

# LPS® PM320-415Y

## SURGE PROTECTIVE DEVICE



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



The LPS® PM320-415Y device is a reliable surge protector designed to protect electronic and electrical equipment. It is ideal for main switchboards and sub-switchboards of commercial, residential and industrial buildings.

Following extensive R&D, this device has 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® PM320-415Y device provides 320,000 amps per phase of surge protection in common and differential modes 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® PM320-415Y device is specially designed with MOV that has built-in thermal cut-out fuse that assist in avoiding fire hazards when dangerous thermal run-away occurs.

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

### How it work

LPS® PM320-415Y device provides unsurpassed performances in lightning surge protection. When a transient surge occurs, the surge protective device will switch to a fully conductive state to divert high current. It will then reset automatically to a non-conducting state when voltage falls to normal operational value.

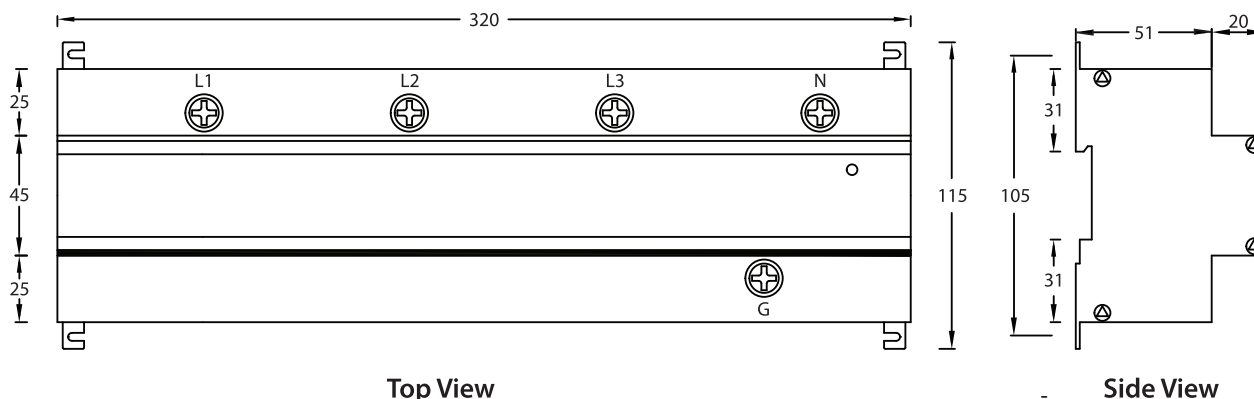
### HIGHLIGHTS

- ▶ **It protects main switchboards and sub-switchboards of commercial, residential and industrial buildings**
- ▶ **It provides both common and differential mode protection with a low let-through voltage**
- ▶ **It is designed with each MOV that has a built-in thermal cut-out fuse that assist in avoiding fire hazards when dangerous thermal run-away occurs**
- ▶ **It is housed in a fail-safe IP 20 metal enclosures for maximum safety**

## Technical Specifications

Technical Data	PM 320 – 415Y
Test Standard	IEC 61643-11, Class II
Type of LV System	TT
Location	Main Switchboard (MSB)
Number of Ports	1 (Parallel Connection)
Nominal Voltage $U_o$	240 VAC (Line – Neutral)
Maximum Continuous Operating Voltage $U_c$	275 VAC (Line – Neutral)
Mode of Protection	L – N, L – G, N – G
Voltage Protection Level $U_p$ $T_2$ @ $I_n$	1.6 kV (Line – Neutral)
Nominal Discharge Current $I_n$	20 kA @ 8/20 $\mu$ s
Maximum Discharge Current $I_{max}$ – Tested	65 kA / mode
– Designed	320 kA / phase, 160 kA / mode
Temporary Overvoltage $U_T$ (L – N) – 5s	441.6 V
– 200ms	1455.0 V
Total Discharge Current $I_{TOTAL}$ Designed	640 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	63 A MCB / Switch Fuse / Transient Protected RCCB
Weight	2 kg
Dimensions	320 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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