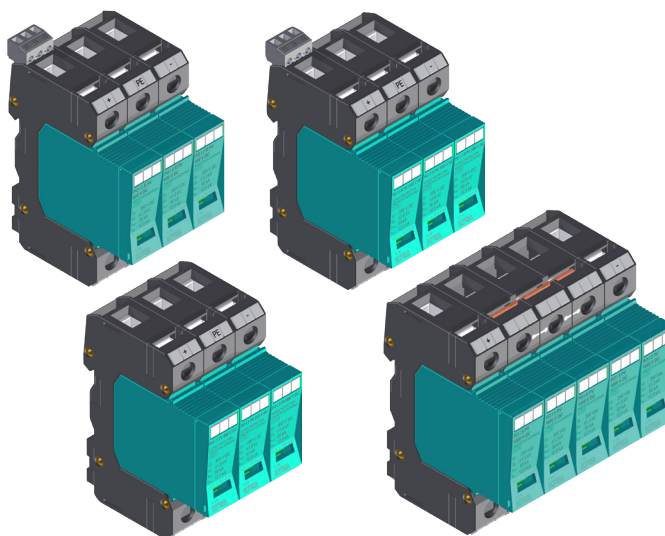
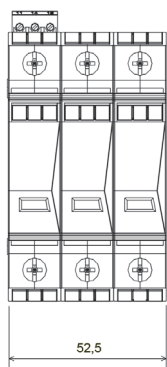


PO I 3 PV 600V DC/12,5kA  
PO I 3 PV 800V DC/12,5kA  
PO I 3 PV 1000V DC/12,5kA  
PO I 5 PV 1000V DC/12,5kA

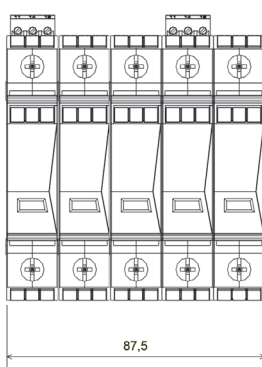
- For protection of DC photovoltaic systems with operating voltage up to 1000V DC
- 3-pole protection with enhanced withstand against failures of insulation against the earth
- Plug-in protectives modules
- Varistor modules for protection against overvoltage
- Optical signalization of operation state
- Remote signalization of operation state ( R version )
- Protective modules rotatable with respect to the base through 180°



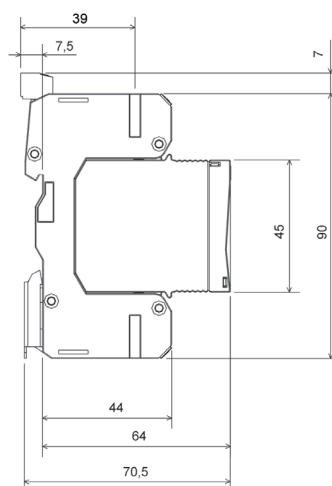
## DIMENSIONS



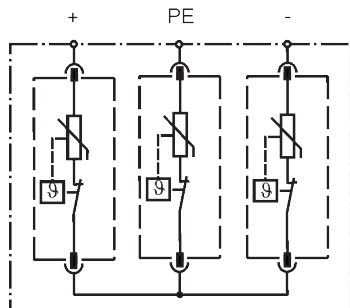
PO I 3 PV 600V DC  
PO I 3 PV 800V DC  
PO I 3 PV 1000V DC



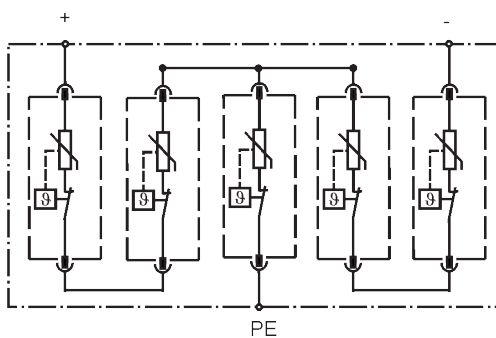
PO I 5 PV 1000V DC



## CONNECTION DIAGRAM

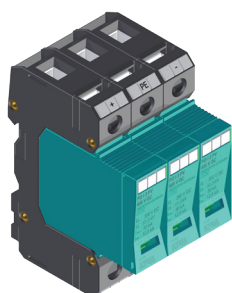


PO I 3 PV 600V DC  
PO I 3 PV 800V DC  
PO I 3 PV 1000V DC

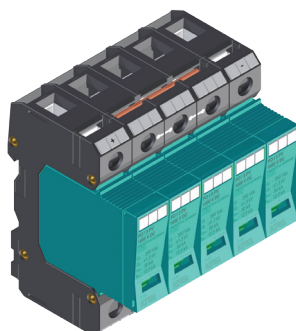


PO I 5 PV 1000V DC

## BASIC VERSION



PO 13 PV 600V DC  
PO 13 PV 800V DC  
PO 13 PV 1000V DC



PO 15 PV 1000V DC

Signalling states :



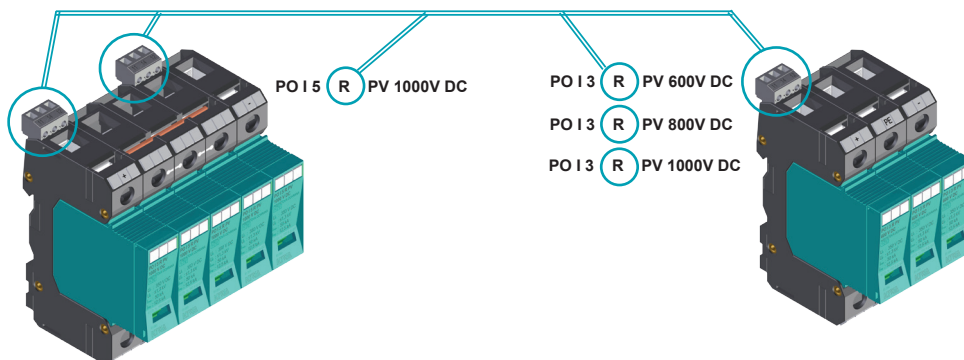
green = OK



red = out of operation,  
to be replaced immediately

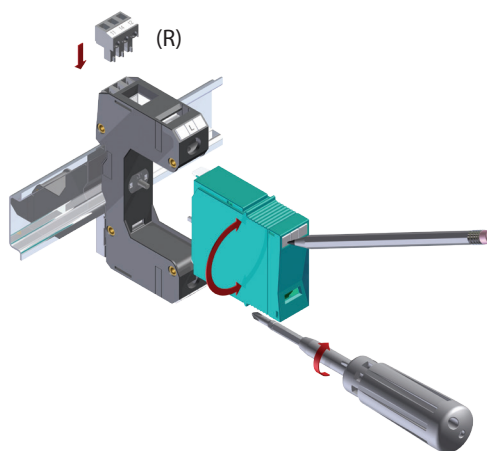
## R and PE VERSION

Optional version with remote signalling ( R )



## INSTALLATION

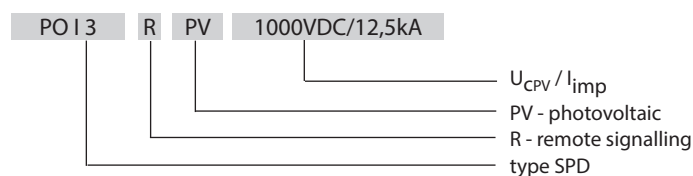
- Installation on DIN rail
- Cable labeling system using Dekafix replaceable strips
- Plug-in varistor can be turned through 180°



## TECHNICAL PARAMETERS

| KIWA                                                                        | TYPE                            | PO I 3 PV 600V DC                                   | PO I 3 PV 800V DC                                                                      | PO I 3 PV 1000V DC    | PO I 5 PV 1000V DC    |
|-----------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------|-----------------------|
| Number of poles                                                             |                                 | 3                                                   | 3                                                                                      | 3                     | 3                     |
| Max. operating voltage                                                      | $\boxed{T1} \boxed{T2} U_{CPV}$ | 600V DC                                             | 800V DC                                                                                | 1000V DC              | 1000V DC              |
| Voltage protection level at                                                 | $I_n \boxed{T1} \boxed{T2} U_p$ |                                                     |                                                                                        |                       |                       |
|                                                                             | L+/L-                           | $\leq 2,8 \text{ kV}$                               | $\leq 3,2 \text{ kV}$                                                                  | $\leq 4,9 \text{ kV}$ | $\leq 5,6 \text{ kV}$ |
|                                                                             | L+L-/PE                         | $\leq 2,8 \text{ kV}$                               | $\leq 1,8 \text{ kV}$                                                                  | $\leq 2,6 \text{ kV}$ | $\leq 4,2 \text{ kV}$ |
| Response time                                                               | $t_A$                           |                                                     |                                                                                        |                       |                       |
|                                                                             | L+/L-                           | <25 ns                                              | <25 ns                                                                                 | <25 ns                | <25 ns                |
|                                                                             | L+L-/PE                         | <25 ns                                              | <25 ns                                                                                 | <25 ns                | <25 ns                |
| Impulse current (10/350)                                                    | $I_{imp}$                       |                                                     |                                                                                        |                       |                       |
|                                                                             | L+/L-                           |                                                     | 12,5 kA                                                                                |                       |                       |
|                                                                             | L+L-/PE                         | 12,5 kA                                             | 6,25 kA                                                                                | 6,25 kA               | 12,5 kA               |
| Nominal discharge current (8/20)                                            | $I_n$                           |                                                     | 30 kA                                                                                  |                       |                       |
| Max. discharge current (8/20)                                               | $I_{max}$                       |                                                     | 50 kA                                                                                  |                       |                       |
| Prospective short-circuit current of a power supply                         | $I_p$                           |                                                     | 25 kA <sub>ef</sub>                                                                    |                       |                       |
| Overcurrent protection gL/gG                                                |                                 |                                                     | $\leq 160 \text{ A}$                                                                   |                       |                       |
| Residual current                                                            | $I_{PE}$                        |                                                     | <1 $\mu\text{A}$                                                                       |                       |                       |
| Signalling changeover contact                                               |                                 |                                                     | M3/0.25 Nm, $\square$ max. 0,2 ... 1,5 mm <sup>2</sup> , max. 250 V AC/1A              |                       |                       |
| Status indication of TDD (Thermic Disconnecting Device)                     |                                 |                                                     | green (OK)/red (OUT)                                                                   |                       |                       |
| Min. ... max. tightening torque                                             |                                 |                                                     | 2 ... 3 Nm                                                                             |                       |                       |
| Connecting conductor cross section                                          |                                 |                                                     |                                                                                        |                       |                       |
|                                                                             | - wire                          |                                                     | 4 ... 35 mm <sup>2</sup>                                                               |                       |                       |
|                                                                             | - cord                          |                                                     | 4 ... 25 mm <sup>2</sup>                                                               |                       |                       |
| Operating temperature range                                                 |                                 |                                                     | - 40 ... +70 °C                                                                        |                       |                       |
| Degree of protection                                                        |                                 |                                                     | IP 20                                                                                  |                       |                       |
| Product dimensions / ( R - version )                                        |                                 | 90 x 64 x 52,5 mm / ( R-version 97 x 64 x 52,5 mm ) |                                                                                        |                       | 97 x 64 x 87,5 mm     |
| Mounting on profiled DIN rail                                               |                                 |                                                     | 35 x 7,5 mm                                                                            |                       |                       |
| Products comply with norms<br>STN EN 61643-11<br>IEC 61643-1<br>VDE 0675-06 |                                 |                                                     | type 1 $\boxed{T1}$ + type 2 $\boxed{T2}$<br>class I + class II<br>klasse B + klasse C |                       |                       |

## PRODUCT SPECIFICATION



| TYPE                        | Order number |
|-----------------------------|--------------|
| PO I 3 PV 600V DC/12,5kA    | 81.058       |
| PO I 3 R PV 600V DC/12,5kA  | 81.059       |
| PO I 3 PV 800V DC/12,5kA    | 81.266       |
| PO I 3 R PV 800V DC/12,5kA  | 81.267       |
| PO I 3 PV 1000V DC/12,5kA   | 81.183       |
| PO I 3 R PV 1000V DC/12,5kA | 81.184       |

| TYPE                        | Order number |
|-----------------------------|--------------|
| PLUG-IN PROTECTIVES MODULES |              |
| PO I 0 PV 600V DC/12,5kA    | 81.071       |
| PO I 0 PV 800V DC/12,5kA    | 81.268       |
| PO I 0 PV 1000V DC/12,5kA   | 81.185       |
| PO I 5 PV 1000V DC/12,5kA   | 81.062       |
| PO I 5 R PV 1000V DC/12,5kA | 81.063       |