### Removable Flange-Mounted – Cover for Easy Access

NO WIRING ACROSS
THE DOOR HINGE

AMPLE SPACE PROVIDED FOR OPTIONAL FEATURES!

**Grounding Lugs** —

#### Enclosure

NEMA 3R Rainproof and Sleet Resistant construction with stainless steel door latches and special corrosion resistant paint.

## **Padlocking**

Provision on door latch for locking door closed, as well as provision for padlocking disconnect switch in OFF or ON position.

**External Reset Button** 



Underwriters Laboratories Inc. listed under File E55632, includes the "Suitable for Use as Service Equipment" label.

- Drip Shield Over Door Opening for added weather protection. Top

mounting conduit hubs provided.

**Circuit Block** 

Features an adjustable magnetic trip characteristic for accurate, dependable fault protection and simultaneous trip of all poles to prevent single phasing.

**Motor Circuit Protector** 





Hand/Off/Auto (HOA)
Selector Switch and Start
Push-Button

Heavy-duty units mounted on the flange of the enclosure for outside accessibility.

> — Start/Bypass Button Accessible from front of

enclosure (booted for environmental protection) for operation of overload relay reset function.

### STANDARD FEATURES INCLUDE:

- Nema 3R Enclosure
- Main circuit breaker with padlockable handle
- Magnetic contactor
- Adjustable thermal overload protection
- External reset pushbutton
- Fused control circuit
- Hand-Off-Auto (HOA) selector switch with start pushbutton
- Terminal block for connection of remote control Device (LOW PRESSURE SWITCH)
- ★ NOTE ~ "MPLC" MODEL NUMBER
  DESIGNATE THE USE OF AN OPTIONAL
  Smarted\* PUMP PROTECTION
  SYSTEM.

77.1000							12/2/12/2/11/2/2/
НР	Phase	Size	Approx. Wt. Lb.	Part Number	Size	Approx. Wt. Lb.	Part Number
			230V		With	SmartBox (	Option*
3	1	25" x 16" x 9"	43	MPCP2103	25" x 16" x 9"	46	MPLCCP2103
5	1		43	MPCP2105		46	MPLCCP2105
7.5	1		44	MPCP2107		47	MPLCCP2107
10	1		44	MPCP2110		47	MPLCCP2110
* Sn	nartBox Optio	n provides low p	ressure cut-c	off pump protection	n		
		230V			460V		
3	3	25" x 16" x 9"	43	MPCP2303		_	
5	3		43	MPCP2305	25" x 16" x 9"	43	MPCP4305
7.5	3		43	MPCP2307		43	MPCP4307
10	3		43	MPCP2310		43	MPCP4310
15	3		44	MPCP2315		43	MPCP4315
20	3		44	MPCP2320		43	MPCP4320
25	3		44	MPCP2325		44	MPCP4325
30	3	39"x19"x11"	90	MPCP2330		44	MPCP4330
40	3		90	MPCP2340		44	MPCP4340
50	3		90	MPCP2350		44	MPCP4350
60	3	_			39"x19"x11"	90	MPCP4360
75	3					90	MPCP4375
100	3					90	MPCP43100

**C316 Bimetallic Ambient** 

**Compensated Overload Relays** 

Covering applications up to 200 HP



FOR MORE INFORMATION ABOUT OTHER INNOVATIVE PRODUCTS BY MUNRO, CALL FOR THE DISTRIBUTOR NEAREST YOU

PH: 800.942.4270 · FAX: 970.263.2277

E-MAIL: MMI@munrocompanies.com • WEBSITE: www.munromfg.com

MMI / STARTBOX SERIES / REV0908



# PUMP START RELAY FOR MOTOR CONTROL



THE STARTING CHOICE FOR LAWN CONTROL(LERS)









From the basic pump start relay, the NEC code-compliant boxes, or the custom box demanded of a specific system, Munro Manufacturing can provide a quality package for all light-duty motor control needs.

The full line of Munro Manufacturing start boxes are housed in compact NEMA 3R weather tight enclosures. All products are available in either stainless steel or "baked-on" powder coating, blue or grey, for long life in difficult environments. All enclosures are UL Listed as "Enclosed Industrial Control Panels" and backed by a limited two-year warranty.

**Colors Available:** 



Powder-Coated Blue



Powder-Coated Grey



Stainless Steel

MODEL SHOWN MPSR24

The Start B□X™ Pump Start Relay provides "pilot duty" operation for all types of electrically driven pump equipment with available coil voltages of 24, 110 and 220 volts.

- COMPATIBLE WITH 110 OR 220 VOLT, 3/4 HP THRU 7-1/2 HP\* SINGLE **PHASE PUMPS**
- COMPATIBLE WITH MOST 24 VOLT TIMED LAWN CONTROLLERS

Type of Enclosure	Coil Voltage	НР	Heater Code Number
MPSR	24	3/4 THRU 7-1/2*	MPSR24
MPSR	110	3/4 THRU 7-1/2*	MPSR110
MPSR	220	3/4 THRU 7-1/2*	MPSR220

# CERTIFIED **MUNRO RELAY QUICK CONNECT TERMINALS WITH GROUNDING WIRE NUTS PROVISION**

## Startbox Plus

Munro has combined the simplicity of the pump start relay with a thermal overload strip to provide a cost effective National Electrical Code (NEC) compliant relay box. The NEC states all motors will be thermally protected from excessive "amperage draw." Because circuit breakers and/or fuses do not constitute thermal overload protection, this requirement is often met through the application of elaborate, and therefore, more expensive "pump panels" - until now.

Type of Enclosure	Coil Voltage	HP	Part Number			
WITH CODE-COMPLIANT THERMAL PROTECTION						
MPSR	24	3	MPSR24V3			
MPSR	110	3	MPSR110V3			
MPSR	220	3	MPSR220V3			
MPSR	24	5	MPSR24V5			
MPLC	220	5	MPSR220V5			
MPSR	24	7-1/2	MPSR24V75			
MPSR	220	7-1/2	MPSR220V75			
MPSR	24	10	MPSR24V10			
MPSR	220	10	MPSR220V10			

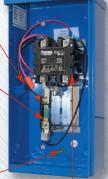
\* NATIONAL ELECTRICAL CODE (NEC) STATES ALL MOTORS WILL BE THERMALLY PROTECTED FROM

MOST MOTORS UNDER 2 HP ARE SUPPLIED WITH THERMAL PROTECTION FROM THE MOTOR MANUFACTURER. FOR MOTORS OVER 2 HP, Start⊞□X ™ CODE-COMPLIANT IS RECOMMENDED. MODEL SHOWN MPSR24V75

**QUICK CONNECT TERMINALS** WITH WIRE NUTS

HEATER ELEMENT **PROVIDES** THERMAL **PROTECTION** FROM EXCESSIVE **AMPERAGE DRAW** 

**GROUNDING PROVISION** 



**OPEN TYPE STARTER WITH** BIMETAL **AMBIENT** COMPENSATED **OVERLOAD** RELAY

& PUMP PROTECTION SYSTEMS ARE UL LISTED **CONTROL PANELS** LOOK FOR THE LISTING MARK



No. XX - EXAMPLE



**One Lawn Controller Starting Multiple** 



**Multiple Lawn Controllers Starting One Pump** 



Hand Off Auto (HOA) Switches for **On-Site Shut Off and Run Commands** 



**Multiple Relays Per Box** 



**Three Phase** 



**Two-Ball Pump Up** 



**Two-Ball Pump Down** 



**UPGRADE**: **SmartBox with Low Pressure Shut-Down** 



**Float Switch Activation** 

FOR MORE INFORMATION ABOUT OTHER INNOVATIVE CUSTOMIZATIONS BY MUNRO MANUFACTURING, CONTACT ONE OF OUR SPECIALISTS!

PHONE: 1.800.942.4270

**EMAIL: MMI@MUNROCOMPANIES.COM** 

## **MUNRO RELAYS**

Munro's 40 AMP Relays are designed with specific parameters in mind:



- CERTIFIED
- FULLY ENCLOSED CONTACTS
- HIGH HOLDING POWER ON OVERSIZED CONTACTS
- LOW CURRENT REQUIREMENTS
  ON THE COIL FOR LOWER
  REQUIRED HOLDING POWER
- **AVAILABLE IN 24 VOLT, 110 VOLT OR 220 VOLT**
- AVAILABLE IN A 2-POLE, 3-POLE
- OPTION OF A SCREW BASE OR **DIN RAIL MOUNTING**



Enclosure Dimensions	Finish	Color	Lockable	NEMA Rating	Part Number
6x6x4"	Powder Coated	Grey	No	NEMA3R	EN664G3
6x6x4"	Stainless Steel	Stainless Steel	No	NEMA3R	EN664S3B
8x8x4"	Powder Coated	Grey	No	NEMA3R	EN884G3
8x8x4"	Stainless Steel	Stainless Steel	No	NEMA3R	EN884S3B
12x12x6"	Powder Coated	Grey	Yes	NEMA3R	EN12126G3
12x12x6"	Stainless Steel	Stainless Steel	Yes	NEMA3R	EN12126S3
12x18x8"	Powder Coated	Grey	Yes	NEMA3R	EN12188G3
12x18x8"	Stainless Steel	Stainless Steel	Yes	NEMA3R	EN12188S3

Based on our policy of improving and developing products, we reserve the right to alter specifications of our product at any time without giving prior notice.