

# LS-series

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LS Surge Diverter



LS Surge Diverter with Enclosure



sample of inside enclosure

# **SURGE DIVERTER**

# **Power Line Surge Protector**

- · AC surge protector for single and three phase systems
- · Easy installation for MDB and load center location
- · Parallel installation with main power system
- · No effect to load or main power
- All TVSS protection mode; Line-Line, Line-Neutral, Line-Earth, Neutral-Earth
- · LED protected status and replaced indicator
- · Remote alarm contact
- · Low let-through voltage less than 600 Volt
- Surge capability Imax = 20 kA, 40 kA (8/20  $\mu$ s)
- High MCOV 280 Vac
- Fuse breakers/Circuit breakers are available only in surge diverter with enclosure model
- Accordance with ANSI/IEEE C62.41-1991 and ANSI/IEEE C62.42-2000

LS-series Surge Diverters provide high energy surge diversion for protection against power surge caused by external sources as lightning strikes and substation switching. LS-series Surge Diverter is designed for mounting at point-of-entry / service entrance, main switchboard or distribution board, sub-distribution board for preventing damage to switchboards and your equipments. Protection and replacement status are indicated by LED indicators. And remote alarm contact provide dry contact signal to allow remote status monitoring.

### **Applications**

- · Industrial power utility
- Telecommunication system
- · Process and control system
- · Computer network / IT system
- · UPS system
- · Security system
- · Medical system

TVSS+



Tested by Center of Excellence in Electrical Power Technology, Chulalongkorn University



















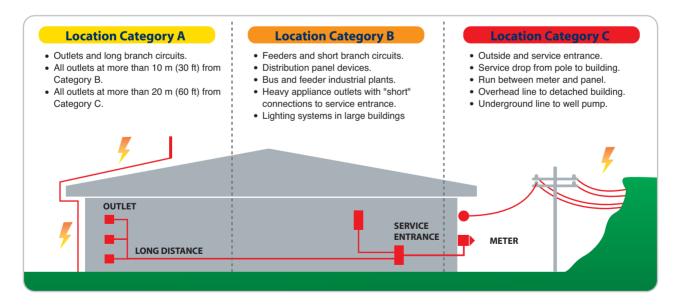




### **SPECIFICATIONS**

SURGE DIVERTER		LS-211C	LS-411C	LS-231C	LS-431C
SURGE DIVERTER WITH ENCLOSURE		LS-211C-ENCL	LS-411C-ENCL	LS-231C-ENCL	LS-431C-ENCL
ELECTRICAL SYSTEM		Single phase (2 wire + earth)		Three phase (3 wire + neutral + earth)	
NOMINAL VOLTAGE		220 Vac or 240 Vac		380 Vac or 415 Vac	
FREQUENCY RANGE		45 - 65 Hz		45 - 65 Hz	
PROTECTION MODE		L-N, L-E, N-E		L-L, L-N, L-E, N-E	
APPLICATION RANGE	MCOV	180 - 280 Vac		310 - 480 Vac	
LET THROUGH VOLTAGE		600 V		600 V	
SURGE ENERGY DISSIPATION		1560 joules	3080 joules	3 x 1560 joules	3 x 3080 joules
SURGE CAPABILITY (I <sub>max</sub> )	8/20 µs wave form	20 kA	40 kA	20 kA / phase	40 kA / phase
LEAKAGE CURRENT	Phase to earth	< 60 μΑ	< 120 μΑ	< 200 μΑ	< 400 μΑ
TRANSIENT RESPONSE TIME		less than 25 ns			
LOCATION CATEGORY		A1, A2, A3, B1, B2, B3, C1, C2			
DESIGN REGULATION	TVSS standard	ANSI/IEEE C62.41-1991, ANSI/IEEE C62.42-2000			
INDICATOR LIGHT	Surge diverter	TVSS Protected (green), Replaced (red)			
	Enclosure	Power line indicator (green), Alarm (red)			
REMOTE ALARM	Dry contact	yes			
SAFETY ISOLATION	Fuse breaker /	available only in surge diverter with enclosure			
	Circuit breaker	(LS-xxxC-ENCL model)			
OPERATING CONDITION	Ambient Temp.	- 40°C to 60°C			
	Relative Humidity	0 - 95% (non-condensing)			
DIMENSIONS	Surge diverter	38 x 215 x 82	44 x 251 x 106	120 x 270 x 120	120 x 270 x 120
(W x H x D in mm.)	Enclsoure	200 x 300 x 120	200 x 300 x 120	260 x 350 x 160	260 x 350 x 160
WEIGHT	Surge diverter	0.7	1.0	2.1	3.0
(Approx. in kg.)	Surge diverter	3.0	3.2	6.5	7.5
	with enclosure				

Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.



Authorized Distributor

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