

# LPS® PM120 Series

## SURGE PROTECTIVE DEVICE



**Protect electronic and electrical equipment  
against lightning induced surges**



The LPS® PM120-220 and PM120-480 devices are reliable surge protectors designed to protect electronic and electrical equipment. They are ideal for main switchboards and sub-switchboards of commercial, residential and industrial buildings.

Following extensive R&D, these devices have been created to deploy state-of-the-art engineering technology to protect your equipment effectively even in the most lightning prone regions in the world.

LPS® PM120-220 and PM120-480 devices provide 120,000 amps per phase of surge protection with instantaneous response. Thus your equipment is protected from lightning surges caused by direct lightning strikes, electro-magnetic couplings, the switch of power networks as well as from inductive loads.

Metal Oxide Varistors (MOVs) are used to maximise performance and reliability. LPS® PM120-220 and PM120-480 devices are specially designed with built-in thermal cut-out fuse that assist in avoiding fire hazards when dangerous thermal run-away occurs.

These devices are equipped with a LED indicator as well as an audible alarm which provides users with visual and audio monitoring on protection status. Furthermore, they are also armed with a NO/NC dry contact for remote monitoring on protection and power supply status with user-friendly RJ II connector.

### How they work

LPS® PM120-220 and PM120-480 devices provide unsurpassed performances in lightning surge protection. When a transient surge occurs, the surge protective devices will switch to a fully conductive state to divert high current. They will then reset automatically to a non-conducting state when voltage falls to normal operational value.

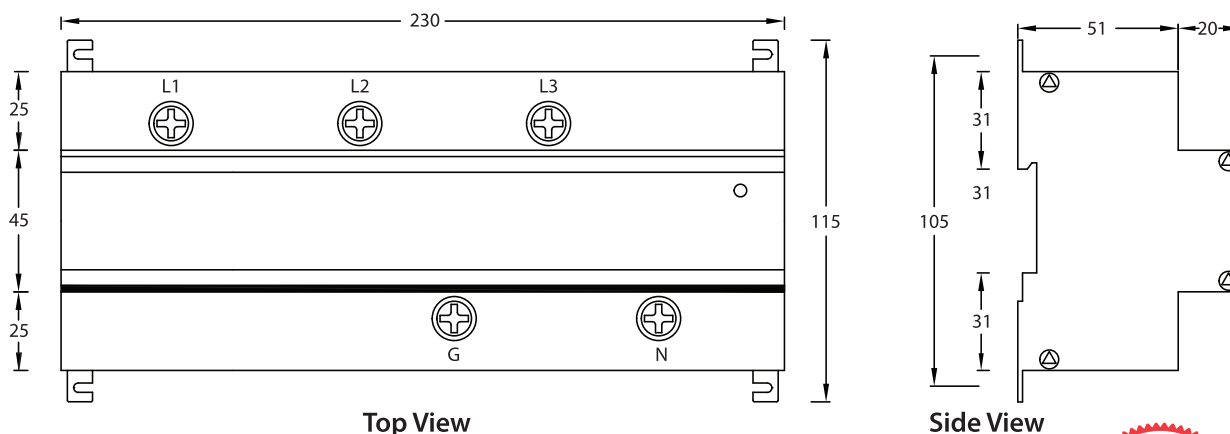
### HIGHLIGHTS

- ▶ **They protect main switchboards and sub-switchboards of commercial, residential and industrial buildings**
- ▶ **They are designed with thermal cut-out fuse that assist in avoiding fire hazards when dangerous thermal run-away occurs**
- ▶ **They are housed in a fail-safe IP 20 metal enclosures for maximum safety**

## Technical Specifications

Technical Data	PM 120 – 220	PM 120 – 480
Compiled Standard	IEC 61643-11, Class II	
Type of LV System	TN	
Location	Main Switchboard (MSB)/Sub-Switchboard (SSB) receiving energy from MSB located in other building	
Number of Ports	1 (Parallel Connection)	
Nominal Voltage $U_o$	208 VAC (Line – Line)	480 VAC (Line – Line)
Maximum Continuous Operating Voltage $U_c$	239 VAC (Line – Line)	552 VAC (Line – Line)
Temporary Overvoltage $U_T$ (L – G) – 5s	228 V	528 V
Mode of Protection	L–G	
Voltage Protection Level $U_p$ $\overline{T2}$ @ $I_n$	750 V (Line – Earth)	1.8 kV (Line – Earth)
Nominal Discharge Current $I_n$	10 kA	
Maximum Discharge Current $I_{max}$ – Designed	120 kA / phase	
	60 kA / mode	
Total Discharge Current $I_{TOTAL}$	360 kA	
Residual Current $I_{PE}$	< 1 mA	
Short-circuit Current Rating $I_{SCCR}$	25 kA	
Frequency	50 / 60 Hz	
Status Indicator	Visual – LED	
	Remote Monitoring – Dry Contact	
	Audible Alarm	
Degree of Protection	IP 20	
Max. Conductor Size	10 mm <sup>2</sup>	
Operating and Storage Temperatures	– 40 °C to 70 °C	
Method of Mounting	Panel Mount	
Rating for External Disconnecter	65A HRC Fuse or Nuisance Tripping Protected RCCB	
Weight	850 g	930 g
Dimensions	230 x 115 x 71 mm	
Warranty	5 years	

## Dimensions



All dimensions in millimetres

All the above specifications are subjected to changes without prior notice.  
Customised products are available upon request.

Awarded the National Mark of  
Malaysian Brand 2015



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