SIEMENS

Data sheet

5SD7581-3

SURGE PROTECTION FOR ETHERNET INTERFACES UP TO 10GBITS, INCLUDED POE



Model	
product brandname	SENTRON
Product designation	Surge protection device
Design of the product	Surge arrester 5SD7 for measuring and control technology
Design of the product / explosion-proof design	No
General technical data	
Break time	
 between L and N / for symmetrical circuit 	1 ns
 between L or N and PE / for symmetrical circuit 	100 ns
Insertion loss / for symmetrical circuit	
 with characteristic wave impedance 100 ohm / 	1 dB
up to 5 MHz / typical	
Power pulse current / at (10/1000) µs	40 A
Capacity / between switched connecting terminals	
 for symmetrical circuit 	0.012 nF
 for asymmetrical circuit 	1 pF
Protection level	
 with pulse curve shape C2 / at (10 kV/5 kA) / to 	700 V
signal ground / acc. to IEC 61643-21	

Overvoltage category	Ш
Voltage	
Continuous operating voltage	
• at DC / maximum	3.3 V
Residual voltage / between L and L	
 for rated discharge current / for symmetrical circuit 	15 V
Voltage limitation / of the output voltage	
 between L and L / at rate of voltage rise 1 kV/µs / for spike or statistical distribution in relation to danger level / for symmetrical circuit 	9 V
• between L and PE / for asymmetrical circuit / at rate of voltage rise 1 kV/µs / for spike or statistical distribution in relation to danger level	700 V
Protection class	
Protection class IP	IP20
Electricity	
Discharge current	
 between L and L / for symmetrical circuit / at (8/20) μs / Rated value 	100 A
 between sum of all L and PE / for asymmetrical circuit / at (8/20) µs / Rated value 	2 kA
Consumed current / Rated value	1.5 A
Protection level / between L and N / for symmetrical circuit	
 with spike / with pulse curve shape C2 / at (10 kV/5 kA) / acc. to IEC 61643-21 	700 V
Main circuit	
Operating voltage	
 rated value / maximum 	3.3 V
Product details	
Product component / remote-signaling contact	No
Product function	
Product function / Surge arrester monitoring	No
Connections	
Type of electrical connection	RJ45
Mechanical Design	
Height	25 mm
Width	102 mm
Depth	65 mm
Net weight	289 g

Material / of the enclosure	ZnAl4Cu1
Environmental conditions	
Degree of pollution	2
Ambient temperature	
 during operation / minimum 	40 °C
 during operation / maximum 	85 °C
Certificates	
Equipment marking	
• acc. to DIN EN 61346-2	F
• acc. to DIN EN 81346-2	F
Declaration of Conformity	



Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system) https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/5SD7581-3

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/5SD7581-3/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7581-3

CAx-Online-Generator http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications