

TECHNICAL DATA SHEET



DCB-F12A-6I-600V-I63A-I-II-10

DCB-F12A-6I-600V-I63A-II-10

Product Description:

Photovoltaic DC Protection Board-Wall Mounted (surface type) IP65. Intended for use with low voltage DC Strings up to 600Vdc and a Max Current of 12A per String. This product caters for the 6 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

*Segen Solar (Pty) Ltd Reserves the right to implement
Changes to specifications depicted in this datasheet
to conform to equipment or Regulatory requirements*

Version: Rev 2

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Technical Datasheet		
Item Number	DCB-F12A-6I-600V-I63A-II-1O	DCB-F12A-6I-600V-I63A-I-II-1O
Max. Open Circuit Voltage V_{oc} *	600 Vdc	600 Vdc
Max Current - On Load Switching**	12Adc / String	12Adc / String
Number of individual Strings	6	6
Number of Inputs	6	6
Number of Outputs	6	6
DC String Connection Input***	6 x MC-4 sets	6 x MC-4 sets
DC string Connection Output***	2X M20 PVC GLANDS	2X M20 PVC GLANDS
Earth Connection	M6 Brass Earth Stud	M6 Brass Earth Stud
Surge Protection Device****	CITEL DC - Type 2	CITEL DC - Type 1 & 2
SPD Short Circuit Current Rating- (I _{SCP})	1000A	1000 A
SPD Total Discharge Current (8/20 μ s) (I _{total})	40kA	60kA
Nominal discharge current (8/20 μ s) [(DC+/DC-) --> PE] (I _n)	15kA	15kA
Max. discharge current (8/20 μ s) [(DC+/DC-) --> PE] (I _{max})	-	40kA
Voltage protection level (U _p)	4.6kV	2.6/4.6kV
Total discharge current (10/350 μ s) [DC+/DC- -> PE] (I _{total})	-	10kA
Lightning impulse current (10/350 μ s) [DC+ -> PE/DC- -> PE] (I _{imp})	-	5kA
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.

