

## SaniForce™ Electro-Pneumatic (EP) Controls

3A6102F  
EN

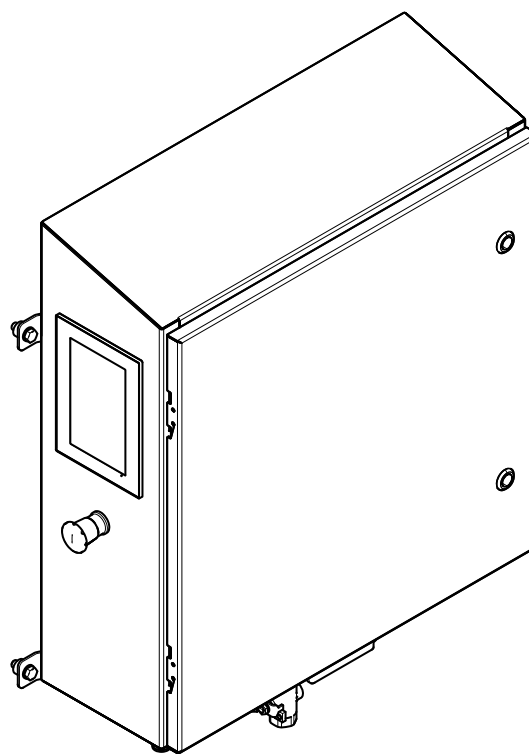
Electro-Pneumatic Controls for use with Graco Hygienic Unloader Systems. For professional use only.



### Important Safety Instructions

Read all warnings and instructions in this manual and the system manuals before using the equipment. **Save all instructions.**

*Maximum Working Air Pressure:*  
100 psi (0.7 MPa, 6.9 bar)



ti34260a

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## Related Manuals

| Manual Number | Title                                       |
|---------------|---|
| 3A5402        | SaniForce Drum Unloader (SDU), Operation    |
| 3A5404        | SaniForce Drum Unloader (SDU), Repair/Parts |
| 3A5416        | SaniForce Tote Unloader (STU), Operation    |
| 3A5417        | SaniForce Tote Unloader (STU), Repair/Parts |

## Models

| Model Number | Kit Number | Description  |
|--------------|------------|--|
| 25D009*      | 25P263     | Electro-pneumatic control panel, STU using 5:1 or 12:1 pumps   |
|              | 25P264     | Electro-pneumatic control panel, STU using 1:1 diaphragm pumps |
| 25D057*      | 25P258†    | Electro-pneumatic control panel, SDU using 5:1 pump            |
|              | 25P259†    | Electro-pneumatic control panel, SDU using 6:1 or 12:1 pump    |
|              | 25P260†    | Electro-pneumatic control panel, SDU using 1:1 diaphragm pump  |

\* These part number are not for sale.

† If purchased as an upgrade from a pneumatic control panel, kit 25P306 is also required.



Electro-pneumatic  
control panel approval









Intertek  
9902741

Conforms to UL STD 508A Certified  
to CSA STD C22.2 No. 286

# Pressure Relief Procedure





Follow the Pressure Relief Procedure whenever you see this symbol.

|  <b>WARNING</b>   |   |   |   |   |
|--|---|---|---|---|
|   |  |  |  |  |
| <p>This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the Pressure Relief Procedure when you stop dispensing and before cleaning, checking, or servicing the equipment.</p> |   |   |   |   |

1. Follow the Pressure Relief Procedure in the system operation manual where this control panel is installed to place the system in a safe maintenance position before servicing the equipment.
2. Turn off all air supply valves located on the bottom of the control panel.

# Software Updates





Contact Graco technical assistance to receive software updates. Software will be sent via email.

|  <b>WARNING</b>  |  |  |  |  |
|---|--|--|--|--|
|    |  |  |  |  |
| <p><b>ELECTRIC SHOCK HAZARD</b></p> <p>To prevent injury, such as electric shock, turn off power at main switch before servicing the equipment.</p> |  |  |  |  |
| <b>NOTICE</b>   |  |  |  |  |
| <p>If power is lost during the update, indeterminate results will occur and the system may not be able to operate when power is restored.</p>       |  |  |  |  |

1. Prior to loading update, record recipes and settings. This must be done manually.
2. On a computer, unzip the software zip file. Do not change the names on any of the unzipped files or directories. Copy all files and directories in the unzipped file onto the root level of a USB flash drive.
3. Lower the ram to its lowest position.
4. Power off the unit and disconnect all power to the control panel.
5. Inside the control panel, install the USB flash drive into the USB port on the bottom of the display unit.
6. Close the panel door.
7. Apply power to the control panel and observe the display screen. Various information will be displayed during the software update. When the automatic run screen is displayed, the update has successfully completed.
 

**NOTE:** If the automatic screen is not displayed within 10 minutes, the update may have failed. Cycle power to the control panel to restart the update again.
8. Power off the unit and disconnect all power to the control panel. Remove the USB flash drive and close the control panel.
9. Verify that settings and recipes have been retained. If they were not retained, enter the recorded settings and recipes.

# Electro-Pneumatic Control Installation

|  <b>WARNING</b>  |   |   |  |  |
|---|---|---|--|--|
|    |  |  |  |  |
| <b>ELECTRIC SHOCK HAZARD</b><br>This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock. <ul style="list-style-type: none"> <li>• If replacing, turn off and disconnect power at the main switch before servicing or installing equipment.</li> <li>• Connect only to a grounded power source</li> <li>• All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations</li> </ul> |   |   |  |  |
| <b>PRESSURIZED FLUID HAZARD</b><br>This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the <a href="#">Pressure Relief Procedure, page 3</a> when you stop dispensing and before cleaning, checking, or servicing the equipment.  |   |   |  |  |
| <b>PERSONAL PROTECTIVE EQUIPMENT</b><br>Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns.   |   |   |  |  |
| NOTICE  |   |   |  |  |
| The electro-pneumatic control panel is only intended for use in permanently mounted systems.  |   |   |  |  |

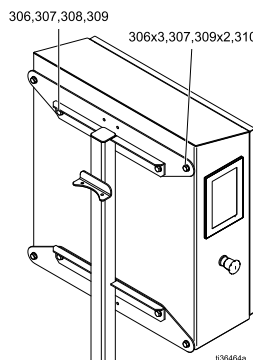
| Ref  | Part/Kit | Description                | Qty |
|------|----------|----------------------------|-----|
| 100  | 17Y665   | LASER, position            | 1   |
| 302  | 17V409   | BRACKET, panel mount       | 2   |
| 306* | 112914   | WASHER, flat               | 4   |
| 307* | 103975   | WASHER, lock               | 4   |
| 308  | 17V628   | SCREW, hex, 3/8 x 3/4 long | 4   |
| 309* | 112913   | NUT, hex                   | 4   |

\* These parts are also used to attach the pneumatic control panel to the stanchion. Retain for re-use when removing the pneumatic panel.

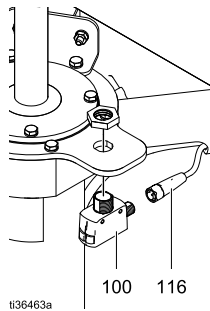
1. Refer to the system operation manual for steps to place the SDU in a safe maintenance condition and relieve pressure, prior to shutting off any facility supply air to the control panel.
2. Label all tubing attached to the bottom of the pneumatic control panel.
3. Disconnect all tubing from the bottom of the pneumatic control panel.
4. Inside the pneumatic control panel, remove the nuts (309) and washers (306, 307) and retain for re-use.
5. Remove the pneumatic control panel from the SDU.
6. Move the screws (310), nuts (309) and washers (306, 307) from the stanchion to the outermost holes on the brackets (302). Ensure the hardware assembly order is the same as it was when mounted on the stanchion.
7. Using the kit screws (308), washers (306, 307), and nuts (309), attach the brackets to the stanchion.
8. Using the washers (306, 307) and nuts (309), mount the electro-pneumatic control panel on the brackets (302).

## Drum Unloader EP control installation

When the SDU electro-pneumatic control is purchased as an upgrade from the pneumatic control, bracket kit 25P306 is required to attach the control panel to the stanchion. The Ref numbers shown below relate to the Ref numbers used in the SDU repair manual. The bracket kit contains:



9. Attach tubing disconnected from the pneumatic control panel to the correct locations on the electro-pneumatic control panel.
10. Refer to the system operation manual for information regarding where to attach facility supply air to the appropriate locations on the electro-pneumatic control panel.
11. Refer to the system operation manual for information regarding the installation of AC power and grounding to the electro-pneumatic control panel.
12. Locate the laser (100) mounting hole near the top of the air cylinder furthest from the control panel. Route the laser cable (116) through the crossover brace between the air cylinders and attach the cable to the laser and electro-pneumatic control panel.

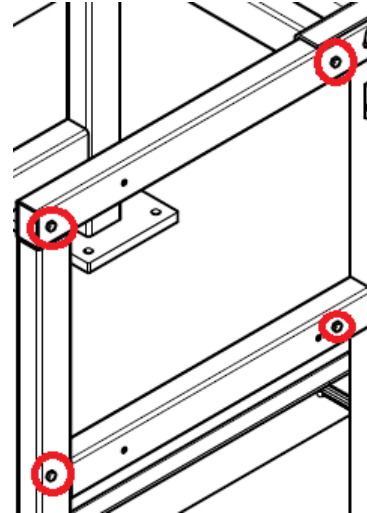


**NOTE:** The laser emits a dot onto the underside of the crossbar. After electro-pneumatic control panel power up, and before attempting to run the system, verify that the dot remains visible on the underside of the crossbar during the entire vertical travel of the ram.

## **Tote Unloader EP Control Installation**

1. Refer to the system operation manual for steps to place the STU in a safe maintenance condition and pressure relief, prior to shutting off any facility supply air to the control panel.
2. Label all tubing attached to the pneumatic control panel.
3. Disconnect all tubing from the pneumatic control panel.

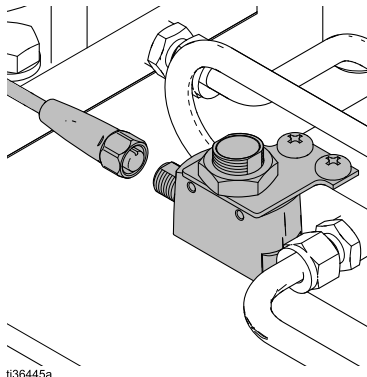
4. Remove the screws, washers, and spacers attaching the pneumatic control panel to the frame of the STU and remove the pneumatic control panel. Retain for re-use.
5. Move the sealing screws near the four frame mounting points for the pneumatic control panel to the holes where the pneumatic control panel was attached to the STU frame. The sealing screws are located to the left of the left side mounting holes and to the right of the right side mounting holes.



6. Using the screws, washers, and spacers from the pneumatic control panel, mount the electro-pneumatic control panel to the frame.
7. Attach tubing disconnected from the pneumatic control panel to the correct locations on the electro-pneumatic control panel.
8. Refer to the system operation manual for information regarding where to attach facility supply air to the appropriate locations on the electro-pneumatic control panel.
9. Refer to the system operation manual for information regarding the installation of AC power and grounding to the electro-pneumatic control panel.

## Electro-Pneumatic Control Installation



10. Locate the laser mounting bracket on top of the air cylinder air distribution manifold (Ref 21 in manual 3A5417). Mount the laser in the bracket. Route the laser cable from the electro-pneumatic control panel to the laser so that it does not interfere with system operation.



**NOTE:** The laser emits a dot onto the underside of the pump support plate. After electro-pneumatic control panel power up, and before attempting to run the system, verify that the dot is visible on the underside of the pump support plate and remains uninterrupted by hoses and cables during the entire vertical travel of the ram.

## Replace the HMI

If the human-machine interface (HMI) unit is malfunctioning or damaged, order replacement kit 26C929 for control panel 25D009 or replacement kit 26C928 for control panel 25D057.

|  <b>WARNING</b>   |  |  |  |  |
|--|--|--|--|--|
|   |  |  |  |  |
| <b>ELECTRIC SHOCK HAZARD</b><br>To prevent injury, such as electric shock, turn off power at main switch before servicing the equipment. |  |  |  |  |

## Disconnect the Existing HMI

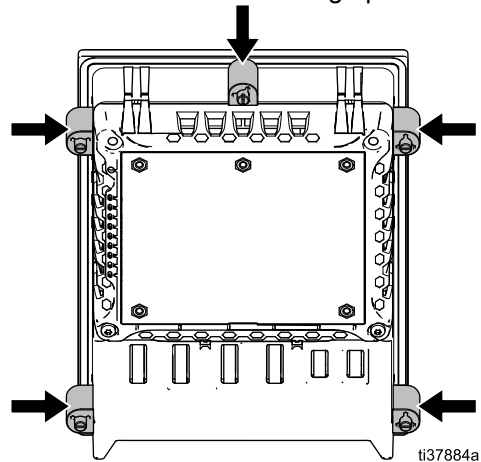
### Tools Required:

- 3.5 mm flathead screwdriver

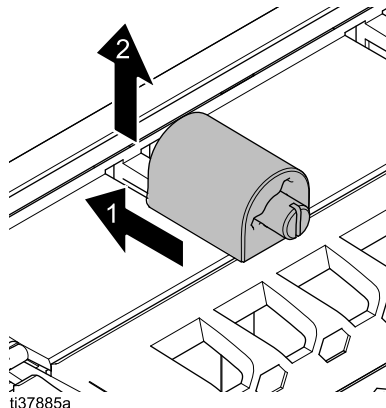
**NOTE:** Before disconnecting the HMI unit, save existing recipes and settings onto a USB device. Follow the instructions in your Operation manual to perform a USB Export. See [Related Manuals, page 2](#). After exporting your recipes and settings, remove the USB device from the HMI unit.

1. Lower the ram to its lowest position.
2. Power off the unit and disconnect all power to the control panel.
3. Open the control panel and disconnect all cables and wires on the back side of the HMI unit.

4. Use a 3.5 mm flathead screwdriver to loosen the five screws around the sides and top of the HMI unit. Retract the screws until the bottom of each screw is flush with the orange plastic.



5. Apply gentle pressure to the front of the HMI unit to hold the unit in place. At the same time, firmly press the five orange tabs *toward* the wall of the enclosure. The orange tabs will snap forward. Pull the orange tabs *away* from the HMI unit to remove the unit from its mount.



6. Gently push the HMI unit out of the control panel to remove the unit completely.

**NOTE:** Save the black rectangular gasket (Ref. 52 for control panel 25D009 or Ref. 90 for control panel 25D057) and the terminal block inside the X2X/IF5 port of the HMI (Ref. 47 for control panel 25D009 or Ref. 62 for control panel 25D057). These components will be used with the replacement HMI unit.

## Install the New HMI

**NOTE:** The following components are required for this procedure:

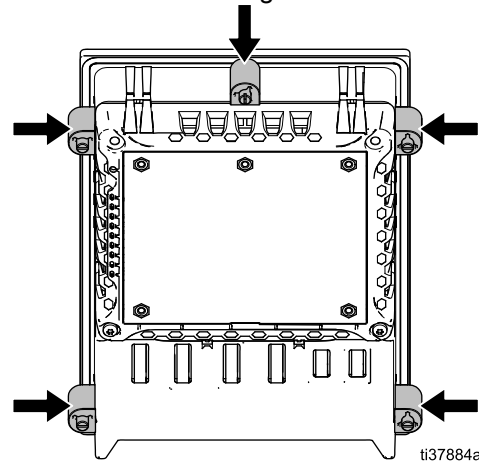
- A new HMI unit (order replacement kit 26C929 for control panel 25D009 or replacement kit 26C928 for control panel 25D057)
- Five orange tabs with screws (supplied with your replacement kit)
- The black rectangular gasket (Ref. 52 for control panel 25D009 or Ref. 90 for control panel 25D057) from the previous HMI unit

### Tools Required:

- 3.5 mm flathead torque screwdriver
1. Ensure the screws in the orange tabs are fully retracted so the bottom of the screw is flush with the orange plastic.
  2. Place the black rectangular gasket around the new HMI unit.
  3. Insert the HMI unit with the gasket into the HMI opening in the control panel. Ensure the gasket creates a seal between the control panel wall and the perimeter of the HMI unit.

4. Hold the HMI unit in place. From the inside of the control panel, insert the five orange tabs into the corresponding spots on the side and top of the HMI unit.

**NOTE:** If necessary, move air lines and wiring away from the HMI unit to access the mounting locations for the orange tabs.

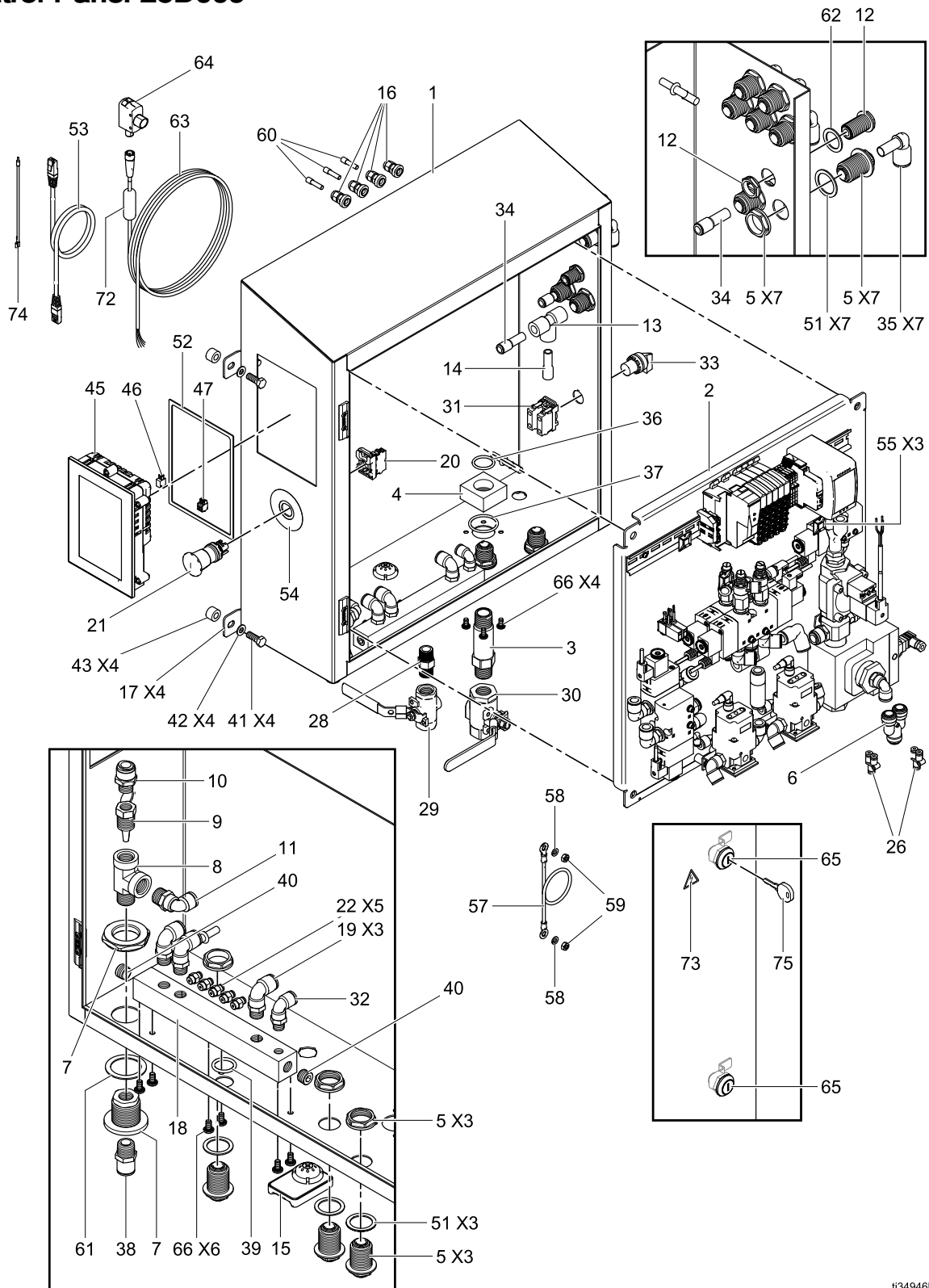


- a. Pull the orange tabs *away* from the enclosure wall until the tabs snap into place.
  - b. Use a 3.5 mm flathead screwdriver to tighten the screws in the orange tabs. Torque to 2.5 in-lb (0.28 N•m). Do not over-tighten.
5. Re-insert all cables and wires into the backside of the HMI unit, including the grounding wire, the power block, the terminal block for the X2X/IF5 port, and the Ethernet cable.
- NOTE:** Insert the Ethernet cable from the DIN-mounted I/O bank into port IF1 on the back of the HMI unit.
6. Power on the unit.
  7. To import settings or recipes saved on a USB device, follow the instructions in your Operation manual to perform a USB Import. See [Related Manuals, page 2](#).



# 25D009 Parts

## Control Panel 25D009



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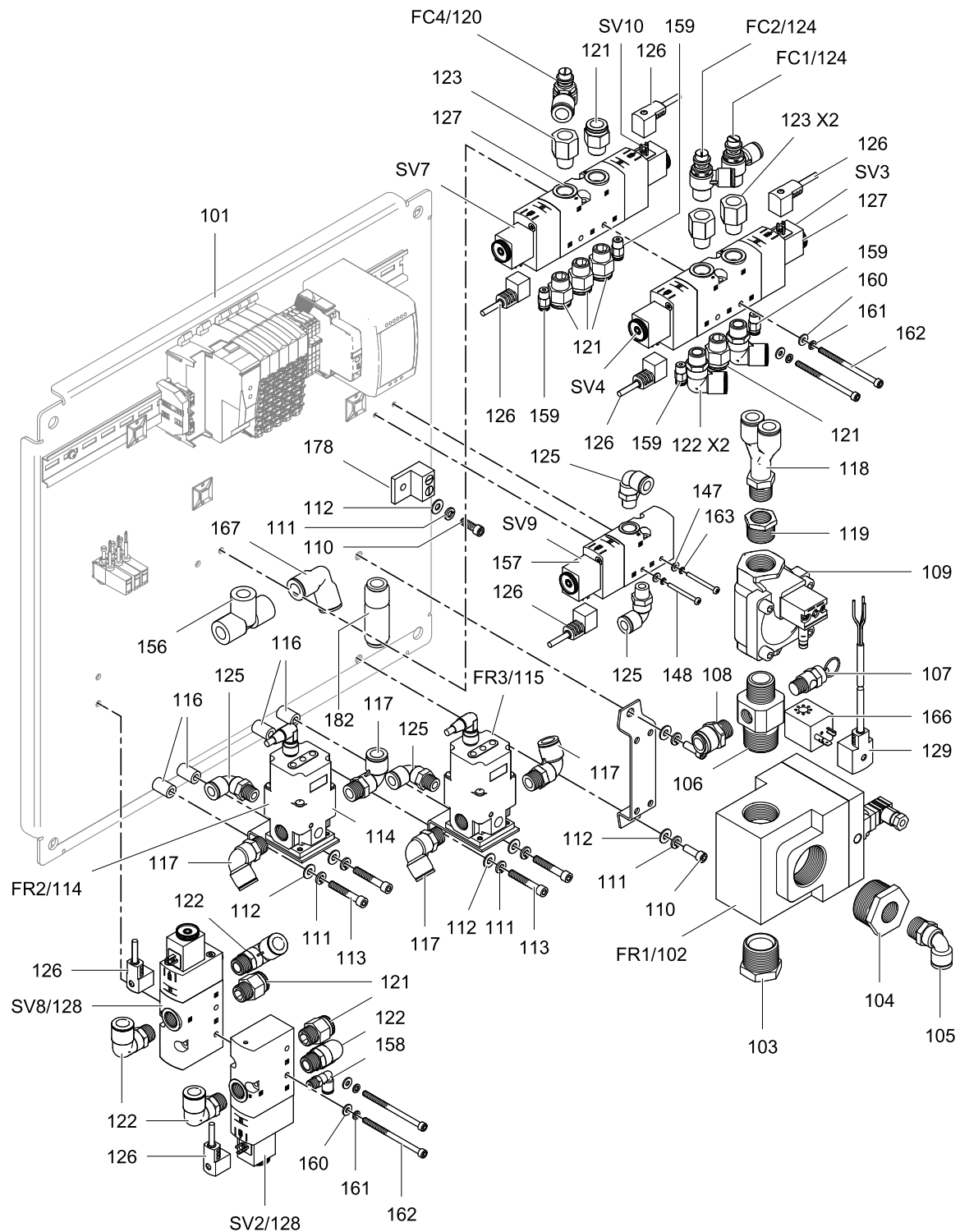
## Control Panel 25D009

| Ref. | Part/Kit | Description                  | Qty. |
|------|----------|------------------------------|------|
| 1    | 17T172   | ENCLOSURE                    | 1    |
| 2    | 25D010   | PANEL, see page 6            | 1    |
| 3    | 17S085   | FITTING, straight            | 1    |
| 4    | 17S086   | BLOCK, control               | 1    |
| 5    | 16Y995   | FITTING, bulkhead union      | 10   |
| 6    | 16Y998   | FITTING, tee, 1/2 tube       | 1    |
| 7    | 16Y981   | FITTING, bulkhead union      | 1    |
| 8    | 124844   | FITTING, tee                 | 1    |
| 9    | 17S738   | NOZZLE, venturi              | 1    |
| 10   | 17T103   | FITTING, straight, 1/2 tube  | 1    |
| 11   | 15V204   | FITTING, elbow, 1/2 tube     | 1    |
| 12   | 17P903   | BULKHEAD, 3/8 tube           | 1    |
| 13   | 513226   | FITTING, tee, 1/2 tube       | 1    |
| 14   | 17A244   | FITTING, reducer, 1/2 to 1/4 | 1    |
| 15   | 17T405   | VENT, breather               | 1    |
| 16   | 111987   | STRAIN RELIEF                | 4    |
| 17   | 17T422   | BRACKET, pkg of 4            | 1    |
| 18   | 17T495   | MANIFOLD                     | 1    |
| 19   | 121212   | FITTING, elbow, swivel       | 3    |
| 20   | 17T404   | BLOCK, contact               | 1    |
| 21   | 17T401   | BUTTON, stop                 | 1    |
| 22   | 114263   | FITTING, 5/32 tube           | 5    |
| 23   | 17Y408   | TUBE, 5/32 O.D.              | 6 ft |
| 24   | 17Y406   | TUBE, 3/8 O.D.               | 6 ft |
| 25   | 17X407   | TUBE, 1/2 O.D.               | 6 ft |
| 26   | 112189   | FITTING, Y                   | 2    |
| 28   | 17X974   | FITTING, nipple              | 1    |
| 29   | 18A938   | VALVE, ball, vented, 1/2     | 1    |
| 30   | 18A937   | VALVE, ball, vented, 3/4     | 1    |
| 31   | 17Y725   | BLOCK, contact               | 1    |
| 32   | 121141   | FITTING, elbow, swivel, 3/8  | 1    |
| 33   | 17Y724   | HANDLE, selector switch      | 1    |
| 34   | 123988   | FITTING, reducer, 1/2 to 3/8 | 2    |
| 35   | 17U812   | FITTING, elbow, 1/2 tube     | 8    |

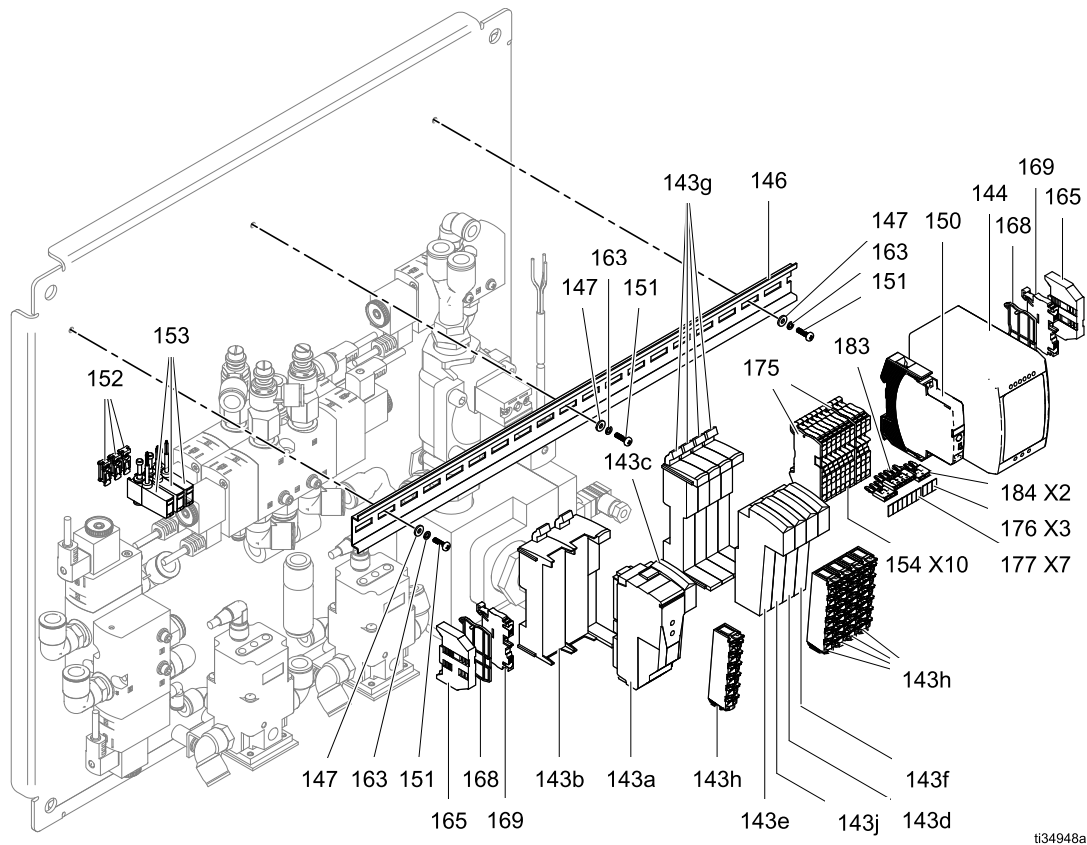
| Ref. | Part/Kit | Description                   | Qty. |
|------|----------|-------------------------------|------|
| 36   | 119008   | O-RING, #216 UL               | 1    |
| 37   | 119006   | O-RING, #222 UL               | 1    |
| 38   | 17T093   | FITTING, straight, 1/2 tube   | 1    |
| 39   | 119007   | O-RING, #213 UL               | 1    |
| 40   | 101754   | PLUG                          | 2    |
| 41   | 102471   | SCREW                         | 4    |
| 42   | 104034   | WASHER, flat                  | 4    |
| 43   | 17T873   | SPACER                        | 4    |
| 45   | 26C929   | KIT, HMI/PLC                  | 1    |
| 46   | 17V140   | BLOCK, HMI power              | 1    |
| 47   | 17V139   | BLOCK, cage clamp             | 1    |
| 48   | 125423   | FITTING, reducer, 5/32 to 1/4 | 1    |
| 51   | 17Y196   | GASKET                        | 10   |
| 52   | 17Y197   | GASKET, HMI                   | 1    |
| 53   | 18A068   | CABLE, CAT 6                  | 1    |
| 54   | 17W415   | LABEL, e-stop                 | 1    |
| 55   | — — —    | MOUNT, cable tie              | 3    |
| 57   | 18A097   | CABLE, grounding, door        | 1    |
| 58   | 104123   | WASHER, lock, spring          | 2    |
| 59   | 104121   | NUT                           | 2    |
| 60   | 125424   | FITTING, plug                 | 3    |
| 61   | 17Y817   | GASKET                        | 1    |
| 62   | 17Y195   | GASKET                        | 1    |
| 63   | 18A046   | CABLE, M12-5P, F, 5M          | 1    |
| 64   | 17Y665   | SENSOR, position              | 1    |
| 65   | 17U123   | LATCH, key                    | 1    |
| 66   | 17T272   | SCREW, sealing                | 10   |
| 70   | 17Z061   | SOFTWARE, control, STU        | 1    |
| 72   | 125835   | CLIP, ferrite bead            | 1    |
| 73   | 189930▲  | LABEL, caution                | 1    |
| 74   | 18A592   | CABLE, HMI ground             | 1    |
| 75   | 25U033   | KEY, replacement, set of 2    | 1    |

▲ Replacement safety labels, tags, and cards are available at no cost.

## Sub Panel 25D010



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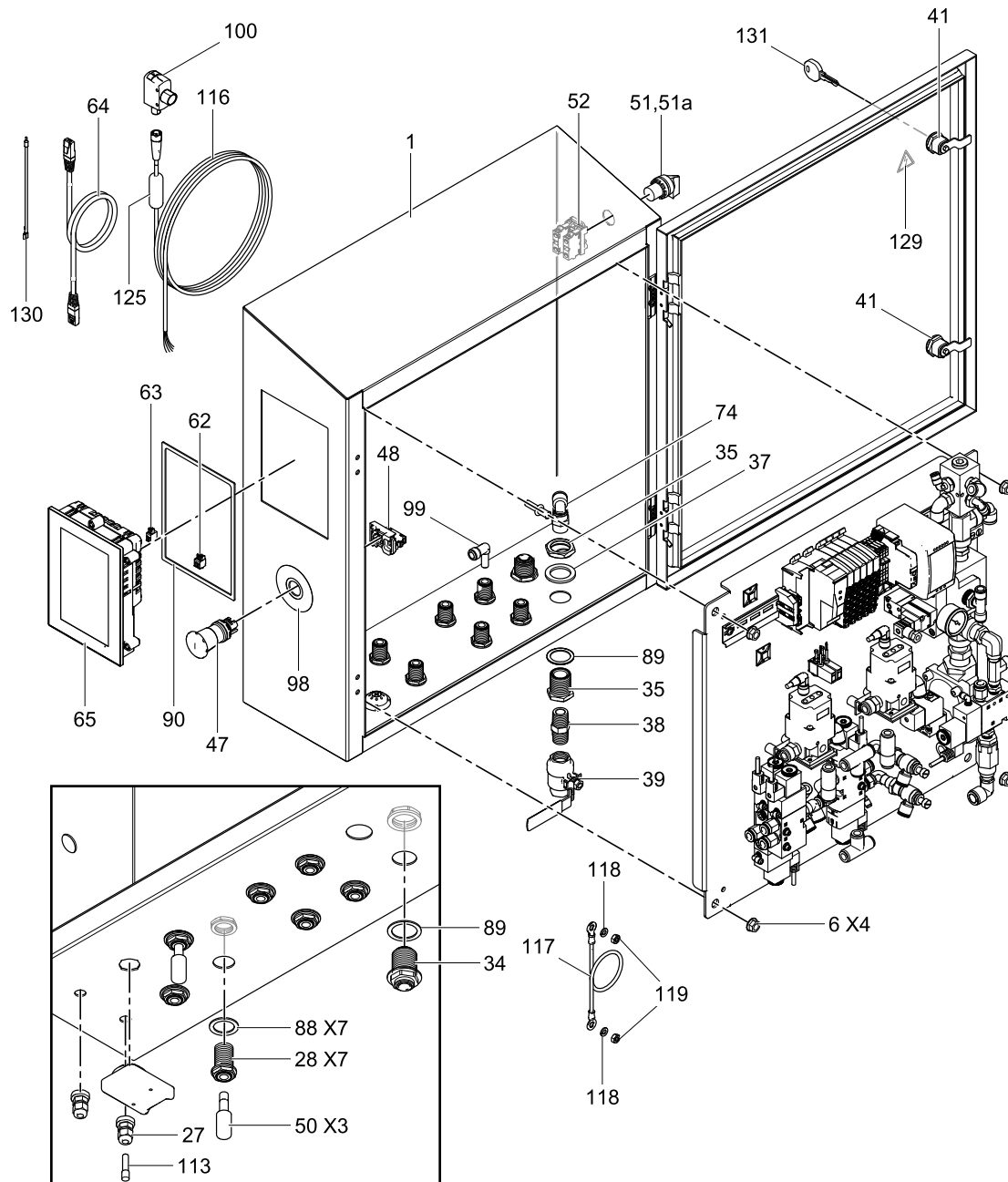
## Sub Panel 25D010

| Ref  | Part/Kit | Description                        | Qty |
|------|----------|------------------------------------|-----|
| 101  | 17T171   | PANEL                              | 1   |
| 102  | 17T174   | REGULATOR                          | 1   |
| 103  | 158586   | FITTING, bushing                   | 1   |
| 104  | C19660   | FITTING, 1-1/4x1/2                 | 1   |
| 105  | 15V204   | FITTING, elbow, 1/2 npt x 1/2 tube | 1   |
| 106  | 17T256   | MANIFOLD                           | 1   |
| 107  | 120306   | VALVE, safety                      | 1   |
| 108  | 17T103   | FITTING, straight                  | 1   |
| 109  | 17T167   | VALVE, 2 way                       | 1   |
| 110  | 100644   | SCREW, cap                         | 3   |
| 111  | 100016   | WASHER, lock                       | 7   |
| 112  | 100086   | WASHER, flat                       | 7   |
| 113  | 565074   | SCREW, shcs 1/4-20 x 1.5           | 4   |
| 114  | 17T204   | REGULATOR, 24V, 130 psi            | 1   |
| 115  | 17T164   | REGULATOR, 24V, 72 psi             | 1   |
| 116  | 17T494   | SPACER                             | 4   |
| 117  | 121212   | FITTING, elbow, swivel             | 4   |
| 118  | 17U989   | FITTING, Y, 1/2 tube               | 1   |
| 119  | 100896   | FITTING, bushing                   | 1   |
| 120  | 17T099   | VALVE, flow control, 1/2 tube      | 1   |
| 121  | 17T412   | FITTING, straight, 1/2 tube        | 7   |
| 122  | 17T413   | FITTING, elbow, swivel             | 6   |
| 123  | 17T436   | FITTING, straight adapter          | 3   |
| 124  | 17T395   | VALVE, flow control, 3/8 tube      | 2   |
| 125  | 121141   | FITTING, elbow, swivel, 3/8        | 4   |
| 126  | 17V077   | CABLE                              | 7   |
| 127  | 17T257   | VALVE, 5 way                       | 2   |
| 128  | 17T285   | VALVE, 3 way                       | 2   |
| 129  | 17V075   | CABLE                              | 1   |
| 143  | 25D576   | KIT, PLC, includes 143a-143j       | 1   |
| 143a | 17U988   | CONTROL, bus b&r                   | 1   |
| 143b | 17U261   | MODULE, bus b&r                    | 1   |
| 143c | 17U264   | MODULE, power                      | 1   |
| 143d | 18A042   | MODULE, analog out                 | 1   |
| 143e | 18A043   | MODULE, mixed                      | 1   |

| Ref  | Part/Kit | Description              | Qty |
|------|----------|--------------------------|-----|
| 143f | 18A044   | MODULE, digital out      | 1   |
| 143g | 17U263   | MODULE, bus b&r          | 4   |
| 143h | 17U981   | BLOCK, terminal          | 5   |
| 143j | 18A045   | MODULE, I/O link         | 1   |
| 144  | 17U986   | POWER SUPPLY, 24V        | 1   |
| 146  | 17B225   | RAIL, DIN                | 1   |
| 147  | 151395   | WASHER, flat             | 5   |
| 148  | 117683   | SCREW                    | 2   |
| 150  | 17U992   | CIRCUIT BREAKER          | 1   |
| 151  | 117831   | SCREW                    | 3   |
| 152  | 17Y959   | BRACKET, pressure sensor | 3   |
| 153  | 17Y955   | SENSOR, pressure         | 3   |
| 154  | 18A033   | BLOCK, terminal          | 10  |
| 156  | 513226   | FITTING, tee, 1/2 tube   | 1   |
| 157  | 17T492   | VALVE, 3 way             | 1   |
| 158  | 17T497   | FITTING, elbow, 5/32     | 1   |
| 159  | 17T498   | FITTING, straight, 5/32  | 5   |
| 160  | 102360   | WASHER, flat             | 4   |
| 161  | 100020   | WASHER, lock             | 4   |
| 162  | 116575   | SCREW                    | 4   |
| 163  | 100068   | WASHER, lock, spring     | 5   |
| 165  | 18A039   | BRACKET                  | 2   |
| 166  | 17V076   | COIL                     | 1   |
| 167  | 17V092   | FITTING, elbow, 1/2 tube | 1   |
| 168  | 18A036   | COVER, end               | 2   |
| 169  | 18A034   | BLOCK, terminal ground   | 2   |
| 175  | 18A035   | COVER, end               | 2   |
| 176  | 18A040   | LABEL, marking, 1060     | 3   |
| 177  | 18A041   | LABEL, 1061              | 7   |
| 178  | 117666   | TERMINAL, ground         | 1   |
| 182  | 18A069   | VALVE CHECK              | 1   |
| 183  | 18A038   | BRIDGE                   | 1   |
| 184  | 18A037   | BRIDGE                   | 2   |

# 25D057 Parts

## Control Panel 25D057



ti34881b

## Control Panel 25D057

| Ref. | Part/Kit | Description                      | Qty. |
|------|----------|----------------------------------|------|
| 1    | 17T379   | ENCLOSURE                        | 1    |
| 2    | 25D056   | PANEL                            | 1    |
| 3    | 17B225   | RAIL, DIN                        | 1    |
| 4    | 102360   | WASHER                           | 3    |
| 5    | 112380   | SCREW                            | 3    |
| 6    | 112958   | NUT                              | 4    |
| 7    | 17T165   | REGULATOR                        | 1    |
| 8    | 100527   | WASHER                           | 2    |
| 9    | 100214   | WASHER, lock                     | 2    |
| 10   | 558673   | SCREW, 5/16-18 x 0.75            | 3    |
| 11   | 124844   | FITTING, tee                     | 2    |
| 12   | 196142   | FITTING, adapter, 1/2 TO 3/4     | 1    |
| 13   | 118574   | FITTING, reducer                 | 1    |
| 14   | 123249   | FITTING, elbow, 1/4 npt          | 1    |
| 15   | 556420   | FITTING, tee                     | 1    |
| 16   | 100721   | PLUG, pipe                       | 1    |
| 16a  | 120306   | VALVE, safety, instead of Ref 16 | 1    |
| 16b  | 103347   | 85 psi, for 5:1 pumps            |      |
| 16c  | 114003   | 100 psi, for 6:1 or 12:1 pumps   |      |
|      |          | 130 psi, 1:1 AODD pumps          |      |
| 17   | 128005   | FITTING, adapter                 | 4    |
| 18   | 17T167   | VALVE, 2 way                     | 1    |
| 19   | 100896   | FITTING, bushing                 | 1    |
| 20   | 17T166   | VALVE, 3 way                     | 2    |
| 21   | 503080   | VALVE, flow control              | 1    |
| 22   | 121459   | FITTING, elbow, 1/2 tube         | 1    |
| 23   | 158491   | FITTING, nipple, 1/2 npt         | 1    |
| 24   | 17Y103   | MANIFOLD                         | 1    |
| 25   | 100361   | PLUG, pipe                       | 1    |
| 26   | 117666   | TERMINAL, ground                 | 1    |
| 27   | 111987   | CONNECTOR                        | 2    |
| 28   | 17P903   | BULKHEAD                         | 7    |
| 29   | 17T494   | SPACER                           | 4    |
| 30   | 17T164   | REGULATOR                        | 2    |
| 31   | 100086   | WASHER                           | 4    |
| 32   | 100016   | WASHER, lock                     | 4    |
| 33   | 565074   | SCREW                            | 4    |
| 34   | 16Y995   | FITTING, bulkhead, 1/2           | 1    |
| 35   | 17P901   | BULKHEAD                         | 1    |

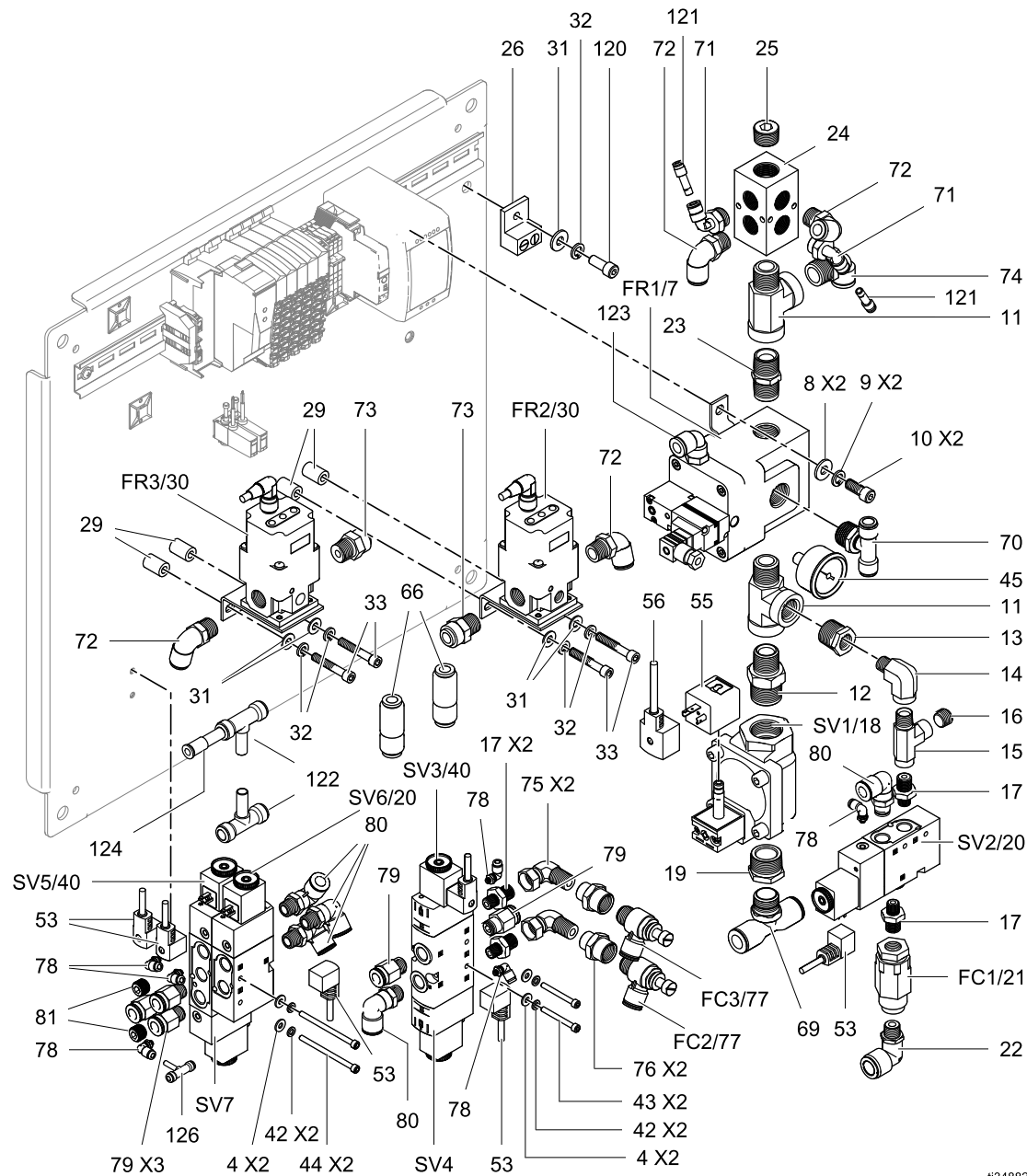
| Ref. | Part/Kit | Description                | Qty. |
|------|----------|----------------------------|------|
| 37   | 17P900   | WASHER                     | 1    |
| 38   | 114373   | FITTING, 1/2 npt           | 1    |
| 39   | 17X891   | VALVE, ball, vented, 1/2   | 1    |
| 40   | 17T168   | VALVE, 5 way               | 2    |
| 41   | 17U123   | LATCH, keyed               | 1    |
| 42   | 100020   | WASHER                     | 4    |
| 43   | C19977   | SCREW                      | 2    |
| 44   | 120103   | SCREW                      | 2    |
| 45   | 127379   | GAUGE                      | 1    |
| 46   | 250576   | KIT, PLC, includes 46a-46j | 1    |
| 46a  | 17U988   | CONTROL, bus b&r           | 1    |
| 46b  | 17U261   | MODULE, bus b&r            | 1    |
| 46c  | 17U264   | MODULE, power              | 1    |
| 46d  | 18A042   | MODULE, analog out         | 1    |
| 46e  | 18A043   | MODULE, mixed              | 1    |
| 46f  | 18A044   | MODULE, digital out        | 1    |
| 46g  | 17U263   | MODULE, bus b&r            | 4    |
| 46h  | 17U981   | BLOCK, terminal            | 5    |
| 46j  | 18A045   | MODULE, I/O link           | 1    |
| 47   | 17T401   | BUTTON, e-stop             | 1    |
| 48   | 17T404   | BLOCK, contact             | 1    |
| 49   | 17T405   | VENT, breather             | 1    |
| 50   | 17T407   | MUFFLER                    | 3    |
| 51   | 17Y724   | HANDLE, selector switch    | 1    |
| 51a  | 18A618   | LABEL, power               | 1    |
| 52   | 17Y725   | BLOCK, contact             | 1    |
| 53   | 17V077   | CABLE                      | 6    |
| 54   | 17Y955   | SENSOR, pressure           | 2    |
| 55   | 17V076   | COIL                       | 1    |
| 56   | 17V075   | CABLE                      | 1    |
| 57   | 18A039   | BRACKET, end               | 2    |
| 58   | 17U986   | POWER SUPPLY, 24V          | 1    |
| 60   | 17U992   | CIRCUIT BREAKER            | 1    |
| 61   | 17Y959   | BRACKET                    | 2    |
| 62   | 17V139   | BLOCK, cage clamp          | 1    |
| 63   | 17V140   | BLOCK, HMI power           | 1    |
| 64   | 18A068   | CABLE, CAT 6               | 1    |
| 65   | 26C928   | KIT, HMI/PLC               | 1    |
| 66   | 18A081   | VALVE, ball check          | 2    |
| 67   | 18A036   | COVER, end                 | 2    |
| 69   | 17G678   | FITTING, tee, 1/2 tube     | 1    |

| Ref. | Part/Kit | Description                 | Qty. |
|------|----------|-----------------------------|------|
| 70   | 17Y098   | FITTING, tee                | 1    |
| 71   | 114153   | FITTING, elbow, swivel, 1/4 | 2    |
| 72   | C19394   | FITTING, elbow, 3/8 tube    | 4    |
| 73   | 115240   | FITTING, tube               | 2    |
| 74   | 15V204   | FITTING, elbow, 1/2 tube    | 2    |
| 75   | 155541   | FITTING, swivel, 1/4 npt    | 2    |
| 76   | C19704   | COUPLING, reducer           | 2    |
| 77   | 17T008   | VALVE, flow control         | 2    |
| 78   | 17T003   | FITTING, elbow, 5/32 tube   | 6    |
| 79   | 17Y095   | FITTING, straight, 3/8 tube | 6    |
| 80   | 17Y096   | FITTING, elbow, 3/8 tube    | 4    |
| 81   | 17Y097   | PLUG                        | 2    |
| 82   | 18A035   | COVER, end                  | 2    |
| 84   | 054760   | TUBE, 1/2 O.D.              | 3    |
| 85   | 054941   | TUBE, 3/8 O.D.              | 20   |
| 87   | 054734   | TUBE, 5/32 O.D.             | 4    |
| 88   | 17Y195   | GASKET                      | 7    |
| 89   | 17Y196   | GASKET                      | 2    |
| 90   | 17Y197   | GASKET, HMI                 | 1    |
| 91   | 18A034   | BLOCK, terminal             | 2    |
| 92   | 18A041   | LABEL, 1061                 | 7    |
| 93   | 18A040   | LABEL, 1060                 | 3    |
| 95   | 18A033   | BLOCK, terminal             | 10   |
| 96   | — — —    | MOUNT, cable tie            | 3    |

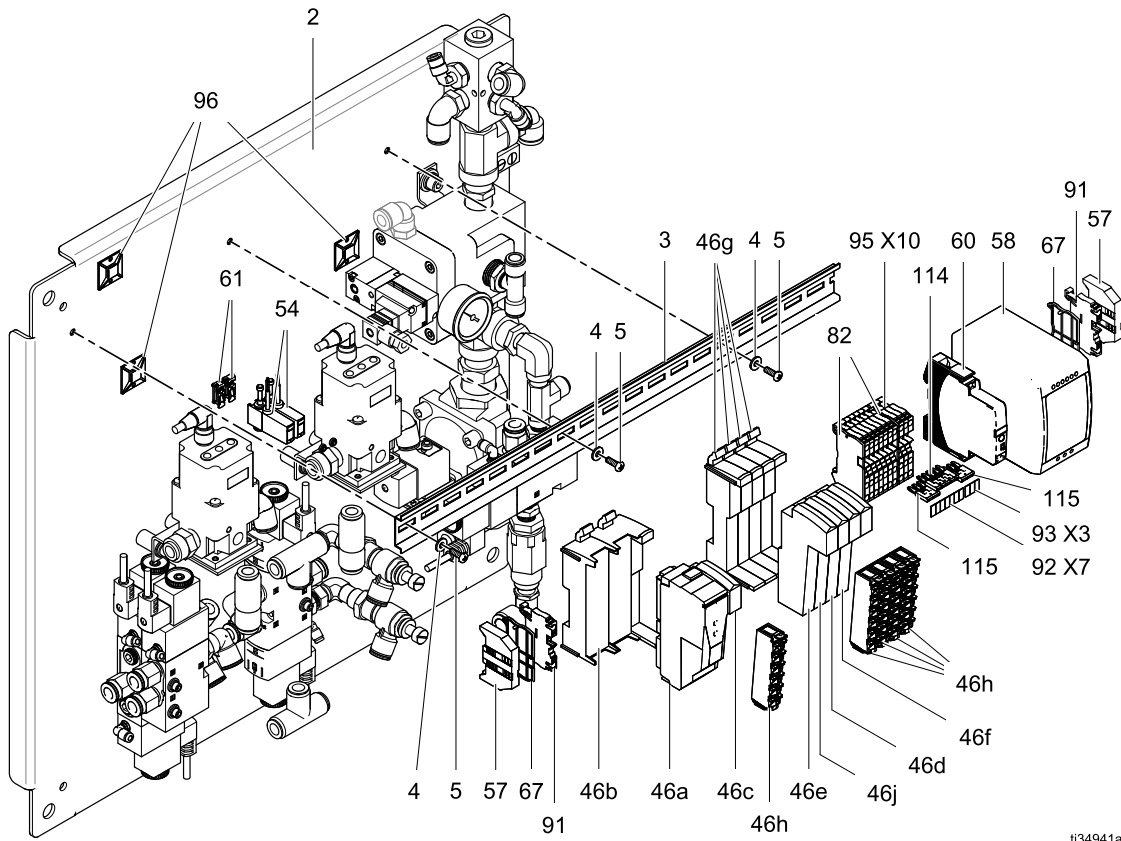
| Ref. | Part/Kit | Description                | Qty. |
|------|----------|----------------------------|------|
| 98   | 17W415▲  | LABEL, e-stop              | 1    |
| 99   | 17T017   | FITTING, elbow, 3/8        | 7    |
| 100  | 17Y665   | SENSOR, position           | 1    |
| 113  | 125424   | FITTING, plug              | 1    |
| 114  | 18A038   | BRIDGE, 5 position         | 1    |
| 115  | 18A037   | BRIDGE, 3 position         | 2    |
| 116  | 18A046   | CABLE, M12–5P, 5M          | 1    |
| 117  | 18A097   | CABLE, grounding, door     | 1    |
| 118  | 104123   | WASHER, lock, spring       | 2    |
| 119  | 104121   | NUT                        | 2    |
| 120  | 100644   | SCREW, 1/2-20              | 1    |
| 121  | 125423   | ADAPTER, 1/4 to 5/32       | 2    |
| 122  | 17C480   | FITTING, tee, 3/8          | 2    |
| 123  | 121141   | FITTING, elbow, 3/8        | 1    |
| 124  | 617569   | ADAPTER, 3/8 to 1/4        | 1    |
| 125  | 125835   | CLIP, ferrite bead         | 1    |
| 126  | 17V626   | FITTING, tee, 5/32         | 5    |
| 128  | 17X703   | SOFTWARE, control, SDU     | 1    |
| 129  | 189930▲  | LABEL, caution             | 1    |
| 130  | 18A592   | CABLE, HMI ground          | 1    |
| 131  | 25U033   | KEY, replacement, set of 2 | 1    |

▲ Replacement safety labels, tags, and cards are available at no cost.





ti34882a



ti34941a

## Technical Data

| Electro-pneumatic Control Panel   |          |                   |
|---|----------|-------------------|
|   | US       | Metric            |
| Maximum system air inlet pressure   | 100 psi  | 0.69 MPa, 6.9 bar |
| Ambient temperature range   | 41–104°F | 5–40°C            |
| Weight  | 50 lb    | 22.7 kg           |
| Enclosure Type: 4X (IP65)<br>Voltage: 100–240 VAC<br>Phase: 1<br>Frequency: 50/60 Hz<br>Maximum Current: 1.3 A<br><b>NOTE:</b> Branch Circuit Protection (maximum 15 A) and disconnect switch not provided. |          |                   |

## California Proposition 65

### CALIFORNIA RESIDENTS

 **WARNING:** Cancer and reproductive harm — [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov).

# Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

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This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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For patent information, see [www.graco.com/patents](http://www.graco.com/patents).

**To place an order,** contact your Graco Distributor or call to identify the nearest distributor.

**Phone:** 612-623-6921 **or Toll Free:** 1-800-328-0211 **Fax:** 612-378-3505

All written and visual data contained in this document reflects the latest product information available at the time of publication.

Graco reserves the right to make changes at any time without notice.

Original Instructions. This manual contains English. MM 3A6102

**Graco Headquarters:** Minneapolis  
**International Offices:** Belgium, China, Japan, Korea

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