TECHNICAL DATA SHEET



DCB-F12A-7I-600V-I63A-I-II-10 DCB-F12A-7I-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 7 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

Technical Datasheet		
ltem Number	DCB-F12A-7I-600V-I63A-II-10	DCB-F12A-7I-600V-I63A-I-II-10
Max. Open Circuit Voltage voc *	600 Vdc	600 Vdc
Max Current - On Load Switching**	12Adc / String	12Adc / String
Number of individual Strings	7	7
Number of Inputs	7	7
Number of Outputs	7	7
DC String Connection Input***	7 x MC-4 sets	7 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 scpv)	1000A	1000 A
SPD Total Discharge Current (8/20µs) (I total)	40kA	60kA
Nominal discharge current (8/20 μs) [(DC+/DC-)> PE] (In)	15kA	15kA
Max. discharge current (8/20 μs) [(DC+/DC-)> PE] (I _{max})	-	40kA
Voltage protection level (UP)	4.6kV	2.6/4.6kV
Total discharge current (10/350 μs) [DC+/DC> PE] (Itotal)	-	10kA
Lightning impulse current (10/350 μs) [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-ordiante Max open circuit voltage of PV String with the inverter MPPT 	Max Voc.	
** On Load Switching permitted, however, if possible romove load first by switchin	g inverter off - Circuit Breaker may also trip i	n abnomal conditions
*** Please use protective caps for unused MC-4 Connectors- Use MC-4 In-Line connectors	ectors 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.

