

# SH-5 DC

## STANDARD SERIES



- DESIGN: MODULAR
- PROTECTION RATING: IP65
- WARRANTY PERIOD: 5 YEARS
- UV RESISTANCE: Yes
- READY TO CONNECT: Yes
- WEIGHT: 1.040 KG



### BASIC PARAMETERS DC SIDE

Number of PV chain inputs/outputs	1   1
Number   Type of DC surge arrester   Type	1   Phoenix   T1/T2
Connection type	Panel-mounted MC4 Stäubli

### ELECTRICAL AND MECHANICAL PARAMETERS OF THE HOUSING

Model	PHS 4 T
Number of fields	4
Enclosure dimensions without chokes and MC4 (L W H)	120.00   128.00   201.00
Compliant with	EN 60670-1, EN 62208
Degree of protection	IP65
Protection class	II
Rated insulation voltage $U_i$ Glow	400 V AC, 1500 V DC
wire test	650°C
Impact resistance	IK08
UV resistance	Yes
Recyclable plastic	Halogen-free
Operating temperature	-25°C – +60°C

## DC surge protector (SPD) used

Manufacturer / Model	PHOENIX/VAL-MS-T1/T21000DC-PV/2+V
Surge protection	T1 / T2
Idle voltage $U_{OCSTC}$	$\leq 975$ V DC
Maximum discharge current $I_{max}$ (8/20) $\mu s$	40 kA
Response time $t_A$	$\leq 25$ ns
Lightning current test (10/350) $\mu s$ , charge	2.5 As
Lightning impulse current (10/350) $\mu s$ , specific energy	6.25 kJ/ $\Omega$
Impulse current (10/350) $\mu s$ , peak value $I_{imp}$	5 kA
Total discharge current $I_{total}$ (8/20) $\mu s$	40 kA
Total discharged current $I_{total}$ (10/350) $\mu s$	5 kA
Insulation resistance $R_{iso}$	$> 5$ G $\Omega$ (at 500 V DC)
Rated discharge current $I_n$ (8/20) $\mu s$	15 kA
Rated load current $I_L$	80 A
Continuous operating current $I_{CPV}$	$< 20$ $\mu A$
Maximum continuous voltage $U_{CPV}$	1170 V DC
Short-circuit resistance $I_{SCPV}$	2000 A
Residual voltage $U_{res}$	$\leq 3.5$ kV (at $I_n$ )
-	$\leq 2.9$ kV (at 5 kA)
-	$\leq 3.2$ kV (at 10 kA)
-	$\leq 3.7$ kV (at 20 kA)
-	$\leq 4.1$ kV (at 30 kA)
-	$\leq 4.6$ kV (at 40 kA)
Protective conductor current $I_{PE}$	$\leq 20$ $\mu A$ DC
-	$\leq 350$ $\mu A$ AC
Protection level $U_p$	$\leq 3.5$ kV
Power consumption in standby mode $P_c$	$\leq 25$ mVA
Connection configuration	Y configuration

