

# 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

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

## Web Resources

Download technical resources at:  
[littelfuse.com/HD-Combiner](http://littelfuse.com/HD-Combiner)

## Ordering Information

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

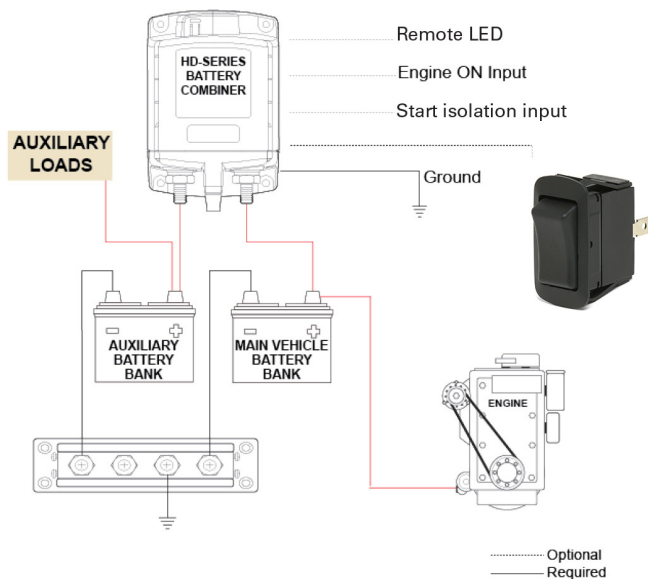
Datasheet Replaces Hotfeed Number D-652

# HD SERIES BATTERY COMBINERS

## Specifications

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

## Configurations



Visit [Littelfuse.com](https://www.littelfuse.com) for the most up-to-date product information. Littelfuse products are designed for specific applications and should not be used for any purpose (including, without limitation, automotive applications) not expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse product documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse product documentation.

**Datasheet Replaces Hotfeed Number D-652**