

TECHNICAL DATA SHEET



DCB-NF-2I-500V-I16-I_II-20

DCB-NF-2I-500V-I16-II-20

Product Description:

Photovoltaic DC Protection Board-Wall Mounted (surface type) IP65. Intended for use with Low voltage DC Strings up to 500Vdc and a Max Current of 16A per String. This product caters for the 2 individually connected PV strings (2 x MMPT type inverters). Each string individually Isolatable by means of built in miniature circuit breaker. Each String also has an integrated Surge Protection Device – individually providing protection to each string. For ease of installation, PV String connection is via original Multi-Contact MC-4 Connectors for input and output connections. A PVC compression gland is provided for Surge protection device cable connection.



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

Technical Datasheet		
Item Number	DCB-NF-2I-500V-I16-II-20	DCB-NF-2I-500V-I16-I_II-20
Max. Open Circuit Voltage V_{oc} *	500 Vdc	500 Vdc
Max Current - On Load Switching**	16Adc / String	16 Adc / String
Number of individual Strings	2	2
Number of Inputs	2	2
Number of Outputs	2	2
DC String Connection Input***	2 x MC-4 sets	2 x MC-4 sets
DC string Connection Output***	2 x MC-4 sets	2 x MC-4 sets
Earth Connection	M6 Brass Earth Stud	M6 Brass Earth Stud
Surge Protection Device****	DEHN DC - Type 2	DEHN DC - Type 1 & 2
SPD Short Circuit Current Rating- (I _{SCPV})	10kA	1000 A
SPD Total Discharge Current (8/20 μ s) (I _{total})	40kA	
Nominal discharge current (8/20 μ s) [(DC+/DC-) --> PE] (I _n)	12,5kA	15kA
Max. discharge current (8/20 μ s) [(DC+/DC-) --> PE] (I _{max})	25kA	30kA
Voltage protection level (U _p)	≤ 2.5 kV	3kV
Voltage protection level at 5 kA (U _p)	≤ 2 kV	
Response time (t _a)	≤ 25 ns	≤ 25 ns
Total discharge current (10/350 μ s) [DC+/DC- -> PE] (I _{total})		12,5kA
Lightning impulse current (10/350 μ s) [DC+ -> PE/DC- -> PE] (I _{imp})		6,25kA
Specific energy [DC+ -> PE/DC- -> PE] (W/R)		9,76 kJ/Ohms
Operating state / fault indication	Green / Red	Green / Red
Enclosure*****	PVC with Smokey Swing Door	PVC with Smokey Swing Door
IP Rating	IP65	IP65
Double Insulated	Yes	Yes
Dimension (H X W X D)	286 x 418 x 148 mm	286 x 418 x 148 mm
UV Protection	YES	YES
Halogen Free	YES	YES
Resistance to Impact	IK08	IK08
Glow Wire Resistance- Enclosure Only	650 °C	650 °C
Max. Operating Voltage	1000Vac / 1500Vdc	1000Vac / 1500Vdc
Assembly General Operating Temperature	-10°C to +40°C	-10°C to +40°C
Notes:		
* 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 and Type 1 & 2- according to EN 50539-11		
***** UNE-EN62208 and IEC 62214		

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



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