

POWER SURGE PROTECTOR

Description

MARSA surge protectors are designed to protect single phase and three phase electrical supply system. Installed parallel to incoming power feeder. The range of products can divert up to 80kA surge current per phase (L-N), (L-E), (N-E) generated in electrical power line to the earth. Protection is effective in diverting the lightning surge, internally generated and over-charging transient conditions.

SINGLE PHASE

PSP1-20240

- Withstand surge current 20kA per phase (L-N), (L-E), (N-E).
- Designed for single phase power line. Suitable for main Switch Board, Sub Switch and Distribution Board, with incoming cable 35 mm² or less.
- Suitable for electrical, electronic and mechanical equipment (control system).

PSP1-40240

- Withstand surge current 40kA per phase (L-N), (L-E), (N-E).
- Designed for single phase power line. Suitable for main Switch Board, Sub Switch and Distribution Board, with incoming cable 95 mm² or less.
- Suitable for electrical, electronic and mechanical equipment (control system).

Important

- * This product is warranted only for manufacturing defects. The warranty period is two years and began on the date of purchased.
- * The warranty does not apply for any misused, altered, neglected or damaged by accident or abnormal conditions of operation or handling.
- * Make sure disconnect the SPD while doing the equipment testing (System/Load).
- * Warranty support is available if product is purchased through MARSA distributors sales marketing.

Features and Benefits

- Full mode protection with 7 MOVs. All mode protection covers Line- Natural (L-N), Line-Earth (L-E) and Neutral – Earth (N-E).
- Monoblock protection and each mode protect by single MOV with the same current rating.
- Ensure reliability of surge protector to the facilities and equipment.
- Transient over current protector.
- Double protection unit suitable to Malaysia extreme lightning condition and frequency.
- Provide light indicator.



STANDARD OF COMPLIANCES

MS IEC 61643-1
MS IEC 61643-12

REFERENCES STANDARD

IEEE C62.41
BS 6651



THREE PHASE

PSP1-20415

- Withstand surge current 20kA per phase (L-N), (L-E) and (N-E).
- Designed for three phase power line. Suitable for main Switch Board, Sub Switch Board and Distribution Board, with incoming cable 35 mm² or less.
- Suitable for electrical, electronic and mechanical equipment (control system).

PSP1-40415

- Withstand surge current 40kA per phase (L-N), (L-E) and (N-E).
- Designed for three phase power line. Suitable for main Switch Board, Sub Switch Board and Distribution Board, with incoming cable 95 mm² or less.
- Suitable for electrical, electronic and mechanical equipment (control system).

PSP1- 80415

- Withstand surge current 80 kA per phase (L-N), (L-E) and (N-E).
- Designed for three phase power line. Suitable for main Switch Board, Sub Switch and Distribution Board, with incoming cable 95 mm² or more.
- Suitable for electrical, electronic and mechanical equipment (control system).



STANDARD OF COMPLIANCES

MS IEC 61643-1
MS IEC 61643-12

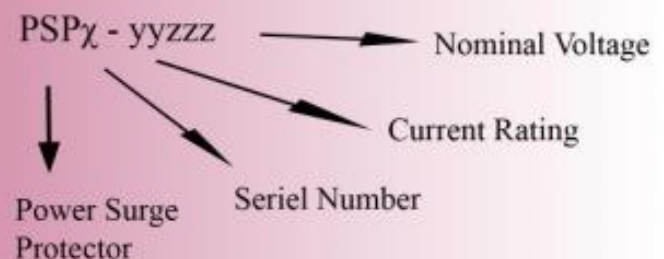
STANDARD OF REFERENCES

IEEE C62.41
BS 6651

Selection Guide

POWER SURGE PROTECTOR

- Single Phase
PSP1-20240
PSP1-40240
- Three Phase
PSP1-20415
PSP1-40415
PSP1-80415



SPECIFICATION

Single Phase & Three Phase

| SPECIFICATION | PSP1 MODEL |
|---|---|
| Description/Type | Parallel surge protector |
| Protection mode | Full Mode (L-N, L-E, N-E) |
| Backup Overcurrent protector / Overheat | Thermal fuse for every MOV |
| Frequency range | 40 Hz - 60Hz |
| Earth Leakage current | <200 μ A |
| Temperature range | -40 $^{\circ}$ C to +85 $^{\circ}$ C |
| Humidity | 0-90% |
| Connection type | Screw terminal |
| Max. Conductor Size | 16mm ² |
| Display | LED Indicator status |
| STANDARD OF COMPLIANCES | MS IEC 61643-1 MS IEC 61643-12 IEEE C62.41 BS 6651 |
| REFERENCES STANDARD | |

| SPECIFICATION | PSP1 20240 | PSP1 40240 | PSP1 20415 | PSP1 40415 | PSP1 80415 |
|--|---------------|---------------|---------------|---------------|---------------|
| Current surge rating per phase- (I_n) (L-N), (L-E), (N-E). | 20kA | 40kA | 20kA | 40kA | 80kA |
| Total current protection rating, I_{max} | 40kA | 60kA | 40kA | 60kA | 100kA |
| Nominal voltage (RMS), (U_n) | 240V | 240V | 415V | 415V | 415V |
| Working voltage (RMS), (U_c) | 215-275V | 215-275V | 373-475V | 373-475V | 373-475V |
| Let Through Voltage, (U_p) 20kV 1.2/50 μ s open circuit voltage 10kA 8/20 μ s short circuit current, | <1.7kV | <1.7kV | <1.7kV | <1.8kV | <1.8kV |
| Let Through Voltage, (U_p) 10kV 1.2/50 μ s open circuit voltage 5kA 8/20 μ s short circuit current, | 1.2kV | 1.2kV | 1.2kV | 1.2kV | 1.2kV |
| Let Through Voltage, (U_p) 6kV 1.2/50 μ s open circuit voltage 3kA 8/20 μ s short circuit current, | <650V | <750V | <700V | <750V | <900V |
| Weight per unit | 540g | 540g | 920g | 960g | 1.4kg |



SINGLE PHASE

Connection



THREE PHASE

Connection



Authorized Agent / Distributed By

