



312064M

ΕN

Hydraulic, Heated, Plural Component Proportioner For spraying polyurethane foam and polyurea coatings. Not for use in explosive atmospheres.

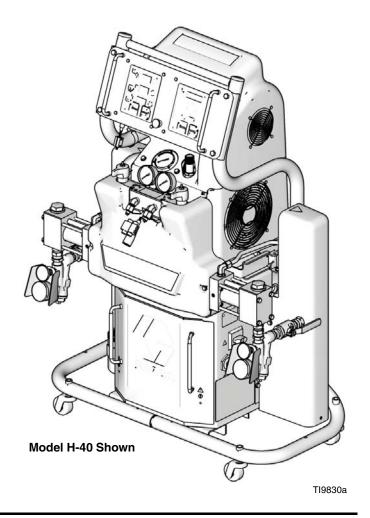


#### **Important Safety Instructions**

Read all warnings and instructions in this manual and in manuals 312062 and 313539. Save all instruction manuals.

See page 3 for model information, including maximum working pressure and approvals.





### **Contents**

Supplied Manuals	2
Models	3
Simplified Schematic, Motor Controls	5
1-Phase Motor	5
3-Phase Motor	6
Simplified Schematic, Heater Controls	7
Simplified Schematic, Power Connections	8

Detailed Schematic,
Motor Controls (1-Phase Motor) 10
Detailed Schematic,
Motor Controls (3-Phase Motor) 11
<b>Detailed Schematic, Heater Controls12</b>
Graco Standard Warranty14
Graco Information14

## **Supplied Manuals**

The following manuals are shipped with the Reactor<sup>™</sup> Proportioner. Refer to these manuals for detailed equipment information.

Order Part 15M334 for a compact disk of Reactor manuals translated in several languages.

Manuals are also available at www.graco.com.

Reactor Hydraulic Proportioner						
Part	Description					
312062	Reactor Hydraulic Proportioner, Operation Manual (English)					
312063	Reactor Hydraulic Proportioner, Repair-Parts Manual (English)					
313539	Reactor H-VR Proportioner, Operation Manual (English)					
313540	Reactor H-VR Proportioner, Repair-Parts Manual (English)					

## **Models**

#### H-25 SERIES

Part, Series	Full Load Peak Amps* Per Phase	Voltage (phase)	System Watts†	Primary Heater Watts	Max Flow Rate◆ Ib/min (kg/min)	Approximate Output per Cycle (A+B) gal. (liter)	Hydraulic Pressure Ratio	Maximum Fluid Working Pressure psi (MPa, bar)
255400, F	69	230V (1)	15,960	8,000	22 (10)	0.063 (0.24)	1.91:1	2000 (13.8, 138)
255401, F	46	230V (3)	15,960	8,000	22 (10)	0.063 (0.24)	1.91:1	2000 (13.8, 138)
255402, F	35	400V (3)	15,960	8,000	22 (10)	0.063 (0.24)	1.91:1	2000 (13.8, 138)
255406, F	100	230V (1)	23,260	15,300	22 (10)	0.063 (0.24)	1.91:1	2000 (13.8, 138)
255407, F	59	230V (3)	23,260	15,300	22 (10)	0.063 (0.24)	1.91:1	2000 (13.8, 138)
255408, F	35	400V (3)	23,260	15,300	22 (10)	0.063 (0.24)	1.91:1	2000 (13.8, 138)

#### H-40 SERIES

Part, Series	Full Load Peak Amps* Per Phase	Voltage (phase)	System Watts†	Primary Heater Watts	Max Flow Rate♦ Ib/min (kg/min)	Approximate Output per Cycle (A+B) gal. (liter)		Maximum Fluid Working Pressure psi (MPa, bar)
★253400, E	100	230V (1)	23,100	12,000	45 (20)	0.063 (0.24)	1.91:1	2000 (13.8, 138)
253401, E	71	230V (3)	26,600	15,300	45 (20)	0.063 (0.24)	1.91:1	2000 (13.8, 138)
253402, E	41	400V (3)	26,600	15,300	45 (20)	0.063 (0.24)	1.91:1	2000 (13.8, 138)
253407, E	95	230V (3)	31,700	20,400	45 (20)	0.063 (0.24)	1.91:1	2000 (13.8, 138)
253408, E	52	400V (3)	31,700	20,400	45 (20)	0.063 (0.24)	1.91:1	2000 (13.8, 138)

#### H-50 SERIES

Part, Series	Full Load Peak Amps* Per Phase	Voltage (phase)	System Watts†	Primary Heater Watts	lb/min	Approximate Output per Cycle (A+B) gal. (liter)		Maximum Fluid Working Pressure psi (MPa, bar)
★253725, E	100	230V (1)	23,100	12,000	52 (24)	0.073 (0.28)	1.64:1	1700 (11.7, 117)
253726, E	71	230V (3)	26,600	15,300	52 (24)	0.073 (0.28)	1.64:1	2000 (13.8, 138)
253727, E	41	400V (3)	26,600	15,300	52 (24)	0.073 (0.28)	1.64:1	2000 (13.8, 138)
256505, E	95	230V (3)	31,700	20,400	52 (24)	0.073 (0.28)	1.64:1	2000 (13.8, 138)
256506, E	52	400V (3)	31,700	20,400	52 (24)	0.073 (0.28)	1.64:1	2000 (13.8, 138)

#### **H-VR SERIES**

Part, Series	Full Load Peak Amps* Per Phase	Voltage (phase)	System Watts†	Primary Heater Watts	Max Flow Rate◆ Ib/min (kg/min)		Hydraulic Pressure	Maximum Fluid Working Pressure psi (MPa, bar)
256886	71	230V (3)	26,600	15,300	15 (4)	Variable	Variable	3500 (24.1, 241)
256887	41	400V (3)	26,600	15,300	15 (4)	Variable	Variable	3500 (24.1, 241)

#### **H-XP2 SERIES**

Part, Series	Full Load Peak Amps* Per Phase	Voltage (phase)	System Watts†	Primary Heater Watts	Max Flow Rate◆	Approximate Output per Cycle (A+B) gal. (liter)	Hydraulic Pressure	Maximum Fluid Working Pressure psi (MPa, bar)
255403, F	100	230V (1)	23,260	15,300	1.5 (5.7)	0.042 (0.16)	2.79:1	3500 (24.1, 241)
255404, F	59	230V (3)	23,260	15,300	1.5 (5.7)	0.042 (0.16)	2.79:1	3500 (24.1, 241)
255405, F	35	400V (3)	23,260	15,300	1.5 (5.7)	0.042 (0.16)	2.79:1	3500 (24.1, 241)

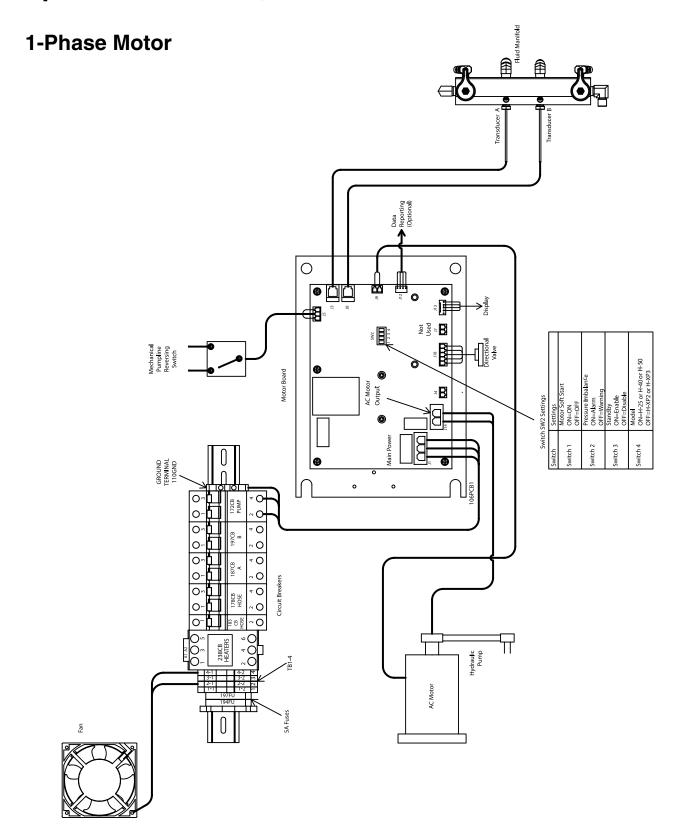
#### **H-XP3 SERIES**

Part,	Full Load Peak Amps* Per Phase	Voltage (phase)	System	Heater	Rate◆		Hydraulic Pressure	Maximum Fluid Working Pressure psi (MPa, bar)
★253403, E	100	230V (1)	23,100	12,000	2.8 (10.6)	0.042 (0.16)	2.79:1	3500 (24.1, 241)
253404, E	95	230V (3)	31,700	20,400	2.8 (10.6)	0.042 (0.16)	2.79:1	3500 (24.1, 241)
253405, E	52	400V (3)	31,700	20,400	2.8 (10.6)	0.042 (0.16)	2.79:1	3500 (24.1, 241)

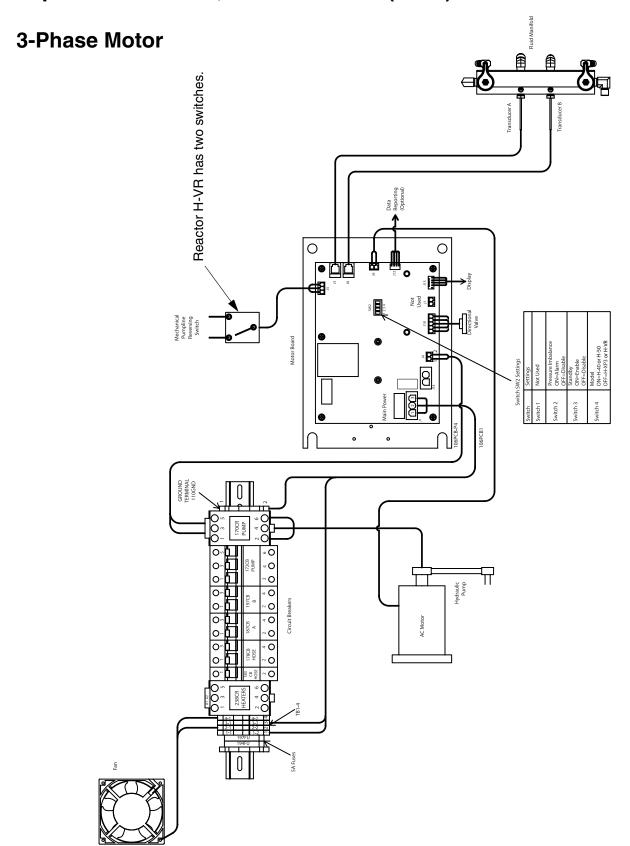
<sup>\*</sup> Full load amps with all devices operating at maximum capabilities. Fuse requirements at various flow rates and mix chamber sizes may be less.

- † Total system watts, based on maximum hose length for each unit:
- Parts 255400 through 255408, 310 ft (94.6 m) maximum heated hose length, including whip hose.
- Parts 253400 through 253408, 253725 through 253727, 256505, and 256506, 410 ft (125 m) maximum heated hose length, including whip hose.
- ◆ Maximum flow rate given for 60 Hz operation. For 50 Hz operation, maximum flow rate is 5/6 of 60 Hz maximum flow.
- ★ CE approval does not apply.

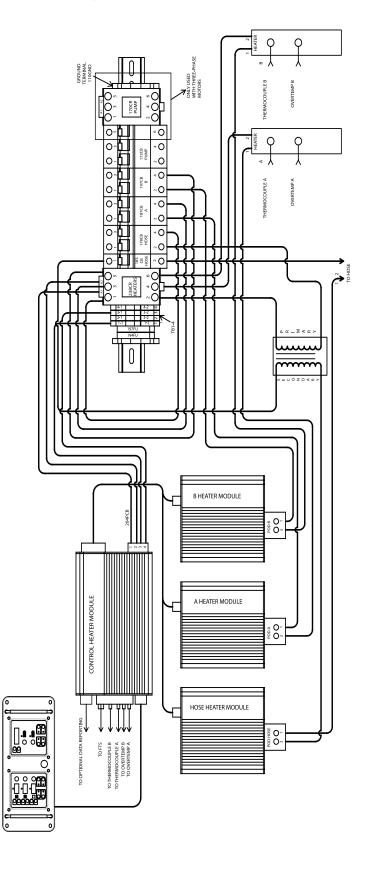
# **Simplified Schematic, Motor Controls**



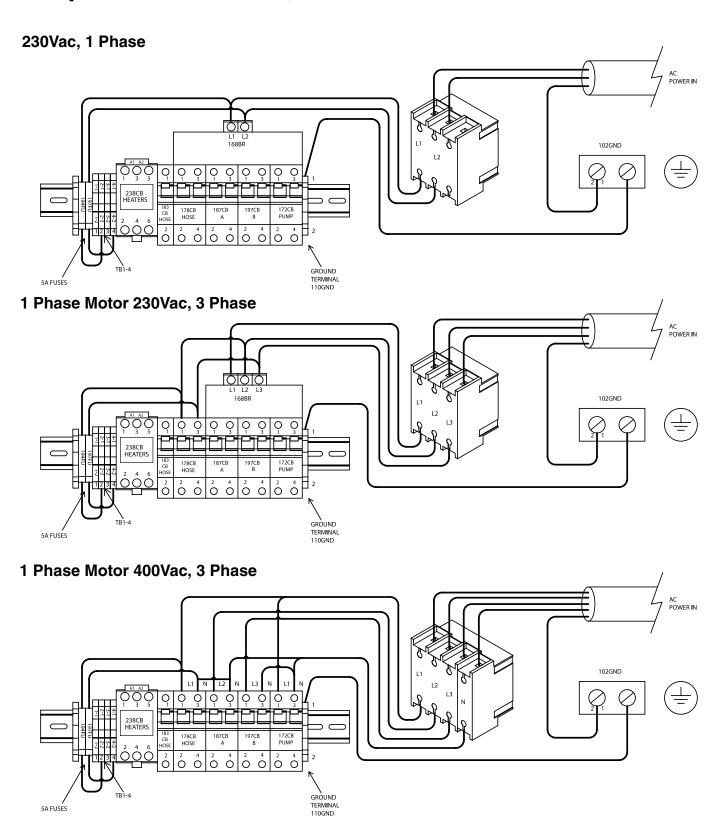
### Simplified Schematic, Motor Controls (cont.)



# **Simplified Schematic, Heater Controls**

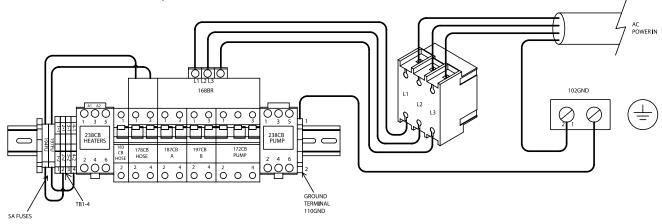


## **Simplified Schematic, Power Connections**

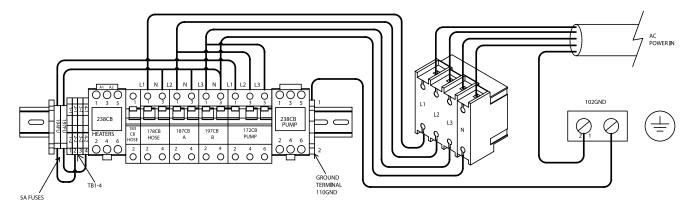


### **Simplified Schematics, Power Connections (cont.)**

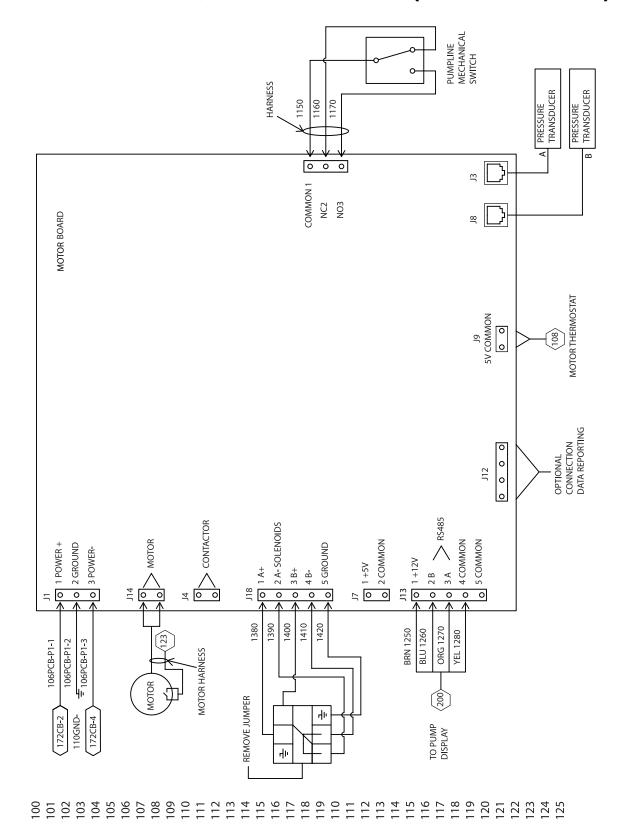
### 3 Phase Motor 230Vac, 3 Phase



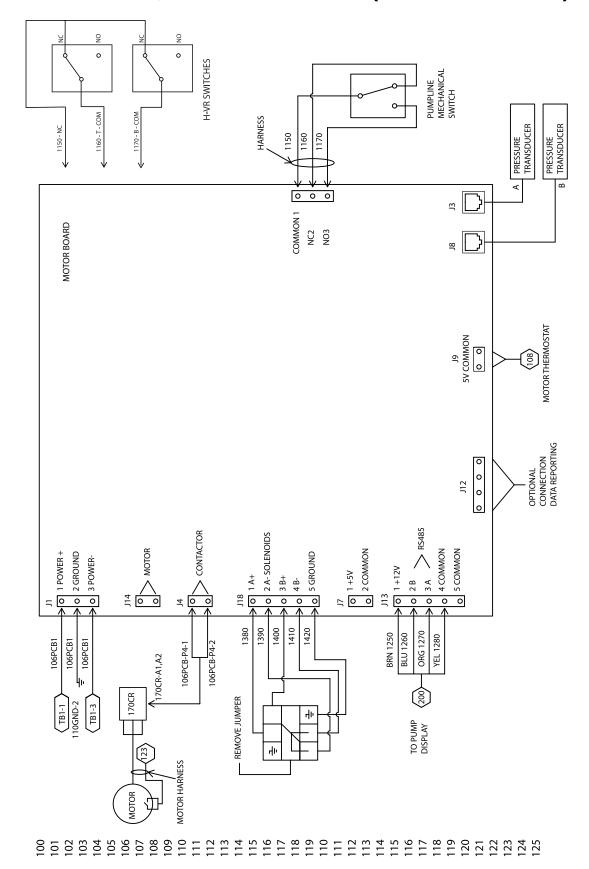
### 3 Phase Motor 400Vac, 3 Phase



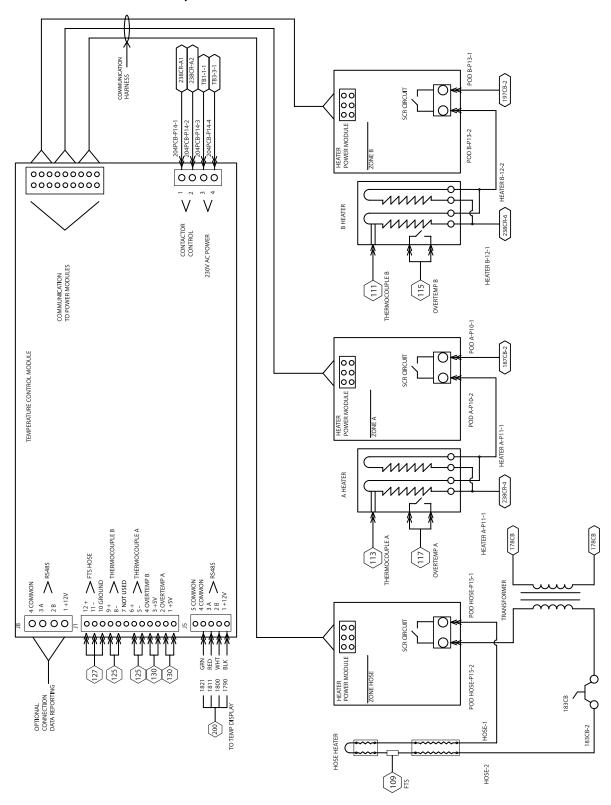
# **Detailed Schematic, Motor Controls (1-Phase Motor)**



## **Detailed Schematic, Motor Controls (3-Phase Motor)**



# **Detailed Schematic, Heater Controls**



### **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.

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.

For patent information, see www.graco.com/patents.

Original instructions. This manual contains English. MM 312064

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

GRACO INC. AND SUBSIDIARIES • P.O. BOX 1441 • MINNEAPOLIS MN 55440-1441 • USA Copyright 2007, Graco Inc. All Graco manufacturing locations are registered to ISO 9001.