

SG275-SGSF

Multistage Surge Filters



Overview

What are AC Surge Filters?

AC surge filters are devices used to suppress and filter voltage surges in alternating current (AC) power systems. They are commonly installed at the power input of electrical equipment or control panels to protect against external surges.

Benefits of AC Surge Filters

They protect electrical equipment from damage caused by lightning strikes and power surges. They help extend the service life of electrical and electronic devices. They reduce the risk of system malfunctions and unexpected downtime.

Functions of AC Surge Filters

They absorb or divert abnormally high voltages away from the circuit. They filter electrical noise and unstable voltage conditions.

Standard

EN/IEC Type1+2/Class I+II, IEC 61643-11, AS/NZS 1768 categories B/C, IEEE C62.41 categories B/C, BS 6651 categories B/C, CP 33 categories B/C, IEC 1000-4-5, UL1449 third edition, ISO 9001 NQA, ISO 14001

Specifications

		40/1 model	40/3 model	63/1 model	63/3 model	125/3 model	250/3 model
Electrical Specifications							
Connection type		Series					
Modes of protection		All mode (L-N, L-PE, N-PE)					
Nominal Voltage	U ₀	230V (L-N) / 50Hz (110V / 60Hz by request only)					
Maximum continuous voltage	U _c	275V (L-N) / 50Hz (130V / 60Hz by request only)					
Phases		1	3	1	3		
Discharge current 8/20μs	I _{max}	130kA					
Discharge current 10/350μs	I _{imp}	50kA					
Maximum load current	I _L	40A		63A		125A	250A
Protection stages		3 Stage (Metal oxide varistor / LC filter / Metal oxide varistor)					
Voltage protection @ 3kA (8/20μs)	U _p	<300V					
Response time	t _A	Instantaneous (<2 ns)					
Earth leakage current		<1μA					
Maximum voltage drop (% of U ₀)	ΔU	<1%					
3dB Frequency @ 50Ω		750Hz		420Hz		350Hz	200Hz
Displays		LED status					
Alarms		Overcurrent / thermal overload, SPDT contact					
Overload/Short Circuit protection efficiency		99%					
Mechanical Specifications							
Operating temperature / humidity		-40 to +70°C / 5 to 95% non-condensing					
Connection type		UIK35 Terminals					N/A
Terminal capacity - power		35mm ²					Bus Bar / Lug
Terminal capacity - alarm		2.5mm ²					
Terminal screw torque - power		2.0Nm					N/A
Terminal screw torque - alarm		0.5Nm					
Environmental		IP 55 in enclosure					
Mounting		Wall mount					
Weight (in enclosure)		9kg	18kg	10kg	20kg	25kg	90kg

