

# YRSP-D2 T1+T2 SERIES

## Type1+Type2 Surge Protective Device For Photovoltaic Systems



### Technical Parameters

| Technical Data      |                                                                         |
|---------------------|-------------------------------------------------------------------------|
| Location of Use     | String box, Inverter                                                    |
| Mode of Protection  | (DC+)-PE, (DC-) PE, (DC+)-(DC-)                                         |
| Surge Ratings       | ITotal=up to 12.5kA (10/35 $\mu$ s)<br>ITotal=up to 40kA (8/20 $\mu$ s) |
| IEC/EN Category     | Class I+II / Type 1+2                                                   |
| Protective Elements | High Energy MOV                                                         |
| Housing             | Pluggable Design                                                        |
| Compliance          | IEC 61643-31<br>EN 50539-11+A1                                          |



| IEC ELECTRICAL                             |                                  | 2P      | 3P    |       |
|--------------------------------------------|----------------------------------|---------|-------|-------|
| YRSP-D2 T1+T2                              |                                  | 600     | 1000  | 1500  |
| Maximum Continuous Operating DC Voltage    | (DC+) - PE, (DC-) - PE $U_{CPV}$ | 600V    | 1000V | 1500V |
|                                            | (DC+) - (DC-) $U_{CPV}$          | -       | 1000V | 1500V |
| Nominal Discharge Current (8/20 $\mu$ s)   | $I_n$                            | 20 kA   |       |       |
| Impulse Discharge Current (10/350 $\mu$ s) | $I_{imp}$                        | 6.25 kA |       |       |
| Total Discharge Current (10/350 $\mu$ s)   | $I_{Total}$                      | 12.5 kA |       |       |
| Total Discharge Current (8/20 $\mu$ s)     |                                  | 40 kA   |       |       |
| Maximum Discharge Current (8/20 $\mu$ s)   | $I_{max}$                        | 40 kA   |       |       |
| Voltage Protection Level                   | (DC+) - PE, (DC-) - PE $U_p$     | 2200V   | 4000V | 5200V |
|                                            | (DC+) - (DC-) $U_p$              | -       | 4000V | 5200V |
| Response Time                              | $t_A$                            | <25ns   |       |       |
| Short-Circuit Current Rating               | $I_{SCP}$                        | 1000A   |       |       |
| Number of Ports                            |                                  | 1       |       |       |

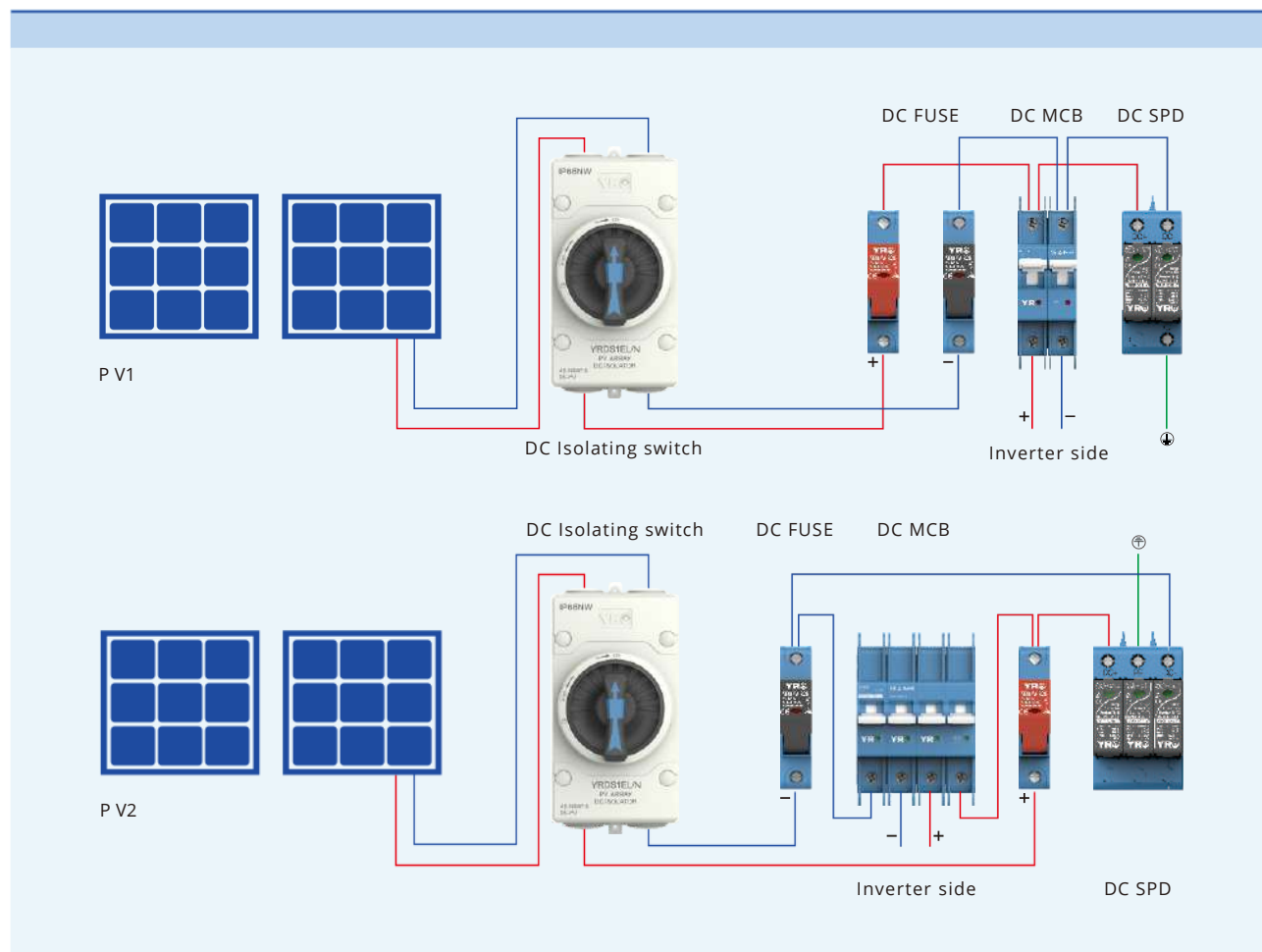
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| Mechanical & Environmental        |           |                                                                      |
|-----------------------------------|-----------|----------------------------------------------------------------------|
| Operating Temperature Range       | $T_a$     | -40 °F to +158 °F [-40 °C to +70 °C]                                 |
| Permissible Operating Humidity    | RH        | 5%...95%                                                             |
| Atmospheric pressure and altitude |           | 80k Pa ... 106k Pa / -500 m ... 2000 m                               |
| Terminal Screw Torque             | $M_{max}$ | 39.9 lbf-in [4.5 Nm]                                                 |
| Conductor Cross Section (max)     |           | 5 AWG (Solid, Stranded) / 5 AWG (Flexible)                           |
|                                   |           | 16 mm <sup>2</sup> (Solid, Stranded) / 16 mm <sup>2</sup> (Flexible) |
| Mounting                          |           | 35 mm DIN Rail, EN 60715                                             |
| Degree of Protection              |           | IP 20 (built-in)                                                     |
| Housing Material                  |           | Thermoplastic: Extinguishing Degree UL 94 V-0                        |
| Thermal Protection                |           | Yes                                                                  |
| Operating State/Fault Indication  |           | Green ok / Red defect                                                |
| Remote Contacts (RC)              |           | Optional                                                             |
| RC Switching Capacity             |           | AC: 250V/0.5A; DC: 250V/0.1A; 125V/0.2A; 75V/0.5A                    |
| RC Conductor Cross Section (max)  |           | 16 AWG (Solid) / 1.5 mm <sup>2</sup> (Solid)                         |

## Wiring Diagram

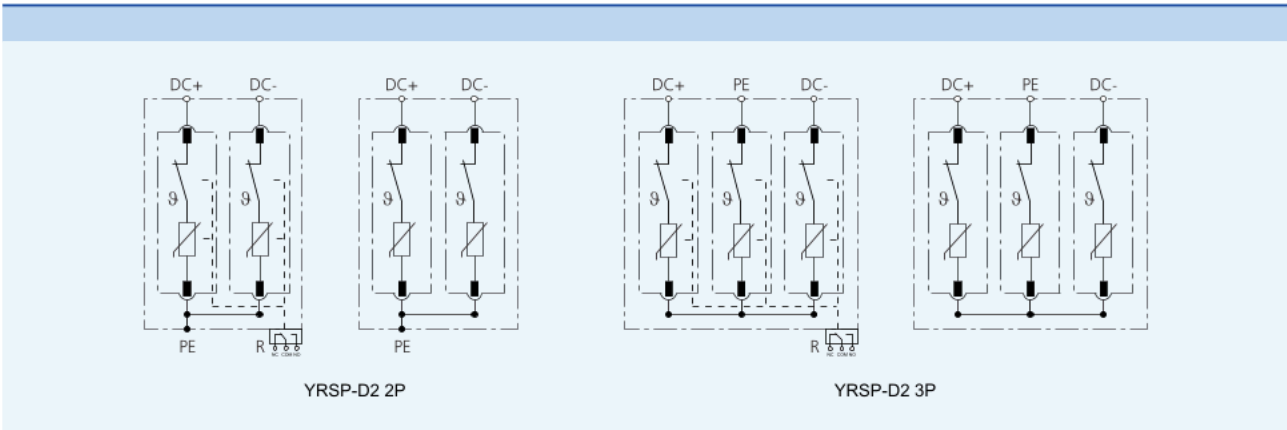


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## Internal Configuration



## Dimensions & Packaging

