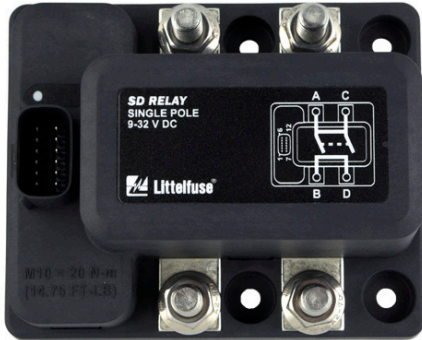


SD SERIES HIGH-AMP RELAY

Bi-Stable Relay with Auxiliary Contacts



Description

The Littelfuse SD series relay will support your remote power switching applications that require high continuous current passage, large engine starting needs and high ambient temperatures.

Additionally the SD series relay helps reduce your costs and saves weight by eliminating the need to route heavy copper cables directly to the mechanical disconnects. Cables can instead be routed directly to loads with with the SD series relay positioned close to the battery or in-line with the desired cable routing allowing you to remotely control the unit with a fine wire harness.

Features and Benefits

- Compact footprint saves space in your installation
- Supports US DOT 11579 and EU ADR requirements for hazmat vehicle compliance
- Bi-stable internal mechanism draw no current in the on or off state saving your batteries voltage supply
- Controlled with small wires saving weight and costs of large copper cables
- Dedicated 24-hour output to power your tachograph or other keep-alive functions
- Local and remote indication of the state of the relay

Specifications Overview

Voltage	12-24 V
Max Continuous Current Per Pole:	300,600 A
Max Intermittent Current Per Pole (30 sec) :	1,000-2,000 A
Max Inrush Current (1 sec):	2,000-3,000 A
Ingress (IP) Rating:	IP66/IP69K

Applications

- Heavy Duty Trucks
- Construction
- Agricultural Equipment
- Heavy Duty Lifting Equipment

Web Resources

Download 2D print and technical resources at:
littelfuse.com/sdrelay

Ordering Information

PART NUMBER	DESCRIPTION	VOLTAGE (Vdc)	AMPERE
880103	12 V, 600 A Continuous, Aux NO & NC Contacts, Tachograph Output, Isolated Primary Contacts	12	600
880107	12 V, Double Pole, 300 A Per Pole Continuous, Aux NO & NC Contacts, Tachograph Output	12, 24	300

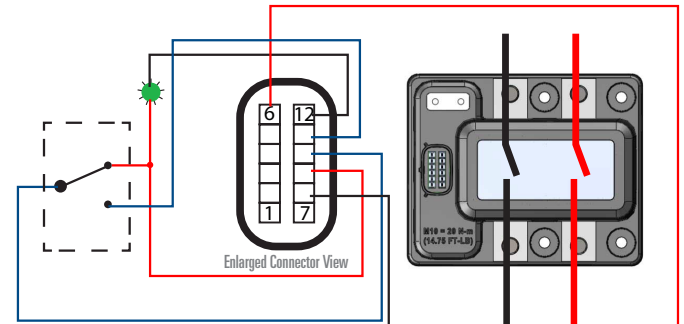
SD SERIES RELAY

Specifications

	880103	880107
Max Continuous Current	(2x 4/0 Input and 2x 4/0 Output Cables) 600 A	(4/0 Input / Output Cables) 300 A
Max Intermittent Current, 30 Sec. Duration	(2x 4/0 Input and 2x 4/0 Output cables) 2,000 A	(4/0 Input/Output cables) 1,000 A
Auxiliary Contact Max Switch/Continuous Current	3A/3A	3A/3A
Ingress Protection Rating	IP66/IP69K	IP66/IP69K
Mounting Hardware (counter-bore mounting holes)	M6 or ¼"	M6 or ¼"
Mounting Bolt Torque, Recommended/Max	20 N-m/40 N-m	20 N-m/40 N-m
High-Amp Terminal Hardware	M10-1.4 Serrated Flange Nut (15 mm hex socket)	M10-1.4 Serrated Flange Nut (15 mm hex socket)
Required Female Socket Plug Connector For Mating With Integral Housing	Molex 33472-1206	Molex 33472-1206
Required Female Socket Terminals	FCI: 54001627 (16-18 AWG wire) FCI: 54002002 (20-22 AWG wire)	FCI: 54001627 (16-18 AWG wire) FCI: 54002002 (20-22 AWG wire)
Operating Temp (SAE J1455, Sec 4.1.3.1)	-40° C to 85° C	-40° C to 85° C
Salt Spray	1,000 Hours	1,000 Hours
Humidity Cycle	0 to 95% RH	0 to 95% RH
Operational Vibration	8 G	8 G

Connector Pin #	Reference	Description	880103	880107
1	AUX_COM	Auxiliary Relay Common Pin	0	0
2	AUX_NC	Auxiliary Relay Normally Closed Pin	0	0
3	PNB_LED	Logic input line, pulled to ground to activate	X	X
4	VSENSE3	Voltage sense #3 for battery combiner functionality	X	X
5	VDC_AUX_OUT	+Vdc fuse protected output	0	0
6	VDC_INPUT	+Vdc for device power	R	R
7	AUX_NO	Auxiliary Relay Normally Open Pin	0	0
8	GND	Ground for device power	R	R
9	SW_POWER	Power output to control switch and LED indicator	0	0
10	CNTRL_IN	Remote control input	R	R
11	SW_LO	Off Reference signal for control switch	R	R
12	LED1	External LED pull-down line (active low)	0	0

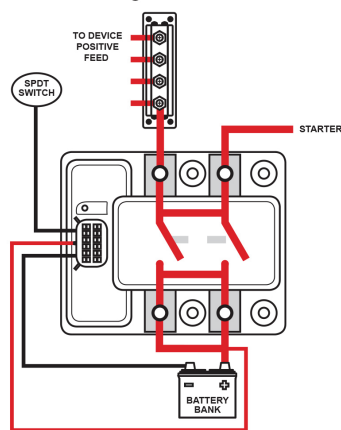
R = Required Connection
O = Optional Connection
X = No Connection



for Molex 33472-1206 (not included)

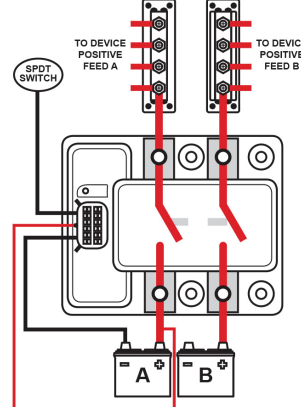
Configurations

PN 880103 (Single Pole)

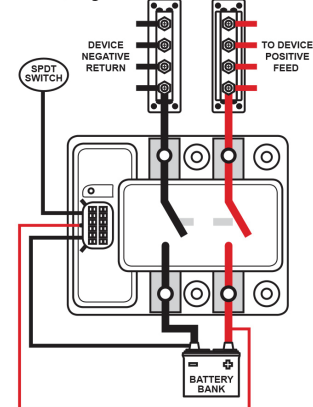


PN 880107 (Dual Pole)

Positive/Positive



Positive/Negative



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