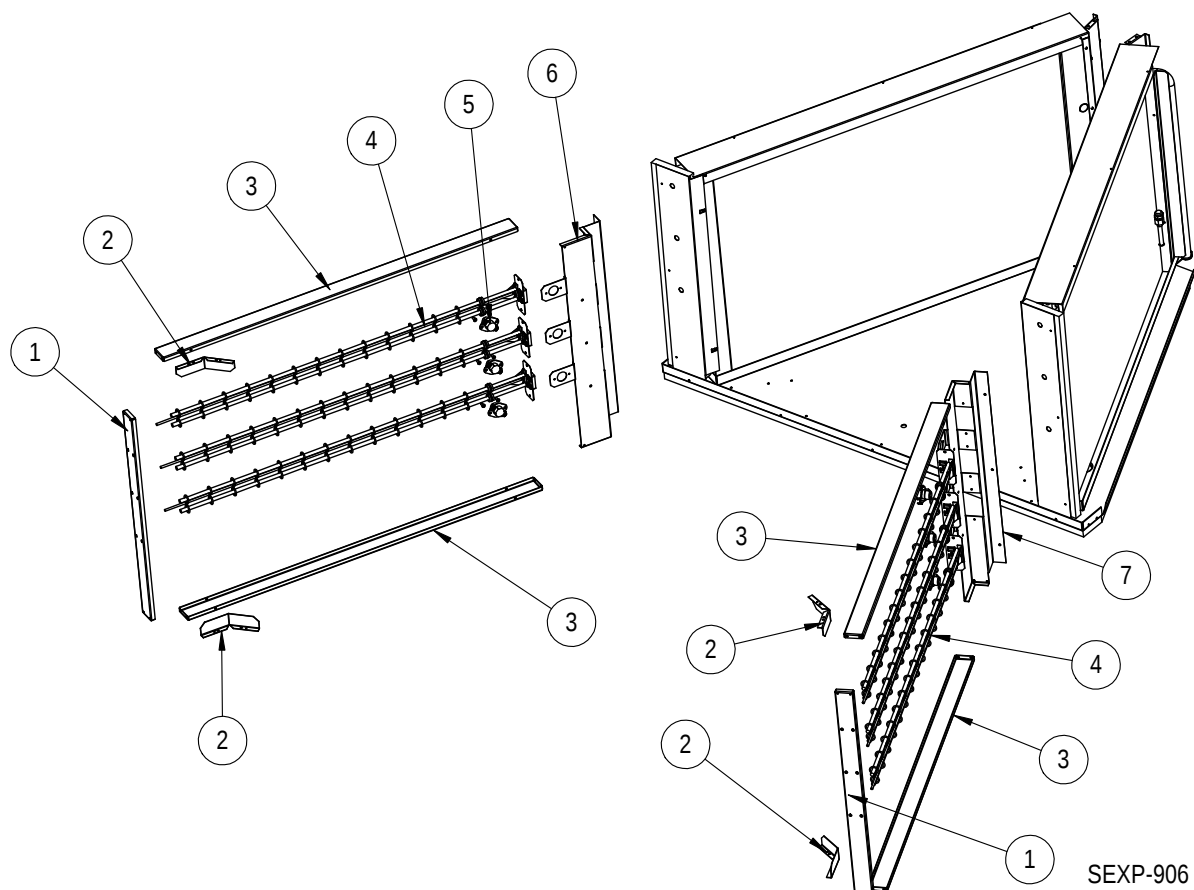
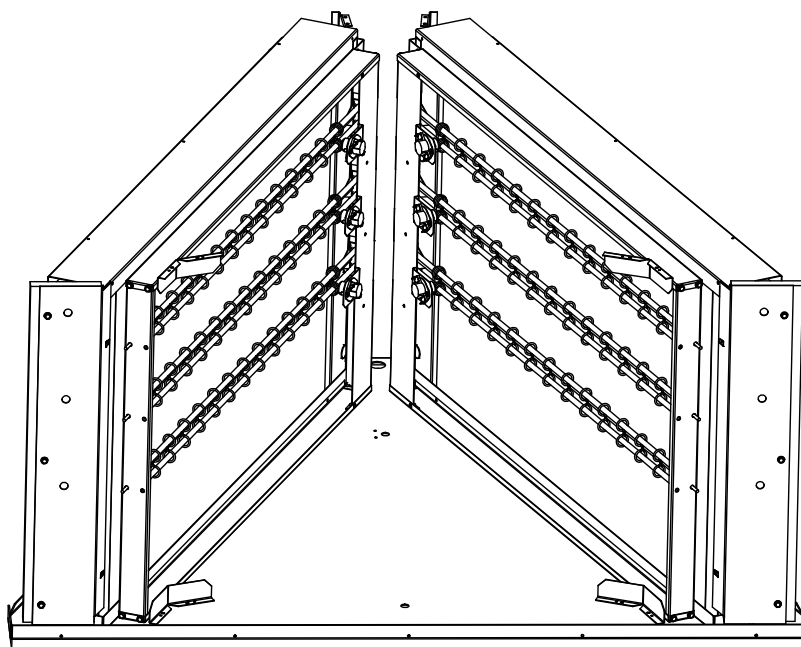
## CONTROL PANEL – C (460V), N (400V), Q (575V) & V (415/380V) VOLTAGES

| Dwg No. | Part Number   | Description                       | 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       | 8301-099-002* | 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      | 8401-041      | Contactors 40 Amp 3-Pole          |           | 1         | 2         |           | 1         | 2         |           | 1         | 2         | 2         |           | 1         | 2         | 2         | 2         | 2         | 2         |
| 21      | 8201-126      | 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: 8301-099-002A).  
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

# 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       | 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         |           |           |           |           |           |           | 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         |           | 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       | 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         | 6         |           |           | 3         | 6         | 6         |           |           |           |           |           | 3         | 6         |           |           |           |           |           |           |           |           |           |           |
| 5       | 8402-192    | Limit Control                         |           |           |           |           |           |           |           |           |           | 3         | 6         |           |           |           |           |           |           | 3         | 6         |           |           |           |           |           |           |
| 5       | 8402-198    | Limit Control                         |           |           |           |           |           |           |           |           |           |           |           | 6         |           |           |           | 6         |           |           |           | 6         |           | 3         | 6         | 6         | 6         |
| 5       | 8402-215    | Limit Control                         |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 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

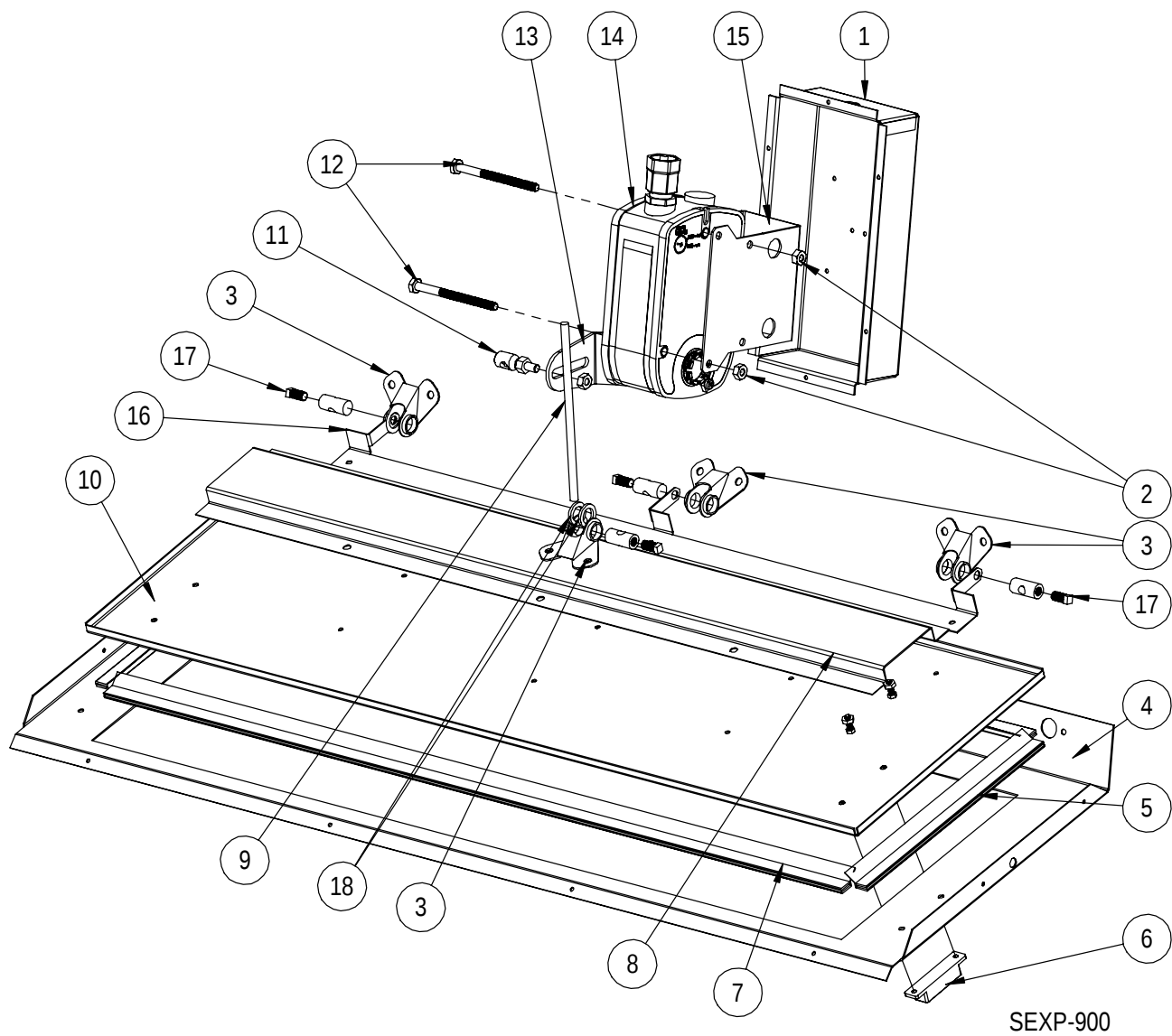
| Dwg No. | Part Number | Description                           | W150APB0Z | W150APB09 | W150APB18 | W150AEB18 | W150APC0Z | W150APC09 | W150APC18 | W150AEC18 | W150APE0Z | W150APE09 | W150APE18 | W150AEE18 | W150APN0Z | W150APN09 | W150APN18 | W150AEN18 | W150APV0Z | W150APV09 | W150APV18 | W150AEV18 | 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         | 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         |           |           | 3         | 6         |           |           |           |           |           |           | 3         | 6         |           |           |           |           |           |           |           |           |           |           |   |
| 5       | 8402-192    | Limit Control                         |           |           |           |           |           |           |           |           |           | 3         | 6         |           |           |           |           |           |           | 3         | 6         |           |           |           |           |           |           |   |
| 5       | 8402-198    | Limit Control                         |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           | 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

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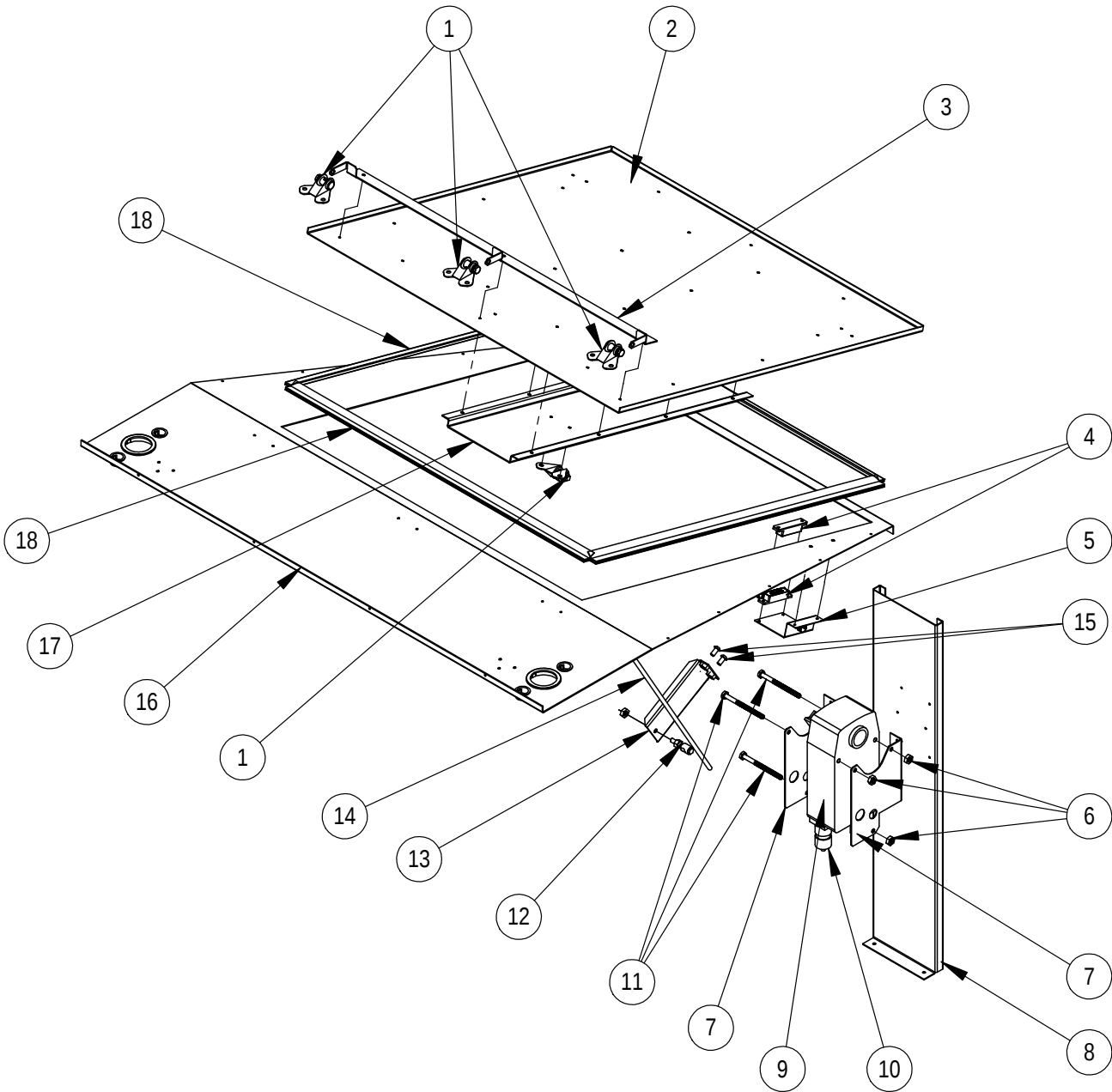
## RIGHT AND LEFT INTAKE DAMPER ASSEMBLIES

| Dwg. No. | Part Number   | Description                                      | W090A *** E |
|----------|---------------|--------------------------------------------------|-------------|
|          |               |                                                  | W120A *** E |
|          |               |                                                  | W150A *** 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

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SEXP-901

# EXHAUST DAMPER ASSEMBLY

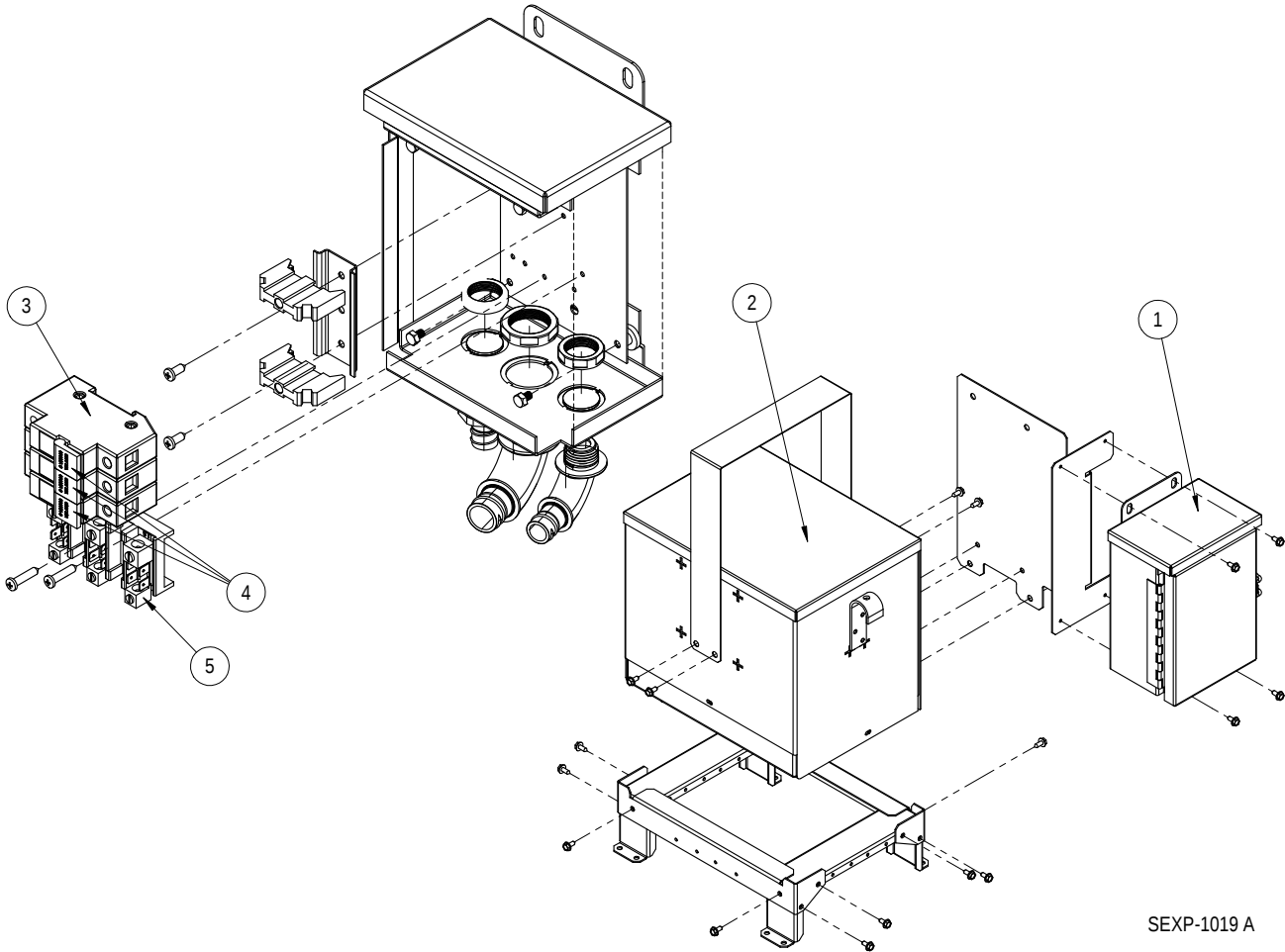
| Dwg. No. | Part Number   | Description                           | W090A *** E | W120A *** E | W150A *** E | W090A *** B | W120A *** B | W150A *** B |
|----------|---------------|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
|          |               |                                       | 4           |             |             |             |             |             |
| 1        | 8602-040      | BKP-24 Butterfly Pivot                |             |             |             |             |             |             |
| 2        | 539-395       | Exhaust Damper Blade                  | X           |             |             |             |             |             |
| 2        | 539-450 ①     | Exhaust Damper Blade                  | X           |             |             |             |             |             |
| NS       | 113-747       | Exhaust Damper Blade Stiffening Angle | 2           |             |             |             |             |             |
| NS       | 113-899 ①     | Exhaust Damper Blade Stiffening Angle | 2           |             |             |             |             |             |
| 3        | 113-731       | Hinge Bracket                         | X           |             |             |             |             |             |
| 3        | 113-793 ①     | Hinge Bracket                         | X           |             |             |             |             |             |
| 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       | S121-579      | Condenser Partition (Economizer)      | X           |             |             |             |             |             |
| 16       | 521-635 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           |             |             |             |             |             |

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       |