

SURGE DIVERTER Cat.C, D DFL-Series

Power Line Surge Suppression for Lightning Protection

DFL series surge protector is a specially designed power line lightning or surge over voltage suppressor used for 220Vac 1Ph/380Vac 3Ph power supplied electronic equipment. It employed advanced lightning protection technique of world and high quality device for lightning protection and assembled with sophisticated process. As the power line is attacked by lightning, the induced huge pulse current and high surge overvoltage at the power line can instantaneously release into earth, therefore the modern electronic equipment has effectively protected from lightning.

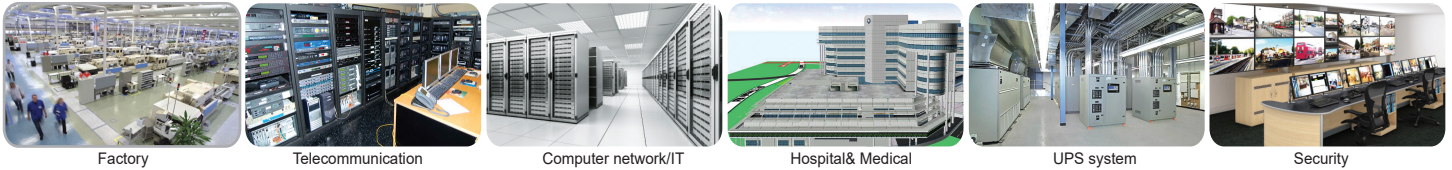


DFL1 / DFL2-D / DFL3-D series, DFL1-S / DFL2-S series

Features

- AC surge protector for single and three phase system
- Surge capacity I_{max} 20, 40, 80, 100kVA(8/20us)
- Fast response time ≤ 25 ns
- Easy installation for MDB LP by Parallel installation
- Lightning Protection Zone : LPZ0, LPZ1, LPZ2, LPZ3
- All TVSS protection mode: Line-line, Line-Neutral, Line-Earth, Neutral-Earth
- LED display indicator for operation and replace status
- Lightning & Surge counter operation Segment LED
- Remote monitoring alarm contact
- Repeat useable after frequent lightning
- Maintenance free of remote unmanned operate station
- Long life operation up to 20 years
- Accordance with ANSI / IEEE C62.41-2002, C62.42-2000, IEC/EN61643-11, IEC/EN61643-22
- ISO 9001:2015, QMS Manufacture Certificate

APPLICATIONS



Factory

Telecommunication

Computer network/IT

Hospital & Medical

UPS system

Security

ANSI/IEEE C62.41-2002 Location Category : A, B, C (Cat.D Outdoor)

Location Category A

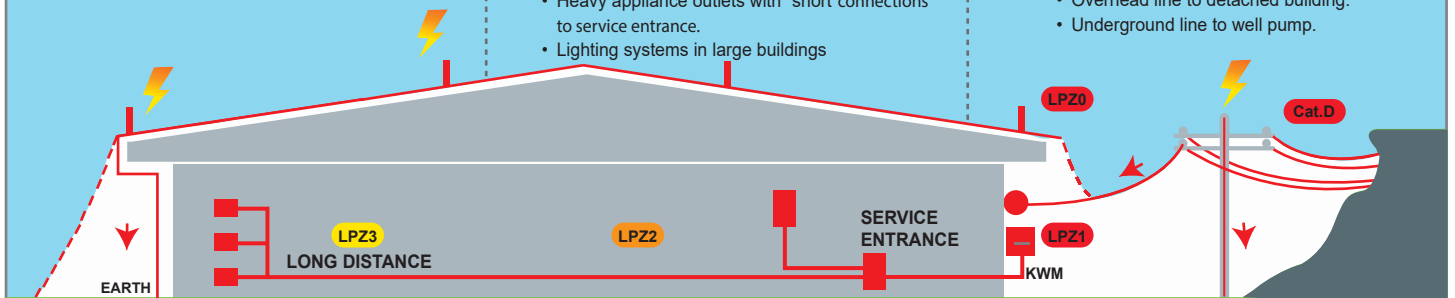
- Outlets and long branch circuits.
- All outlets at more than 10 m (30 ft) from Category B.
- All outlets at more than 20 m (60 ft) from Category C.

Location Category B

- Feeders and short branch circuits.
- Distribution panel devices.
- Bus and feeder industrial plants.
- Heavy appliance outlets with "short" connections to service entrance.
- Lighting systems in large buildings

Location Category C

- Outside and service entrance.
- Service drop from pole to building.
- Run between meter and panel.
- Overhead line to detached building.
- Underground line to well pump.

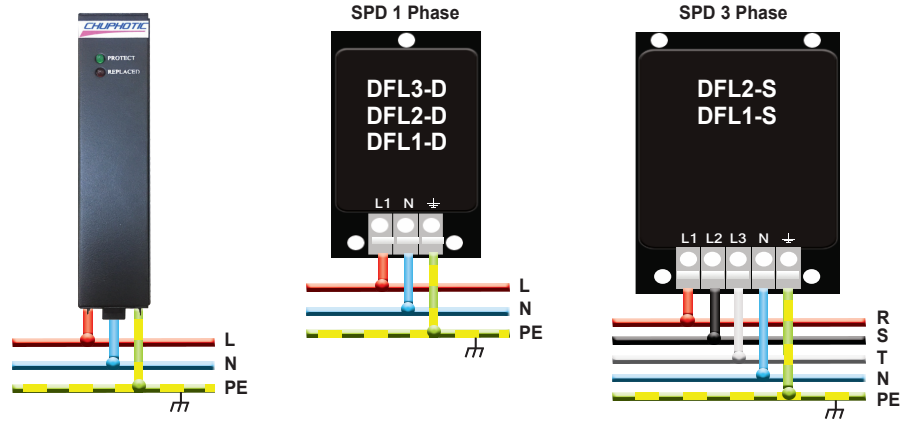


IEC/EN 61643 Lightning Protection Zone : LPZ3 : LPZ2 : LPZ1 : LPZ0 (Outdoor)



DFL-Series

Power Line Surge Suppression



SPECIFICATIONS

SURGE DIVERTER SURGE PROTECTION		DFL3-D 15kA	DFL3-D 25kA	DFL2-D 40kA	DFL1-D 80kA	DFL2-S 40kA	DFL1-S 80kA	DFL1-S 100kA
Location Cat. / Protection Zone		Cat.A,B / LPZ3,2	Cat.A,B / LPZ3,2	Cat.B,C / LPZ2,1	Cat.C,D / LPZ1,0	Cat.B,C / LPZ2,1	Cat.C,D / LPZ1,0	Cat.C,D / LPZ1,0
Electrical System		1 phase(2wire+PE)				3 phase(3wire+Neutral+PE)		
Normal Voltage		220/230/240 Vac 50/60Hz				380/400/415 Vac 50/60Hz		
Frequency Range		45 - 65 HZ						
Mode of Protection	ALL MODE	Phase-Ground(L-G), Neutral-Ground(N-G), Phase-Neutral(L-N)				Phase-Phase(L-L), Phase-Ground(L-G), Neutral-Ground(N-G),Phase-Neutral(L-N)		
Application Range	OPERATED - MCOV	180 - 260 Vac				280 - 480 Vac		
Let Through Voltage	Surge 500A / 3KA	600V (UL1449 500A) / 1200V (C62.41 Cat.C1 3KA)						
Surge Energy Dissipation	MOV / Varistor	1560 joules		3120 joules	4160 joules	3x3120 joules	3x4160 joules	3x5200 joules
Surge Capability Transient	I _{max} : 8/20 μsec 1 shoot.	30 kA	50 kA	80 kA	160 kA	80 kA	160 kA	200 kA
	I _n : 8/20 μsec 10 shoot.	15 kA	25 kA	40 kA	80 kA	40 kA	80 kA	100 kA
Transient Response Time		Less than 25 ns						
Design Regulation	TVSS standard	ANSI/IEEE C62.41-2002, ANSI/IEEE C62.42-2000, IEC/EC61643-11, IEC/EN61643-22						
Indicator	Surge diverter's LED	Green LED light: TVSS normal, Red and Green LED Blight: TVSS protected and warning alarm state, it should be soon replaced, Red LED light: TVSS protected warning alarm state and should be replaced at one, Red and Green Off: Fault Power supply or Power breaker off						
	Surge and Lightning's counter segment	No				Surge Lightning Counter by 7 Segment,LED		
	Enclosure(option)	Power line indicator: Green LED						
Remote Alarm	Dry contact	Yes, NC/NO contact 2A/250Vac						
Safety Isolation	Fuse OR Circuit Breaker	Available only in surge diverter with enclosure						
		32-63A	40-100A	63-125A	100-250A	63-125A	100-250A	100-250A
Operation Condition	Ambient temperature	-40°C to 60°C						
	Relative Humidity	0-95 %(non-condensing)						
Dimension (WxHxD mm.)	Surge diverter	45x250x110			153x290x75	160x250x85	238x349x92	280x389x120
	Enclosure(option)	280x350x150				300x450x150		
Weight (Approx. in kg.)	Surge diverter	1.2	1.8	3	4	7	8	
	Surge diverter with Enclosure(Option)	6.2	6.8	8.0	10.4	13.0	14.0	

*All above specification may be change without prior notice.

Chuphotic.BRO-01.Surge DFL-Series.Rev1.00/2020