

Technical Note - Associated Data of DC Switch Disconnector and DC Terminal Blocks in Connection Unit of SE100K -AUxxxxxxx and SE82.8K-AUxxxxxxx Three Phase Inverters

Version History

Version 1.0 (November 2020) – Release

General

This technical note provides essential specifications related to the DC Switch Disconnector and DC terminal blocks wires installed inside the Connection Unit of SE100K-AUxxxxxxx and SE82.8K-AUxxxxxxx Three Phase Inverters.

The information provided in this document is essential for installation and maintenance of the inverter.

Type of DC Wires Used for Terminal Block Connections inside the Connection Unit

The following table specifies the type of wires used for connecting the DC terminal blocks inside the Connection Unit of Three Phase Inverters.

Wire Type	Description
Connectable conductor materials	Copper
Nominal cross section	10 mm ²
Solid conductor	3 ... 16 mm ²
Solid conductor, push-in termination	4 ... 16 mm ²
Fine-stranded conductor	3 ... 16 mm ²
Fine-stranded conductor with ferrule with plastic collar	4 ... 10 mm ²
Fine-stranded conductor with ferrule, push-in termination	4 ... 10 mm ²
Strip length	17 ... 19 mm

Switch Disconnector Voltage, Current and Associated Data

The following table specifies the Voltage and current data associated with the Connection Unit.

Identification	Rating Data		
Switch, unenclosed – catalogue number (with DC- PV2 rating)	SI55-BMDC64R-6		
Specific dedicated individual enclosure – catalogue number (with minimum IP56NW rating)	SI55-PEL64R-6 (enclosed version)		
Assembly of switch and dedicated individual enclosure – catalogue number	DCD-3PH-AU-S7-B		
I_{th} rated thermal current, unenclosed, at 40°C shade ambient air temperature	55A		
I_{the} rated thermal current, indoor, at 40°C shade ambient air temperature, in a specific dedicated enclosure	55A		
I_{the} rated thermal current, outdoors, at 40°C shade ambient air temperature, without solar effects in a specific dedicated enclosure IP56NW	55A		
I_{the} solar current value, outdoors, at 40°C shade ambient air temperature with solar effects in a specific dedicated enclosure rated IP56NW	55A		
I_{the} solar current value, outdoors, at 60°C shade ambient air temperature with solar effects in a specific dedicated enclosure rated IP56NW	55A		
2 Pole <u> 1 </u> <u> 2 </u>	U_e rated operationa l Voltage V dc	I_{ei} DC-PV2 rated operational current A	$I_{(make)}$ & $I_{c(break)}$ DC-PV2 4 x I_e A
	≤300	55	220
	500	55	220
	600	55	220
	1000	20	80