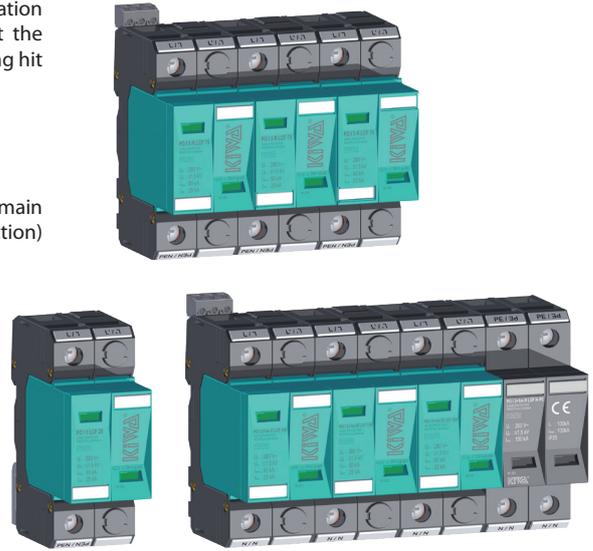
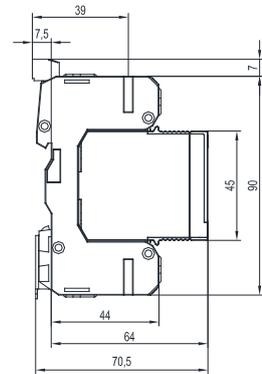
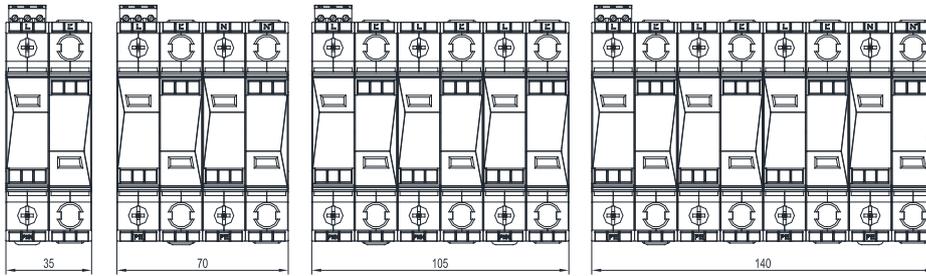


**PO I LCF 25kA**

- For protection of mains and appliances in industrial buildings, administration buildings, buildings of civil amenities and detached houses against the effects of overvoltage wave caused by a close, direct or indirect lightning hit
- It decreases overvoltage and restricts overvoltage wave energy
- Installation: into the main distributor
- Usage as the 1st level T1 of overvoltage protection
- It provides overvoltage protection for appliances installed in the main distributor in the range of T1, T2, T3 (coarse, medium and fine protection)
- High diverting capability provided by powerful varistors MOV and lightning arrester
- Zero leaking current (LCF version)
- Zero follow current
- Version: basic part + plug-in protective modules
- Protective modules rotatable by 180° with respect to the base
- Optical and remote signalization of operation state
- Multifunctional terminals for conductors and bus bars
- The products can be connected in „T“ and „V“ connections

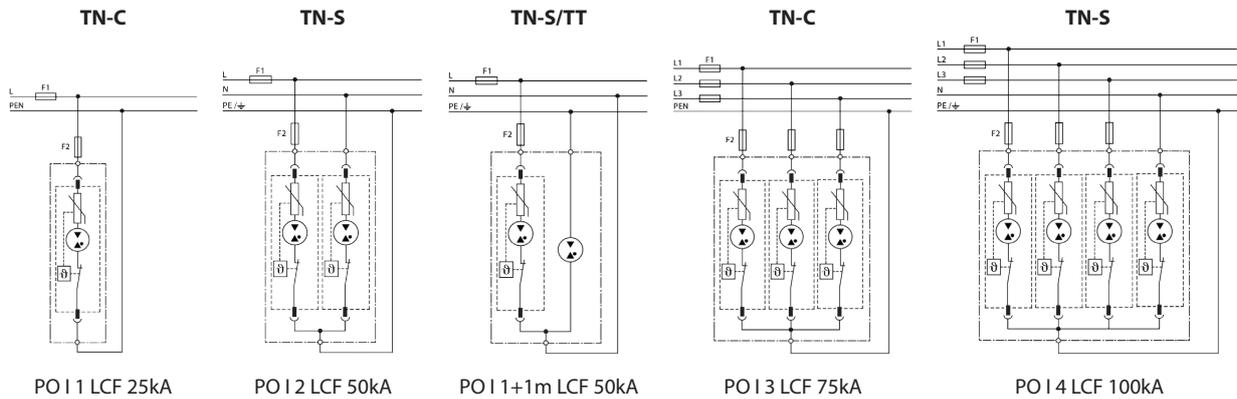


**DIMENSIONS**



PO I 1 LCF 25kA    PO I 2 LCF 50kA    PO I 3 LCF 75kA    PO I 3+1m LCF 100kA

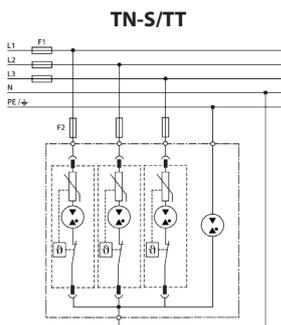
**CONNECTION DIAGRAM**



PO I 1 LCF 25kA    PO I 2 LCF 50kA    PO I 1+1m LCF 50kA    PO I 3 LCF 75kA    PO I 4 LCF 100kA

**CONNECTION DIAGRAM**

**LCF VERSION**



PO I 3+1m LCF 100kA

- LCF version is version with zero leaking current and zero follow current
- Possibility of application in front of electricity meter\*\* as well as after current breaker (\*\*valid only with the agreement of appropriate electricity supplier)
- Varistor is connected in series with gas filled spark gap

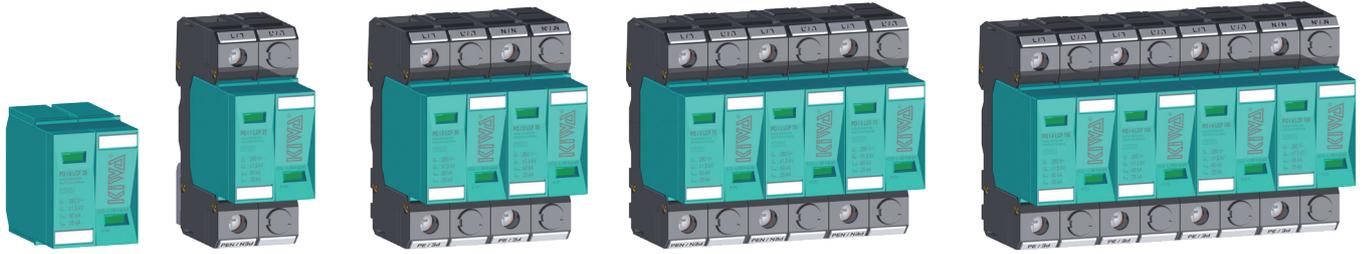
Plug-in protective modules



Signalling states

- OK -
- decrease protection function  $I_{imp} = 12,5kA$  -
- out of operation, to be replaced immediately -

## VERSIONS



PO I 0 LCF

PO I 1 LCF 25kA

PO I 2 LCF 50kA

PO I 3 LCF 75kA

PO I 4 LCF 100kA

## R and N-PE VERSION

Optional version with remote signalling (R)

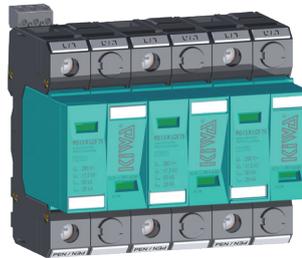
Each product's modification containing varistor module, can be supplied with remote signalling system to identify a state of overvoltage protection device.



PO I 1 R LCF 25kA



PO I 2 R LCF 50kA



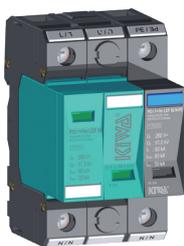
PO I 3 R LCF 75kA



PO I 4 R LCF 100kA

Version N-PE with monoblock 100 kA

Version N-PE with monoblock 25 kA



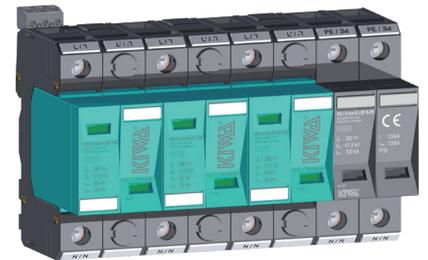
PO I 1+1m LCF 50kA



PO I 1+1 m R LCF 50kA



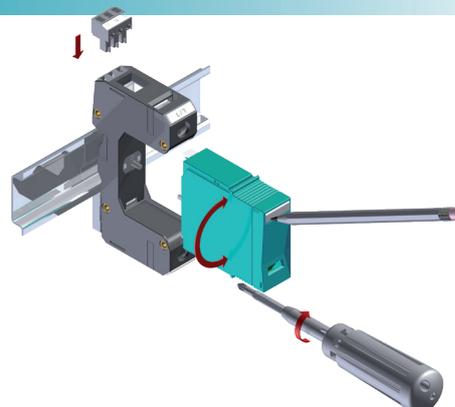
PO I 3+1m LCF 100kA



PO I 3+1 m R LCF 100kA

## INSTALLATION

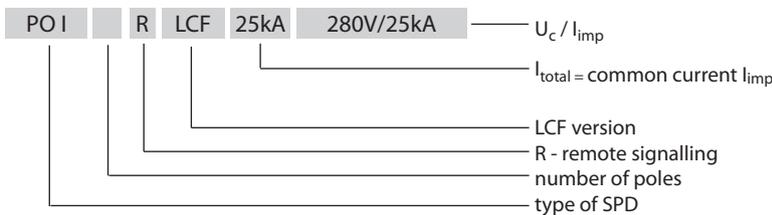
- Installation on DIN rail
- Cable labeling system using Dekafix replaceable strips
- Plug-in varistor can be turned through 180°



**TECHNICAL PARAMETERS**

TYPE	PO I LCF		
	N-PE		L-N
	50	100	LCF
Number of poles	1	1	1
Nominal voltage $U_n$	230 V AC	230 V AC	230 V AC
Max. operating voltage $U_c$ <span style="border: 1px solid black; padding: 0 2px;">T1</span> <span style="border: 1px solid black; padding: 0 2px;">T2</span> <span style="border: 1px solid black; padding: 0 2px;">T3</span>	260 V AC	260 V AC	280 V AC
Voltage protection level $U_p$ <span style="border: 1px solid black; padding: 0 2px;">T1</span> <span style="border: 1px solid black; padding: 0 2px;">T2</span> <span style="border: 1px solid black; padding: 0 2px;">T3</span>	≤1,5 kV	≤1,5 kV	≤1,5 kV
Response time $t_A$	<100 ns	<100 ns	<100 ns
Impulse current (10/350) $I_{imp}$	50 kA	100 kA	25 kA
Open circuit voltage $U_{oc}$ <span style="border: 1px solid black; padding: 0 2px;">T3</span>	10 kV	6 kV	6 kV
Nom. discharge current (8/20) $I_n$ <span style="border: 1px solid black; padding: 0 2px;">T1</span> <span style="border: 1px solid black; padding: 0 2px;">T2</span>	60 kA	100 kA	40 kA
Max. discharge current (8/20) $I_{max}$	60 kA	100 kA	60 kA
Prospective short-circuit current of a power supply $I_p$	-	-	25 kA <sub>ef</sub>
Overcurrent protection gL/gG	-	-	≤250 A
Temporary overvoltage $U_{TOV}$	-	-	335 V AC
Residual current $I_{PE}$	<1 μA	<1 μA	<1 μA
Follow current $I_f$	100 A	100 A	-
Signalling changeover contact	-	-	M3/0.25 Nm, □ max. 0,2 ... 1,5 mm <sup>2</sup> , max. 250 V AC/1 A
Status indication of TDD (Thermic Disconnecting Device)	-	-	green (OK)/ red (OUT)
Status indication of EWS	-	-	-
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 ... +80 °C		
Degree of protection	IP 20		
Colour	black; RAL 9011- holder/N-PE module turquoise blue; RAL 5018 - plug-in module		
Dimensions (mm)/ R version (mm)	90 x 64 x 17,5	90 x 64 x 35	90 x 64 x 35 / 97 x 64 x 35
Mounting on profiled DIN rail	35 x 7,5 mm		
Products comply with norms STN EN 61643-11 IEC 61643-1 VDE 0675-06	type 1 <span style="border: 1px solid black; padding: 0 2px;">T1</span> + type 2 <span style="border: 1px solid black; padding: 0 2px;">T2</span> + type 3 <span style="border: 1px solid black; padding: 0 2px;">T3</span> Class I + Class II + Class III Klasse B + Klasse C + Klasse D		

**PRODUCT SPECIFICATION**



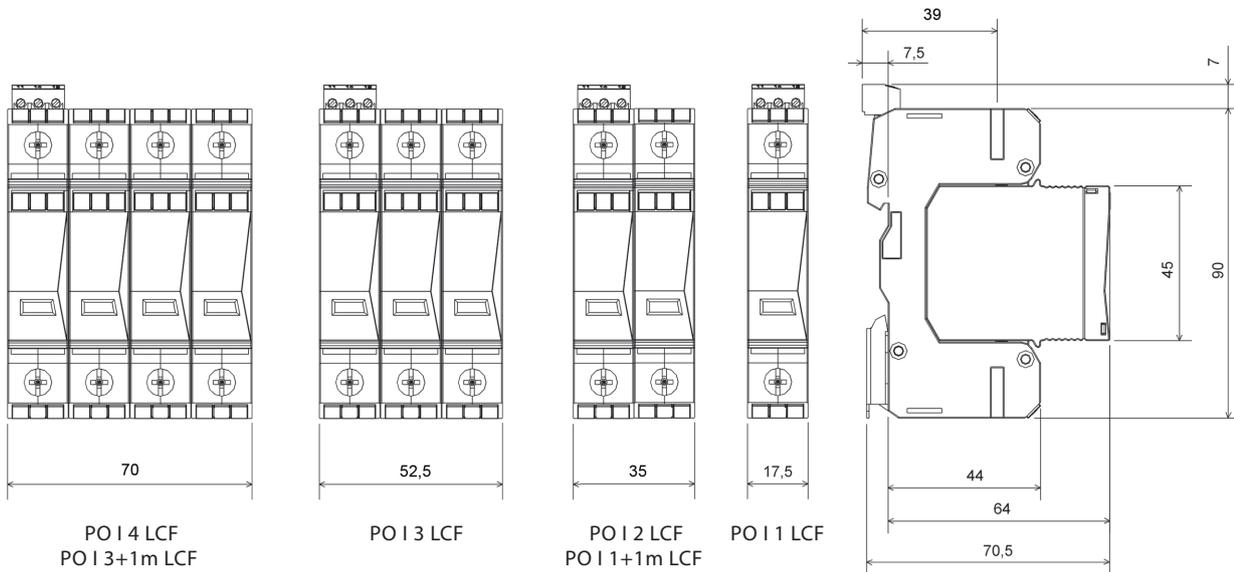
TYPE	Order No.	TYPE	Order No.	TYPE	Order No.
PO I 1 LCF 25kA 280V/25kA	81.310	PO I 3 R LCF 75kA 280V/25kA	81.318	PO I 0 LCF 25kA 280V/25kA	81.322
PO I 2 LCF 50kA 280V/25kA	81.311	PO I 4 R LCF 100kA 280V/25kA	81.319		
PO I 3 LCF 75kA 280V/25kA	81.312	PO I 1+1m LCF 50kA 280V/25kA	81.314		
PO I 4 LCF 100kA 280V/25kA	81.313	PO I 1+1m R LCF 50kA 280V/25kA	81.320		
PO I 1 R LCF 25kA 280V/25kA	81.316	PO I 3+1m LCF 100kA 280V/25kA	81.315		
PO I 2 R LCF 50kA 280V/25kA	81.317	PO I 3+1m R LCF 100kA 280V/25kA	81.321		

**PO I LCF 12,5kA**

- For protection of mains and appliances in industrial buildings, administration buildings, buildings of civil amenities and detached houses against the effects of overvoltage wave caused by a close, direct or indirect lightning hit
- It decreases overvoltage and restricts overvoltage wave energy
- Installation: into the main distributor
- Usage as the 1st level T1 of overvoltage protection
- It provides overvoltage protection for appliances installed in the main distributor in the range of T1, T2, T3 (coarse, medium and fine protection)
- High diverting capability provided by powerful varistors MOV and lightning arrester
- Zero leaking current (LCF version)
- Zero follow current
- Version: basic part + plug-in protective modules
- Protective modules rotatable by 180° with respect to the base
- Optical and remote signaling of operation state
- Multifunctional terminals for conductors and bus bars



**DIMENSIONS**



PO I 4 LCF  
PO I 3+1m LCF

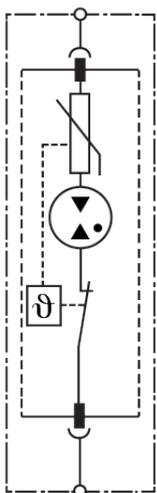
PO I 3 LCF

PO I 2 LCF  
PO I 1+1m LCF

PO I 1 LCF

**BASIC VERSION**

**EWS VERSION**

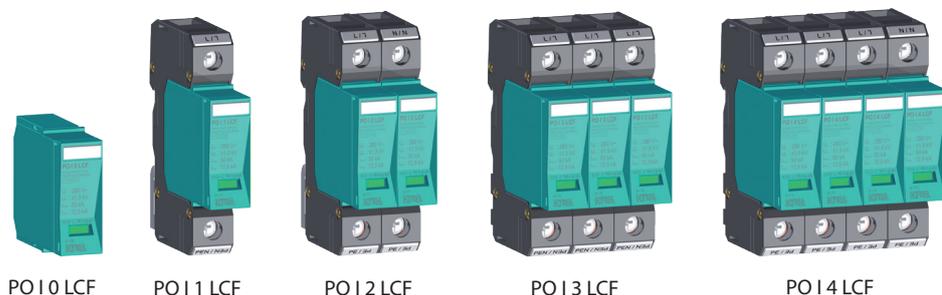


Signalling states

-  green = OK
-  red = out of operation, to be replaced immediately

Wear signalling states in EWS version

-  green = OK
-  yellow = replacement is recommended
-  red = out of operation, to be replaced immediately



PO I 0 LCF

PO I 1 LCF

PO I 2 LCF

PO I 3 LCF

PO I 4 LCF

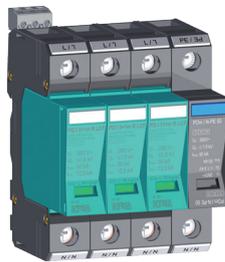
## R and N-PE VERSION

Optional version with remote signalling (R)

Each product's modification containing varistor module, can be supplied with remote signalling system to identify a state of overvoltage protection device.

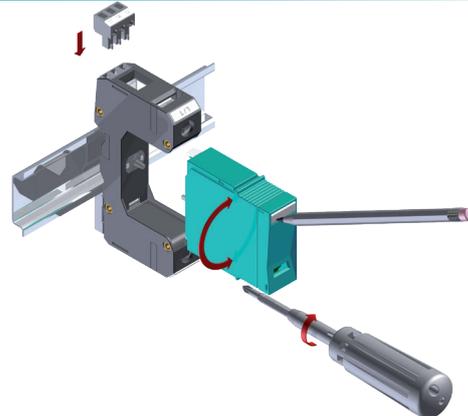


N-PE monoblock version



## INSTALLATION

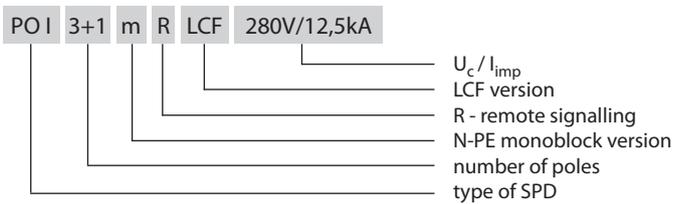
- Installation on DIN rail
- Cable labeling system using Dekafix replaceable strips
- Plug-in varistor can be turned through 180°



**TECHNICAL PARAMETERS**

TYPE	PO I LCF	
	L-N	N-PE
Number of poles	1	1
Nominal voltage $U_n$	230 V AC	230 V AC
Max. operating voltage $U_c$ <span style="border: 1px solid black; padding: 0 2px;">T1</span> <span style="border: 1px solid black; padding: 0 2px;">T2</span> <span style="border: 1px solid black; padding: 0 2px;">T3</span>	280 V AC	260 V AC
Voltage protection level $U_p$ <span style="border: 1px solid black; padding: 0 2px;">T1</span> <span style="border: 1px solid black; padding: 0 2px;">T2</span> <span style="border: 1px solid black; padding: 0 2px;">T3</span>	≤1,5 kV	≤1,5 kV
Response time $t_A$	<100 ns	<100 ns
Impulse current (10/350) $I_{imp}$	12,5 kA	50 kA
Open circuit voltage $U_{oc}$ <span style="border: 1px solid black; padding: 0 2px;">T3</span>	20 kV	10 kV
Nominal discharge current (8/20) $I_n$ <span style="border: 1px solid black; padding: 0 2px;">T1</span> <span style="border: 1px solid black; padding: 0 2px;">T2</span>	30 kA	60 kA
Max. discharge current (8/20) $I_{max}$	50 kA	60 kA
Prospective short-circuit current of a power supply $I_p$	25 kA <sub>ef</sub>	-
Overcurrent protection gL/gG	≤160 A	-
Temporary overvoltage $U_{TOV}$	335 V AC	-
Residual current $I_{pE}$	-	<1 μA
Follow current $I_f$	-	100 A
Signalling changeover contact	M3/0.25 Nm, □ max. 0,2 ... 1,5 mm <sup>2</sup> , max. 250 V AC/1 A	-
Status indication of TDD (Thermic Disconnecting Device)	green (OK)/ red (OUT)	-
Status indication of EWS	green (OK)/ yellow/ 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 ... +80 °C	
Degree of protection	IP 20	
Colour - plug-in varistor	turquoise blue; RAL 5018	black; RAL 9011
- holder	black; RAL 9011	
Dimensions (mm)/ R version (mm)	90 x 64 x 17,5 / 97 x 64 x 17,5	90 x 64 x 17,5
Mounting on profiled DIN rail	35 x 7,5 mm	
Products comply with norms STN EN 61643-1 IEC 61643-1 VDE 0675-06	type 1 <span style="border: 1px solid black; padding: 0 2px;">T1</span> + type 2 <span style="border: 1px solid black; padding: 0 2px;">T2</span> + type 3 <span style="border: 1px solid black; padding: 0 2px;">T3</span> Class I + Class II + Class III Klasse B + Klasse C + Klasse D	

**PRODUCT SPECIFICATION**



TYPE	Order No.	TYPE	Order No.	TYPE	Order No.
PO I 1 LCF 280V/12,5kA	81.170	PO I 3 LCF 280V/12,5kA	81.172	PO I 0 LCF 280V/12,5kA	81.182
PO I 1 R LCF 280V/12,5kA	81.174	PO I 3 R LCF 280V/12,5kA	81.176		
PO I 2 LCF 280V/12,5kA	81.171	PO I 4 LCF 280V/12,5kA	81.173		
PO I 2 R LCF 280V/12,5kA	81.175	PO I 4 R LCF 280V/12,5kA	81.177		
PO I 3+1m LCF 280V/12,5kA	81.180	PO I 1+1m LCF 280V/12,5kA	81.178		
PO I 3+1m R LCF 280V/12,5kA	81.181	PO I 1+1m R LCF 280V/12,5kA	81.179		