

TECHNICAL DATA DC-SWITCH

FRONIUS SYMO 15.0-3-M to 20.0-3-M

LS55 E 7858 (43,0002,0490)

Data according to IEC 60947-3, VDE 0660, GB14048.3 (CCC)

Utilization category DC-PV2

Main contacts		Type	LS55	
Rated thermal current I _{th}		A	55	over-current breaking capability ⁴⁾
Rated insulation voltage U _i ¹⁾		V	1500	
Rated insulation voltage U _i ²⁾		V	-	
Rated operational current I_e³⁾				
	300V	A	55	220
	400V	A	40	160
1 pole	500V	A	25	100
(valid for DC+1, DC+2 and	600V	A	13	52
DC- each)	700V	A	10	40
	800V	A	8	32
	900V	A	6	24
	1000V	A	4	16
	500V	A	55	220
2 poles in series	600V	A	55	220
(valid for MPPT1 and	700V	A	55	220
MPPT2 individually)	800V	A	49	196
	900V	A	35	140
	1000V	A	20	80
	500V	A	85	340
2 poles in series	600V	A	75	300
+ 2 poles parallel	700V	A	60	240
(valid for MPPT1 and	800V	A	49	196
MPPT2 in parallel)	900V	A	35	140
	1000V	A	25	100

1) Suitable at overvoltage category I to III, pollution degree 3 (standard-industry): U_{imp} = 8kV.

2) Suitable at overvoltage category I to III, pollution degree 2 (min. IP55): U_{imp} = 8kV.

3) Suitable for use in photovoltaic systems

4) as per IEC 60947-3 Table D.5 (5 operating cycles)



SHIFTING THE LIMITS

TEMPERATURE DERATING

Due to this DC Switch being integral to the inverter, the inverter's own output power temperature derating factor needs to be considered (see inverter Datasheet for details).

The DC Switch has **no current capability derating** factor **up to an ambient temperature of +65°C**.

ALTITUDE DERATING

0 to 2.000m:	1x I _e
2.001 to 2.500m:	0,975 x I _e
2.501 to 3.000m:	0,950 x I _e
3.001 to 3.500m:	0,925 x I _e
3.501 to 4.000m:	0,900 x I _e
4.001 to 4.500m:	0,875 x I _e
4.501 to 5.000m:	0,850 x I _e