

ML-Series

Automatic Charging Relay

500A magnetic latching relay automatically combines batteries during charging and isolates batteries when discharging and when starting engine.

- Magnetic Latching (ML) relay draws very low current in the ON or OFF state
- Start Isolation (SI) can be configured for temporary isolation of house loads from engine circuit during engine cranking to protect sensitive electronics
- Engine Isolation (EI) can be configured for isolation of two engines while both are running to protect engine electronics and maximize alternator output
- Manual override knob provides an added level of safety allowing control with or without power and offering LOCKED OFF capability for servicing
- Senses charging on two battery banks
- LED output to remotely indicate switch state - requires optional LED or Remote Control Contura Switch with integrated LED (included in retail package)
- 3/8"-16 Tin-Plated Copper studs for maximum conductivity and corrosion resistance
- One-piece stainless flange nuts ensure safe and secure connections
- Label recesses for circuit identification

Related Products



ML-Series Remote Battery Switches



Battery Management Panels



Paralleling Link Bus



Stud Mount Insulators



MRBF® Terminal Fuse Blocks



IGNITION PROTECTED



7622



7620



Remote Control Contura Switch
Included in retail package



Duetch DTM Cable End now offered for both retail and bulk units. Other connector plugs are available for high volume OEM applications.



9160 Paralleling Link Bus
For paralleling ML-Remote Battery Switches and Automatic Charging Relays

- Tin-plated Copper for maximum conductivity and corrosion resistance
- Sold individually

Specs

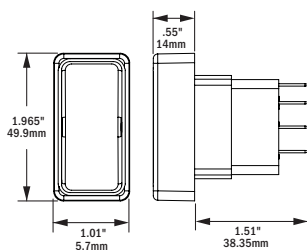
| Part # | Coil Volts | Cable End | Manual Control |
|---------|----------------------|---------------|----------------|
| 7620 | 12V DC | Stripped Wire | No |
| 7620100 | 12V DC | Deutsch DTM | No |
| 7622 | 12V DC | Stripped Wire | Yes |
| 7622100 | 12V DC | Deutsch DTM | Yes |
| 7621 | 24V DC | Stripped Wire | No |
| 7621100 | 24V DC | Deutsch DTM | No |
| 7623 | 24V DC | Stripped Wire | Yes |
| 7623100 | 24V DC | Deutsch DTM | Yes |
| 9160 | Paralleling link bus | | |

Wire Size and Current Ratings

| Wire Size | Cranking 30 sec. | Intermittent 5 min. | Continuous (UL 1107) |
|--------------------------------------|---------------------|------------------------|-------------------------|
| 2/0 AWG (70 mm ²) | 1,000A | 400A | 225A |
| 4/0 AWG (120 mm ²) | 1,100A | 400A | 300A |
| 2x 4/0 AWG (2x 120 mm ²) | 1,450A | 700A | 500A |

Remote Control Contura Switch (2146)

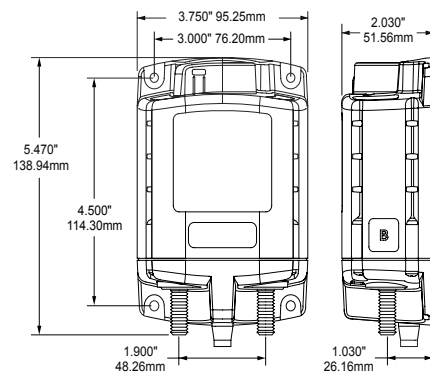
| | |
|----------------------------|---|
| Amperage Max. Operating | 20A @ 12V DC, 15A @ 24V DC |
| Amperage Operating Current | 18mA |
| Temperature Range | -40°C (-40°F) to 85°C (185°F) |
| Pole/Throw | SPDT |
| Lighting | LED rated 100,000 hours half-life |
| Seals | Internal and external gasket panel seal |
| Mounting Hole | 1.45" x 0.83" (36.83 mm x 21.08 mm) |
| Regulatory | Meets UL 1500 and ISO 8846 external ignition protection requirements, Switch front is IP67 when mounted with gasket in place - protected against immersion up to 1 meter for 30 minutes |



Selection Chart



| Part # | 7620 7620100 | 7622 7622100 | 7621 7621100 | 7623 7623100 |
|--|--|-----------------|-----------------|-----------------|
| Manual Control | -- | Yes | -- | Yes |
| Nominal Voltage | 12V DC | | 24V DC | |
| Cranking Rating (30 sec.) | 1,450A DC | | | |
| Intermittent Rating (5 min.) | 700A DC | | | |
| Continuous Rating | 500A DC | | | |
| Amperage Operating Current - continuous @ 25°C nominal VDC | < 13mA | | | |
| Amperage Operating Current - when changing state | < 7.0A DC | | < 4.0A DC | |
| Switching Cycles | 100,000 | | | |
| Coil Function | Magnetic Latching Bi-Stable | | | |
| Remote Control Switch Included | 2146 SPDT ON-OFF-ON | | | |
| Control Circuit Connection | Tinned Wire or Deutsch Connector | | | |
| Mounting | #10 or M5 | | | |
| Terminal Stud Size | 3/8"-16 (M10) | | | |
| Terminal Stud Length | 7/8" (22 mm) | | | |
| Maximum Terminal Stud Torque | 140 in-lb (15.8 Nm) | | | |
| Cable Size to Meet Ratings | 4/0 AWG (120 mm²) × 2 | | | |
| Terminal Ring Diameter Clearance | 1.12" (28.4 mm) | | | |
| Weight | 2.04lb (0.93 kg) | | | |
| Regulatory | CE marked, Meets ISO 8846 and SAE J1171 external ignition protection requirements IP66 - protected against powerful water jets | | | |



Specifications subject to change. See blueseasystems.com for current information.