

TECHNICAL DATA SHEET

LIGHTNING PROTECTION INTERNATIONAL PTY LTD
Comprehensive Lightning and Surge Protection ABN 11 099 190 897

- Direct Strike Protection
- Earthing Products & Solutions
- Surge & Transient Protection for Power, Data, Communications and RF Lines



LPI® MOV Power Protection Module - SST150 + NE

Features

- High performance surge protector for an operating voltage of 220 - 240Vac
- One Ph-N + one N-E or Three Ph-N + one N-E, protectors combined in one neat package
- Easy Installation
- DIN rail mounting



Product Description - 1 x SST150 + NE

The LPI 1 x SST150 + NE combines a piece of the SST150 protector rated at 50kA 8/20 μ s (I_{max}), with the NE15 neutral earth protector rated for 15kA 10/350 μ s (I_{max}) OR NE100 neutral earth protector rated for 100kA 10/350 μ s (I_{max}), in one neat and easily installed package for single phase applications. The unit is designed for mounting at main power switchboards and distribution boards in category C locations as per the IEC and other international standards.

The LPI SST150 is designed to provide surge and transient protection between each phase and neutral in compliance to IEC 61643. The SST150 comes with fast responsive Metal Oxide Varistors (MOV), modules. Each module provides status indication. Each SST150 comes as a two part item. The base is hard-wired into the circuit to be protected, and the protection module is plugged into this base. This enables easy replacement of protection modules should they be degraded or damaged by excessive transient activity.

The LPI NE provides high capacity protection between neutral and earth as is required for TT, and TN-S applications.



Product Description - 3 x SST150 + NE

The LPI 3 x SST150 + NE combines three pieces of the SST150 protector rated at 50kA 8/20 μ s (I_{max}), with the NE15 neutral earth protector rated for 15kA 10/350 μ s (I_{max}) OR NE100 neutral earth protector rated for 100kA 10/350 μ s (I_{max}), in one neat and easily installed package for three phase applications. The unit is designed for mounting at main power switchboards and distribution boards in category C locations as per the IEC and other international standards.

The LPI SST150 is designed to provide surge and transient protection between each phase and neutral in compliance to IEC 61643. The SST150 comes with fast responsive Metal Oxide Varistors (MOV), modules. Each module provides status indication. Each SST150 comes as a two part item. The base is hard-wired into the circuit to be protected, and the protection module is plugged into this base. This enables easy replacement of protection modules should they be degraded or damaged by excessive transient activity.

The LPI NE provides high capacity protection between neutral and earth as is required for TT, and TN-S applications.

Note and Remarks

LPI® has a policy of continuing product development. Therefore, the above specifications are subject to change without notice.

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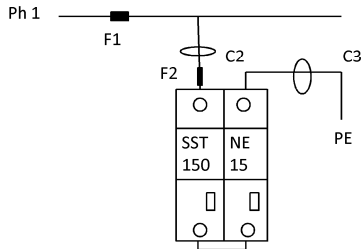
Ordering code:	LPI 1 X SST150 + NE15	LPI 3 X SST150 + NE15	LPI 1 X SST150 + NE100	LPI 3 X SST150 + NE100
Description:	Single phase shunt protector 50kA 8/20µs P-N, 15kA 10/350µs N-E protection, 220-240VAC Nominal, 385V Uc	Three phase shunt protector 50kA 8/20µs P-N, 15kA 10/350µs N-E protection, 220-240VAC Nominal, 385V Uc	Single phase shunt protector 50kA 8/20µs P-N, 15kA 10/350µs N-E protection, 220-240VAC Nominal, 385V Uc	Three phase shunt protector 50kA 8/20µs P-N, 15kA 10/350µs N-E protection, 220-240VAC Nominal, 385V Uc
Surge rating (Imax):	50kA 8/20µs P-N, 50kA 8/20µs, 15kA 10/350µs N-E	3 X 50kA 8/20µs P-N, 50kA 8/20µs, 15kA 10/350µs N-E	50kA 8/20µs P-N, 50kA 8/20µs, 100kA 10/350µs N-E	3 X 50kA 8/20µs P-N, 50kA 8/20µs, 100kA 10/350µs N-E
Nominal voltage:	220 – 240Vac @ 50/60Hz			
Max operating voltage (Uc):	385 Vrms			
Response time:	< 5ns			
Protection Modes:	Ph-N and N-E			
Protection status indication:	Green / Red indicator			
Dimensions:	36(W) x 90(L) x 63(H) mm	72(W) x 90(L) x 63(H) mm	36(W) x 90(L) x 63(H) mm	72(W) x 90(L) x 63(H) mm
Mounting:	Standard 35 mm – DIN43880 Din rail			
Weight:	190g	380g	190g	380g
IP rating:	IP 20			
Colour:	Blue			
Conductor size:	Each Phase 25mm ² (max), N 25mm ² (max), E 25mm ² (max)			
Operating temperatures:	-40 to +80°C, 0 – 95% humidity			
Standards:	IEC 61643-1 E DIN V 0675-6 1989-11			
Surge withstand:	ANSI C62.41 Cat A, Cat B, Cat C AS/NZS 1768-1991 Cat A, Cat B, Cat C			
Application:	Main and sub-distribution boards			
Configuration:	Hardwired base and pluggable module P-N + High capacity N-E module.			
Warranty:	5 Years			



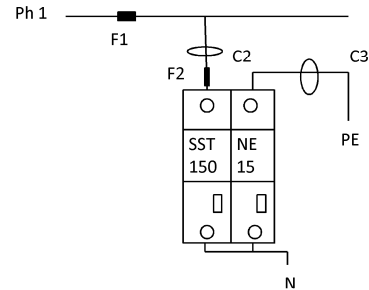
Good Module (Green) **Bad Module Replacement needed (Red)**

Figure 1: Status Indication of Module (Green = Good, Red = Bad)

Connection Diagram for 1 x SST150+NE15 (or NE100)

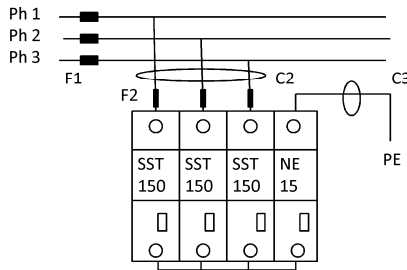


TN-C or IT Power System

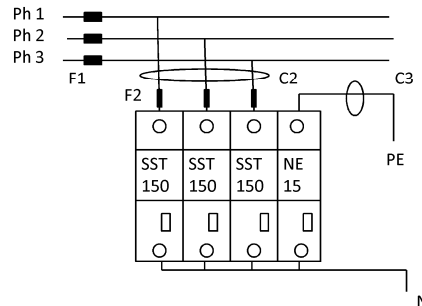


TN-S, TN-CS or TT Distribution System

Connection Diagram for 3 x SST150+NE15 (or NE100)



TN-C or IT Power System



TN-S, TN-CS or TT Distribution System

Recommended Fuse and Cable Sizes

Fuse F1 gL/ gG	C2 (mm sq.)	C3 (mm sq.)	Fuse F2 gL/ gG
25A up to 80A	10	16	Not required
100A	16	16	Not required
125A	16	16	Not required
160A	25	25	Not required
> 160A	25	25	160A

Figure 2: Fuse and Cable size for NE15

Fuse F1 gL/ gG	C2 (mm sq.)	C3 (mm sq.)	Fuse F2 gL/ gG
25A up to 80A	10	16	Not required
100A-125A	16	16	Not required
160A	25	25	Not required
200A-315A	35	35	Not required
> 500A	35	35	315A

Figure 3: Fuse and Cable size for NE100