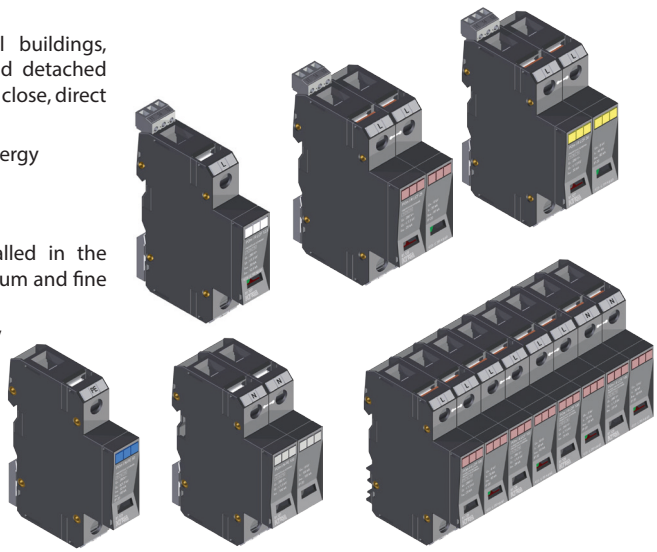
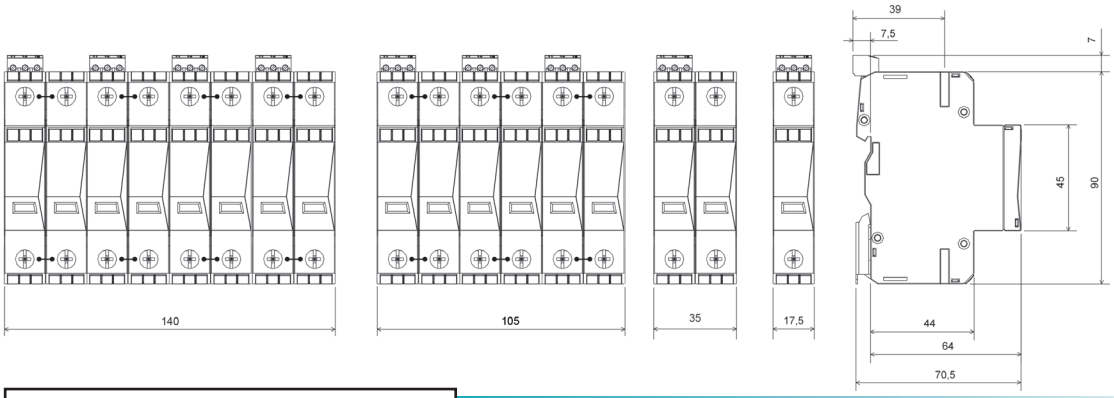
POm I LCF

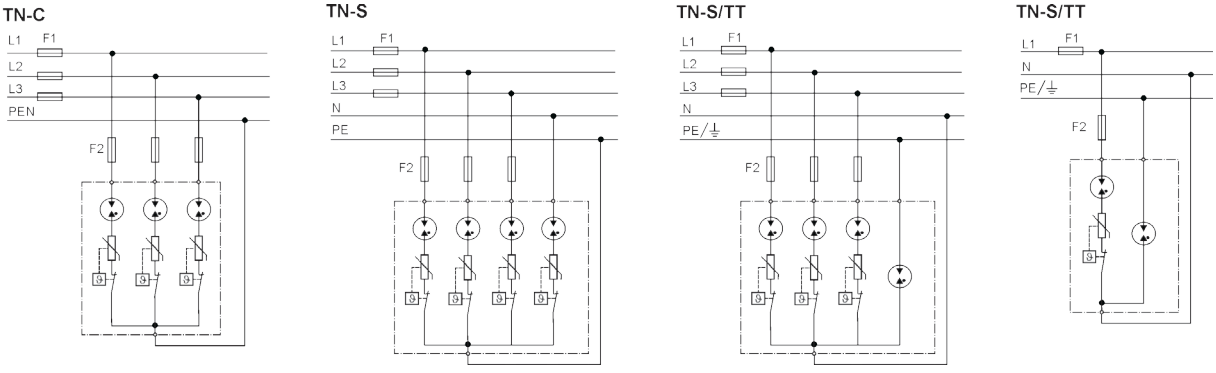
- For protection of mains and appliances in industrial buildings, administration buildings, buildings of civil amenities and detached houses against the effects of overvoltage wave caused by a close, direct or indirect lightning hit
- It decreases overvoltage and restricts overvoltage wave energy
- Installation: 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 power varistors MOV and lightning arrester
- Zero leaking current (LCF version)
- Zero follow current
- Optical and remote signalization of operation state
- Multifunctional terminals for conductors
- Possibility of monoblock connection by bus bars



DIMENSIONS



CONNECTION DIAGRAM



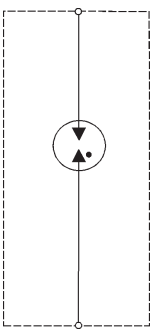
POm I 3 LCF 35,3
POm I 3 LCF 75
POm I 3 LCF 90

POm I 4 LCF 50
POm I 4 LCF 100
POm I 4 LCF 120

POm I 3+1 LCF 50
POm I 3+1 LCF 100

POm I 1+1 LCF 50

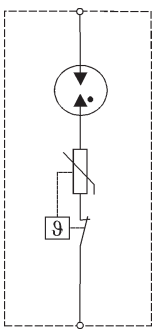
N-PE VERSION



POm I N-PE 50
I_{total} = 50 kA

POm I N-PE 100
I_{total} = 100 kA

LCF VERSION



- 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

Signalling states

green = OK

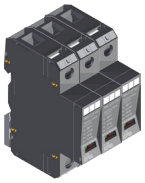
red = out of operation, to be replaced immediately

DELIVERY AND ASSEMBLY INSTRUCTION

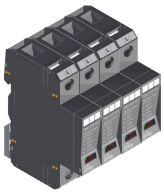
Completed from individual poles – using individual poles taken from store during the assembly process according to needs

Delivered and assembled as one unit – simple installation

POm I LCF 12,5
I_{imp} = 12,5 kA

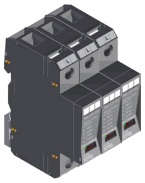


3x POm I LCF 12,5
I_{total} = 37,5 kA

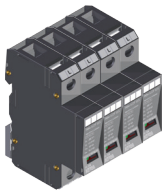


4x POm I LCF 12,5
I_{total} = 50 kA

3x POm I LCF 12,5
1x POm I N-PE 50
I_{total} = 50 kA



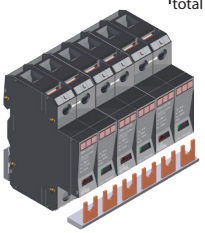
POm I 3 LCF 37,5
I_{total} = 37,5 kA



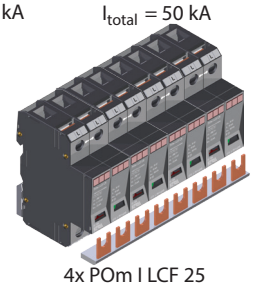
POm I 4 LCF 50
I_{total} = 50 kA

POm I 3+1 LCF 50
I_{total} = 50 kA

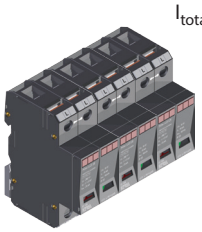
POm I LCF 25
I_{imp} = 25 kA



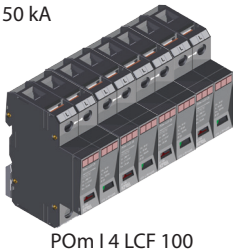
3x POm I LCF 25
I_{total} = 75 kA



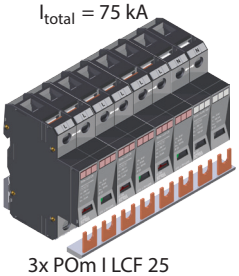
4x POm I LCF 25
I_{total} = 100 kA



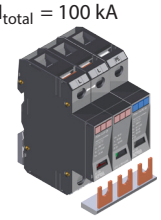
POm I 3 LCF 75
I_{total} = 75 kA



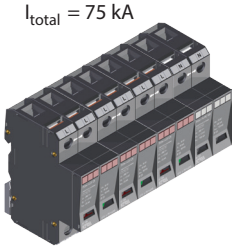
POm I 4 LCF 100
I_{total} = 100 kA



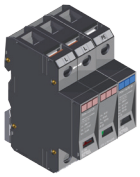
3x POm I LCF 25
1x POm I N-PE 100
I_{total} = 100 kA



1x POm I LCF 25
1x POm I N-PE 50
I_{total} = 50 kA

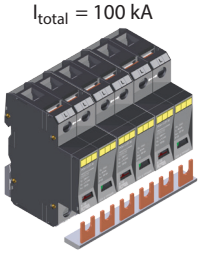


POm I 3+1 LCF 100/25
I_{total} = 100 kA

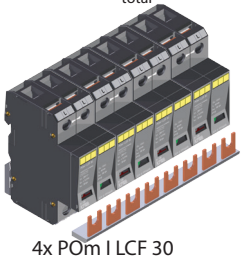


POm I 1+1 LCF 50/25
I_{total} = 50 kA

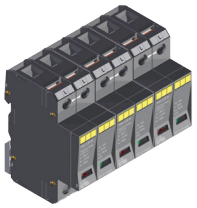
POm I LCF 30
I_{imp} = 30 kA



3x POm I LCF 30
I_{total} = 90 kA

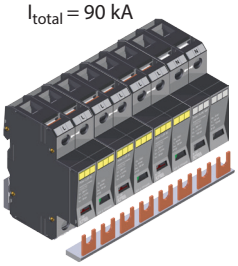


4x POm I LCF 30
I_{total} = 120 kA

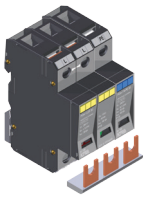


POm I 3 LCF 90
I_{total} = 90 kA

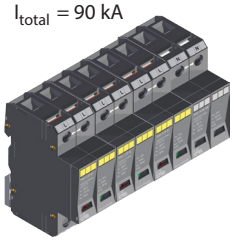
POm I 4 LCF 120
I_{total} = 120 kA



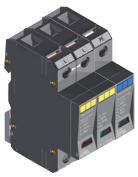
3x POm I LCF 30
1x POm I N-PE 100
I_{total} = 100 kA



1x POm I LCF 30
1x POm I N-PE 50
I_{total} = 50 kA



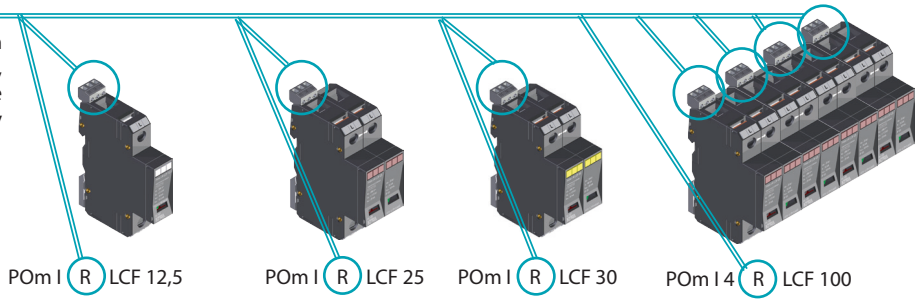
POm I 3+1 LCF 100/30
I_{total} = 100 kA



POm I 1+1 LCF 50/30
I_{total} = 50 kA

R VERSION

Each product's modification containing varistor module, can be supplied with remote signalling system to identify the state of SPD.



TECHNICAL PARAMETERS

KIWA TYPE		POm I				
		N-PE		L-N		
		50	100	LCF 12,5	LCF 25	LCF 30
Number of poles		1	1	1	1	1
Nominal voltage	U_n	230 V~	230 V~	230 V~	230 V~	230 V~
Max. operating voltage T1 T2 T3	U_c	260 V~	260 V~	280 V~	280 V~	280 V~
Voltage protection level T1 T2 T3	U_p	≤1,5 kV	≤1,5 kV	≤1,5 kV	≤1,5 kV	≤1,5 kV
Response time	t_A	<100 ns	<100 ns	<100 ns	<100 ns	<100 ns
Impulse current (10/350)	I_{imp}	50 kA	100 kA	12,5 kA	25 kA	30 kA
Open circuit voltage T3	U_{oc}	10 kV	6 kV	6 kV	6 kV	6 kV
Nom. discharge current (8/20) T1 T2	I_n	60 kA	100 kA	30 kA	40 kA	40 kA
Max. discharge current (8/20)	I_{max}	60 kA	100 kA	50 kA	60 kA	60 kA
Prospective short-circuit current of a power supply	I_p			25 kA_{ef}	25 kA_{ef}	25 kA_{ef}
Overcurrent protection gL/gG		-	-	≤160 A	≤250 A	≤315 A
Temporary overvoltage	U_{TOV}	-	-	335 V AC		
Residual current	I_{PE}	<1 µA		<1 µA		
Follow current	I_f	100 A		-		
Signalling changeover contact		-	-	M3/0.25 Nm, ▫0,2 ... 1,5 mm^2, max. 250 V~/1A		
Status indication of TDD (Thermic Disconnecting Device)		-		green (OK) / red (OUT)		
Status indication of EWS		-		-		
Min. ... max. tightening torque		2 ... 3 Nm		2 ... 3 Nm		
Connecting conductor cross section: - wire		4 ... 35 mm^2		4 ... 35 mm^2		
- cord		4 ... 25 mm^2		4 ... 25 mm^2		
Operating temperature range		- 40 ... +70 °C		- 40 ... +70 °C		
Degree of protection		IP 20		IP 20		
Colour		black, RAL 9011		black, RAL 9011		
Dimensions		97 x 64 x 17,5 mm	97 x 64 x 35 mm	97 x 64 x 17,5 mm	97 x 64 x 35 mm	
Mounting on profiled DIN rail		35 x 7,5 mm		35 x 7,5 mm		
Products comply with norms EN 61643-11 IEC 61643-1 VDE 0675-06		type 1 T1 + type 2 T2 + type 3 T3 Class I + Class II + Class III Klasse B + Klasse C + Klasse D		type 1 T1 + type2 T2 + type 3 T3 Class I + Class II + Class III Klasse B + Klasse C + Klasse D		

PRODUCT SPECIFICATION

POm I | | R | LCF | 12,5 | 280V/12,5kA

- 280V/12,5kA — U_c / I_{imp}
- 12,5 — I_{total} - common current I_{imp}
- LCF — LCF, N-PE version
- R — R - remote signalling
- (blank) — number of poles
- POm I — type SPD

Busbars	Order number
2 pol - QB 18 - 2	91.601
3 pol - QB 18 - 3	91.603
4 pol - QB 18 - 4	91.605
6 pol - QB 18 - 6	91.610
8 pol - QB 18 - 8	91.609

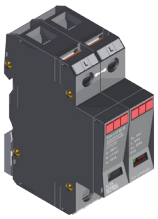
TYPE	Order number
POm I LCF 12,5	81.104
POm I R LCF 12,5	81.107
POm I 3 LCF 37,5	81.136
POm I 3 R LCF 37,5	81.137
POm I 4 LCF 50	81.138
POm I 4 R LCF 50	81.139
POm I 3+1 LCF 50	81.140
POm I 3+1 R LCF 50	81.141
POm I N-PE 50	81.101
POm I N-PE 100	81.121

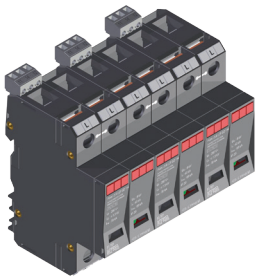
TYPE	Order number
POm I LCF 25	81.124
POm I R LCF 25	81.125
POm I 3 LCF 75	81.130
POm I 3 R LCF 75	81.131
POm I 4 LCF 100	81.128
POm I 4 R LCF 100	81.129
POm I 3+1 LCF 100/25	81.142
POm I 3+1 R LCF 100/25	81.143
POm I 1+1 LCF 50/25	81.150
POm I 1+1 R LCF 50/25	81.151

TYPE	Order number
POm I LCF 30	81.126
POm I R LCF 30	81.127
POm I 3 LCF 90	81.132
POm I 3 R LCF 90	81.133
POm I 4 LCF 120	81.134
POm I 4 R LCF 120	81.135
POm I 1+1 LCF 50/30	81.144
POm I 1+1 R LCF 50/30	81.145
POm I 3+1 LCF 100/30	81.152
POm I 3+1 R LCF 100/30	81.153

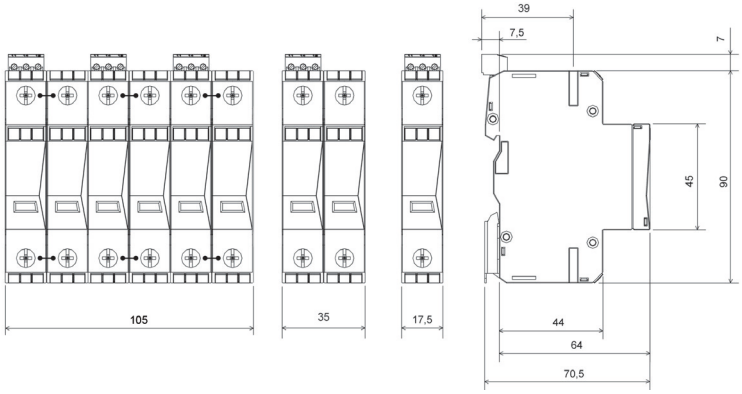
POm I LCF BD

- For protection of mains and appliances in administration buildings, buildings of civil amenities and detached houses against 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 power varistors MOV and lightning arrester
- Zero leaking current (LCF version)
- Zero follow current
- Optical and remote signalization of operation state
- Multifunctional terminals for conductors
- Possibility of monoblock connection by bus bars

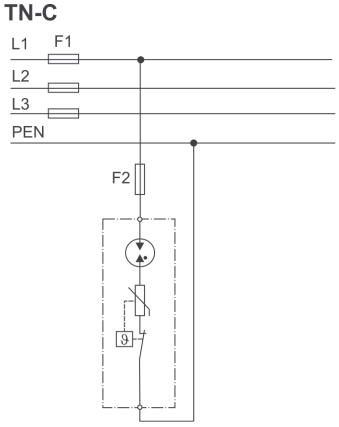




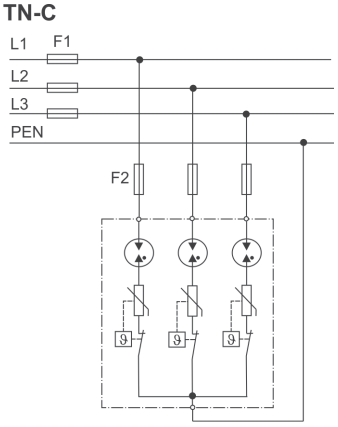
DIMENSIONS



CONNECTION DIAGRAM

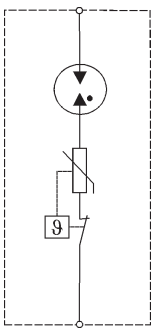


POm I LCF BD 38



POm I 3 LCF BD 114

LCF VERSION



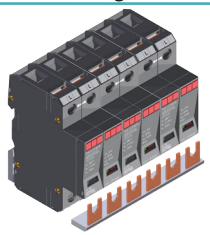
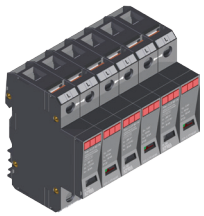
- LCF version is version with zero leaking current and zero follow current
- Possibility of application in front of electricity meter** as well as after current breaker (**valid only with the agreement of appropriate electricity supplier)
- Varistor is connected in series with gas filled spark gap

Signalling states

green = OK

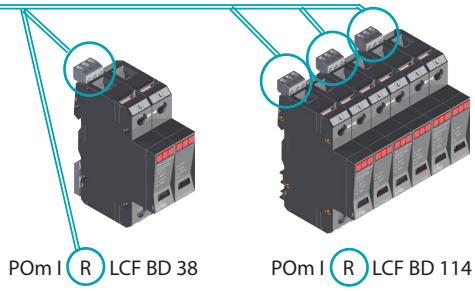
red = out of operation,
to be replaced immediately

DELIVERY AND ASSEMBLY INSTRUCTION

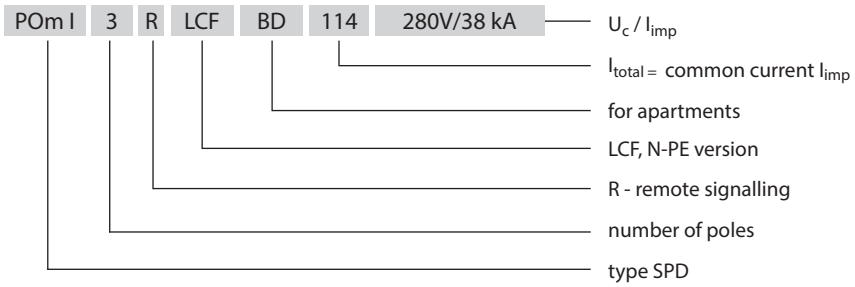
	Completed from individual poles – using individual poles taken from store during the assembly process according to needs	Delivered and assembled as one unit – simple installation
 POm I LCF BD 38 I_{imp} = 38 kA	 3x POm I LCF BD 38 I_{total} = 114 kA	 POm I 3 LCF BD 114 I_{total} = 114 kA

R VERSION

Each product's modification containing varistor module, can be supplied with remote signalling system to identify the state of SPD.



PRODUCT SPECIFICATION



TYPE	Order number
POm I LCF BD 38 280V/38kA	81.156
POm I R LCF BD 38 280V/38kA	81.157
POm I 3 LCF BD 114 280V/38kA	81.160
POm I 3 R LCF BD 114 280V/38kA	81.161

Busbars	Order number
3 pole - QB 18 - 3	91.603

TECHNICAL PARAMETERS

KIWA	TYPE	POm I	
		L-N	
		LCF BD 38	LCF BD 114
Number of poles		1	3
Nominal voltage	U_n	230 V AC	230 V AC
Max. operating voltage T1 T2 T3	U_c	280 V AC	280 V AC
Voltage protection level T1 T2 T3	U_p	≤1,5 kV	≤1,5 kV
Response time	t_A	<100 ns	<100 ns
Impulse current (10/350)	I_{imp}	38 kA	3x 38 kA (114 kA)
Open circuit voltage T3	U_{oc}	6 kV	6 kV
Nom. discharge current (8/20) T1 T2	I_n	40 kA	40 kA
Max. discharge current (8/20)	I_{max}	60 kA	60 kA
Prospective short-circuit current of a power supply	I_p	25 kA_{ef}	25 kA_{ef}
Overcurrent protection gL/gG		≤315 A	≤315 A
Temporary overvoltage	U_{TOV}	335 V AC	335 V AC
Residual current	I_{PE}	<1 µA	<1 µA
Follow current	I_f	-	-
Signalling changeover contact		M3/0.25 Nm, □ 0,2 ... 1,5 mm^2, 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^2	
	- cord	4 ... 25 mm^2	
Operating temperature range		- 40 ... +70 °C	
Degree of protection		IP 20	
Colour		black, RAL 9011	
Dimensions		97x64x17,5	97x64x35
Mounting on profiled DIN rail		35 x 7,5 mm	
Products comply with norms EN 61643-11 IEC 61643-1 VDE 0675-06		type 1 T1 + type 2 T2 + type 3 T3 Class I + Class II + Class III Klasse B + Klasse C + Klasse D	