OM-07720
November 1, 2024

INSTALLATION AND OPERATION MANUAL

WITH PARTS LIST

GORMAN-RUPP PUMPS

CONTROL BOX

MODELS:

48319-501thru 48319-530

SIMPLEX, 3P, 5 to 50HP

GORMAN-RUPP PUMPS | GRPUMPS.COM

TABLE OF CONTENTS

INTRODUCTION

Read this manual carefully to learn how to safely install and operate your control box. Failure to do so could result in personal injury or damage to the control box or the pump.

This manual does not include maintenance instructions. Have a qualified electrician perform all maintenance. **Be sure** to follow all safety precautions as outlined by the National Electric Code and all local codes.

These control boxes are Nema Type 3R rainproof enclosures with padlockable front covers. **The enclosures are not designed to be watertight, and should not be submerged.** They are designed for use with 230, 460, 575 and 380 volts, 3 phase Gorman-Rupp submersible pumps. The integral electric motor of the submersible pump **must** be operated through the control box. The control box is **not** explosion-proof and should not be operated in a hazardous atmosphere.

Because pump installations are seldom identical, this manual cannot possibly provide detailed instructions and precautions for every aspect of each specific application. Therefore, it is the responsibility of the owner/installer of the pump to ensure that applications not addressed in this manual are performed **only** after establishing that neither operator safety nor pump integrity are compromised by the installation. Pumps and related equipment **must** be installed and operated according to all national, local and industry standards.

If there are any questions regarding the control box which are not covered in this manual or in other literature accompanying this unit, please contact your Gorman-Rupp distributor, or The Gorman-Rupp Company:

The Gorman-Rupp Company

P.O. Box 1217

Mansfield, Ohio 44901-1217

Phone: (419) 755-1011

or:

Gorman-Rupp of Canada Limited

70 Burwell Road

St. Thomas, Ontario N5P 3R7

Phone: (519) 631-2870

RECORD CONTROL BOX NUMBER

Please record the control box number, voltage, phase, and pump model in the spaces provided below. Your Gorman-Rupp distributor needs this information when you require parts or service.

Control Box: _____

Voltage: _____

Phase: _____

Pump Model: _____

WARRANTY INFORMATION

The warranty provided with your control box is part of Gorman-Rupp's support program for customers who operate and maintain their equipment as described in this and the other accompanying literature. Please note that should the equipment be abused or modified to change its performance beyond the original factory specifications, the warranty will become void and any claim will be denied.

HAZARD AND INSTRUCTION DEFINITIONS

See Page I-2

HAZARD AND INSTRUCTION DEFINITIONS

The following are used to alert personnel to procedures which require special attention, to those which could damage equipment, and to those which could be dangerous to personnel:

Immediate hazards which WILL result in severe personal injury or death. These instructions describe the procedure required and the injury which will result from failure to follow the procedure.

Hazards or unsafe practices which COULD result in severe personal injury or death. These instructions describe the procedure required and the injury which could result from failure to follow the procedure.

Hazards or unsafe practices which COULD result in minor personal injury or product or property damage. These instructions describe the requirements and the possiÂble damage which could result from failure to follow the procedure.

NOTE

Instructions to aid in installation, operation, and maintenance or which clarify a procedure.

SAFETY - SECTION A

The following information applies throughout this manual to Gorman-Rupp Control Boxes.

Because pump installations are seldom identical, this manual cannot possibly provide detailed instructions and precautions for each specific application. Therefore, it is the owner/installer's responsibility to ensure that applications not addressed in this manual are performed only after establishing that neither operator safety nor pump integrity are compromised by the installation.

WARNING!

Before attempting to install, operate, or wire this control box, familiarize yourself with this manual, and with all other literature shipped with the control box. Unfamiliarity with all aspects of control operation covered in this manual could lead to destruction of equipment, injury, or death to personnel.

WARNING!

Before connecting any cable to the control box, be sure to ground the control box. See Section B for suggested grounding methods.

WARNING!

The control box provides overload protection and power control. Do not connect the pump motor directly to the incoming power lines. If the power circuit breaker or overload relay is tripped during operation, correct the problem before resetting or replacing.

WARNING!

The electrical power used to operate this control box is high enough to cause injury or death. Obtain the services of a qualified electrician to make all electrical connections. Make certain that the enclosure is properly grounded; never use gas pipe as an electrical ground. Be sure that the incoming power matches the voltage and phase of the control before connecting the power source. Do not make electrical connections if the voltage is not within the limits. If the overload unit is tripped during operation, correct the problem before restarting.

WARNING!

The electrical power used to operate this control box is high enough to cause injury or death. Make certain that the control handle on the control box is in the OFF position and locked out, or that the power supply to the control box has been otherwise cut off and locked out, before attempting to open or service the control box. Tag electrical circuits to prevent accidental start-up.

WARNING!

Obtain the services of a qualified electrician to make all electrical connections, and to troubleshoot, test and/or service the electrical components of the control box.

Do not attempt to repair individual components of the control box. Any component which fails should be replaced.

INSTALLATION - SECTION B

GENERAL INFORMATION

Review all SAFETY information in Section A.

This section is intended only to summarize recommended installation practices for the control box. If there are any questions concerning your specific application, contact your Gorman-Rupp distributor or the Gorman-Rupp Company.

PREINSTALLATION INSPECTION

The control box was inspected before shipment from the factory. Before installation, inspect the control for damage which may have occurred during shipment. Check as follows:

a. Inspect the control box for cracks, dents, and other obvious damage.

b. Check that all control box components are securely attached to their mounting surfaces, and that the electrical connections are tight and free of corrosion.

c. Compare the amperes, phase, voltage and hertz indicated on the pump motor name plate to the ratings indicated for the control box.

d. Carefully read all tags, decals, and markings on the control box.

If anything appears to be abnormal, contact your Gorman-Rupp distributor or the factory to determine the repair policy. Do not put the control box into service until appropriate action has been taken.

CONTROL BOX INSTALLATION

WARNING!

The control box furnished with the pump is designed to operate the pump. The control box provides overload protection and power control. Do not connect the pump motor directly to the incoming power lines.

Enclosure

The control box is a NEMA Type 3R rainproof enclosure with a padlockable front cover. **The enclosure is not designed to be watertight, and should not be submerged.**

No mounting hardware is furnished with the control box, contact your Gorman-Rupp sales associate for mounting tabs. Secure the control box vertically on a level surface, above flood level. The control should be mounted on a flat surface. If the mounting surface is not perfectly flat, it may be necessary to use shims (not supplied) with the enclosure.The box should be easily accessible to the operator, and located close enough to the pump to avoid excessive voltage drop due to cable length.

CAUTION

Failure to mount the control box vertically on a level surface may affect operation of the pump controls.

After the box is securely installed, make certain the front cover latches properly before installing any electrical lines.

CONTROL BOX DIMENSIONS

For the approximate physical dimensions of your control box, refer to page K-6.

ELECTRICAL CONNECTIONS

WARNING!

Obtain the services of a qualified electrician to make all electrical connections and to service the control box.

WARNING!

The electrical power used in this control box is high enough to cause injury or death. Make certain that the control box is properly grounded after installation. Make certain that the power source phase and voltage matches the data on the control box. Complete all electrical connections before connecting the power supply to the control box. Make certain to ground the appropriate lead of the power source before connecting power to the control. Make certain that the control box is properly grounded after installation.

Grounding Methods

Electrically ground the installation before connecting the field wiring to the control box. Install a grounding terminal to the enclosure and connect it to a properly embedded electrode.

The material used for the electrode must be an excellent conductor of electricity, such as copper. If iron or steel is used, it must be galvanized or otherwise metal plated to resist corrosion. **Do not** coat the electrode with any material of poor conductivity, such as paint or plastic.

The electrode must conform to the recommendations of N.E.C. ARTICLE 250. Follow all installation requirements of the N.E.C., and all applicable codes. See Figure B-2 for some suggested grounding methods.

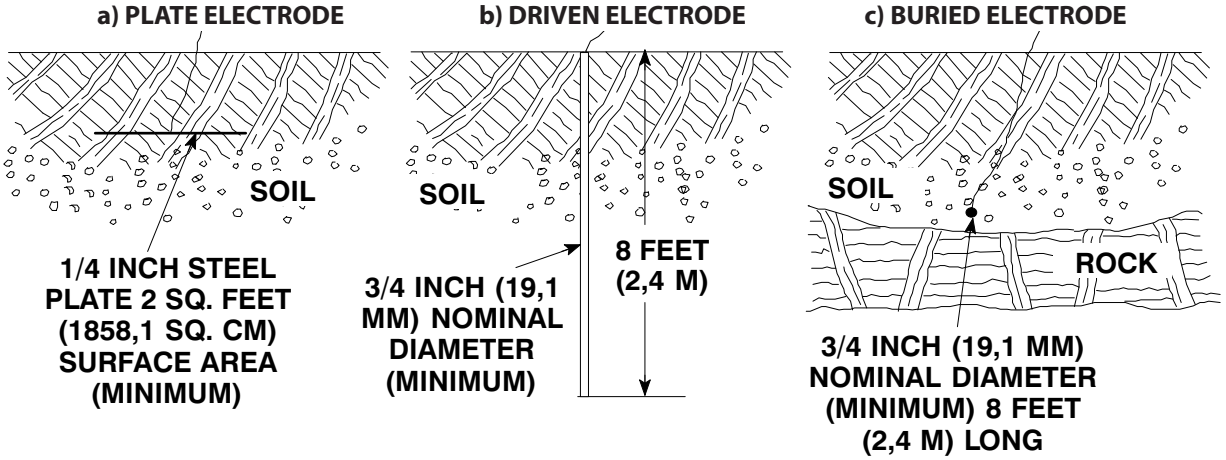

Figure B-2. Suggested Grounding Methods

a. **Plate Electrode:** An iron or steel plate, 1/4 inch (6,4 mm) thick, completely impeded in the ground. The plate must present a surface area of at least 2 square feet (1858,1 sq. cm).
b. **Driven Electrode:** A rod or pipe, 3/4 inch (19,1 mm) in diameter minimum, 8 feet (2,4 m) long, complete -ly driven into the ground.
c. **Buried electrode:** If rock or stone prevents embedding the full 8 foot (2,4 m) length of the ground rod, bury it horizontally in a trench.

Space the ground rod or plates at least 6 feet (1,8 m) from any other electrode or ground rod, such as those used for signal circuits, radio grounds, lightning rods, etc.

The earth surrounding the ground rod or plate **must** contain enough moisture to make a good electrical connection. In dry or sandy areas, pour water around the rod, or consult qualified personnel to devise a method of improving the connection.

Field Wiring Connections (Incoming Power)

WARNING!

The electrical power used to operate this pump is high enough to cause injury or death. Obtain the services of a qualified electrician to make all electrical connections. Make certain that the pump and enclosure are properly grounded; never use gas pipe as an electrical ground. Be sure that the incoming power matches the voltage and phase of the pump and control before connecting the power source. Do not run the pump if the voltage is not within the limits.

The control is designed to regulate the power supply. The field wiring must be properly sized to ensure an adequate voltage supply. The voltage available **at the pump motor** must be within the indicated range.

Table 3. Pump Motor Voltage Limits

Nominal Voltage	Phase	Minimum Voltage	Maximum Voltage
230	3	210	250
380 (50 Hz)	3	345	415
460	3	420	500
575	3	520	630

If the voltage is not within the recommended limits, obtain the services of a qualified electrician to determine the correct field wiring size and other details to ensure an adequate voltage supply.

Make certain all connections are tight and that cable entry points are rainproof. Support the cable weight, if required, to prevent excessive strain on cable clamps and cable.

NOTE

After the power cables have been connected to the control box, make certain the connection is water proof.

Power Cable Connections

WARNING!

The electrical power used to operate the control box is high enough to cause injury or death. Obtain the services of a qualified electrician to make all electrical connections. Make certain that incoming power to the control box is in the off position and locked out, or that the power supply to the control box has been otherwise cut off and locked out, before connecting power or accessory cables.

When necessary to change or connect power cables to the control box, make certain the incoming power is **OFF** and **LOCKED OUT**. Make certain the control box is **properly grounded** and that the electrical data on the control matches the pump motor name plate data.

Connect the power cable to the control box as shown in the wiring diagrams in this section. Use conduit or cable clamps to secure the power and accessory cables to the control box. Make certain that all connections are tight and that cable entry points are rainproof.

Control Box Specifications

Overload relays are provided to protect the pump motor.

WARNING!

If burnout of the overload protection occurs, the complete overload protection must be replaced.

OPERATION - SECTION C

Review all SAFETY information in Section A.

Follow the instructions on all tags, labels and decals attached to the control box.

WARNING!

The electrical power used to operate this control box is high enough to cause injury or death. Make certain that the control handle on the control box is in the OFF position and locked out, or that the power supply to the control box has been otherwise cut off and locked out, before attempting to open or service the control box. Tag electrical circuits to prevent accidental start-up.

WARNING!

Obtain the services of a qualified electrician to make all electrical connections, and to troubleshoot, test and/or service the electrical components of the control box.

CONTROL BOX FUNCTION

WARNING!

The control box is not designed to be explosion-proof. Do not operate in an explosive atmosphere.

The control box is provided to facilitate operation of the pump. It contains controls for starting and stopping the pump, and provides overload protection for the pump motor. The pump control may be equipped with an optional automatic liquid level sensing device, in which case the circuits are also contained within the control box.

WARNING!

The control box provides overload protection and power control. Do not connect the pump motor directly to the incoming power lines. If the power circuit breaker or overload relay is tripped during operation, correct the problem before resetting or replacing.

CAUTION

Since operation of the pump motor is dependent upon the quality and performance of the electrical controls, the pump warranty is valid only when controls have been specified or provided by The Gorman-Rupp Company.

Component Function

The control box contains the following hand operated switches and controls.

- The **control handle** operates the control box circuit breakers. In the OFF position, the control handle opens the circuit breakers to interrupt incoming power through the control box and prevent pump operation. In the ON position, it closes the circuit breakers to permit pump operation. The circuit breakers will open or "trip" automatically in the event of a short circuit overload current. When tripped, move the control handle to OFF and back to ON to reset the circuit breakers.
- The **selector switch** controls the mode of operation. In the OFF position, it prevents all operation of the pump. In the HAND position, it allows the pump to run continuously. In the AUTO position, it allows the pump to be controlled automatically by the optional liquid level control system, if used.
- The **overload unit** is also the ON and OFF switch. The overload relay will trip automatically if the current drawn by the motor exceeds design specifications. Allow 10 seconds for the unit to cool after tripping before resetting.

- The **reset** pushbutton resets the motor overload after it has been TRIPPED by an overload. The overload relay will trip automatically if the current drawn by the motor exceeds design specifications. Allow 10 seconds for the relay to cool after tripping before pressing the reset.

NOTE

If the circuit breaker trips, do not reset it immediately. Wait at least ten minutes before resetting the control handle back to the ON position. If the overload unit continues to trip, operational problems exist.

WARNING!

The pump motor will restart as soon as the RESET pushbutton is pressed, unless the selector switch is in the OFF position. Turn the selector switch to OFF and move the control handle to OFF before approaching the pump.

- The **liquid level devices** (optional equipment) operate in conjunction with the 3-position switch (HAND-OFF-AUTO) supplied for that option. After the level sensors and circuitry have been installed, pump operation may be automatically controlled for filling or dewatering functions. **Intrinsically safe relays** can be added as an option to the liquid level devices. For a 2 float system please reference GR part no. 48319-901. For a 3-5 float system please reference GR part no. 48319-902.
- The **operational warning lights** operate in conjunction with the 3-position switch (HAND-OFF-AUTO) supplied as a part of that option. After the level sensors and circuitry have been installed, pump operations may be automatically controlled for filling or dewatering functions. The green run light is standard equipment on all the controls and indicates the pump is running. The light will be energized when the 3-position switch is in the HAND position or when the pump is running with the switch in the AUTO position. The amber seal failure light (standard equipment only on some controls) works in conjunction with a sensor probe located in the seal oil cavity of the pump and detects an influx of moisture into the cavity. Should this condition occur, the pump motor should remain inoperative until the problem is corrected. The motor overheat condition (standard equipment on some controls) works in conjunction with a thermostat embedded in the motor windings. In event of a high temperature condition, the motor is shut-down. After the motor cools, the device is automatically reset.
- An **Alarm Light and/or Horn** can be added as an option to the control panel. Please refere to section K page 3 for connections of the devices to be added.
- The **elapsed time meter** (ETM) is a non-resetable timer that tracks pump run time. The timer will be energized when the 3-position switch is in the hand position or when the pump is running with the switch in auto position.

WARNING!

Always terminate power to the control box before performing service functions.

Power through the control box may be terminated by moving the control handle to the OFF position, thereby opening the circuit breakers. This stops the pump, but does not terminate incoming power through the field wiring connected to the control box.

TROUBLESHOOTING - SECTION D

Review all SAFETY information in Section A.

WARNING!

The electrical power used to operate this control box is high enough to cause injury or death. Obtain the services of a qualified electrician to troubleshoot, test and/or service the electrical components.

Many of the probable remedies listed in the troubleshooting chart below require use of electrical test instruments; for specific procedures, see **Electrical Testing** at the end of the troubleshooting chart.

When troubleshooting, also refer to the technical information accompanying the pump and optional equipment.

TROUBLESHOOTING CHART

TROUBLE	POSSIBLE CAUSE	PROBABLY REMEDY
PUMP FAILS TO START, OVERLOAD UNIT NOT TRIPPED (MANUAL MODE)	Power source incompatible with control box.	Correct power source.
	No voltage at line side of circuit breaker.	Check power source for blown fuse, open overload unit, broken lead, or loose connection.
	No voltage at line terminals on bottom of overload unit in control box.	Check power source for blown fuse, open disconnect, broken wire, or loose connection.
OVERLOAD UNIT TRIPS	Low or high voltage, or excessive voltage drop between pump and control box.	Measure voltage at control box. Check that wiring is correct type, size, and length. (See **Field Wiring Connections**, Section B).
	Power input phases not balanced.	If imbalance exceeds 1 percent, notify power company.
	Control box not compatible with pump.	Electrical data on control box and pump name plate must agree. Replace control box if not in agreement.
	Foreign object locking impeller or bearing frozen.	Remove foreign material or replace damaged bearing. If bearing is damaged, check for water in motor housing.
	Motor windings short-circuited.	Check motor windings with ohmmeter.

ELECTRICAL TESTING

Be certain to refer to the wiring diagram(s) in Section K of this manual before reconnecting any electrical components which have been disconnected.

Test Equipment

A volt/amp/ohmmeter and megohmeter of adequate range and quality will be required to conduct the electrical tests. The suggested equipment indicated below is commercially available, or an equivalent substitute may be used.

Equipment	Use
Ammeter/Voltmeter	To check AC Voltage and current (amperage)
Ohmmeter	To measure resistance (ohms) to ground

Voltage Imbalance

Each phase of the incoming three-phase power must be balanced with the other two as accurately as a commercial voltmeter will read. If the phases are out of balance, contact your power company and request that they correct the condition.

ELECTRICAL DRAWINGS AND DATA - SECTION K

The electrical power used to operate this control box is high enough to cause injury or death. Make certain that the control handle on the control box is in the OFF position and locked out, or that the power supply to the control box has been otherwise cut off and locked out, before attempting to open or service the control box. Tag electrical circuits to prevent accidental start-up.

Obtain the services of a qualified electrician to make all electrical connections, and to troubleshoot, test and/or service the electrical components of the control box.

Do not attempt to repair individual components of the control box. Any component which fails should be replaced.

48319-501 to 48319-530
SYMBOL LIBRARY

WIRING

STATION WIRING BY GORMAN RUPP

FIELD WIRING BY OTHERS OR OPTIONAL WIRING

TERMINALS

TB01 = GROUND POTENTIAL

TB02 = 120 VAC POTENTIAL

FSTB01 = FLOAT TERMINAL BLOCK CONNECTIONS

IS_01 = INTRISICALLY SAFE CONNECTION

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CONDUCTOR COLORS

GROUND	GREEN/YELLOW
200/208/230/240/400,460,480,575/600V	BLACK
120VAC	RED
NEUTRAL	WHITE

WARNING: CONNECT TO CONTROL PANEL GROUND LUG BEFORE APPLYING LINE POTENTIAL. IF APPLICABLE, CONTROL CIRCUIT TO BE GROUNDED BY USER IF CONDITIONS PERMIT

c UL us
U.L. 508A

REV.	MODIFICATION	DATE	NAME	APPROVED BY

PAGE DESCRIPTION	SYMBOL LIBRARY	
PROJECT CITY	MANSFIELD	
PROJECT STATE	OHIO - OH	
DATE	DRAWN BY	APPROVED BY
08/01/2024	JLS	AA

PROJECT NAME
CONTROL BOX

PROJECT DESCRIPTION
SIMPLEX CONTROL PANEL

DRAWING NUMBER	SERIAL NUMBER
48319-501 to 530	ASSEMBLY DATE

THE GORMAN-RUPP CO.
600 S. AIRPORT ROAD
MANSFIELD, OH 44901

GORMAN-RUPP PUMPS

LINE VOLTAGE, 3Ø, 60 HZ (MAIN DISCONNECT AND BRANCH CIRCUIT PROTECTION TO BE PROVIDED BY OTHERS)

L1 L2 L3 GND

P_GND01

PE GRN — GND — GND (SEE WARNING NOTE)

PUMP MOTOR CIRCUIT BREAKER MCB01

1L1 BLK — 1 L1 — 2 T1 — 1L11 BLK

1L2 BLK — 3 L2 — 4 T2 — 1L21 BLK

1L3 BLK — 5 L3 — 6 T3 — 1L31 BLK

M01: 1 L1 / 2 T1 — 3 L2 / 4 T2 — 5 L3 / 6 T3 — (344)

OL01: 1 L1 / 2 T1 — 3 L2 / 4 T2 — 5 L3 / 6 T3

1T1 BLK — 1T2 BLK — 1T3 BLK

+FIELD

PUMP MOTOR

MTR01: U1 P1 — V1 (344) — W1 P2 — PE

MTRGND01 — GND — MTRGND01 GRN/YEL

800F: 97 98 — 95 96 (344)

(OVERLOAD TO BE SET AT MOTOR NAME PLATE FLA)

1L11 14 BLK — 1L21 14 BLK

T01 150VA

H-1F1 — H6-2F1

FU01 — FU01

H1 H2 H3 H4 H5 H6

575V 480V 460V 240V 200V 0V

FU02

TB02 5 01 16 RED — X1-F2 — X1 — X2 — N 16 WHT — TB02 1

GND 14 GRN/YEL — TB01 1

D1_Labels

D2_HOLE_PLUGS

D3_Panduit

120VAC (340)

N (340)

(338) 120VAC

NOTE 1: IN ORDER TO SHUT OFF PUMP RUN RELAY CR01, WIRE ONLY LOWER FLOAT SWITCH FS02, OR STOP PUMP FROM PLC CONTACT CR-A, NOT BOTH. IF BOTH ARE WIRED, CR01 MAY NOT SHUT OFF WHEN EXPECTED.

(339) N

IF MOTOR HAS THERMAL PROTECTION, REMOVE THE JUMPER BETWEEN TERMINALS TB02:10 AND TB02:11 AND CONNECT TO MOTOR LEADS P1 AND P2.

PUMP H-O-A SS01 OFF — HAND — AUTO

XOO — L3 — L4

01 16 RED — 02 16 RED — TB02 6

M01 A1 / A2 — 03 16 RED — TB02 10

JPR01 — +FIELD — MTP MTR01 P1' P2' (303) — TB02 11

PUMP MOTOR OVERLOAD OL01 — 04 14 BLK — 95 NO — 96 NO — N 16 WHT — TB02 2

(304)

OOX — R3 — R4 — TB02 05 16 RED — 12 05 16 RED — CR01 21 24 (354) — 02 16 RED — TB02 7

M01 -3 -4 (344) — 06 16 RED — TB02 13

PUMP MOTOR RUN LIGHT LT01 — X1 GN X2 — N 16 WHT — TB02 3

PUMP ELAPSED TIME METER ET01 — 06 16 RED — N 16 WHT

NOTE 1

TB02 8 — FSTB01 02 16 RED — 1 14 RED

LOWER FLOAT SWITCH FS02 +FIELD — FSTB01 07 14 RED — 3 07 16 RED — TB02 14 — FSTB01 07 16 RED — 4 07 14 RED

UPPER FLOAT SWITCH FS01 +FIELD — FSTB01 08 14 RED — 5 08 16 RED — TB02 17 — 08 16 RED

PUMP RUN RELAY CR01 A1 / A2 — N 16 WHT

TB02 9 — 02 16 RED

STOP PUMP FROM PLC CR-A — 02 14 RED — 07 14 RED — +OPTION

NOTE 1

TB02 15 — 07 16 RED — CR01 11 14 (354) — 08 16 RED

START PUMP FROM PLC CR-B — 07 14 RED — 08 14 RED — +OPTION

TB02 16 — TB02 18

HIGH WATER ALARM LIGHT LT02 — 09 16 RED — X1 RD X2 — N 16 WHT — +OPTION

TB02 4

ALARM SILENCE PB01

TB02 19 — 09 16 RED — R3 — R4 YE — 10 16 RED — TB02 21

IF HIGH WATER ALARM IS USED, CONNECT PER DASHED LINES.

HIGH LEVEL ALARM SWITCH FS03 +FIELD — FSTB01 2 — 02 14 RED — 09 14 RED — 6 09 16 RED — TB02 20

CR02 — 09 16 RED — 11 14 (368) — 10 16 RED — HIGH WATER ALARM RELAY CR02 A1 / A2 — N 16 WHT

10 16 RED

HIGH WATER ALARM

+FIELD HRN01

11. 12 (368) — 11 16 RED — TB02 22 — 11 14 RED — N 14 WHT

PUMP RUN DRY CONTACT M01

TB02 23 — 12 16 RED — .44 .43 (344) — 13 16 RED — TB02 24

IS_01 1 — CONNECTION FOR INTRINISICALLY SAFE BOX OPTION — 2 N 16 WHT IS_01

300 1304E 2 (304) — 4 (305) — 6 (306) — -4 (348) — -2 -43 (374) — .32

62.33.8.120.0040 32103 14 (357) — 12 (346) — 24 — 22 — 34 — 32

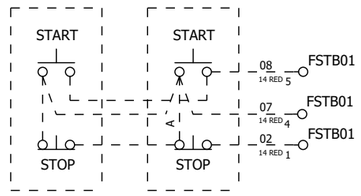
14 (368) — 12 (371) — 24 — 22 — 34 — 32

WARNING: CONNECT TO CONTROL PANEL GROUND LUG BEFORE APPLYING LINE POTENTIAL. IF APPLICABLE, CONTROL CIRCUIT TO BE GROUNDED BY USER IF CONDITIONS PERMIT	c UL us U.L. 508A	REV.	MODIFICATION	DATE	NAME	APPROVED BY	PAGE DESCRIPTION	PUMP DIAGRAM		PROJECT NAME
							PROJECT CITY	MANSFIELD		CONTROL BOX
							PROJECT STATE	OHIO - OH		
							DATE	DRAWN BY	APPROVED BY	
							08/01/2024	JLS	AA	

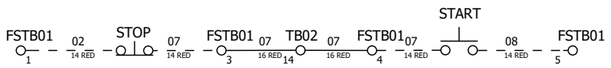
PROJECT DESCRIPTION		THE GORMAN-RUPP CO.	PAGE
SIMPLEX CONTROL PANEL		600 S. AIRPORT ROAD	3
DRAWING NUMBER	SERIAL NUMBER ASSEMBLY DATE	MANSFIELD, OH 44901	
48319-501 to 530			

OPTIONS & CONNECTIONS

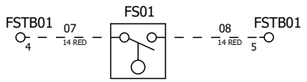
3 WIRE PILOT DEVICE



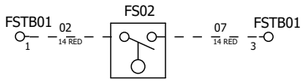
WHEN MORE THAN ONE PUSHBUTTON STATION IS USED, CONNECT PER DASHED LINES OMITTING CONNECTOR "A".



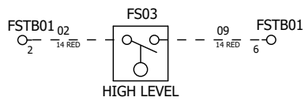
REMOTE PUSHBUTTON IN PLACE OF FLOAT SWITCH



UPPER FLOAT SWITCH



LOWER FLOAT SWITCH



HIGH LEVEL
ALARM SWITCH

HORN

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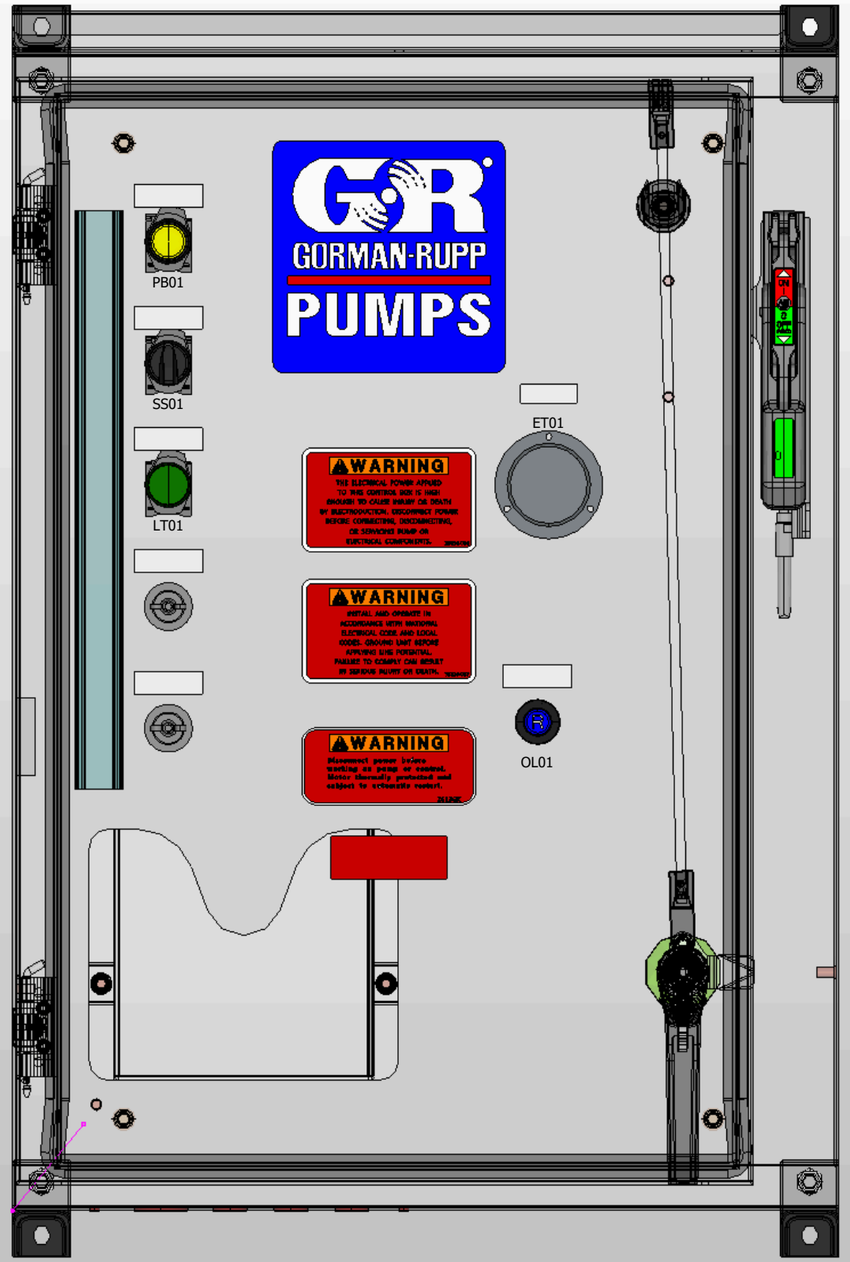
WARNING: CONNECT TO CONTROL PANEL GROUND LUG BEFORE APPLYING LINE POTENTIAL. IF APPLICABLE, CONTROL CIRCUIT TO BE GROUNDED BY USER IF CONDITIONS PERMIT	c UL us U.L. 508A	REV.	MODIFICATION	DATE	NAME	APPROVED BY	PAGE DESCRIPTION	OPTIONS & CONNECTIONS		PROJECT NAME	PROJECT DESCRIPTION
							PROJECT CITY	MANSFIELD		CONTROL BOX	SIMPLEX CONTROL PANEL
							PROJECT STATE	OHIO - OH			DRAWING NUMBER 48319-501 to 530 / SERIAL NUMBER ASSEMBLY DATE
							DATE	DRAWN BY	APPROVED BY		
							08/01/2024	JLS	AA		

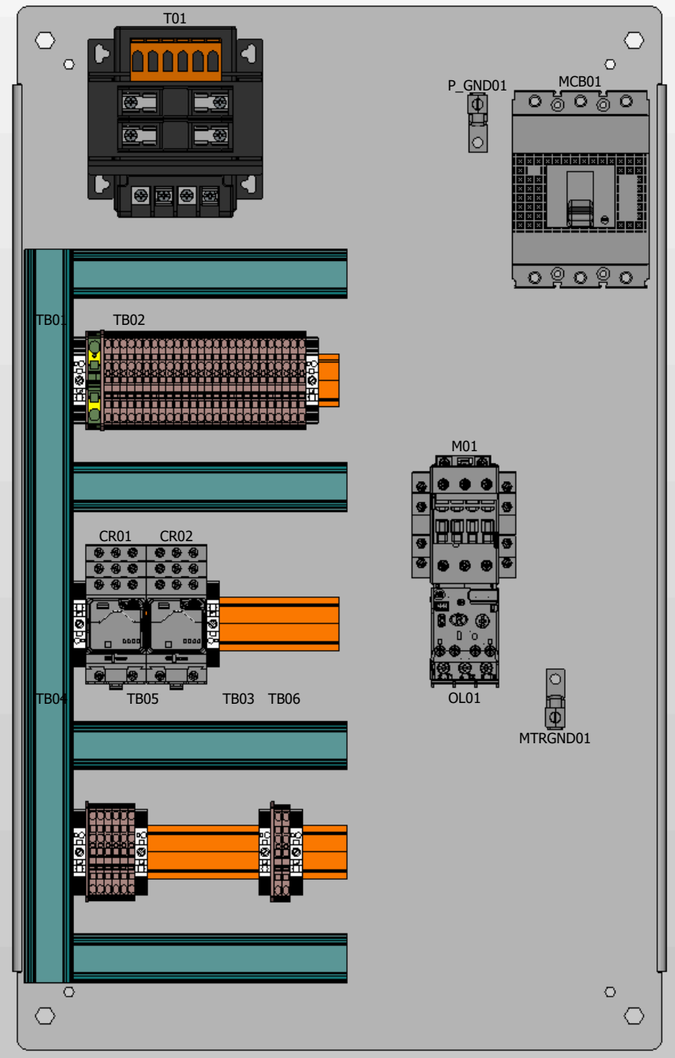
THE GORMAN-RUPP CO.
600 S. AIRPORT ROAD
MANSFIELD, OH 44901

GORMAN-RUPP PUMPS

DOOR VIEW



MOUNTING PANEL



WARNING: CONNECT TO CONTROL PANEL GROUND LUG BEFORE APPLYING LINE POTENTIAL. IF APPLICABLE, CONTROL CIRCUIT TO BE GROUNDED BY USER IF CONDITIONS PERMIT	c UL us U.L. 508A	REV.	MODIFICATION	DATE	NAME	APPROVED BY	PAGE DESCRIPTION	ENCLOSURE VIEW		PROJECT NAME	PROJECT DESCRIPTION
							PROJECT CITY	MANSFIELD		CONTROL BOX	SIMPLEX CONTROL PANEL
							PROJECT STATE	OHIO - OH			DRAWING NUMBER 48319-501 to 530 / SERIAL NUMBER ASSEMBLY DATE
							DATE	DRAWN BY	APPROVED BY		
							08/01/2024	JLS	AA		

THE GORMAN-RUPP CO.
600 S. AIRPORT ROAD
MANSFIELD, OH 44901

GORMAN-RUPP PUMPS

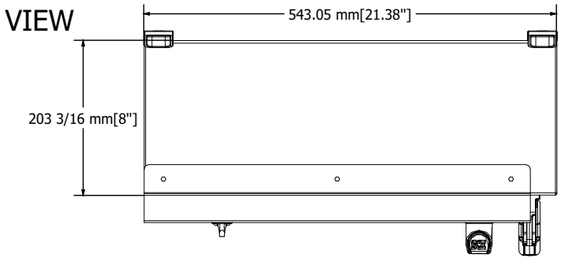
PAGE 5

SIMPLEX PUMP CONTROL

ACROSS-THE-LINE STARTER 3 POLE
THERMAL MAGNETIC TRIP CIRCUIT BREAKER
TYPE 140G, NEMA 3R ENCLOSURE

140G – MOTOR CIRCUIT BREAKERS ARE THERMAL AND MAGNETIC TRIP. SET ADJUSTABLE TRIPS TO TRIP AT APPROXIMATELY 9-11 TIMES FULL LOAD CURRENT (FLA). MOTORS ARE OF SPECIAL DESIGN AND DO NOT REQUIRE HIGHER SETTINGS. A TRIPPED BREAKER STRONGLY INDICATES A FAULT CONDITION IS PRESENT.

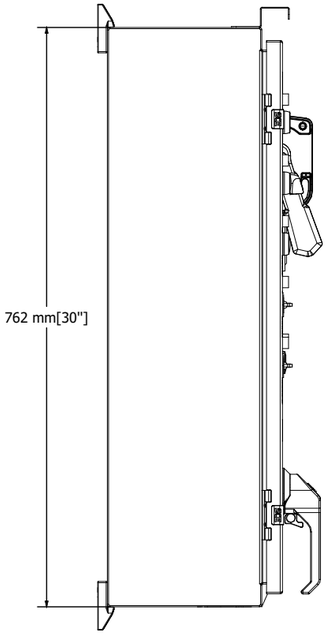
TOP HAND VIEW



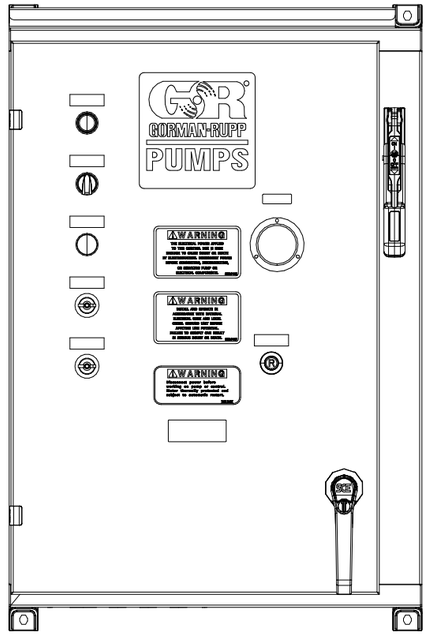
OVERLOAD
PRESS THE RESET BUTTON TO SET RELAY.
ALLOW 10 SECONDS FOR RELAY TO COOL
AFTER TRIPPING BEFORE PRESSING RESET.

WARNING
AFTER BEING PLACED IN SERVICE, THE TRIPPING OF THE CIRCUIT BREAKER IS AN INDICATION THAT A FAULT CURRENT HAS BEEN INTERRUPTED. CURRENT CARRYING COMPONENT PARTS OF THE MAGNETIC MOTOR CONTROLLER SHOULD BE EXAMINED AND REPLACED IF DAMAGED TO PROVIDE CONTINUED PROTECITON AGAINST FIRE OR SHOCK HAZARD.

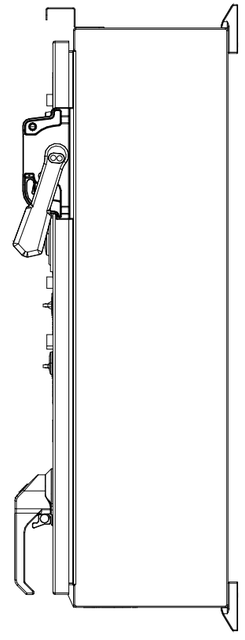
LEFT HAND SIDE VIEW



FRONT HAND VIEW



RIGHT HAND SIDE VIEW



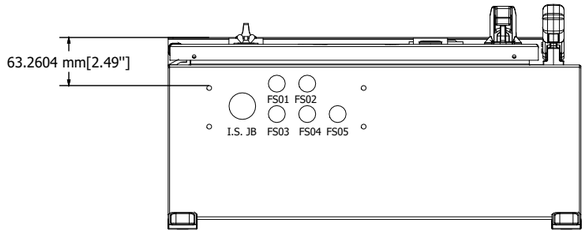
P/N 38814-072 AFFIX TO CONTROL PANEL DOOR

PUMP CONTROL PANEL

THE GORMAN-RUPP COMPANY
MANSFIELD, OHIO ST. THOMAS, ONTARIO

DWG. NO. 48319-5XX S/N (ASSEMBLY DATE)

XXX VOLTS 3 PH __ W 60 HZ
MIN. MAIN WIRE XX AMPS ENCL TYPE 3R
LARGEST MOTOR FLA XXX AMPS UL TYPE 1
SHORT CIRCUIT AMPS 5 ka rms sys XXX V MAX OR
_____ ka WHEN PROTECTED BY _____ A MAX RK1, RMS OR J FUSE



BOTTOM HAND VIEW

MANUFACTURING NOTES:

- STATION NUMBER LABEL: B30C-1125-595-RD LABEL
- USE BRADY.B33-37-8591-WT, DEV 49 15342 LABELS FOR DOOR DEVICES
- USE 27788-505 FOR SELECTOR SWITCH JUMPER
- THICKNESS OF MATERIAL ON PERFOREX = SET TO 2.0
- ENSURE GROUND ON INNER DOOR AND OUTER DOOR
- REMOVE DATA POCKET. AFFIX 38811-502 AND 38811-503 TO DOOR INSIDE IN LOCATION OF WHERE DATAPOCKET WAS LOCATED.

-INSTALL HOLE COVERS ON ENCLOSURE OUTSIDE FLOOR FOR CONDUIT HOLES.
- PANEL IS TO BE MOUNTED ON SKID AND SHRINK WRAPPED FOR SHIPMENT TO MAIN PLANT.

P/N 38816-060 AFFIX TO CONTROL BACKPLATE NEAR FUSES

WARNING

TO REDUCE RISK OF FIRE, REPLACE ONLY WITH
THE SAME TYPE AND RATING OF USE OR EQUIVALENT.
WARNING
FU1: VARIES FU2: VARIES FU3: _____
FU4: _____ FU5: _____ FU6: _____

WARNING: CONNECT TO CONTROL PANEL GROUND LUG BEFORE APPLYING LINE POTENTIAL. IF APPLICABLE, CONTROL CIRCUIT TO BE GROUNDED BY USER IF CONDITIONS PERMIT

c UL us
U.L. 508A

REV.	MODIFICATION	DATE	NAME	APPROVED BY

PAGE DESCRIPTION	5 SIDED VIEWS	
PROJECT CITY	MANSFIELD	
PROJECT STATE	OHIO - OH	
DATE	DRAWN BY	APPROVED BY
08/01/2024	JLS	AA

PROJECT NAME
CONTROL BOX

PROJECT DESCRIPTION
SIMPLEX CONTROL PANEL

DRAWING NUMBER 48319-501 to 530
SERIAL NUMBER ASSEMBLY DATE

THE GORMAN-RUPP CO.
600 S. AIRPORT ROAD
MANSFIELD, OH 44901

GORMAN-RUPP PUMPS

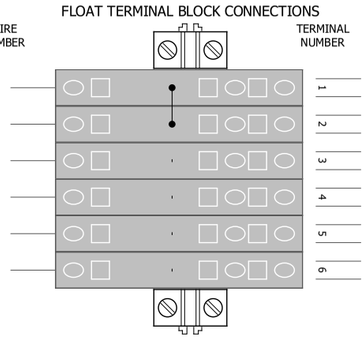
PAGE 6

TERMINAL DIAGRAM

GR_TerminalStrip

STRIP =+A1-FSTB01

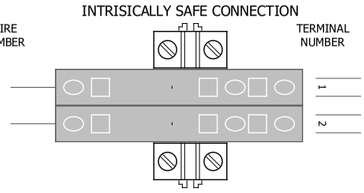
FLOAT TERMINAL BLOCK CONNECTIONS



PAGE	POTENTIAL	EXTERNAL TARGETS	WIRE COLOR	WIRE NUMBER	TERMINAL NUMBER	WIRE NUMBER	WIRE COLOR	INTERNAL TARGETS
(354)					1	02	RED	+FIELD-FS02
						02	RED	-TB02
(368)					2	02	RED	+FIELD-FS03
(354)					3	07	RED	-TB02
						07	RED	+FIELD-FS02
(354)					4	07	RED	+FIELD-FS01
						07	RED	-TB02
(354)					5	08	RED	-TB02
						08	RED	+FIELD-FS01
(368)					6	09	RED	-TB02
						09	RED	+FIELD-FS03

STRIP =+A1-IS_01

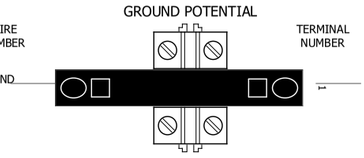
INTRISICALLY SAFE CONNECTION



PAGE	POTENTIAL	EXTERNAL TARGETS	WIRE COLOR	WIRE NUMBER	TERMINAL NUMBER	WIRE NUMBER	WIRE COLOR	INTERNAL TARGETS
(378)					1	02	RED	-TB02
(378)					2	N	WHT	-TB02

STRIP =+A1-TB01

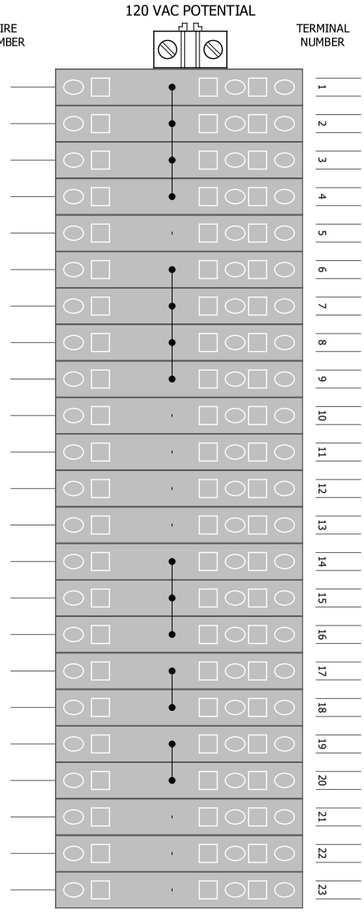
GROUND POTENTIAL



PAGE	POTENTIAL	EXTERNAL TARGETS	WIRE COLOR	WIRE NUMBER	TERMINAL NUMBER	WIRE NUMBER	WIRE COLOR	INTERNAL TARGETS
(319)	NEUTRAL	-T01	GRN/YEL	GND	1			

STRIP =+A1-TB02

120 VAC POTENTIAL



PAGE	POTENTIAL	EXTERNAL TARGETS	WIRE COLOR	WIRE NUMBER	TERMINAL NUMBER	WIRE NUMBER	WIRE COLOR	INTERNAL TARGETS
(316)					1	N	WHT	-T01
(344)					2	N	WHT	-OL01
(348)					3	N	WHT	-CR01
(362)					4	N	WHT	-IS_01
						N	WHT	-LT01
(316)					5	N	WHT	+FIELD-HRN01
						01	RED	+OPTION-LT02
(344)					6	01	RED	-T01
						02	RED	-SS01
(348)					7	02	RED	-M01
						02	RED	-SS01
(354)					8	02	RED	-CR01
						02	RED	-FSTB01
(357)					9	02	RED	+OPTION-CR-A
						02	RED	-IS_01
(344)					10	03	BLK	+FIELD-MTR01
						03	RED	-M01
(344)					11	04	BLK	+FIELD-MTR01
						04	RED	-OL01
(348)					12	05	RED	-CR01
						05	RED	-SS01
(348)					13	06	RED	-LT01
						06	RED	-M01
(354)					14	07	RED	-FSTB01
						07	RED	-FSTB01
(357)					15	07	RED	-CR01
						07	RED	+OPTION-CR-A
(360)					16	07	RED	+OPTION-CR-B
						08	RED	-CR01
(354)					17	08	RED	-FSTB01
						08	RED	+OPTION-CR-B
(360)					18			
						09	RED	-PB01
(365)					19	09	RED	+OPTION-LT02
						09	RED	-CR02
(368)					20	09	RED	-FSTB01
						10	RED	-CR02
(365)					21	10	RED	-PB01
						11	RED	+FIELD-HRN01
(371)					22	11	RED	-CR02
						12	RED	-M01
(374)					23			

WARNING: CONNECT TO CONTROL PANEL GROUND LUG BEFORE APPLYING LINE POTENTIAL. IF APPLICABLE, CONTROL CIRCUIT TO BE GROUNDED BY USER IF CONDITIONS PERMIT

UL 508A

REV.	MODIFICATION	DATE	NAME	APPROVED BY

PAGE DESCRIPTION: TERMINAL DIAGRAM

PROJECT CITY: MANSFIELD

PROJECT STATE: OHIO - OH

DATE: 08/01/2024

DRAWN BY: JLS

APPROVED BY: AA

PROJECT NAME: CONTROL BOX

PROJECT DESCRIPTION: SIMPLEX CONTROL PANEL

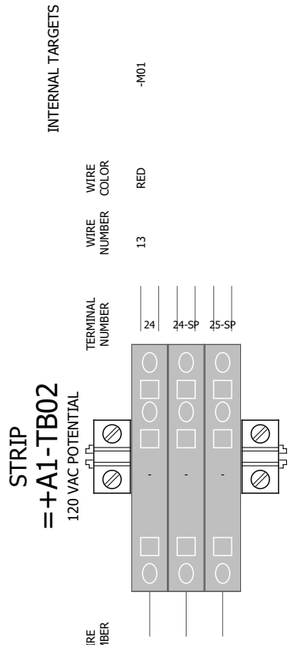
DRAWING NUMBER: 48319-501 to 530

SERIAL NUMBER / ASSEMBLY DATE:

THE GORMAN-RUPP CO.
600 S. AIRPORT ROAD
MANSFIELD, OH 44901

GR_TerminalStrip

TERMINAL DIAGRAM



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WARNING: CONNECT TO CONTROL PANEL GROUND LUG BEFORE APPLYING LINE POTENTIAL. IF APPLICABLE, CONTROL CIRCUIT TO BE GROUNDED BY USER IF CONDITIONS PERMIT	c UL us U.L. 508A	REV.	MODIFICATION	DATE	NAME	APPROVED BY	PAGE DESCRIPTION	TERMINAL DIAGRAM		PROJECT NAME	PROJECT DESCRIPTION
							PROJECT CITY	MANSFIELD		CONTROL BOX	SIMPLEX CONTROL PANEL
							PROJECT STATE	OHIO - OH			DRAWING NUMBER 48319-501 to 530 / SERIAL NUMBER ASSEMBLY DATE
							DATE	DRAWN BY	APPROVED BY		
							08/01/2024	JLS	AA		

THE GORMAN-RUPP CO.
600 S. AIRPORT ROAD
MANSFIELD, OH 44901

GORMAN-RUPP PUMPS

Motor Starter Lookup Table - M01

Drawing #	Drawing #	Manufacturer	Manufacturer's Part #	GR Part #	Description
48319-501	48319-502	Allen Bradley	300-BOD9311	27513-021	300 NEMA Contactor, Size 1, 3 N.O. Poles, 1 N.O., 1 N.C. Auxiliary Contact, Screw Terminals
48319-503	48319-504				
48319-505	48319-506				
48319-507	48319-508				
48319-511	48319-512				
48319-509	48319-510		300-COD9311	27513-022	300 NEMA Contactor, Size 2, 3 N.O. Poles, 1 N.O., 1 N.C. Auxiliary Contact, Screw Terminals
48319-514	48319-515				
48319-516	48319-519				
48319-520	48319-522				
48319-523	-				
48319-513	48319-517		300-DOD9311	27513-023	300 NEMA Contactor, Size 3, 3 N.O. Poles, 1 N.O., 1 N.C. Auxiliary Contact, Screw Terminals
48319-518	48319-521				
48319-524	48319-525				
48319-526	48319-527				
48319-528	48319-529				
48319-530	-				

Overload Lookup Table - OL01

Drawing #	Drawing #	Manufacturer	Manufacturer's Part #	GR Part #	Description
48319-501	48319-502	Allen Bradley	193-1EFEG	27541-358	E100 Overload Relay, 5.4...27A, NEMA 300, Size 1, Energy Saving
48319-503	48319-504				
48319-506	48319-507				
48319-508	48319-511				
48319-512	-				
48319-505	-		193-1EFFG	27541-359	E100 Overload Relay, 11...55A, NEMA 300, Size 1, Energy Saving
48319-509	48319-510		193-1EFQH	27541-360	E100 Overload Relay, 13.2...66A, NEMA 300, Size 2, Energy Saving
48319-514	48319-515				
48319-516	48319-519				
48319-520	48319-522				
48319-523	-				
48319-518	48319-521		193-1EFGJ	27541-361	E100 Overload Relay, 20...100A, NEMA 300, Size 3, Energy Saving
48319-524	48319-525				
48319-526	48319-527				
48319-528	48319-529				
48319-530	-				

Motor Circuit Breaker Lookup Table - MCB01

Drawing #	Drawing #	Manufacturer	Manufacturer's Part #	GR Part #	Description
48319-504	-	Allen Bradley	140G-H2C3-C15	27323-201	140G - Molded Case Circuit Breaker, H frame, Thermal Magnetic, 3 Poles, 15A
48319-503	48319-508		140G-H2C3-C20	27323-202	140G - Molded Case Circuit Breaker, H frame, Thermal Magnetic, 3 Poles, 20A
48319-502	48319-507		140G-H2C3-C30	27323-204	140G - Molded Case Circuit Breaker, H frame, Thermal Magnetic, 3 Poles, 30A
48319-511	48319-512				
48319-501	-		140G-H2C3-C40	27323-206	140G - Molded Case Circuit Breaker, H frame, Thermal Magnetic, 3 Poles, 40A
48319-505	48319-506		140G-H2C3-C50	27323-208	140G - Molded Case Circuit Breaker, H frame, Thermal Magnetic, 3 Poles, 50A
48319-515	48319-520				
48319-510	48319-519		140G-H2C3-C60	27323-209	140G - Molded Case Circuit Breaker, H frame, Thermal Magnetic, 3 Poles, 60A
48319-523	-				
48319-509	48319-522		140G-H2C3-C70	27323-210	140G - Molded Case Circuit Breaker, H frame, Thermal Magnetic, 3 Poles, 70A
48319-526	-				
48319-514	48319-525		140G-H2F3-C90	27323-212	140G - Molded Case Circuit Breaker, H frame, Thermal Magnetic, 3 Poles, 90A
48319-528	-				
48319-513	48319-527		140G-H2F3-D10	27323-213	140G - Molded Case Circuit Breaker, H frame, Thermal Magnetic, 3 Poles, 100A
48319-530	-				
48319-517	48319-518		140G-H2F3-D12	27323-214	140G - Molded Case Circuit Breaker, H frame, Thermal Magnetic, 3 Poles, 125A
48319-521	48319-529				
48319-524	-		140G-J2F3-D17	27323-242	140G - Molded Case Circuit Breaker, J frame, Thermal Magnetic, 3 Poles, 175A

Transformer Primary Fuse Lookup Table - FU01

Drawing #	Drawing #	Manufacturer	Manufacturer's Part #	GR Part #	Description
48319-501	48319-502	Bussman	FNQR 2	27311-420	Fuse, FNQ-R Class CC, 600 VAC, 1/4-30A, Time-Delay; 2A
48319-505	48319-506				
48319-509	48319-510				
48319-513	48319-514				
48319-517	48319-518				
48319-521	48319-524				
48319-503	48319-507		FNQR 1.0	27311-413	Fuse, FNQ-R Class CC, 600 VAC, 1/4-30A, Time-Delay; 1A
48319-511	48319-515				
48319-519	48319-522				
48319-525	48319-527				
48319-529	48319-531				
48319-533	48319-535				
48319-537	48319-539				
48319-504	48319-508		FNQR 0.8	27311-412	Fuse, FNQ-R Class CC, 600 VAC, 1/4-30A, Time-Delay; .8A
48319-512	48319-516				
48319-520	48319-523				
48319-526	48319-528				
48319-530	48319-532				
48319-534	48319-536				
48319-538	48319-540				

Wire Lookup Table

Drawing #	Drawing #	Drawing #	Drawing #	Wire Label	Description
48319-524	-	-	-	1L1/1L2/1L31L11/1L21/1L311 T1/1T2/1T3	Black, #3 AWG
48319-517	48319-518	48319-521	48319-529		Black, #4 AWG
48319-513	48319-514	48319-525	48319-527		
48319-528	48319-530	-	-		Black, #6 AWG
48319-505	48319-509	48319-510	48319-519		
48319-522	48319-523	48319-526			Black, #8 AWG
48319-501	48319-502	48319-506	48319-515		
48319-516	48319-520	-	-		Black, #10 AWG
48319-503	48319-504	48319-507	48319-508		
48319-511	48319-512	-	-		Black, #12 AWG
48319-517	48319-518	48319-521	48319-524	MTRGND01	
48319-529	-	-	-		Green/Yellow, #6 AWG
48319-509	48319-513	48319-514	48319-522		
48319-525	48319-526	48319-527	48319-528		
48319-530	-	-	-		Green/Yellow, #8 AWG
48319-501	48319-502	48319-505	48319-506		
48319-510	48319-515	48319-515	48319-516		
48319-519	48319-520	48319-520	48319-523		Green/Yellow, #10 AWG
48319-503	48319-504	-	-		
48319-507	48319-508				
48319-511	48319-512				Green/Yellow, #12 AWG
	-	-	-	1L11/1L21	Black, #14 AWG
	-			01 to 13	Red, #16 AWG
All	-			N	White, #16 AWG

WARNING: CONNECT TO CONTROL PANEL GROUND LUG BEFORE APPLYING LINE POTENTIAL. IF APPLICABLE, CONTROL CIRCUIT TO BE GROUNDED BY USER IF CONDITIONS PERMIT

c UL us

U.L. 508A

REV.	MODIFICATION	DATE	NAME	APPROVED BY

PAGE DESCRIPTION	BOM	
PROJECT CITY	MANSFIELD	
PROJECT STATE	OHIO - OH	
DATE	DRAWN BY	APPROVED BY
08/01/2024	JLS	AA

PROJECT NAME: CONTROL BOX

PROJECT DESCRIPTION: SIMPLEX CONTROL PANEL

DRAWING NUMBER: 48319-501 to 530

SERIAL NUMBER ASSEMBLY DATE:

THE GORMAN-RUPP CO.
600 S. AIRPORT ROAD
MANSFIELD, OH 44901

GORMAN-RUPP PUMPS

Motor Lookup Table - MTR01

Drawing #	Voltage	Phase	Hertz	HP	FLA
48319-501	200V	3Ø	60	5	17.5
48319-502	230V				15.2
48319-503	460V				7.6
48319-504	575V				6.1
48319-505	200V			7.5	25.3
48319-506	230V				22
48319-507	460V				11
48319-508	575V				9
48319-509	200V			10	32.2
48319-510	230				28
48319-511	460				14
48319-512	575V				11
48319-513	200V			15	48.3
48319-514	230V				42
48319-515	460V				21
48319-516	575V				17
48319-517	200V			20	62.1
48319-518	230V				54
48319-519	460V				27
48319-520	575V				22
48319-521	230V			25	68
48319-522	460V				34
48319-523	575V				27
48319-524	230V			30	80
48319-525	460V				40
48319-526	575V				32
48319-527	460V			40	52
48319-528	575V				41
48319-529	460V			50	65
48319-530	575V				52

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Common Components

Common Components

Device Tag	Quantity	GR Part Number	Manufacturer	Manufacturer's Part Number	Description
	2	27434-053	FINDER	62.33.8.120.0040	Power relay, 3 pole, 16 A - AC (50/60 Hz) - 120 V - AgCdO - Standard
	2	27275-017		92.03	Screw terminal socket panel, for 62.32/66.33
CR01 - CR02	2	27279-147		092.71	Metal retaining clip, S92
	1	29812-020	BRADY	94913	Arc Flash Hazard Label
	1	38817-092	GORMAN RUPP	38817-092	Spring Cage Terminal Block Label
	1	27233-117	WEIDMULLER	166962000	Terminal Block Operating Tool
	1	38817-088	GORMAN RUPP	38817-088	Warning High Interrupting Label
	1	OM-07720		OM-07720	Control Panel Manual E.S. - Panel 48319-501 through 48319-530, Size 1, 2 and 3 Starters
	1	38811-503		38811-503	Adhesive Sticker #1, 48319-501 to 530, Size 1,2,3 Starters 's Electrical Drawings
D1_LABELS	1	38811-504		38811-504	Adhesive Sticker #2, 48319-501 to 530, Size 1,2,3 Starters 's Electrical Drawings
	1	27388-912	HAMMOND	HP100	Steel Hole Plug, 1" Conduit, Max Hole 1.38", Plug Diameter 1.88", ANSI 61 Gray
D2_HOLE_PLUGS	5	27388-915		HP50	Steel Hole Plug, 1/2" Conduit, Max Hole 0.88", Plug Diameter 1.38", ANSI 61 Gray
	7	27157-013	PANDUIT	F1X3LG6_W/C1LG6	Narrow Slotted Wiring Duct, PVC, WIth Cover
D3_Panduit	7	27157-020		F2X3LG6_W/C2LG6	Narrow Slotted Wiring Duct, PVC, WIth Cover
DR01-DR03	3	27494-021	ALLEN-BRADLEY	199-DR1	DIN Mounting Rail
	1	27160-469	SAGINAW	30XEL2108LP	XEL LP Enclosure
	1	27160-521		30P20GALV	Subpanel
	1	27160-522		DS20N4	Shield, Drip
	1	27180-337		ELMFK4	Foot Kit, Set of 4
EN01	3	27388-909	HOFFMAN	SPBG	Hole Sealer, 1.22 in, Gray, Mild Steel
	1	26862-123	GRASSLIN	FWZ72-120/60	Hour Meter, 7 Digit Display
ET01	1	GR.DEV 49 15342	BRADY	B33-37-8591-WT	0.5" X 1.5" LABEL, ELAPSED TIME METER
FU02	1	27311-042	COOPER BUSSMAN	FNM 1.5	1.5A Fuse, Time Delay, Dual Element
INHIB01	1	18614-022	A+ CORP	HXC 4X4	Inhibitor, 10 CU FT
LBL01	1	GR.DEV 29 15342	BRADY	B30C-1125-595-RD	1.125" X 3.0" LABEL (SERIAL NUMBER)
LABEL01	1	GR-06	GORMAN RUPP	GR-06	Warning Decal
LABEL02	1	38816-066		38816-066	Warning Decal
LABEL03	1	38816-067		38816-067	Warning Decal
LABEL04	1	2613GK		2613GK	Warning Decal
	1	27384-915	ALLEN-BRADLEY	800F-Q5G	Integrated LED Module - 120VAC GREEN
LT01	1	27856-228		800FP-P3	Pilot Light - GREEN

Common Components

Common Components

Device Tag	Quantity	GR Part Number	Manufacturer	Manufacturer's Part Number	Description
	3	27382-003	ALLEN-BRADLEY	800F-ALP	Latch
LT01, SS01,PB01	3	27381-085		800F-Q10	1 N.O. Contact Block
LT01, SS01,PB01, LT02, LT06, OL01	7	DEV 75 15342	BRADY	B30EP-172-593-WT	22.5 mm Motor Run Legend Plate
PB01	1	27384-074	ALLEN-BRADLEY	800FP-F5	Push Button, Yellow
SS01	1	27385-493		800FP-SM32	3-Pos Selector Switch
	2	27324-231		140G-H-TLC13	Terminal Lug, H-Fram
MCB01	1	27324-188		140G-H-FCX03	140G Operating Mechanisms, Flex-Cable , Non-Metalic Flange Handle , 3 ft
M01	1	27527-125		100-ESB11	Auxiliary Contact, 1NO, 1NC, Right Side
	1	27524-008		800FP-R611	Reset Button
OL01	1	27524-035		800F-ATR19	Threaded Reset Rod, 515 mm length
	1	38817-077	GORMAN RUPP	38817-077	Warning Ground Label
	1	27222-004	PANDUIT	CBA70-14-CY	Copper Cable Lug, 70 Amp, #4-14
P_GDN01	1	27222-005			or Copper Cable Lug, 125 Amp, #6-1/0
	1	27222-004			Copper Cable Lug, 70 Amp, #4-14
MTRGND01	1	27222-005			or Copper Cable Lug, 125 Amp, #6-1/0
	8	27233-054	ALLEN-BRADLEY	1492-EAJ35	End Anchor
	3	27233-041		1492-EBL6	End Barrier
	1	27233-040		V1492-EBL3T	End Barrier
	34	27233-367		1492-L3T	Feed-through terminal
TERMINAL	1	27233-371		1492-LG6	PE terminal
T01	1	27557-083	DONGAN	DT-0150-4179	Transformer, 150 VA, Variable Primary Voltage