

SERIES CSHPB

ENGINEERING DATA SHEET

HALL EFFECT CURRENT SENSOR FOR BATTERY BUS DIRECT AND RETURN PROTECTION



FEATURES AND CHARACTERISTICS

- Electronic module in association with a contactor to provide bi-directional protection adapted to current flow direction.
- Designed for direct mounting on bus bar contactors.
- Provide an I^2t trip law, with accelerated trip time at currents higher than $10 I_n$ in the direction battery to bus. In the reversed direction, trip current and law may be defined at different level.
- No voltage drop in protected line.
- Trip status provided by an internal latching device.
- Override input to avoid inadvertent trip during start process.
- IBIT circuit for high reliability operation.
- Weight: 110 grams \pm 5%.
- Temperature range: -50°C To +85°C

GENERAL ELECTRICAL SPECIFICATIONS

Supply voltage according to MIL Std 704	16 to 32 Vdc
Current supply at 28 Vdc	30 mA max + contactor coil supply
Cold weather supply voltage operation	10.5 Vdc
Low voltage protection by immediate trip	< 9 V \pm 10%
Output current	1 amp permanent 6 Amps inrush (30ms)
Dielectric strength (All secondary terminal to ground)	1000 Vdc
Insulation resistance (All secondary terminal to ground)	100 M Ω at 50 Vdc



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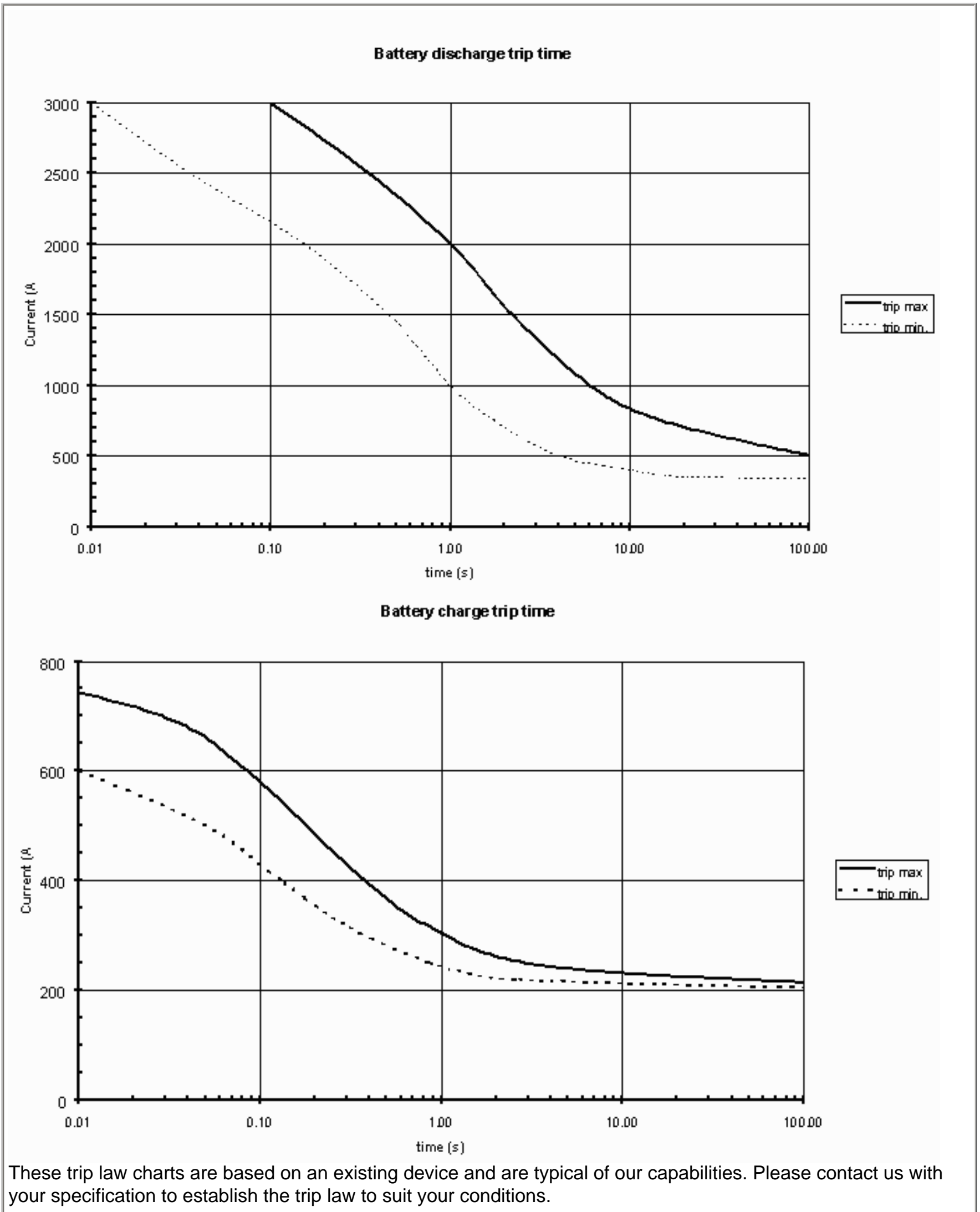
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Data sheets are for initial product selection and comparison. Contact Leach International prior to choosing a component.



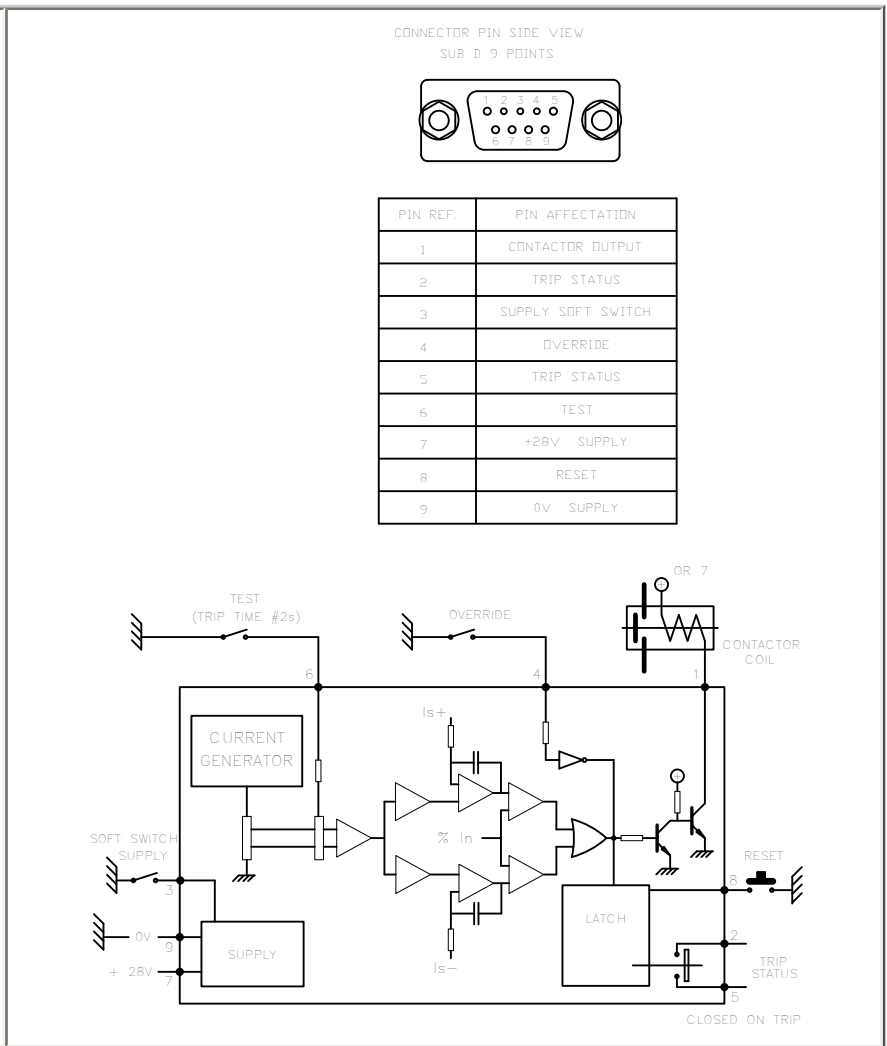
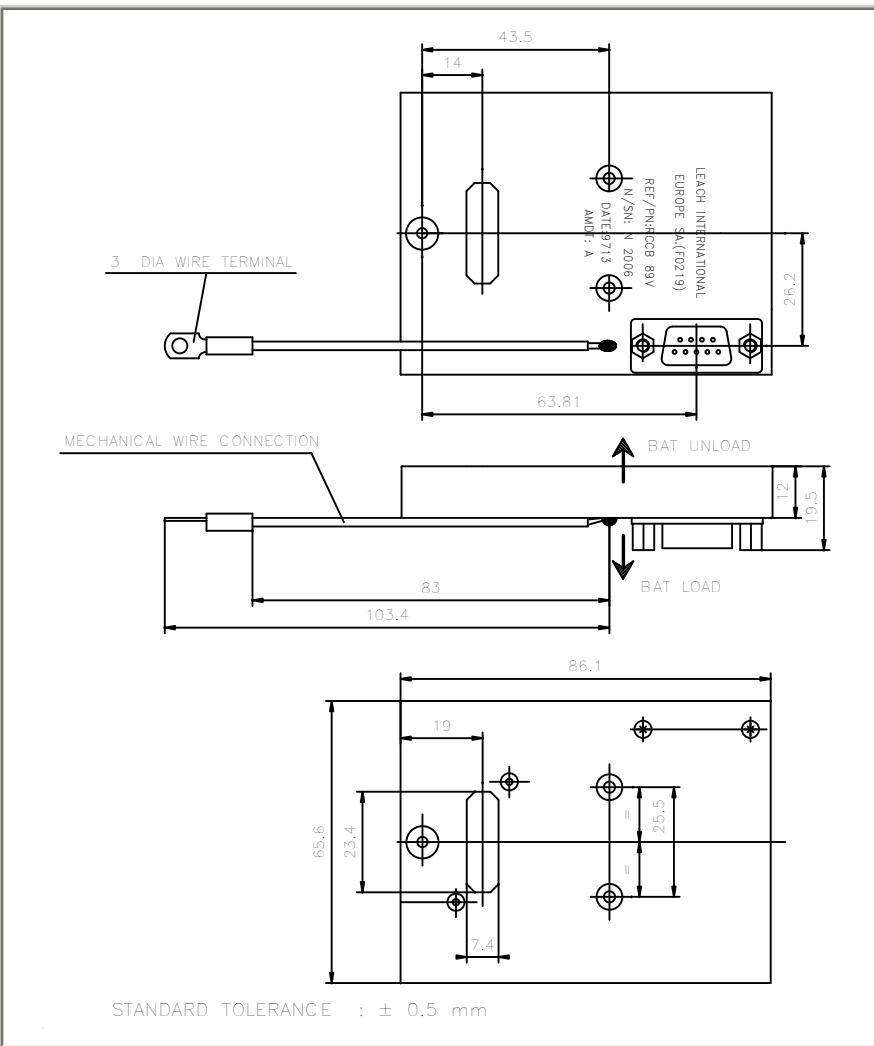
ENVIRONMENTAL CONDITIONS

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Vibrations - Sinusoidal per MIL Std 202 Method 204 : 20-2000 Hz - Random 10-2000 Hz	10 G 0.15 g ² /Hz
Shock: Structure per MIL Std 202 method 213	30 G
Salt Spray: per MIL Std 202 method 101	96 H
Humidity: per MIL Std 202 method 106 - HR 95%	240H
Altitude	45000 ft max.
Voltage spikes: DO160 section 17 category A	
Audio frequency conducted susceptibility: DO160 section 18 category Z	
Induced signals: DO160 section 19 category Z	
Radio frequency: DO160 section 20 category W	
Lightning: DO160 section 22 category B2F2. (B4F4 with additional module)	

MOUNTING

SCHEMATIC AND WIRING DIAGRAM



NUMBERING SYSTEM

CSHPB XXX
 |-----Specific number for your application (consult factory).
 |-----Basic family current sensor for protection bi-directional