

# 26A231 Air Control Box Kit

3A4497A

EΝ

Interfaces Air Control Management for Spray Devices used with a ProMix<sup>®</sup> PD2K Dual Panel Electronic Proportioner. For professional use only.

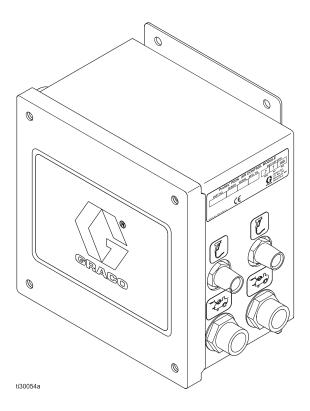
#### 26A231 - Air Control Module

100 psi (0.7 MPa, 7 bar) Maximum Air Inlet Pressure



#### **Important Safety Instructions**

Read all warnings and instructions in this manual and in the PD2K Proportioner manuals, the Gun Flush Box manual, and the Gun Air Shutoff Kit manual. Save all instructions.





## **Contents**

Related Manuals 2
Overview
Installation 3
Pressure Relief Procedure 3
Location 3
Mount the Enclosure
Install the Cable 4
Install the Pressure Switch 6
Connect the Gun Flush Box
Connect Air Supply to Module
Replace the Cover 7
Ground the Enclosure
Parts 8
Dimensions 9
Technical Data
Graco Standard Warranty 12
Graco Information

## **Related Manuals**

See the following manuals for additional information on the ProMix PD2K Proportioner and Gun Flush Box Kits.

Manual	Description
3A4186	ProMix PD2K Dual Panel Proportioner Operation Manual, Manual Systems
332457	ProMix PD2K Proportioner Installation Manual, Manual Systems
3A2800	ProMix PD2K Proportioner Repair-Parts Manual, Manual Systems
312784	Gun Flush Box Kit Instruction-Parts Manual
310745	Gun Air Shutoff Kit Instruction-Parts Manual

# **Overview**

Air Control Module 26A231 provides electrical and air connections to enable a ProMix PD2k Dual Panel proportioner to operate two manual spray devices, as well as, one or two gun flush boxes, or one or two air shutoff valves. See Fig. 1 for the identification label.

Order Gun Flush Box Kit(s) 15V826 separately (see the Gun Flush Box Kit manual). Each 15V826 Kit includes one gun flush box and related parts. The pressure switch included in Gun Flush Box Kit 15V826 will be installed in this interface module.

Order Air Shutoff Kit(s) 15V823 separately (see the Gun Air Shutoff Kit manual). Each 15V823 kit includes one air cutoff valve and related parts.



Fig. 1. Air Control Module Identification Label

## Installation



The equipment mush be grounded to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode. Grounding provides an escape wire for the electric current.

#### **Pressure Relief Procedure**



Follow the Pressure Relief Procedure whenever you see this symbol.



This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection or splashing fluid, follow the **Pressure Relief Procedure** when you stop spraying and before cleaning, checking, or servicing the equipment. When turned off, all air valves bleed to atmosphere.

- 1. Relieve pressure from the air inlet supply before connecting air to inlet (13) of the enclosure. See **Parts** on page 8.
- 2. Follow the Pressure Relief Procedure in the applicable manuals. See **Related Manuals**, page 2.

#### Location

Install the air control module enclosure (1) within 15 ft (4.5 m) of the PD2K Dual Panel Control Enclosure, to ensure that the cable (23) will reach between the two enclosures.

#### **Mount the Enclosure**

- 1. See **Dimensions**, page 9.
- Ensure that the wall and mounting hardware are strong enough to support the weight of the equipment, fluid, hoses, and stress caused during operation.

Using the equipment as a template, mark the mounting holes on the wall at a convenient height for the operator and so equipment is easily accessible for maintenance.

- Drill mounting holes in the wall. Install anchors as needed.
- 4. Bolt equipment securely.

#### Install the Cable

- 1. Loosen the captive screws and remove the front cover from the enclosure.
- 2. The cable (23) has bare wires at both ends. Thread the shortest end (4 in. [102 mm]) into the enclosure through the strain relief bushing (7). See Fig. 2.
- 3. Connect the cable wires to the left side of the terminal strip (12), as indicated by the label (37). See Fig. 2 and Table 1.
- 4. Connect the other end of the cable (5 in. [127 mm]) to the appropriate terminal blocks of the EFCM in the PD2K Dual Panel Control Enclosure. See Fig. 3 and Table 2.

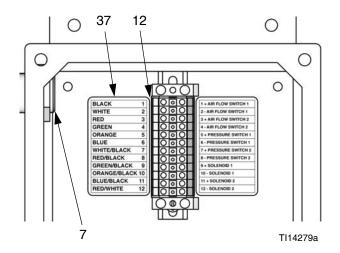


Fig. 2. Connect Cable to Terminal Strip

**Table 1: Terminal Strip Wire Connections** 

Pin No.	Cable Wire Colors	Pin No.	Switch Wires
1	Black	1	Air Flow Switch 1 +
2	White	2	Air Flow Switch 1 -
3	Red	3	Air Flow Switch 2 +
4	Green	4	Air Flow Switch 2 -
5	Orange	5	Pressure Switch 1 +
6	Blue	6	Pressure Switch 1 -
7	White/Black	7	Pressure Switch 2 +
8	Red/Black	8	Pressure Switch 2 -
9	Green/Black	9	Solenoid 1, + (12V), Red
10	Orange/Black	10	Solenoid 1, - (COM), Black
11	Blue/Black	11	Solenoid 2, + (12V), Red
12	Red/White	12	Solenoid 2, - (COM), Black

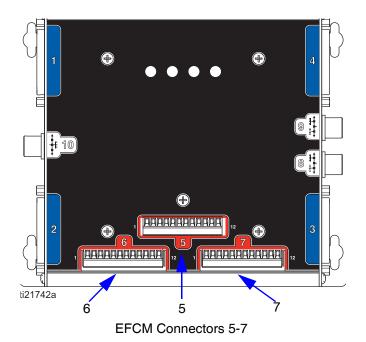


Fig. 3. Enhanced Fluid Control Module

**Table 2: EFCM Terminal Connections** 

Pin No.	Cable Wire Colors	Pin No.	EFCM Connector
1	Black	1	6
2	White	2	6
3	Red	3	6
4	Green	4	6
5	Orange	9	7
6	Blue	10	7
7	White/Black	11	7
8	Red/Black	12	7
9	Green/Black	5	5
10	Orange/Black	6	5
11	Blue/Black	7	5
12	Red/White	8	5

#### **Install the Pressure Switch**

**NOTE:** The Air Control Module Kit does not include a pressure switch (PS). The pressure switch is supplied with the gun flush box kit. Install the pressure switch in the interface module as follows.

- Each gun flush box kit includes one pressure switch (PS). The Air Control module can accommodate 1 or 2 pressure switches. Install the switch(es) in the left side of the enclosure. See Fig. 4.
- Pressure switch is part of gun flush box kit; not included with Air Control Module Kit.

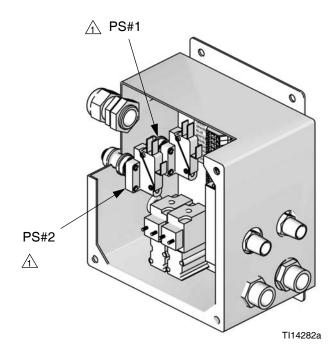


Fig. 4. Install Pressure Switch (two shown)

2. Connect the wires from PS#1 to the right side of the terminal strip (12) pins 5 (+) & 6 (-), as indicated by the label (38). See Fig. 5 and Table 1.

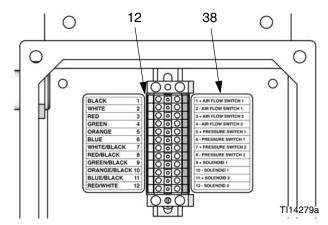


Fig. 5. Connect Pressure Switch to Terminal Strip

3. If using a second gun flush box, connect the wires from PS#2 to the right side of the terminal strip (12) pins 7 (+) & 8 (-), as indicated by the label (38). See Fig. 5 and Table 1.

## **Connect the Gun Flush Box**

**NOTE:** Use 5/32 in. (4 mm) OD tubing to connect the gun flush box air ports to the interface module air ports, as follows. See Fig. 7.

- 1. From the **P** port to the air supply.
- 2. From the A port to the pressure switch air input.
- 3. From the **C** port to the gun flush box solenoid output.
- 4. From the **S** port to the atomizing air safety shutoff valve pilot port. See the gun flush box manual for details on the safety shutoff valve.
- 5. From the AFS to the atomizing air safety shutoff valve IN port. See the gun flush box manual for details on the safety shutoff valve.

## **Connect Air Supply to Module**

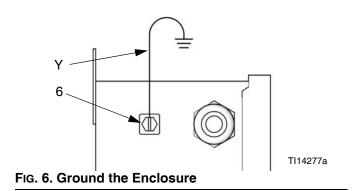
Connect a 1/4 in. (6 mm) OD tube between a clean, dry air supply (filtered to 10 microns) and the module air inlet fitting (13). See **Parts** on page 8.

## **Replace the Cover**

Reinstall the cover on the enclosure and secure with the four captive screws.

## **Ground the Enclosure**

Connect a ground wire (Y) from the enclosure's ground screw (6) to a true earth ground. See Fig. 6.



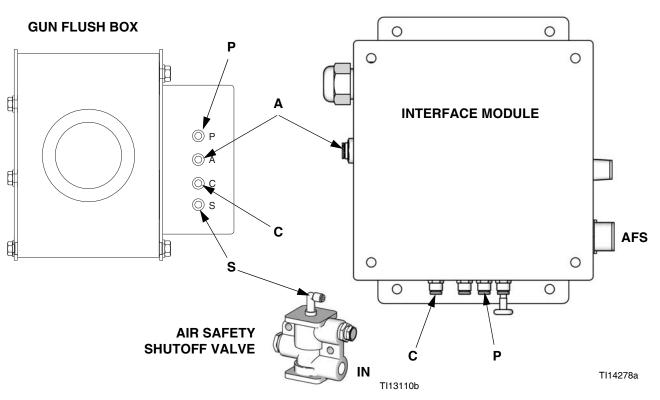
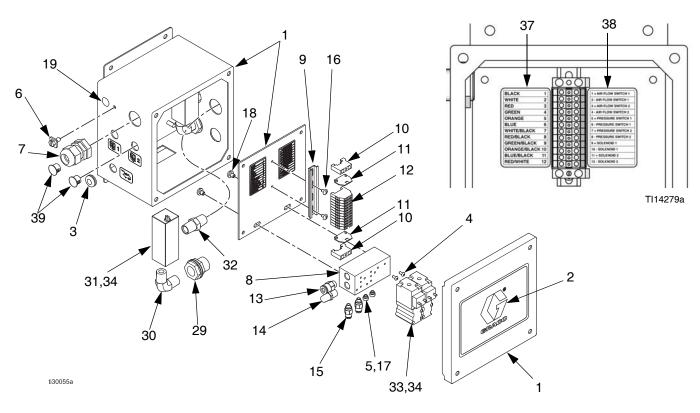


Fig. 7: Gun Flush Box to Air Control Module Air Connections

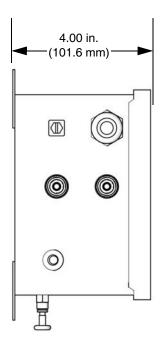
# **Parts**

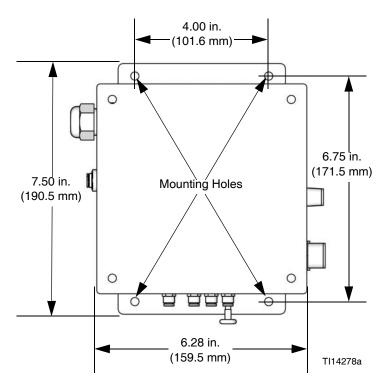


# Part No./Description

Ref.	Part	Description	Qty	Ref.	Part	Description	Qty
1	15V531	ENCLOSURE	1	25	598095	TUBE, nylon; 5/32 in. OD; 50 ft.	1
2	15U918	LABEL, product	1			(not shown)	
3	118435	GROMMET	1	29	104641	BULKHEAD	2
4	121628	SCREW, self-sealing	2	30	111763	ELBOW, 1/4 in npt.	2
5	104644	PLUG, screw	2	31	119159	SWITCH, air flow	2
6		SCREW, ground	1	32	113029	NIPPLE, 1/4 in. x 1/4 in. npt	2
7		BUSHING, strain relief	1	33	121324	VALVE, solenoid; .25W	2
8		MANIFOLD, GFB solenoid	1	34	112514	FERRULE, wire; AWG-18	8
9		RAIL; 3 in. (76 mm)	1	37		LABEL, cable wire connections	1
10	116804	,	2	38		LABEL, switch wire connections	1
11		COVER, end, terminal	2	39	125946	PLUG, hole; 1/2 in.	2
12		TERMINAL, rail mount	12				
13	115671	CONNECTOR, tube; 1/4 in. OD	1				
14	C06061	MUFFLER, sintered; 1/8 diam.	1				
15	111328	CONNECTOR, tube; 5/32 in. OD	2				
16		SCREW, machine, truss-hd	2				
17	104640	GASKET	2				
18	103832	SCREW, machine	2				
19	186620	LABEL, symbol, ground	1				
23	15V819	-	1				
		shown)					

# **Dimensions**





TI14276a

Dimensions

# **Technical Data**

26A231 Air Control Module						
	US	Metric				
Maximum air inlet pressure	100 psi	100 psi 0.7 MPa, 7 bar				
Inlet/Outlet Sizes						
Air inlet size	1/4 ir	1/4 in. (6 mm) OD tube connector				
Air exhaust port size	5/32	5/32 (4mm) OD tube connector				
Weight						
26A231 Air Control Module	6.69 lb.	3.03 kg				

# **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.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

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.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

#### FOR GRACO CANADA CUSTOMERS

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés, à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

# **Graco Information**

For the latest information about Graco products, visit www.graco.com.

For patent information, see 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 3A4497

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

GRACO INC. AND SUBSIDIARIES • P.O. BOX 1441 • MINNEAPOLIS MN 55440-1441 • USA Copyright 2016, Graco Inc. All Graco manufacturing locations are registered to ISO 9001.

www.graco.com Revision A, October 2016