

## 1st level - with replaceable plug-in's **T1+T2+T3** (B+C+D)

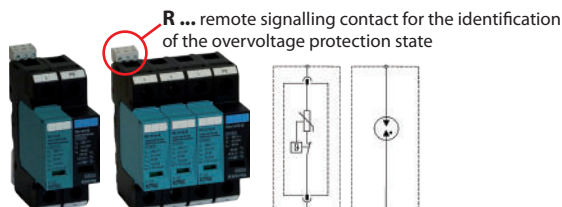
$I_{imp} = 12,5 \text{ kA}$

R ... remote signaling contact

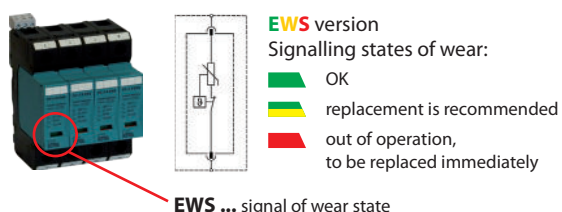


| SPD without contact                                | Order No. | SPD with contact - R | Order No. |
|----------------------------------------------------|-----------|----------------------|-----------|
| PO I 1 280V/12,5kA                                 | 81.001    | PO I 1 R 280V/12,5kA | 81.005    |
| PO I 2 280V/12,5kA                                 | 81.002    | PO I 2 R 280V/12,5kA | 81.006    |
| PO I 3 280V/12,5kA                                 | 81.003    | PO I 3 R 280V/12,5kA | 81.007    |
| PO I 4 280V/12,5kA                                 | 81.004    | PO I 4 R 280V/12,5kA | 81.008    |
| PO I 0 280V/12,5kA (spare plug-in protective unit) |           |                      | 81.017    |

TN-S



| SPD without contact                                | Order No. | SPD with contact - R    | Order No. |
|----------------------------------------------------|-----------|-------------------------|-----------|
| PO I 1+1m 280V/12,5kA                              | 81.031    | PO I 1+1m R 280V/12,5kA | 81.032    |
| PO I 3+1m 280V/12,5kA                              | 81.027    | PO I 3+1m R 280V/12,5kA | 81.028    |
| PO I 0 280V/12,5kA (spare plug-in protective unit) |           |                         | 81.017    |



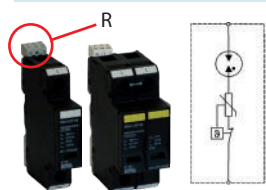
EWS version  
Signalling states of wear:

- OK
- replacement is recommended
- out of operation, to be replaced immediately

| SPD without contact                                        | Order No. | SPD with contact - R     | Order No. |
|------------------------------------------------------------|-----------|--------------------------|-----------|
| PO I 1 EWS 280V/12,5kA                                     | 81.023    | PO I 1 R EWS 280V/12,5kA | 81.025    |
| PO I 2 EWS 280V/12,5kA                                     | 81.024    | PO I 2 R EWS 280V/12,5kA | 81.026    |
| PO I 3 EWS 280V/12,5kA                                     | 81.013    | PO I 3 R EWS 280V/12,5kA | 81.015    |
| PO I 4 EWS 280V/12,5kA                                     | 81.014    | PO I 4 R EWS 280V/12,5kA | 81.016    |
| PO I 0 EWS 280V/12,5kA (spare plug-in protective unit EWS) |           |                          | 81.020    |

## 1st level - monoblock **T1+T2+T3** (B+C+D)

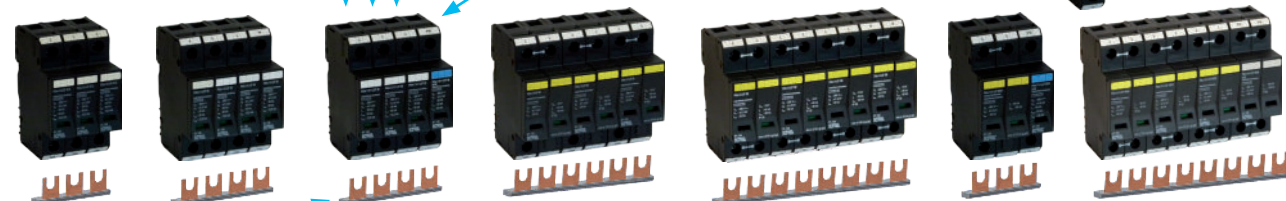
$I_{imp} = 12,5 \text{ kA}$ ,  $I_{imp} = 25 \text{ kA}$ ,  $I_{imp} = 30 \text{ kA}$



| SPD without contact        | Order No. | SPD with contact - R         | Order No. |
|----------------------------|-----------|------------------------------|-----------|
| POm I LCF 12,5 280V/12,5kA | 81.104    | POm I R LCF 12,5 280V/12,5kA | 81.107    |
| POm I LCF 25 280V/25kA     | 81.124    | POm I R LCF 25 280V/25kA     | 81.125    |
| POm I LCF 30 280V/30kA     | 81.126    | POm I R LCF 30 280V/30kA     | 81.127    |

| SPD with spark gap N-PE   | Order No. |
|---------------------------|-----------|
| POm I N-PE 50 260V/50kA   | 81.101    |
| POm I N-PE 100 260V/100kA | 81.121    |

SPDs completed from individual poles:



NOTE:  
Busbar QB 18-4, completed from 3 pieces of monoblock POm I LCF 12,5kA and 1 piece of POm I N-PE 50kA

| Busbars           | Order No. | Busbars           | Order No. | Busbars           | Order No. |
|-------------------|-----------|-------------------|-----------|-------------------|-----------|
| QB 18-2 (2 - pol) | 91.601    | QB 18-4 (4 - pol) | 91.605    | QB 18-8 (8 - pol) | 91.609    |
| QB 18-3 (3 - pol) | 91.603    | QB 18-6 (6 - pol) | 91.610    |                   |           |

## SPDs from monoblock integrated into 1 SPDs:

### Completed from POm I LCF 12,5 280V/12,5kA

| SPD without contact          | Order No. | SPD with contact - R           | Order No. |
|------------------------------|-----------|--------------------------------|-----------|
| POm I 3 LCF 37,5 280V/12,5kA | 81.136    | POm I 3 R LCF 37,5 280V/12,5kA | 81.137    |
| POm I 4 LCF 50 280V/12,5kA   | 81.138    | POm I 4 R LCF 50 280V/12,5kA   | 81.139    |
| POm I 3+1 LCF 50 280V/12,5kA | 81.140    | POm I 3+1 R LCF 50 280V/12,5kA | 81.141    |

### Completed from POm I LCF 25 280V/25kA

| SPD without contact            | Order No. | SPD with contact - R             | Order No. |
|--------------------------------|-----------|----------------------------------|-----------|
| POm I 3 LCF 75 280V/25kA       | 81.130    | POm I 3 R LCF 75 280V/25kA       | 81.131    |
| POm I 4 LCF 100 280V/25kA      | 81.128    | POm I 4 R LCF 100 280V/25kA      | 81.129    |
| POm I 1+1 LCF 50/25 280V/25kA  | 81.150    | POm I 1+1 R LCF 50/25 280V/25kA  | 81.151    |
| POm I 3+1 LCF 100/25 280V/25kA | 81.142    | POm I 3+1 R LCF 100/25 280V/25kA | 81.143    |

### Completed from POm I LCF 30 280V/30kA

| SPD without contact            | Order No. | SPD with contact - R             | Order No. |
|--------------------------------|-----------|----------------------------------|-----------|
| POm I 3 LCF 90 280V/30kA       | 81.132    | POm I 3 R LCF 90 280V/30kA       | 81.133    |
| POm I 4 LCF 120 280V/30kA      | 81.134    | POm I 4 R LCF 120 280V/30kA      | 81.135    |
| POm I 1+1 LCF 50/30 280V/30kA  | 81.144    | POm I 1+1 R LCF 50/30 280V/30kA  | 81.145    |
| POm I 3+1 LCF 100/30 280V/30kA | 81.152    | POm I 3+1 R LCF 100/30 280V/30kA | 81.153    |

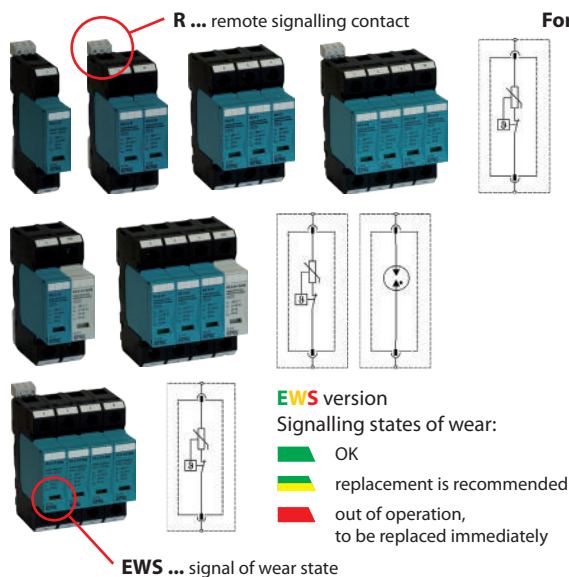


## PRODUCT SPECIFICATION

**POm I 3 R LCF 90 280V/30kA**

$U_c/I_{imp}$  = max. operating voltage / impulse current  
 common current  $I_{imp}$   
 version with zero residual current and zero follow current  
 remote signalling  
 3 - number of poles  
 class I.  
 m - non-replaceable unit = monoblock type SPD

2nd level - with replaceable plug-in's **T2+T3** (C+D)



For SPD's with other voltages please ask technical support dpt. on [www.kiwa.sk](http://www.kiwa.sk)

| SPD without contact                               | Order No. | SPD with contact - R | Order No. |
|---------------------------------------------------|-----------|----------------------|-----------|
| PO II 1 280V/40kA                                 | 82.001    | PO II 1 R 280V/40kA  | 82.005    |
| PO II 2 280V/40kA                                 | 82.002    | PO II 2 R 280V/40kA  | 82.006    |
| PO II 3 280V/40kA                                 | 82.003    | PO II 3 R 280V/40kA  | 82.007    |
| PO II 4 280V/40kA                                 | 82.004    | PO II 4 R 280V/40kA  | 82.008    |
| PO II 0 280V/40kA (spare plug-in protective unit) |           |                      | 82.053    |

TN-S

| SPD without contact                                    | Order No. | SPD with contact - R  | Order No. |
|--------------------------------------------------------|-----------|-----------------------|-----------|
| PO II 1+1 280V/40kA                                    | 82.017    | PO II 1+1 R 280V/40kA | 82.019    |
| PO II 3+1 280V/40kA                                    | 82.018    | PO II 3+1 R 280V/40kA | 82.020    |
| PO II 0 280V/40kA (spare plug-in protective unit)      |           |                       | 82.053    |
| PO II 0 N-PE 260V/40kA (spare plug-in protective unit) |           |                       | 82.060    |

| SPD without contact                                       | Order No. | SPD with contact - R    | Order No. |
|-----------------------------------------------------------|-----------|-------------------------|-----------|
| PO II 1 EWS 280V/40kA                                     | 82.068    | PO II 1 R EWS 280V/40kA | 82.070    |
| PO II 2 EWS 280V/40kA                                     | 82.069    | PO II 2 R EWS 280V/40kA | 82.071    |
| PO II 3 EWS 280V/40kA                                     | 82.013    | PO II 3 R EWS 280V/40kA | 82.015    |
| PO II 4 EWS 280V/40kA                                     | 82.014    | PO II 4 R EWS 280V/40kA | 82.016    |
| PO II 0 EWS 280V/40kA (spare plug-in protective unit) EWS |           |                         | 82.055    |

| SPD without contact                                       | Order No. | SPD with contact - R    | Order No. |
|-----------------------------------------------------------|-----------|-------------------------|-----------|
| PO II 1 LCF 280V/40kA                                     | 82.064    | PO II 1 R LCF 280V/40kA | 82.066    |
| PO II 2 LCF 280V/40kA                                     | 82.065    | PO II 2 R LCF 280V/40kA | 82.067    |
| PO II 3 LCF 280V/40kA                                     | 82.009    | PO II 3 R LCF 280V/40kA | 82.011    |
| PO II 4 LCF 280V/40kA                                     | 82.010    | PO II 4 R LCF 280V/40kA | 82.012    |
| PO II 0 LCF 280V/40kA (spare plug-in protective unit) LCF |           |                         | 82.054    |

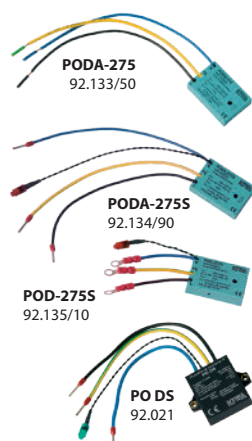
LCF ... version with zero residual current and zero follow current

3rd level **T3** (D)

| Compact module      |           |                      |           |
|---------------------|-----------|----------------------|-----------|
| SPD without contact | Order No. | SPD with contact - S | Order No. |
| RPO D 230V/16A      | 92.024    | RPO DS 230V/16A      | 92.025    |
| RPO D 24V/16A       | 92.082    | RPO DS 24V/16A       | 92.085    |



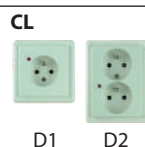
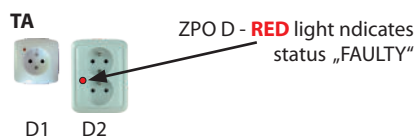
| Compact module with HF filter (F) Width only 2 units |           |                      |           |
|------------------------------------------------------|-----------|----------------------|-----------|
| SPD without contact                                  | Order No. | D with contact - R   | Order No. |
| RPOD F 6 230V/6A                                     | 92.136    | RPOD R F 6 230V/6A   | 92.137    |
| RPOD F 16 230V/16A                                   | 92.042    | RPOD R F 16 230V/16A | 92.043    |



| SPD modules for sockets                        |           |                                                               |
|------------------------------------------------|-----------|---------------------------------------------------------------|
|                                                | Order No. |                                                               |
| PODA-275<br>acoustic signalling                | 92.133/10 | wire end ferrule, lenght of wire 50 mm                        |
|                                                | 92.133/20 | cable lug, lenght of wire 60 mm                               |
|                                                | 92.133/30 | wire end ferrule, lenght of wire on order                     |
|                                                | 92.133/40 | cable lug, lenght of wire on order                            |
|                                                | 92.133/50 | wire end ferrule and cable lug pack in, lenght of wire 160 mm |
| PODA-275S<br>acoustic and optic red signalling | 92.134/10 | wire end ferrule, lenght of wire 160 mm                       |
|                                                | 92.134/90 | ending and lenght of wire on order                            |
| POD-275S (S-optic)<br>optic red signalling     | 92.135/10 | wire end ferrule, lenght of wire 50 mm                        |
|                                                | 92.135/20 | cable lug, lenght of wire 60 mm                               |
|                                                | 92.135/90 | wire end ferrule, lenght of wire 160 mm                       |
| PO DS optic green signalling                   | 92.021    | wire end ferrule, lenght of wire 150 mm                       |



| Surge protective sockets |           |                         |           |                         |           |                         |                         |        |
|--------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|-------------------------|--------|
| TANGO D1                 | Order No. | TANGO D2                | Order No. | CLASSIC D1              | Order No. | CLASSIC D2              | Order No.               |        |
| ZPO D ATA1 iS-4kV/white  | 92.069    | ZPO D ATA2 iS-4kV/white | 92.070    | ZPO D ACL1 iS-4kV/white | 92.071    | ZPO D ACL2 iS-4kV/white | 92.072                  |        |
| ZPO D ATA1 iS-4kV/burg.  | 92.098    | ZPO D ATA2 iS-4kV/burg. | 92.116    | ZPO D ACL1 iS-4kV/beige | 92.090    | ZPO D ACL2 iS-4kV/brown | 92.095                  |        |
| ZPO D ATA1 iS-4kV/gray   | 92.106    | ZPO D ATA2 iS-4kV/ivory | 92.111    | ZPO D ACL1 iS-4kV/brown | 92.105    | VALENA D1               | Order No.               |        |
| ZPO D ATA1 iS-4kV/black  | 92.109    | ZPO D ATA2 iS-4kV/black | 92.108    |                         |           |                         | ZPO D LVA1 iS-4kV/white | 92.077 |
| ZPO D ATA1 iS-4kV/beige  | 92.110    | ZPO D ATA2 iS-4kV/beige | 92.107    |                         |           |                         | ZPO D LVA1 iS-4kV/beige | 92.078 |



For complete assortment of SPD please see KIWA Catalogue or contact technical support, both on [www.kiwa.sk](http://www.kiwa.sk)

The table „Tolerance ranges for inspection of SPD KIWA“ is published on web page [www.kiwa.sk](http://www.kiwa.sk)