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HD SERIES BATTERY COMBINERS

Intelligent Relay Shares Charge Voltage Between Two Battery Banks

PN 880051

Description

Combines battery banks when one is being actively charged, and disconnects them when charge voltage is removed. Supports high-amp intermittent or continuous current loads. Very low quiescent current draw (in On or Off states) due to bi-stable mechanism. Sealed to IP67 & IP69K

Features and Benefits

- Optional remote On or Off switching override enables emergency override for starting from an auxiliary battery, or allows house/cab functions to operate longer in critical applications.
- Supports high current loads such as large inverter loads. Operates under high temperature conditions. Compact unit is an ideal choice for applications in heavy vehicles, construction, agriculture, military, mining and agriculture.
- Eliminates the cost of routing heavy copper cables to mechanical-only battery switches. Battery combiner can be conveniently located between battery banks, and remote switch can be conveniently located in the cab or wherever required, using only small gauge wiring.
- Optional start isolation input ensures isolation of auxiliary loads from engine cranking voltage spikes and sags.
- Optional 'Engine On' input eliminates relay cycling caused by voltage drop along cables.

Specifications Overview

Voltage Ratings:	880051 – 9-16V DC 880055 – 18-32V DC
Max Continuous Current:	300A (1x 4/0 input/output cable)
Inrush Current Rating:	1500A (1x 4/0 input/output cable)
Ingress Protection:	IP67/IP69K
Operating Temp:	-40°C to + 85°C

Web Resources

Download technical resources at:
littelfuse.com/HD-Combiner

Ordering Information

PART NUMBER	DESCRIPTION
880051	HD Battery Combiner 9-16V DC
880055	HD Battery Combiner 18-32V DC

Datasheet Replaces Hotfeed Number D-652

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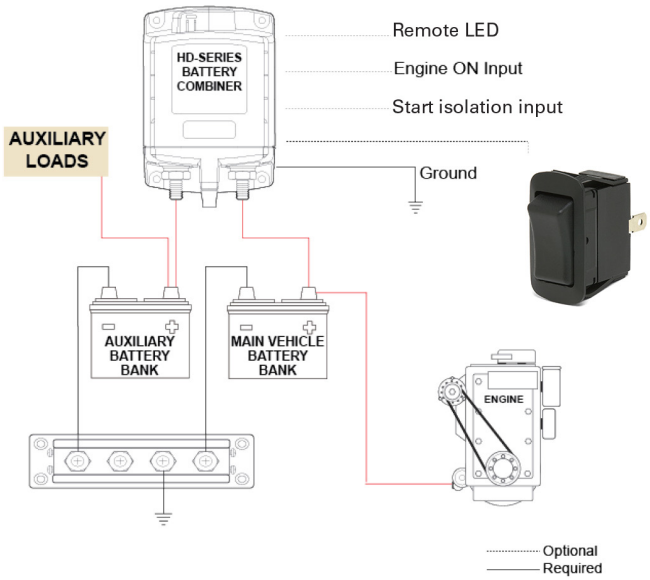
Specifications

880051 & 880055	
Max Continuous Current Rating	300A (1x 4/0 input/output cable)
Inrush Current Rating (10 Seconds)	1500A (1x 4/0 input/output cable)
Control Current	40mA (when not changing state) 6A at 12V DC / 3A at 24V DC (when changing state, 50msec)
Relay Contact Position	
Combine (30 Seconds)	13.5V DC at 12V / 27.0V DC at 24V
Combine (90 Seconds)	13.1V DC at 12V / 26.0V DC at 24V
Open (10 Seconds)	12.3V DC at 12V / 24.7V DC at 24V
Open (30 Seconds)	12.7V DC at 12V / 25.5V DC at 24V
Low Voltage Cutoff	9V DC at 12V / 18V DC at 24V
Connector	Deutsch 6-position DTM
Mounting Hardware	M5 or #10
Terminal Hardware	3/8" (Accepts M10 Terminals)
Temperature Range	-50°C to + 105°C
Humidity	0-95% RH
Shock	10G
Vibration	8G
Ingress Rating	IP67/IP69K
Weight	1.69lb (0.77kg)
Ignition Protection	Meets ISO 8846 & SAE J1171

Recommended Rocker Switch	
Type	Sustained SPDT On-Off-On

Configurations



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