

# TECHNICAL DATA SHEET



DCB-F12A-4I-150V-I63A-II-10

**Product Description:** For Axpert 1MPPT 4kW/5kVa\_48vdc

Photovoltaic DC Protection Board-Wall Mounted (surface type ) IP65. Intended for use with low voltage DC Strings up to 150Vdc and a Max Current of 9A per String. This product caters for the 4 individually connected PV strings (1MPPT Inverters) Isolatable by means of built in miniature circuit breaker. Each String utilises a fuse on the positive string and a terminal on the negative string and has a DC Surge protective device –providing protection. For ease of installation, PV String connection is via original Multi-Contact MC-4 Connectors for input and output via compression glands. A M6 Earth Stud is Provided for earth connection.



*Picture shown for illustrative and representative purposes only and may differ from actual Product*

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*Version: Rev 1*

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## Technical Datasheet

Item Number	DCB-F12A-4I-150V-I16A-II-10
Max. Open Circuit Voltage $V_{oc}$ *	150 Vdc
Max Current - On Load Switching**	16Adc / String
Number of individual Strings	4
Number of Inputs	4
Number of Outputs	1
DC String Connection Input***	4 x MC-4 set
DC string Connection Output***	1 x set M20 compression gland
Earth Connection	M6 Brass Earth Stud
Surge Protection Device****	<b>CITEL DC - Type 2</b>
SPD Total Discharge Current (8/20 $\mu$ s) (I total)	20kA
Nominal discharge current (8/20 $\mu$ s) [(DC+/DC-) --> PE] (I <sub>n</sub> )	20kA
Max. discharge current (8/20 $\mu$ s) [(DC+/DC-) --> PE] (I <sub>max</sub> )	40kA
Voltage protection level (U <sub>p</sub> )	620V
Total discharge current (10/350 $\mu$ s) [DC+/DC- -> PE] (I <sub>total</sub> )	-
Lightning impulse current (10/350 $\mu$ s) [DC+ -> PE/DC- -> PE] (I <sub>imp</sub> )	
Operating state / fault indication	Green / Red
Enclosure*****	PVC with Smokey Swing Door
IP Rating	IP65
Double Insulated	Yes
Dimension (H X W X D)	246 x 310 x 148 mm
UV Protection	YES
Halogen Free	YES
Resistance to Impact	IK08
Glow Wire Resistance- Enclosure Only	650 °C
Max. Operating Voltage	1000Vac / 1500Vdc
Assembly General Operating Temperature	-10°C to +40°C
<b>Notes:</b>	
* Please co-ordinate Max open circuit voltage of PV String with the inverter MPPT Max Voc.	
** On Load Switching permitted, however, if possible remove load first by switching inverter off - Circuit Breaker may also trip in abnormal conditions	
*** Please use protective caps for unused MC-4 Connectors- Use MC-4 In-Line connectors for PV String field wire connection	
**** SPD Type 2 according to EN 50539-11	
***** UNE-EN62208 and IEC 62214	

**NB: All equipment to be installed and operated by Qualified Personnel only.**

