

HD SERIES

300 A Heavy-Duty High-Current Latching Relays



Description

HD Series 300 A Heavy-Duty High-Current Latching Relays are remotely operated bistable relay disconnects designed for high-current circuits and applications that demand high performance, such as large inverter loads and high ambient temperature situations. Sealed to an IP67/IP69K rating, these heavy-duty automotive relays are built to withstand dust, water, and harsh weather, as well as environments with high shock and vibration.

The HD series bistable relays provide significant cost and weight benefits by eliminating the need to route heavy copper cables to more conveniently located mechanical-only disconnects. Cables can instead be routed directly to loads with the HD series relay positioned close to the battery or in line with the desired cable routing. Remote control of the HD latching relay can then be located in any convenient location on the vehicle with a finewire harness linking the HD relay to the control switch.

Web Resources

Download 2D print, installation guide and technical resources at: littelfuse.com/HD

Ordering Information

| PART NUMBER | DESCRIPTION | HOUSING | HARDWARE | CONTACTS | CONNECTOR | COIL TYPE |
|-------------|--|---------------------|------------------|--------------|-------------------|---|
| 880086 | 16 V 300 A Heavy-Duty High-Current Magnetically Latching Bistable Relay with 12 V Coil | Black Thermoplastic | Hex nuts 3/8"-16 | Silver Alloy | 6-Pin Deutsch DTM | Magnetically Latched Bistable |
| 880088 | 32 V 300 A Heavy-Duty High-Current Magnetically Latching Bistable Relay with 24 V Coil | Black Thermoplastic | Hex nuts 3/8"-16 | Silver Alloy | 6-Pin Deutsch DTM | Magnetically Latched Bistable |
| 880159 | 16 V 300 A Heavy-Duty High-Current Electronically Controlled Magnetically Latching Bistable Relay with 12 V Coil | Black Thermoplastic | Hex nuts 3/8"-16 | Silver Alloy | 6-Pin Deutsch DTM | Electronically Controlled Magnetically Latched Bistable |
| 880160 | 32 V 300 A Heavy-Duty High-Current Electronically Controlled Magnetically Latching Bistable Relay with 24 V Coil | Black Thermoplastic | Hex nuts 3/8"-16 | Silver Alloy | 6-Pin Deutsch DTM | Electronically Controlled Magnetically Latched Bistable |

Specifications

| | |
|-------------------------------------|---|
| Current Rating Continuous: | 300 A (4/0 Input & Output Cable) |
| Max Voltage Rating | 16 V, 32 V |
| Agency Approval - Shock: | 10 G's |
| Agency Approval - Vibration: | 8 G's |
| Ingress Protection: | IP67/IP69K |
| Mounting Method: | Base Mounting Holes |
| Circuitry: | SPST |
| Ignition Protection: | UL 94V-0 |
| Input Terminals: | 3/8"-16 Copper Studs |
| Mounting Method: | 4 Mounting Holes (5.55 mm - 5.88 mm) |
| Operating Temp Range: | Operational: -50°C to 85°C Non-Operational: -55°C to 105°C |

Applications

- Heavy-Duty Vehicles
- Construction Vehicles
- Agricultural Equipment
- Military Vehicles
- Heavy-Duty Lifting Equipment

Features and Benefits

- Supports high-current continuous loads up to 300 A and intermittent loads up to 1500 A for 10 seconds
- Available with a 12 VDC coil or 24 VDC coil
- Magnetically latched bistable or electronically controlled magnetically latched bistable operation draws no current in the On or Off position for low power consumption
- Remote operation eliminates long runs of heavy cable, minimizing cable complexity, cost, and vehicle weight
- Sealed to an IP67/IP69K rating for protection against dust, debris, and water ingress
- Silver alloy contacts assure the lowest voltage drop/resistance and extend cycling life
- Models 880159 and 880160 are electronically controlled, allowing a single low-current signal to control the bistable relay.