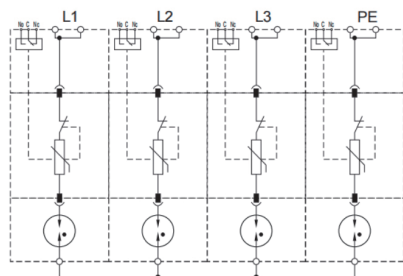




PB25MGVT/960-R/3PI



Basic circuit diagram



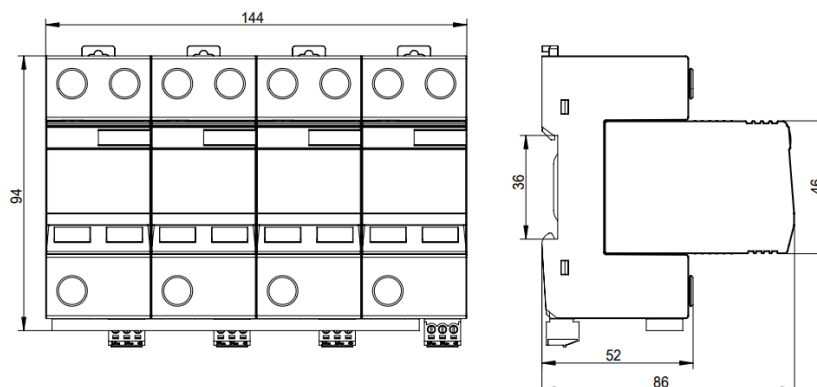
The PB25MGVT/960-R/3PI is class I & class II (or T1+T2) prewired four poles combined SPD designed for high voltage power system lightning current & surge protection, especially for location of high risk exposure or LPZ 0-2 building entrances (IEC 62305-4) to against the damage from direct or close lightning strikes.

With built in JDA VT technology, PB25MGVT ensures remarkable lightning current discharge capacity up to 22kA 10/350 μ s and No leakage current & No follow current. It can be applied in most electrical installation and provide better reliability and safety protection, and fulfill the specific requirement of wind turbine industrial.

A notable feature of PB25MGVT is dual module redundancy design, two individual MOV protection modules in parallel in one pole SPD with two indication windows, so that the SPD could keep on working in spite of one protection module fault or one indication window turns to red. That will help to realize the uninterrupted

- T1+ T2 SPD per IEC/EN 61643-11 standard.
- Prewired four poles TUV certificated SPDs for use in three phase TN-C / IT systems.
- Unique thermal disconnecter design provides quick thermal response and secure disconnection
- Dual module redundancy for one pole SPD and dual fault indication windows, with optional remote signal contact.
- Lightning current capacity up to 22 kA 10/350 μ s, surge current capability up to 100kA 8/20 μ s
- Low voltage protection level due to JDA VT technology.
- High short-circuit current rating up to 50kArms, suitable for application in most AC power system.
- Long service life because of no leakage current and follow current
- Better reliability and robustness, Higher TOV (Temporary Over-Voltage) withstanding performance
- Pluggable module for easy replacement without the need to remove system wiring.
- Comply with UL1449 5th, IEEE C62.41, CSA C22.2 standards

Dimension drawing





Dimension drawing

Part No.	PB25MGVT/960-R/3PI
In accordance with	IEC/EN 61643-11:2011; UL1449 5th; EN50539-22
Category IEC/EU/VDE	I+ II /1+2/ B+C
Protection mode	L-PE, L-L
Nominal Voltage (AC) U_n	690V, 3-Phase TN-C/IT
Power frequency	50/60Hz
Max. continuous operating voltage(AC) U_c	960V
Nominal discharge current by pole (8/20) I_n	25kA
Max. discharge current by pole (8/20) I_{max}	100kA
Lightning impulse current by pole (10/350) I_{imp}	22kA (Annotation1)
Voltage protection level U_p	4.0kV (L-L, L-PE)
Response time t_A	$\leq 25ns$
Temporary overvoltage TOV U_T Withstand mode 120min	1350Vac
Follow current & interrupt rating I_{fi}	No
Leakage current I_{pe}	0mA
Short-circuit current rating I_{sscr}	50kArms
Backup fuse(only required if not already provided in mains)	$\leq 250A$ gL/gG
Operating temperature range	-40°C ~ +85°C
Altitude	-500m ~ +4000m
Cross-section of connection wire (max)	Single-strand 35mm ² ; multi-strand 25mm ²
Mounting	35mm DIN-rail in accordance with EN 50022/DIN46277-3
Enclosure material	Thermoplastic; extinguishing degree UL94 V-0
Degree of protection	IP20
Installation width	8 modules, DIN 43880
Thermal disconnecter	Internal Green – normal ; red - failure
Remote alarm contact	With
Additional data for Remote Alarm Contacts	
Remote alarm contact type	Isolated Form C
Switching capability U_n/I_n	AC: 250V/0.5A DC: 250V/0.1A; 125V/0.2A; 75V/0.5A
Cross-section of remote signaling wire	Max. 1.5mm ² (or # 16AWG)

Annotation 1 : 22kA per pole, total 88kA I_{imp} per phase > 50kA