

**Features**

- 6-position backplane for PS2500/PS3500 series power modules
- Multiple input/output wiring configurations
- Removable terminals for easy wiring
- Serial or parallel fault bus
- ATEX and cULus approvals for Div 2/Zone 2

**Assembly**

**Function**

The PS3500-TB-6 is a 6-position backplane used by the PS2500/PS3500 series power supply modules. Power configuration and alarms are controlled by DIP switches on the backplane. The backplane connects to universal AC (90-250 V) or DC (90-300 V) inputs and supports redundancy.

The PS3500-TB-6 allows a maximum of 90 A of output power, 75 A in N+1 configuration or 45 A in triple redundant mode. Automatic load sharing of all of the power modules is built into the backplane. Input and output lines can be wired independently or in parallel, providing easy configuration of N+1 redundancy.

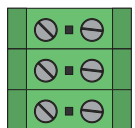
The fault bus can be configured in serial or parallel combinations.



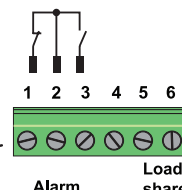
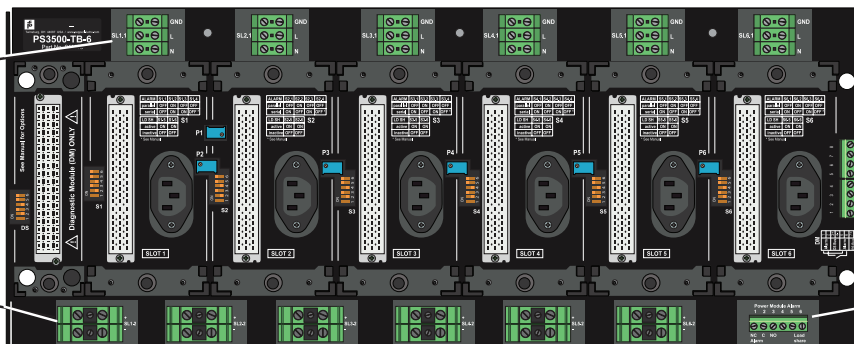
**Connection**

Release date 2013-03-05 17:10 Date of issue 2013-03-05 911113\_eng.xml

90 - 250 V AC  
90 - 300 V DC



24 V DC

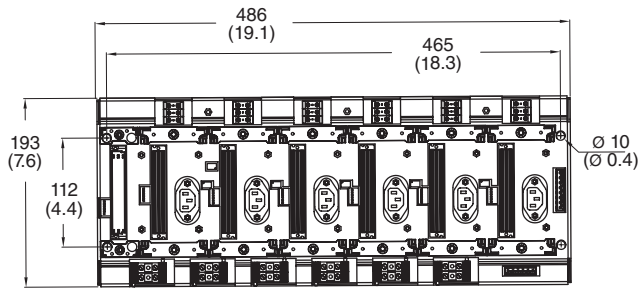


Zone 2  
Div. 2

|   |   |
|---|---|
| <b>Interface</b>  |   |
| Type  | diagnostic bus: RS 485  |
| <b>Input</b>  |   |
| Rated values  | terminal ratings: current 30 A, voltage 300 V   |
| Voltage   | 90 ... 250 V AC; ± 10 %, 90 ... 300 V DC  |
| <b>Output</b>   |   |
| Rated values  | terminal ratings: current 65 A, voltage 300 V   |
| Fault signal  | removable terminals : power module alarm  |
| <b>Directive conformity</b>                             |   |
| Electromagnetic compatibility                           |   |
| Directive 2004/108/EC                                   | EN 61326-1:2006<br>EN 61000 sections 3-2, 3-3, 4-2, 4-4, 4-5, 4-6, and 4-11   |
| <b>Conformity</b>                                       |   |
| Electromagnetic compatibility                           | NE 21:2006  |
| Protection degree                                       | EN 60529  |
| Shock resistance  | EN 60068-2-27   |
| Vibration resistance                                    | EN 60068-2-6  |
| <b>Ambient conditions</b>                               |   |
| Ambient temperature                                     | -25 ... 70 °C (-13 ... 158 °F)  |
| Storage temperature                                     | -40 ... 85 °C (-40 ... 185 °F)  |
| Relative humidity                                       | < 95 % , noncondensing  |
| Shock resistance  | 15 g , 11 ms  |
| Vibration resistance                                    | 1 g , 58 ... 150 Hz   |
| <b>Mechanical specifications</b>                        |   |
| Core cross-section                                      | input terminals: 4 mm <sup>2</sup> (10 AWG)<br>output terminals: 10 mm <sup>2</sup> (6 AWG)   |
| Housing material  | Powder Coated, 1010 Cold Rolled Steel   |
| Protection degree                                       | IP20  |
| Mass  | approx. 2.9 kg ( 6.375 lbs )  |
| Dimensions  | 193 x 78 x 486 mm (7.6 x 3.1 x 19.1 in)   |
| <b>Data for application in connection with Ex-areas</b> |   |
| EC-Type Examination Certificate                         | ITS 09 ATEX 46140 X   |
| Group, category, type of protection                     | ⊕ I/3 G Ex nC IIC T4  |
| Directive conformity                                    |   |
| Directive 94/9/EC                                       | EN 60079-0, EN 60079-15   |
| <b>International approvals</b>                          |   |
| UL approval   | cULus Listed<br>E230669<br>E350173  |
| Approved for  | Class I/Div 2, ABCD   |
| ETL Intertek  | listed<br>ANSI/UL 508 - 2005<br>ANSI/ISA 12.12.01 - 2.07<br>CSA C22.2 No. 213<br>C22.2 No.214CSA C22.2 No. 213<br>CAN/CSA C22.2 No.14-05<br>With update No.3, 2008  |
| Approved for  | Class I, Zone 2, Group IIC T4<br>Class I, Division 2, Groups A, B, C, D, T4   |
| <b>General information</b>                              |   |
| Supplementary information                               | Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> . |

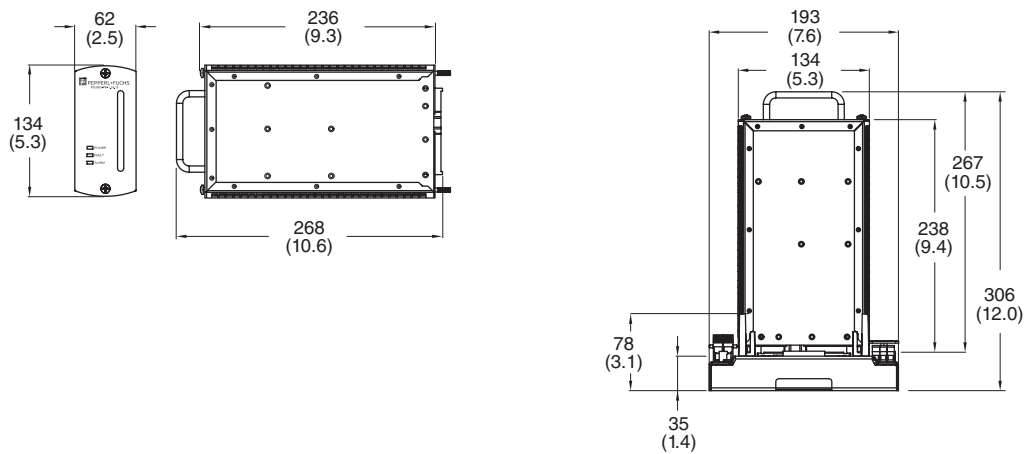
Release date 2013-03-05 17:10 Date of issue 2013-03-05 911113\_eng.xml

**Dimensions mm (in)**



**System dimensions mm (in)**

PS 3500-PM-1.24.15



Release date 2013-03-05 17:10 Date of issue 2013-03-05 911113\_eng.xml