

Type 3 surge arrester Requirement class D Rated voltage UN 230 V UC 253V AC, 4-pole for 3-phase power supply



Article number

General data	
Standard	IEC 61643-11: 2011, EN 61643-11: 2012
Product designation	Surge protection device
SPD classification / acc. to EN 61643-11	
• Test Class I, Type 1	No
• Test Class II, Type 2	No
• Test Class III, Type 3	Yes
Number of SPD ports	1
Design of the product	Surge arrester
Design of pole	4
Designation of the protective paths	L-N, L-PE, N-PE
Mounting type	DIN rail NS 35
Material / of the enclosure	PA 6.6-FR
Size of surge arrester	2MW
Degree of pollution	2
Overvoltage category / acc. to IEC 61010-1	III
Protection class IP / at connection all terminals	IP20
Shock acceleration	30 gn

Vibrational acceleration / at 5 Hz ... 500 Hz / limited to 2,5 h / per axis	5 gn
Ambient temperature / during operation	-40 °C ... 70 °C
Ambient temperature / during storage and transport	-40 °C ... 70 °C
Relative humidity / during operation	5 % ... 95 %
Installation altitude / at height above sea level / maximum	2 000 m
Width	35.4 mm
Height	90 mm
Depth	70.9 mm
Net weight	134 g

Electrical data

Type of distribution system	TT, TN-S
Operating voltage	230 / 400 V AC
Continuous operating voltage <ul style="list-style-type: none"> • maximum 	264 V
Load current	26 A (30 °C)
Protective conductor current	5 µA (255 V AC)
Discharge current <ul style="list-style-type: none"> • at (8/20) µs 	3 kA
Follow current extinguishing capability <ul style="list-style-type: none"> • between N and PE 	100 A (255 V a.c.)
Short-circuit rating (SCCR) / at 264 V	1.5 kA
Protection level <ul style="list-style-type: none"> • between L and N • between L and PE • between N and L • between N and PE • between PE and N and/or L 	1.4 kV 1.5 kV 1.2 kV 1.5 kV 1.5 kV
Response time <ul style="list-style-type: none"> • between L and (PE)N • between N and PE 	25 ns 100 ns
Settable response factor / of trip current	1.6
Fuse protection type / at V-shaped connection	25 A (gG / B / C)
Insulation resistance (Riso)	5 MΩ

Connections/Terminals

Type of electrical connection	Screw terminal
Wire stripping length	8 mm
Tightening torque	0.75 ... 0.85
Wire stripping length	8 mm
Connectable conductor cross-section <ul style="list-style-type: none"> • for finely stranded conductor 	0.2 ... 2.5

<ul style="list-style-type: none"> • for rigid conductor 	0.2 ... 4
<ul style="list-style-type: none"> • finely stranded 	0.2 ... 2.5
AWG number / as coded connectable conductor cross section	24 ... 12
Design of the thread / of the connection screw	M3
Signal design	Defect signaling contact

Indicator/remote signaling	
Switching function / of the remote-signaling contacts	N/C contact
Operating voltage / of the remote-signaling contacts	<ul style="list-style-type: none"> • at AC • at DC
<ul style="list-style-type: none"> • at AC • at DC 	250 ... 250 125 V (200 mA DC)
Operating current / of the remote-signaling contacts	<ul style="list-style-type: none"> • at AC • at DC
<ul style="list-style-type: none"> • at AC • at DC 	3 mA ... 3 A 1 A DC (30 V DC)
Connection type of remote signaling contact	M3
Connectable conductor cross-section	<ul style="list-style-type: none"> • for remote signaling contacts / for rigid conductor • for finely stranded conductor / for remote signaling contacts
<ul style="list-style-type: none"> • for remote signaling contacts / for rigid conductor • for finely stranded conductor / for remote signaling contacts 	0.2 ... 4 0.2 ... 2.5
Tightening torque / for remote signaling contacts	0.8 N·m
Wire stripping length / of the cable / for remote signaling contacts	8 mm

NEMA/UL - Data	
Type of distribution system	TT, TN-S
TOV behavior	<ul style="list-style-type: none"> • at TOV test voltage • at TOV test voltage (L-N) • at TOV test voltage (N-PE)
<ul style="list-style-type: none"> • at TOV test voltage • at TOV test voltage (L-N) • at TOV test voltage (N-PE) 	440 V AC (120 min / withstand mode) 440 V AC (5 s / withstand mode) / 440 V AV AC (120 min / withstand mode) 1200 V (200 ms / withstand mode)
Combustibility class acc. to UL 94	V0

Further information	
Information- and Downloadcenter (Catalogs, Brochures,...)	
http://www.siemens.com/lowvoltage/catalogs	
Industry Mall (Online ordering system)	
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SD7434-1	
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)	
https://support.industry.siemens.com/cs/ww/en/ps/5SD7434-1	
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)	
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7434-1	
CAX-Online-Generator	
http://www.siemens.com/cax	

