

ML-Series Automatic Charging Relays (ACR)

500 Amp 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 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 (p. 155) 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 steel flange nuts ensure safe and secure connections
- Silver alloy contacts provide high reliability for live switching
- Retail packaging includes a Remote Control Contura Switch (p. 95)

Live Current Switching		300A @ 12V DC-10,000 Cycles	
Relay Contact Position		12V DC	24V DC
Combine	(30 sec.)	13.5V DC	27.0V DC
Combine	(2 min.)	13.0V DC	26.0V DC
Open	(10 sec.)	12.35V DC	24.7V DC
Open Low	(30 sec.)	12.75V DC	25.5V DC
Over Voltage Lockout		16.2V DC	32.4V DC
Under Voltage Lockout		9.6V DC	19.2V DC
Under Voltage Recovery		10.0V DC	20.0V DC

Regulatory

CE marked, meets ISO 8846 and SAE J1171 external ignition protection requirements
IP66 - protected against powerful water jets (see inside back cover)

IGNITION PROTECTED

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

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

For the full list of specifications see page 55

For the dimension drawing see page 45

Related Products



ML-Series Remote Battery Switches
page 45



MRBF Terminal Fuse Blocks
page 70



Remote Control Switch 360 Panels
page 96



Paralleling Link Bus
page 45 (see table)



LEDs
page 155



Stud Mount Insulators
page 110



7622



Remote Control Contura Switch included in retail package



7620



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