

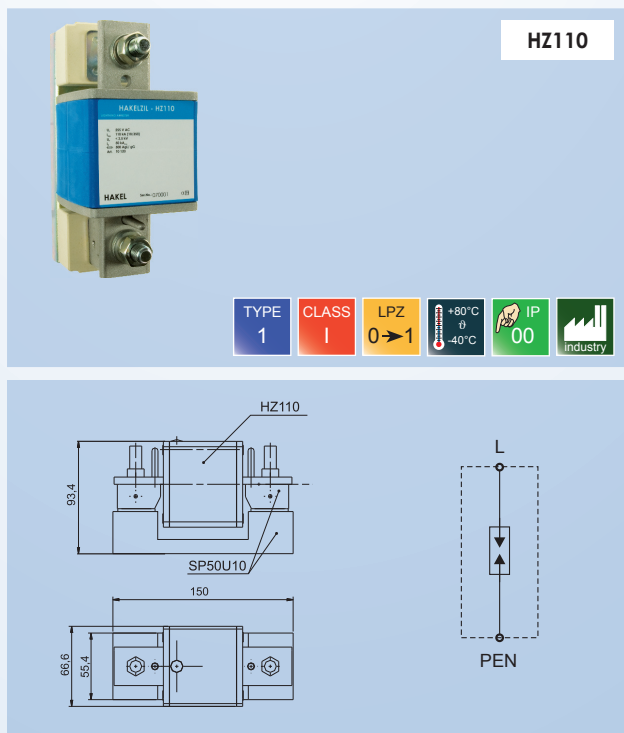


HIGH-POWER LIGHTNING ARRESTER

HZ110 is a lightning arrester type 1 according to EN 61643-11. These are recommended for use in the Lightning Protection Zones Concept at the boundaries of LPZ 0 – 1 (according to IEC 1312-1 and EN 62305) for lightning current equipotential bonding in power supply systems entering the building.

The lightning arrester is constructed as an encapsulated multiple spark gap for installation in main switchboards. HZ110 is mainly intended for use in TNC systems.

Multiple spark gap



High-power lightning arrester HZ110 is intended for use in areas with a high frequency of storm days. The main use of HZ110 arrester is in industrial installations such as transformers or the main switchboards of large industrial buildings.

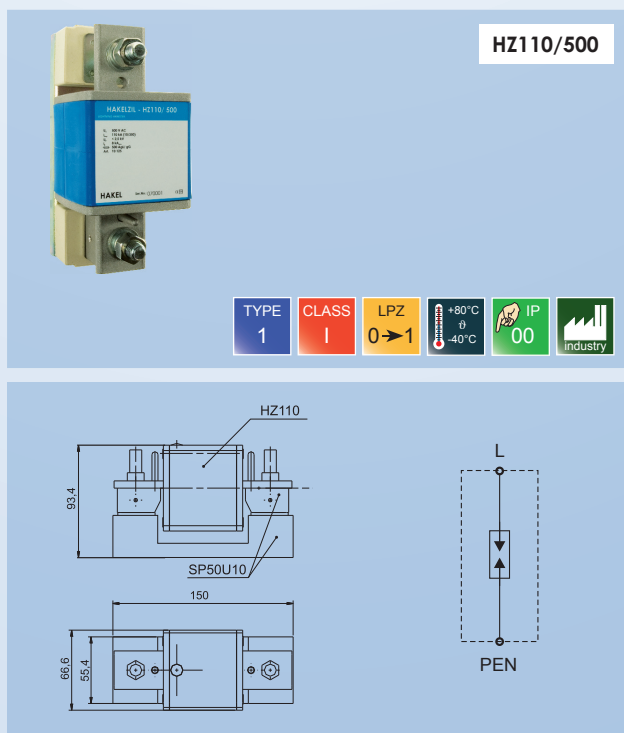
Type HZ110

Nominal voltage	U_N	230 V AC
Max. continuous operating voltage	U_C	255 V AC
Insulation resistance	R_i	> 100 MΩ
Lightning impulse current (10/350)	I_{imp}	110 kA
- charge	Q	55 As
- specific energy	W/R	3000 kJ/Ω
Temporary overvoltage (TOV)	U_T	500 V/ 5 sec
Voltage protection level at I_{imp}	U_p	< 2,5 kV
Follow current interrupting rating at U_C	I_{fi}	50 kA _{rms}
Response time	t_A	< 100 ns
Max. back-up fuse		500 AgL/gG
Lifetime		min. 100 000 h
Weight	m	1000 g
Article number		10 120



M.102

Multiple spark gap



High-power lightning arrester HZ110/500 is intended for use in areas with a high frequency of storm days. The main use of HZ110/500 arrester is in industrial installations such as main switchboards of large industrial buildings.

Type HZ110/500

Nominal voltage	U_N	400 V AC
Max. continuous operating voltage	U_C	500 V AC
Insulation resistance	R_i	> 100 MΩ
Lightning impulse current (10/350)	I_{imp}	110 kA
- charge	Q	55 As
- specific energy	W/R	3000 kJ/Ω
Temporary overvoltage (TOV)	U_T	500 V/ 5 sec
Voltage protection level at I_{imp}	U_p	< 2,5 kV
Follow current interrupting rating at U_C	I_{fi}	8 kA _{rms}
Response time	t_A	< 100 ns
Max. back-up fuse		500 AgL/gG
Lifetime		min. 100 000 h
Weight	m	1000 g
Article number		10 125

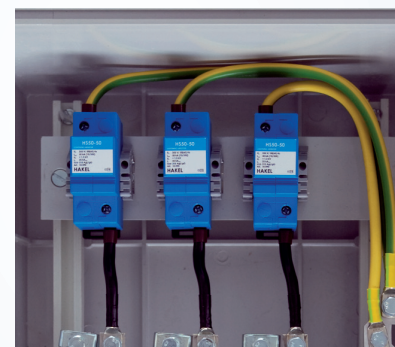


M.102

LIGHTNING ARRESTERS – SPARK GAP

HS50-50 is a lightning arrester type 1 according to EN 61643-11. These are recommended for use in the Lightning Protection Zones Concept at the boundaries of LPZ 0 – 1 (according to IEC 1312-1 and EN 62305) for lightning current equipotential bonding in power supply systems entering the building.

The lightning arrester is constructed as an encapsulated multiple spark gap for installation in main switchboards. HS50-50 is mainly intended for use in TNC systems. For TNS and TT systems it is necessary to combine these arresters with lightning arrester HS100 (or JK110) which is intended for equipotential bonding between N and PE.



Multiple spark gap

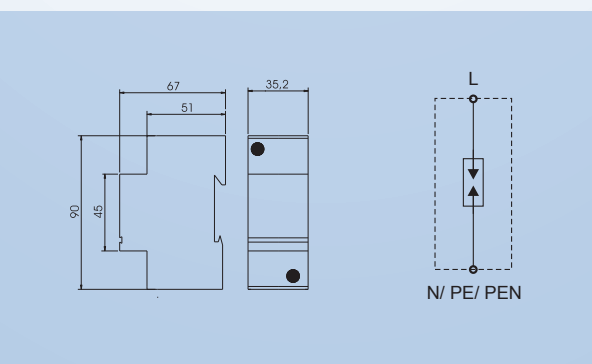
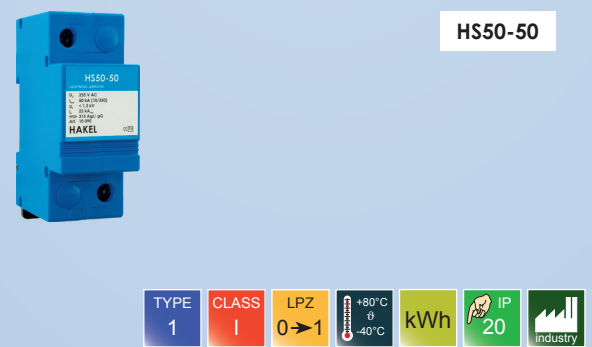
The main use of HS50-50 is in industrial installations such as transformers, the main switchboards of large industrial buildings and places with high risk of a direct lightning strike. It is also suitable for applications in unmeasured parts of electrical installation (before electrometer) according to VDN Directive, 2nd Edition 2004 (TAB 2000).

Type HS50-50		
Nominal voltage	U_N	230 V AC
Max. continuous operating voltage	U_C	255 V AC
Insulation resistance	R_i	> 100 MΩ
Lightning impulse current (10/350)	I_{imp}	50 kA
- charge	Q	25 As
- specific energy	W/R	600 kJ/Ω
Temporary overvoltage (TOV)	U_T	440 V/ 5 sec
Voltage protection level at I_{imp}	U_p	< 1,3 kV
Follow current interrupting rating at U_C	I_{fi}	12 kA _{rms}
Response time	t_A	< 100 ns
Max. back-up fuse		315 AgL/gG
Lifetime		min. 100 000 h
Weight	m	225 g
Article number		10 090



Note: HS50-50 can be supplied with LED diode signaling the right functioning on a special request.

Multiple spark gap



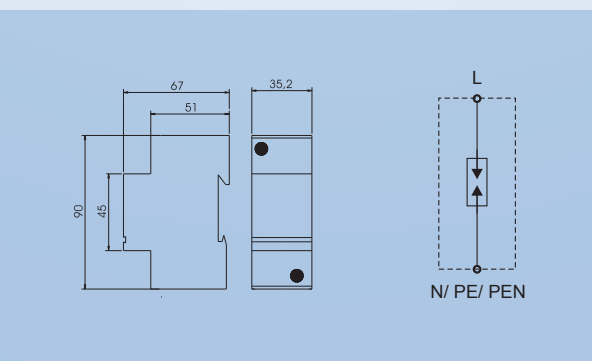
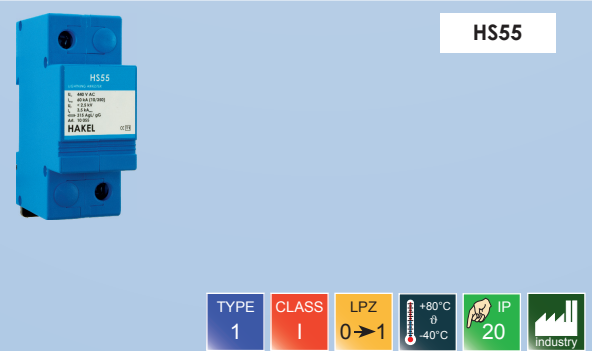
Multiple spark gap

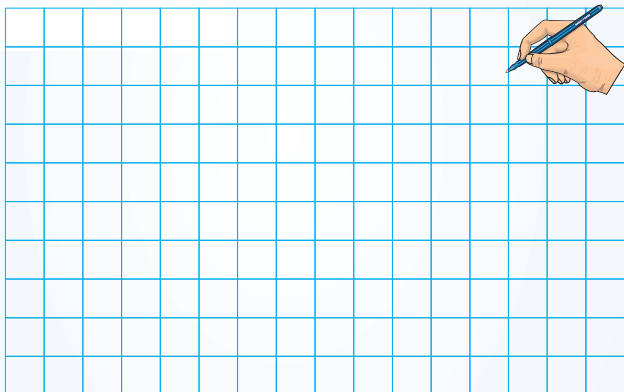
HS55 arrester is intended for special installations in industrial buildings requiring max. continuous operating voltage of 440 V AC. The main use of HS55 arrester is in main switchboards of large industrial buildings and places with high risk of a direct lightning strike.

Type HS55		
Nominal voltage	U_N	400 V AC
Max. continuous operating voltage	U_C	440 V AC
Insulation resistance	R_i	> 100 MΩ
Lightning impulse current (10/350)	I_{imp}	50 kA
- charge	Q	25 As
- specific energy	W/R	600 kJ/Ω
Temporary overvoltage (TOV)	U_T	500 V/5 sec
Voltage protection level at I_{imp}	U_p	< 2,5 kV
Follow current interrupting rating at U_C	I_{fi}	3,5 kA _{rms}
Response time	t_A	< 100 ns
Max. back-up fuse		315 AgL/gG
Lifetime		min. 100 000 h
Weight	m	225 g
Article number		10 055

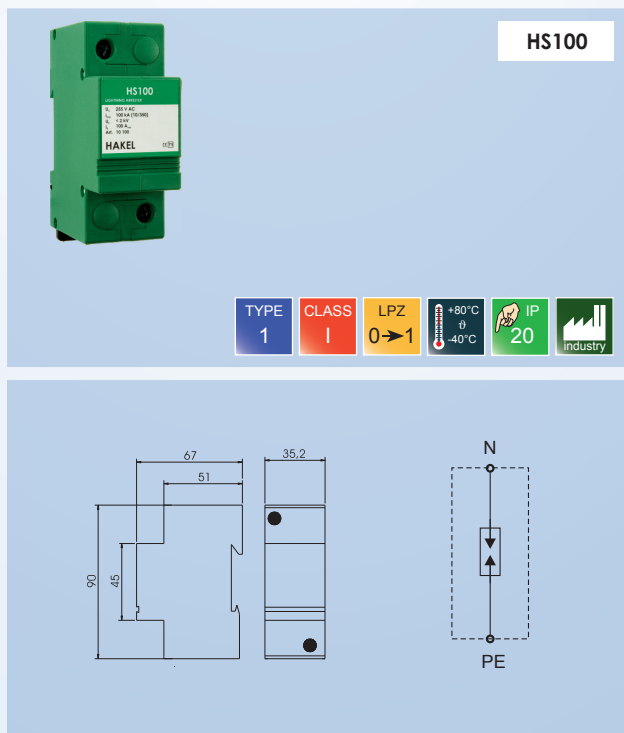


Multiple spark gap





Single spark gap



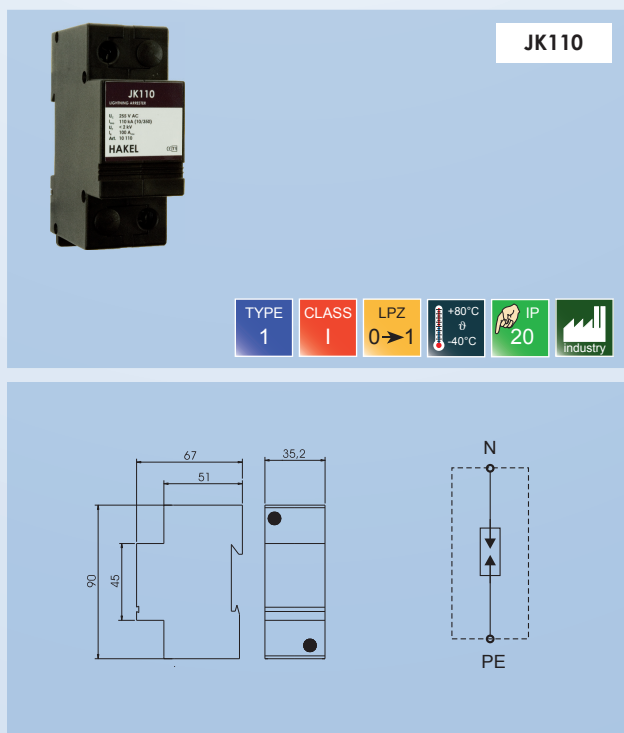
HS100 is a total current spark gap type 1 according to EN 61643-11 and is intended for use in TNS and TT systems (3+1 or 1+1) at the boundaries of LPZ 0 – 1. HS100 is to be installed between N and PE only.

Type HS100

Max. continuous operating voltage	U_C	255 V AC
Insulation resistance	R_i	> 1000 M Ω
Lightning impulse current (10/350)	I_{imp}	100 kA
- charge	Q	50 As
- specific energy	W/R	2500 kJ/ Ω
Temporary overvoltage (TOV)	U_T	1200 V/ 0,2 sec
Max. discharge current (8/20)	I_{max}	150 kA
Nominal discharge current (8/20)	I_n	75 kA
Voltage protection level at I_{imp}	U_p	< 2 kV
Spark-Over Voltage 1,2/50 μ s		< 1,5 kV
Follow current interrupting rating at U_C	I_{fi}	100 A _{rms}
Response time	t_A	< 100 ns
Lifetime		min. 100 000 h
Weight	m	360 g
Article number		10 100



Single spark gap



JK110 is a total current spark gap type 1 according to EN 61643-11 and is intended for use in TNS and TT systems (3+1 or 1+1) at the boundaries of LPZ 0 – 1. JK110 is to be installed between N and PE only.

Type JK110

Max. continuous operating voltage	U_C	255 V AC
Insulation resistance	R_i	> 1000 M Ω
Lightning impulse current (10/350)	I_{imp}	110 kA
- charge	Q	55 As
- specific energy	W/R	3000 kJ/ Ω
Max. discharge current (8/20)	I_{max}	150 kA
Nominal discharge current (8/20)	I_n	75 kA
Temporary overvoltage (TOV)	U_T	1200 V/ 0,2 sec
Voltage protection level at I_{imp}	U_p	< 2 kV
Follow current interrupting rating at U_C	I_{fi}	100 A _{rms}
Response time	t_A	< 100 ns
Lifetime		min. 100 000 h
Weight	m	360 g
Article number		10 110

Application table

Type	Art. No.	TE	Weight (g)	No. of poles	Circuit	I_{imp} (kA)	U_c (V)	Mode of protection
HZ110	10 120	4	1000	1	1+0	110	255	L/N, L/PEN, L/PE
HZ110/500	10 125	4	1000	1	1+0	110	500	L/N, L/PEN, L/PE
HS50-50	10 090	2	225	1	1+0	50	255	L/N, L/PEN, L/PE
HS55	10 055	2	225	1	1+0	50	440	L/N, L/PEN, L/PE
HS100	10 100	2	360	1	0+1	100	255	N/PE
JK110	10 110	2	360	1	0+1	110	255	N/PE

Recommended sets for TNC system

Set	Consisting of	TE	Weight (g)	No. of poles	Circuit	I_{total} (kA)	Application
HZ110/3+0	3xHZ110	12	3000	3	3+0	-	Areas with high frequency of storm days
HZ110/500/3+0	3xHZ110/500	12	3000	3	3+0	-	Areas with high frequency of storm days
HS50-50/3+0	3xHS50-50	6	675	3	3+0	-	Transformers, main switchboard and before electrometer
HS55/3+0	3xHS55	6	675	3	3+0	-	Transformers and main switchboard

Recommended sets for TNS system

HS50-50/4+0	4xHS50-50	6	900	4	4+0	-	Transformers, main switchboard and before electrometer
HS55/4+0	4xHS55	6	900	4	4+0	-	Transformers and main switchboard

Recommended sets for TNS and TT systems

HS50-50/3+1	3xHS50-50 + 1xHS100	8	1035	4	3+1	100	Transformers, main switchboard and before electrometer
HS55/3+1	3xHS55 + 1xJK110	8	1035	4	3+1	110	Transformers and main switchboard

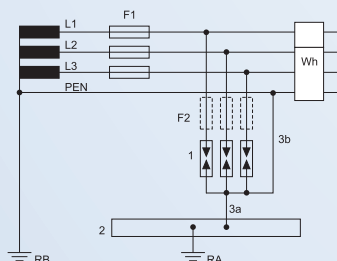
TE - dividing unit (17,5 mm)

Housing material - Polyamide PA6

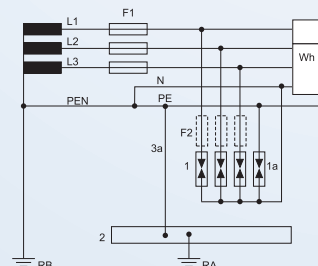
Recommended cable cross-section of the connected conductors (at tightening torque of clamps 4Nm)

35 mm² (solid), 25 mm² (flexible)

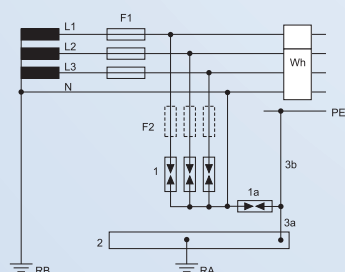
TNC (3+0)



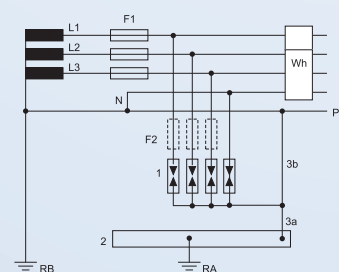
TNS (3+1)



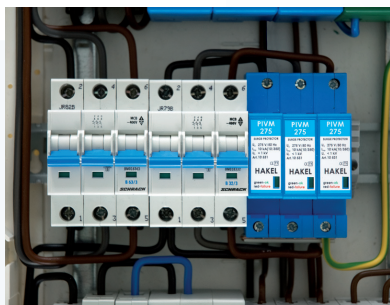
TT (3+1)



TNS (4+0)



- 1 Multiple spark gap HS50-50 or HS55
- 2 Total current spark gap HS100 or JK110
- 3a, 3b Earthing wires for arresters
- F1 Main back-up fuse of service main
- F2 Recommended back-up fuse 315AgL/gG
(only if the main back-up fuse F1 is fitted with back-up fuses > 315AgL/gG)
- RA Grounding of the equipment
- RB Grounding system



LIGHTNING ARRESTERS - VARISTOR

PIVM is modular lightning arrester type 1 according to EN 61643-11. Complete device consist of a base part and pluggable module. These arresters are recommended for use in the Lightning Protection Zones Concept at the boundaries of LPZ 0 – 1 (according to IEC 1312-1 and EN 62305) for lightning current equipotential bonding and elimination of switching surges that originate in power supply systems entering the building.

The PIVM is mainly intended for use in TNC systems. For TNS and TT systems it is necessary to combine these arresters with lightning arrester B25, B25M or B50 which are intended for equipotential bonding between N and PE.

The main use of PIVM7 arrester is in structures of LPL III – IV according to EN 62305, e.g. residential houses with cable supply and subdistribution boards of big industrial structures.

Single-pole MOV lightning arrester



PIVM7-75 DS

TYPE
1

CLASS
I

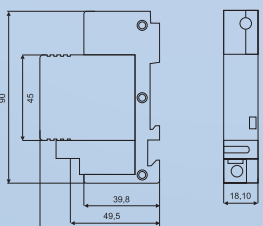
LPZ
0→1

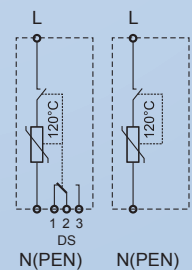
DS
DS

+80°C
-40°C

IP
20

home





N(PEN) N(PEN)

Type PIVM7-75/PIVM7-75 DS

Max. continuous operating voltage	U_C	75 V AC
Lightning impulse current (10/350)	I_{imp}	7 kA
- charge	Q	3,5 As
- specific energy	W/R	12 kJ/Ω
Max. discharge current (8/20)	I_{max}	50 kA
Nominal discharge current (8/20)	I_n	30 kA
Temporary overvoltage (TOV)	U_T	-
Voltage protection level at I_{imp}	U_p	< 350 V
Response time	t_A	< 25 ns
Max. back-up fuse		160 AgL/gG
Lifetime		min.100 000 h
Short-circuit withstand capability at max.back-up fuse	I_p	60 kA _{rms}
Weight	m	98 g
Article number		
PIVM7-75		10 116
PIVM7-75 DS		10 117



Varistor-based spare module

PIVM7-75/M

Art. No.

10 522

Single-pole MOV lightning arrester



PIVM7-150 DS

TYPE
1

CLASS
I

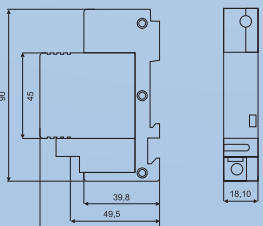
LPZ
0→1

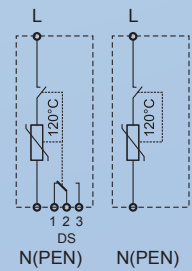
DS
DS

+80°C
-40°C

IP
20

home





N(PEN) N(PEN)

Type PIVM7-150/PIVM7-150 DS

Max. continuous operating voltage	U_C	150 V AC
Lightning impulse current (10/350)	I_{imp}	7 kA
- charge	Q	3,5 As
- specific energy	W/R	12 kJ/Ω
Max. discharge current (8/20)	I_{max}	50 kA
Nominal discharge current (8/20)	I_n	30 kA
Temporary overvoltage (TOV)	U_T	-
Voltage protection level at I_{imp}	U_p	< 950 V
Response time	t_A	< 25 ns
Max. back-up fuse		160 AgL/gG
Lifetime		min.100 000 h
Short-circuit withstand capability at max.back-up fuse	I_p	60 kA _{rms}
Weight	m	106 g
Article number		
PIVM7-150		10 018
PIVM7-150 DS		10 019



Varistor-based spare module

PIVM7-150/M

Art. No.

10 523

**Function of remote monitor terminals**

When the PIVM DS is operating correctly, the terminations 1-2 are connected to normally closed contacts, 2-3 are normally open. If the internal varistor component is damaged as a result of thermal overloading, terminations 1-2 will then be open and 2-3 closed.

el. strength against surround. circuits	3750 V _{rms}
el. strength against network circuits	3750 V _{rms}
insulation resistance	$2 \times 10^7 \Omega$
max. switching current	~ 0,5 A
max. switching voltage	~ 250 V

Type PIVM7-275/PIVM7-275 DS

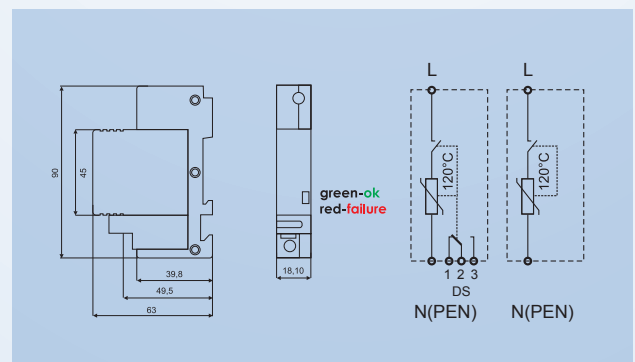
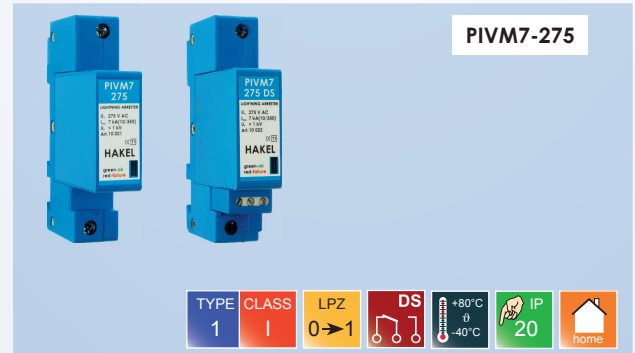
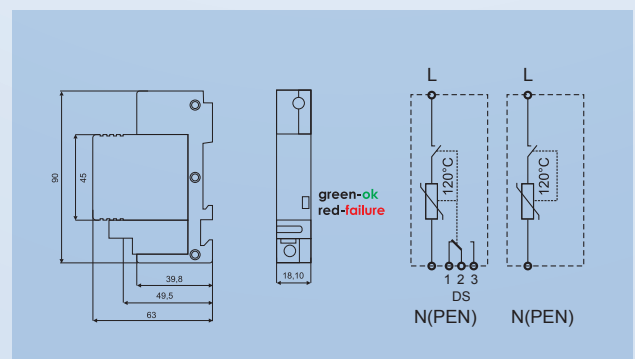
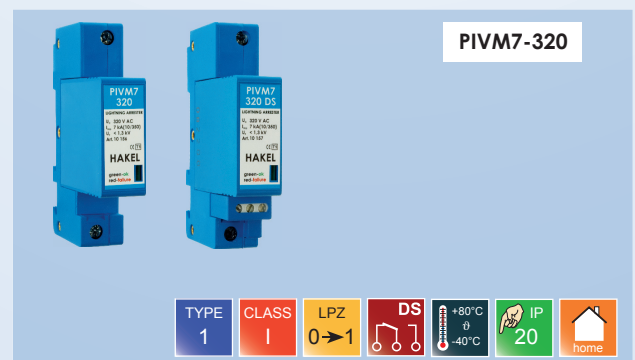
Max. continuous operating voltage	U _C	275 V AC
Lightning impulse current (10/350)	I _{imp}	7 kA
- charge	Q	3,5 As
- specific energy	W/R	12 kJ/Ω
Max. discharge current (8/20)	I _{max}	50 kA
Nominal discharge current (8/20)	I _n	30 kA
Temporary overvoltage (TOV)	U _T	335 V/5 sec
Voltage protection level at I _{imp}	U _p	< 1,2 kV
Response time	t _A	< 25 ns
Max. back-up fuse		160 AgL/gG
Lifetime		min.100 000 h
Short-circuit withstand capability at max.back-up fuse	I _p	60 kA _{rms}
Weight	m	99 g
Article number		
PIVM7-275		10 021
PIVM7-275 DS		10 022



M.102

Varistor-based spare module

PIVM7-275/M	Art. No.	10 524
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Single-pole MOV lightning arrester**Single-pole MOV lightning arrester****Type PIVM7-320/PIVM7-320 DS**

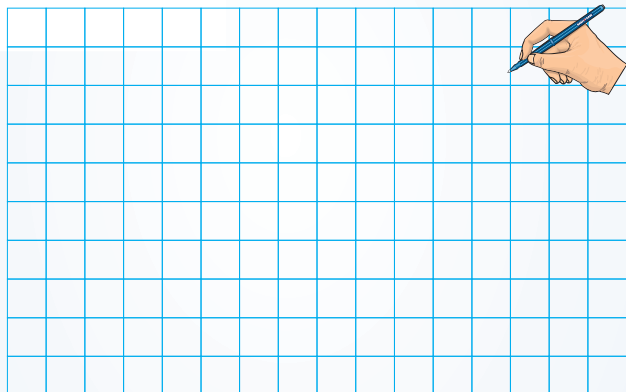
Max. continuous operating voltage	U _C	320 V AC
Lightning impulse current (10/350)	I _{imp}	7 kA
- charge	Q	3,5 As
- specific energy	W/R	12 kJ/Ω
Max. discharge current (8/20)	I _{max}	50 kA
Nominal discharge current (8/20)	I _n	30 kA
Temporary overvoltage (TOV)	U _T	335 V/5 sec
Voltage protection level at I _{imp}	U _p	< 1,3 kV
Response time	t _A	< 25 ns
Max. back-up fuse		160 AgL/gG
Lifetime		min.100 000 h
Short-circuit withstand capability at max.back-up fuse	I _p	60 kA _{rms}
Weight	m	106 g
Article number		
PIVM7-320		10 156
PIVM7-320 DS		10 157



M.102

Varistor-based spare module

PIVM7-320/M	Art. No.	10 525
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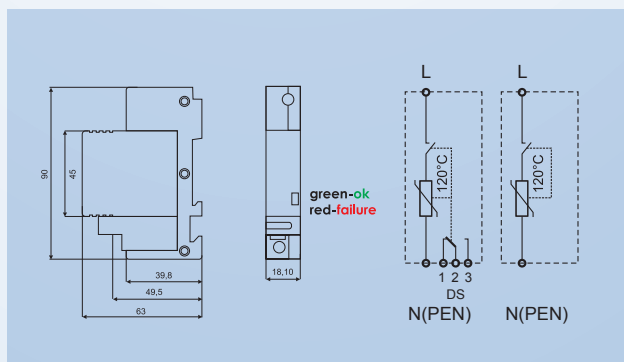
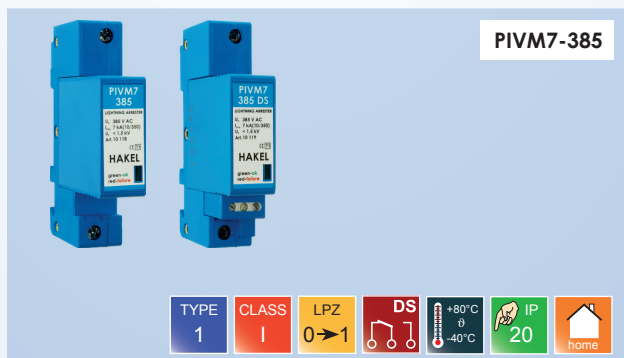


Single-pole MOV lightning arrester

**Function of remote monitor terminals**

When the PIVM DS is operating correctly, the terminations 1-2 are connected to normally closed contacts, 2-3 are normally open. If the internal varistor component is damaged as a result of thermal overloading, terminations 1-2 will then be open and 2-3 closed.

el. strength against surround. circuits	3750 V _{rms}
el. strength against network circuits	3750 V _{rms}
insulation resistance	$2 \times 10^7 \Omega$
max. switching current	~ 0,5 A
max. switching voltage	~ 250 V

**Type PIVM7-385/PIVM7-385 DS**

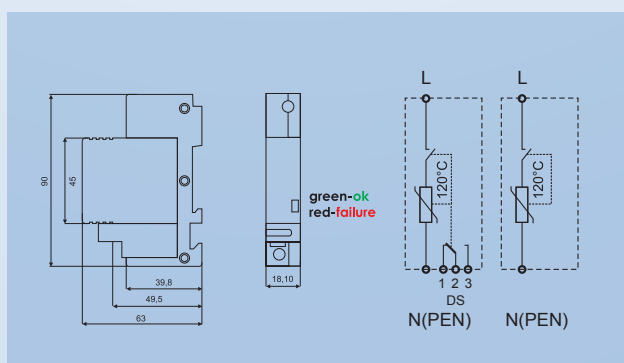
Max. continuous operating voltage	U _C	385 V AC
Lightning impulse current (10/350)	I _{imp}	7 kA
- charge	Q	3,5 As
- specific energy	W/R	12 kJ/Ω
Max. discharge current (8/20)	I _{max}	50 kA
Nominal discharge current (8/20)	I _n	30 kA
Temporary overvoltage (TOV)	U _T	-
Voltage protection level at I _{imp}	U _p	< 1,5 kV
Response time	t _A	< 25 ns
Max. back-up fuse		160 AgL/gG
Lifetime		min.100 000 h
Short-circuit withstand capability at max.back-up fuse	I _p	60 kA _{rms}
Weight	m	106 g
Article number		
PIVM7-385		10 118
PIVM7-385 DS		10 119

**Varistor-based spare module****Art. No.**

PIVM7-385/M

10 526

Single-pole MOV lightning arrester

**Type PIVM7-440/PIVM7-440 DS**

Max. continuous operating voltage	U _C	440 V AC
Lightning impulse current (10/350)	I _{imp}	7 kA
- charge	Q	3,5 As
- specific energy	W/R	12 kJ/Ω
Max. discharge current (8/20)	I _{max}	50 kA
Nominal discharge current (8/20)	I _n	30 kA
Temporary overvoltage (TOV)	U _T	580 V/5 sec
Voltage protection level at I _{imp}	U _p	< 1,7 kV
Response time	t _A	< 25 ns
Max. back-up fuse		160 AgL/gG
Lifetime		min.100 000 h
Short-circuit withstand capability at max.back-up fuse	I _p	60 kA _{rms}
Weight	m	108 g
Article number		
PIVM7-440		10 028
PIVM7-440 DS		10 029

**Varistor-based spare module****Art. No.**

PIVM7-440/M

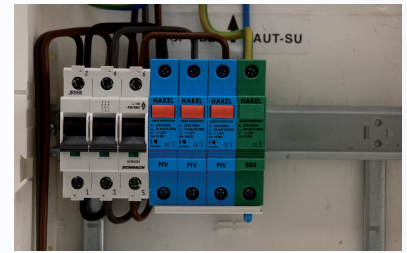
10 527

LIGHTNING ARRESTERS - VARISTOR

PIV is lightning arrester type 1 according to EN 61643-11. These arresters are recommended for use in the Lightning Protection Zones Concept at the boundaries of LPZ 0 – 1 (according to IEC 1312-1 and EN 62305) for lightning current equipotential bonding and elimination of switching surges that originate in power supply systems entering the building.

The PIV is mainly intended for use in TNC systems. For TNS and TT systems it is necessary to combine these arresters with lightning arrester B25, B50 or B80 which are intended for equipotential bonding between N and PE.

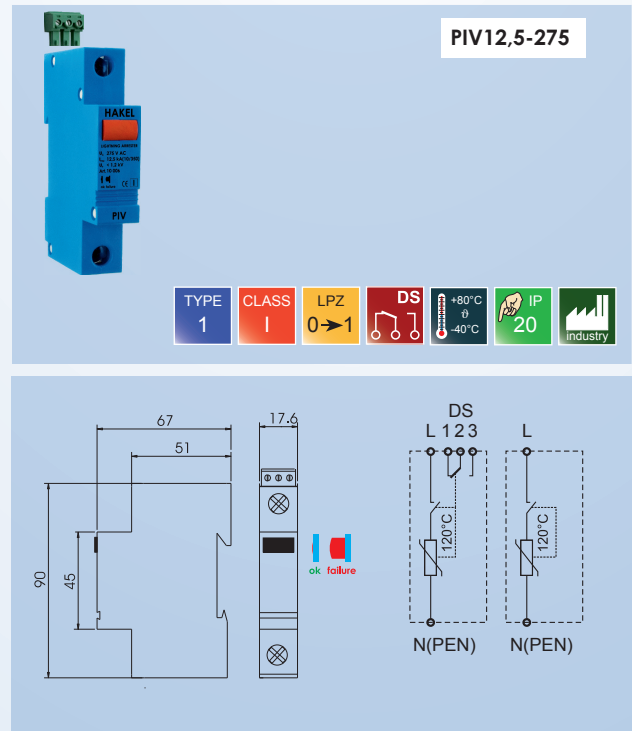
The main use of PIV12,5 arrester is in structures of LPL III – IV according to EN 62305, e.g. residential houses with cable supply and subdistribution boards of big industrial structures.



Type PIV12,5-275/PIV12,5-275 DS		
Max. continuous operating voltage	U_C	275 V AC
Lightning impulse current (10/350)	I_{imp}	12,5 kA
- charge	Q	6,25 As
- specific energy	W/R	39 kJ/Ω
Max. discharge current (8/20)	I_{max}	100 kA
Nominal discharge current (8/20)	I_n	50 kA
Temporary overvoltage (TOV)	U_T	335 V/5 sec
Voltage protection level at I_{imp}	U_p	< 1,2 kV
Response time	t_A	< 25 ns
Max. back-up fuse		250 AgL/gG
Lifetime		min.100 000 h
Short-circuit withstand capability at max.back-up fuse	I_p	60 kA _{rms}
Weight	m	140 g
Article number		
PIV12,5-275		10 006
PIV12,5-275 DS		10 020

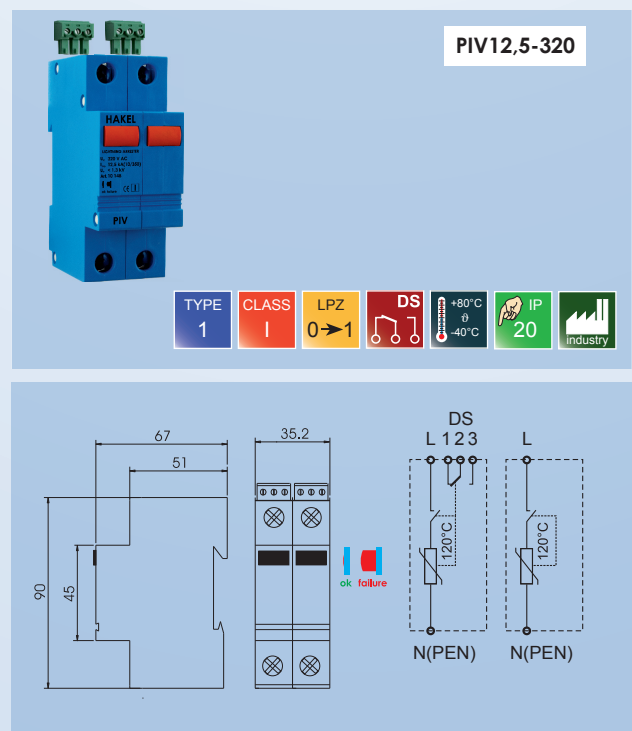


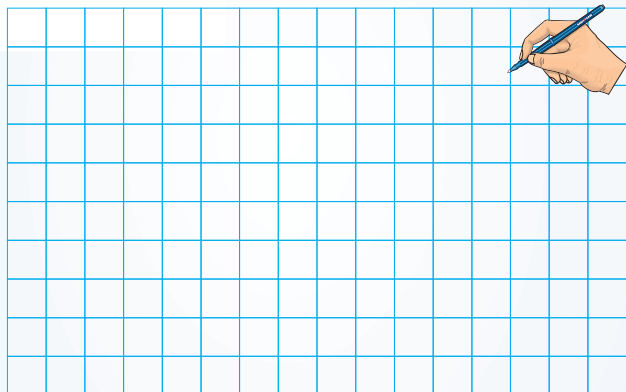
Single-pole MOV lightning arrester



Single-pole MOV lightning arrester

Type PIV12,5-320/PIV12,5-320 DS		
Max. continuous operating voltage	U_C	320 V AC
Lightning impulse current (10/350)	I_{imp}	12,5 kA
- charge	Q	6,25 As
- specific energy	W/R	39 kJ/Ω
Max. discharge current (8/20)	I_{max}	100 kA
Nominal discharge current (8/20)	I_n	50 kA
Temporary overvoltage (TOV)	U_T	335 V/5 sec
Voltage protection level at I_{imp}	U_p	< 1,3 kV
Response time	t_A	< 25 ns
Max. back-up fuse		250 AgL/gG
Lifetime		min.100 000 h
Short-circuit withstand capability at max.back-up fuse	I_p	60 kA _{rms}
Weight	m	234 g
Article number		
PIV12,5-320		10 148
PIV12,5-320 DS		10 149



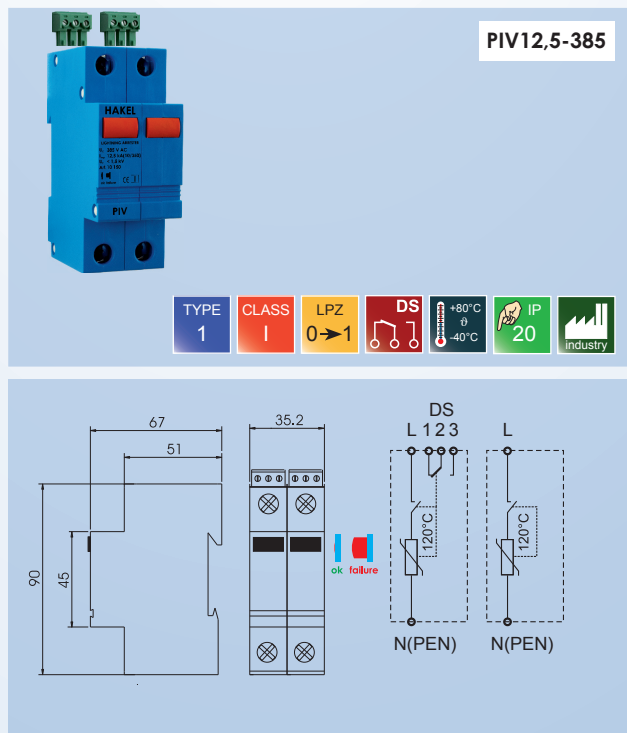


Function of remote monitor terminals

When the PIVM DS is operating correctly, the terminations 1-2 are connected to normally closed contacts, 2-3 are normally open. If the internal varistor component is damaged as a result of thermal overloading, terminations 1-2 will then be open and 2-3 closed.

el. strength against surround. circuits	3750 V _{rms}
el. strength against network circuits	3750 V _{rms}
insulation resistance	$2 \times 10^7 \Omega$
max. switching current	~ 0,5 A
max. switching voltage	~ 250 V

Single-pole MOV lightning arrester



PIV12,5-385

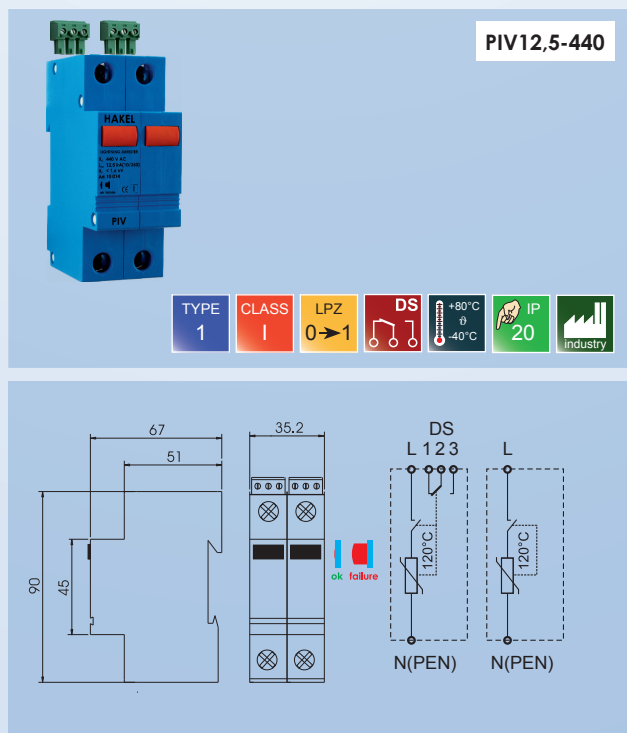
Type PIV12,5-385/ PIV12,5-385 DS

Max. continuous operating voltage	U_C	385 V AC
Lightning impulse current (10/350)	I_{imp}	12,5 kA
- charge	Q	6,25 As
- specific energy	W/R	39 kJ/Ω
Max. discharge current (8/20)	I_{max}	100 kA
Nominal discharge current (8/20)	I_n	50 kA
Temporary overvoltage (TOV)	U_T	560 V/5 sec
Voltage protection level at I_{imp}	U_p	< 1,5 kV
Response time	t_A	< 25 ns
Max. back-up fuse		250 AgL/gG
Lifetime		min.100 000 h
Short-circuit withstand capability at max.back-up fuse	I_p	60 kA _{rms}
Weight	m	234 g
Article number		
PIV12,5-385		10 150
PIV12,5-385 DS		10 151



M102

Single-pole MOV lightning arrester



PIV12,5-440

Type PIV12,5-440/PIV12,5-440 DS

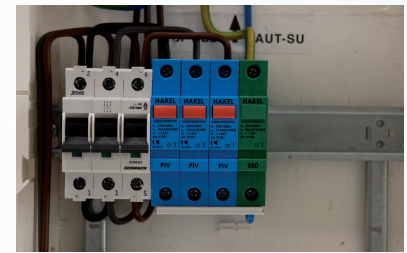
Max. continuous operating voltage	U_C	440 V AC
Lightning impulse current (10/350)	I_{imp}	12,5 kA
- charge	Q	6,25 As
- specific energy	W/R	39 kJ/Ω
Max. discharge current (8/20)	I_{max}	100 kA
Nominal discharge current (8/20)	I_n	50 kA
Temporary overvoltage (TOV)	U_T	580 V/5 sec
Voltage protection level at I_{imp}	U_p	< 1,6 kV
Response time	t_A	< 25 ns
Max. back-up fuse		250 AgL/gG
Lifetime		min.100 000 h
Short-circuit withstand capability at max.back-up fuse	I_p	60 kA _{rms}
Weight	m	236 g
Article number		
PIV12,5-440		10 014
PIV12,5-440 DS		10 024



M102

LIGHTNING ARRESTERS – GAS DISCHARGE TUBE

B25, B25M, B50, B80 and B100 are total current gas discharge tubes type 1 according to EN 61643-11 and are intended for use in TNS and TT systems (3+1 or 1+1) at the boundaries of LPZ 0 – 1. B25, B25M, B50, B80 and B100 are to be installed between N and PE only.



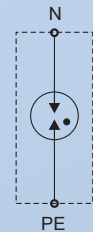
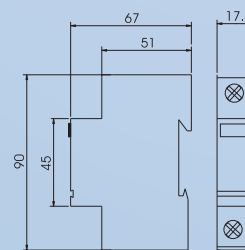
Type B25

Max. continuous operating voltage	U_C	255 V AC
Insulation resistance	R_i	> 1000 M Ω
Lightning impulse current (10/350)	I_{imp}	25 kA
- charge	Q	12,5 As
- specific energy	W/R	156 kJ/ Ω
Temporary overvoltage (TOV)	U_T	1200 V/0,2 sec
Max. discharge current (8/20)	I_{max}	50 kA
Nominal discharge current (8/20)	I_n	30 kA
Voltage protection level at I_{imp}	U_p	< 1,3 kV
Sparkover voltage 1,2/50 μ s		< 1,5 kV
Follow current interrupting rating at U_C	I_{fi}	100 A _{rms}
Response time	t_A	< 100 ns
Lifetime		min.100 000 h
Weight	m	72 g
Article number		30 024



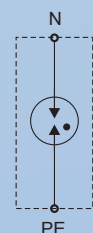
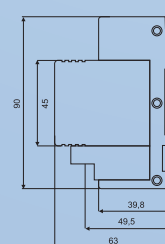
Single-pole Gas Discharge Tube

B25



Single-pole Gas Discharge Tube

B25M



Type B25M

Max. continuous operating voltage	U_C	255 V AC
Insulation resistance	R_i	> 1000 M Ω
Lightning impulse current (10/350)	I_{imp}	25 kA
- charge	Q	12,5 As
- specific energy	W/R	156 kJ/ Ω
Temporary overvoltage (TOV)	U_T	1200 V/0,200 sec
Max. discharge current (8/20)	I_{max}	50 kA
Nominal discharge current (8/20)	I_n	30 kA
Voltage protection level at I_{imp}	U_p	< 1,3 kV
Sparkover voltage 1,2/50 μ s		< 1,5 kV
Follow current interrupting rating at U_C	I_{fi}	100 A _{rms}
Response time	t_A	< 100 ns
Lifetime		min.100 000 h
Weight	m	73 g
Article number		30 124

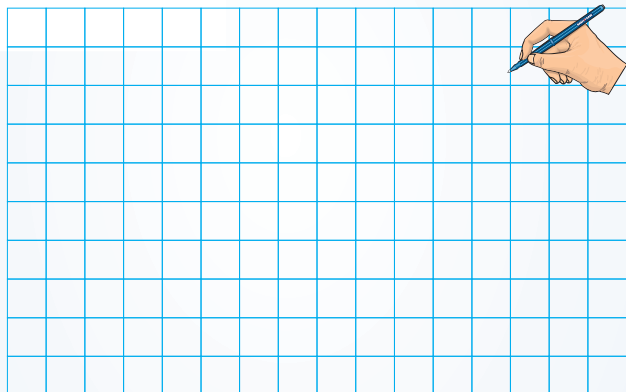


GDT-based spare module

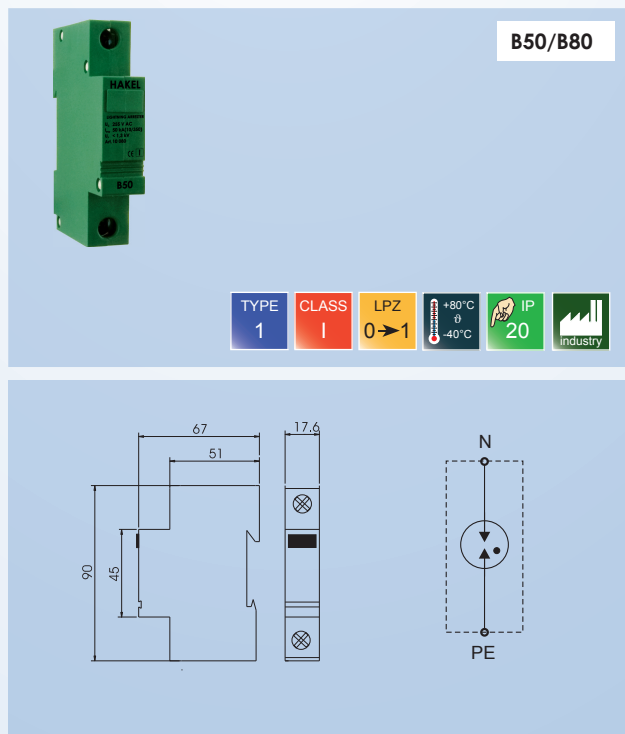
Art. No.

B25M/M

30 126



Single-pole Gas Discharge Tube



B50/B80

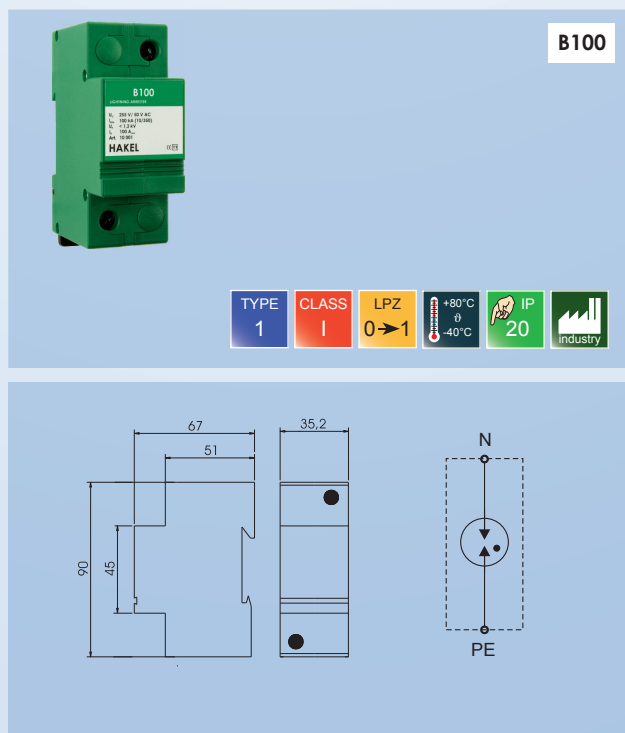
Type B50/B80

Max. continuous operating voltage	U_C	255 V AC
Insulation resistance	R_i	> 1000 M Ω
Lightning impulse current (10/350)	I_{imp}	50 kA/ 80 kA
- charge	Q	25 As/ 40 As
- specific energy	W/R	625 kJ/ Ω / 1600 kJ/ Ω
Temporary overvoltage (TOV)	U_T	1200 V/0,2 sec.
Max. discharge current (8/20)	I_{max}	75 kA
Nominal discharge current (8/20)	I_n	50 kA
Voltage protection level at I_{imp}	U_p	< 1,3 kV
Sparkover voltage 1,2/50 μ s		< 1,5 kV
Follow current interrupting rating at U_C	I_{fi}	100 A _{rms}
Response time	t_A	< 100 ns
Lifetime		min.100 000 h
Weight	m	116 g
Article number		
B50		10 050
B80		10 080



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Single-pole Gas Discharge Tube



B100

Type B100

Max. continuous operating voltage	U_C	255 V AC
Insulation resistance	R_i	> 1000 M Ω
Lightning impulse current (10/350)	I_{imp}	100 kA
- charge	Q	50 As
- specific energy	W/R	2500 kJ/ Ω
Temporary overvoltage (TOV)	U_T	1200 V/0,2 sec
Max. discharge current (8/20)	I_{max}	150 kA
Nominal discharge current (8/20)	I_n	75 kA
Voltage protection level at I_{imp}	U_p	< 1,3 kV
Sparkover voltage 1,2/50 μ s		< 1,5 kV
Follow current interrupting rating at U_C	I_{fi}	100 A _{rms}
Response time	t_A	< 100 ns
Lifetime		min.100 000 h
Weight	m	228 g
Article number		10 001



M.102

Application table									
Type	Art. No.	Former type	TE	Weight (g)	No. of poles	Circuit	I _{imp} (kA)	U _c (V)	Mode of protection
PIVM7-75	10 116		1	98	1	1+0	7	75	L/N, L/PEN, L/PE
PIVM7-75 DS	10 117		1	98	1	1+0	7	75	L/N, L/PEN, L/PE
PIVM7-150	10 018	PIVT - 120	1	106	1	1+0	7	150	L/N, L/PEN, L/PE
PIVM7-150 DS	10 019	PIVT - 120 DS	1	106	1	1+0	7	150	L/N, L/PEN, L/PE
PIVM7-275	10 021	PIVT - 230	1	99	1	1+0	7	275	L/N, L/PEN, L/PE
PIVM7-275 DS	10 022	PIVT - 230 DS	1	99	1	1+0	7	275	L/N, L/PEN, L/PE
PIVM7-320	10 156		1	106	1	1+0	7	320	L/N, L/PEN, L/PE
PIVM7-320 DS	10 157		1	106	1	1+0	7	320	L/N, L/PEN, L/PE
PIVM7-385	10 118		1	106	1	1+0	7	385	L/N, L/PEN, L/PE
PIVM7-385 DS	10 119		1	106	1	1+0	7	385	L/N, L/PEN, L/PE
PIVM7-440	10 028	PIVT - 400	1	108	1	1+0	7	440	L/N, L/PEN, L/PE
PIVM7-440 DS	10 029	PIVT - 400 DS	1	108	1	1+0	7	440	L/N, L/PEN, L/PE
PIV12,5-275	10 006	PIV - 230	1	140	1	1+0	12,5	275	L/N, L/PEN, L/PE
PIV12,5-275 DS	10 020	PIV - 230 DS	1	140	1	1+0	12,5	275	L/N, L/PEN, L/PE
PIV12,5-320	10 148		2	234	1	1+0	12,5	320	L/N, L/PEN, L/PE
PIV12,5-320 DS	10 149		2	234	1	1+0	12,5	320	L/N, L/PEN, L/PE
PIV12,5-385	10 150		2	234	1	1+0	12,5	385	L/N, L/PEN, L/PE
PIV12,5-385 DS	10 151		2	234	1	1+0	12,5	385	L/N, L/PEN, L/PE
PIV12,5-440	10 014	PIV - 400	2	236	1	1+0	12,5	440	L/N, L/PEN, L/PE
PIV12,5-440 DS	10 024	PIV - 400 DS	2	236	1	1+0	12,5	440	L/N, L/PEN, L/PE
B25	30 024		1	72	1	0+1	25	255	N/PE
B25M	30 124		1	73	1	0+1	25	255	N/PE
B50	10 050		1	116	1	0+1	50	255	N/PE
B80	10 080		1	116	1	0+1	80	255	N/PE
B100	10 001		2	228	1	0+1	100	255	N/PE

Recommended sets for TNC system

Set	Consisting of	TE	Weight (g)	No. of poles	Circuit	I _{total} (kA)	Application
PIVM7-275/3+0	3xPIVM7-275	3	297	3	3+0	-	Residential houses with standard equipment,
PIVM7-275 DS/3+0	3xPIVM7-275 DS	3	297	3	3+0	-	industrial structures free of people and internal equipment
PIV12,5-275/3+0	3xPIV12,5-275	3	318	3	3+0	-	The main switchboard in family houses,
PIV12,5-275 DS/3+0	3xPIV12,5-275 DS	3	318	3	3+0	-	smaller office buildings and agricultural buildings

Recommended sets for TNS system

PIVM7-275/4+0	4xPIVM7-275	4	396	4	4+0	-	Residential houses with standard equipment,
PIVM7-275 DS/4+0	4xPIVM7-275 DS	4	396	4	4+0	-	industrial structures free of people and internal equipment
PIV12,5-275/4+0	4xPIV12,5-275	4	560	4	4+0	-	The main switchboard in family houses,
PIV12,5-275 DS/4+0	4xPIV12,5-275 DS	4	560	4	4+0	-	smaller office buildings and agricultural buildings

Recommended sets for TNS and TT systems

PIVM7-275/3+1	3xPIVM7-275 + 1xB25M	4	370	4	3+1	25	Residential houses with standard equipment,
PIVM7-275 DS/3+1	3xPIVM7-275 DS + 1xB25M	4	370	4	3+1	25	industrial structures free of people and internal equipment
PIV12,5-275/3+1	3xPIV12,5-275 + 1xB50	4	434	4	3+1	50	The main switchboard in family houses,
PIV12,5-275 DS/3+1	3xPIV12,5-275 DS + 1xB50	4	434	4	3+1	50	smaller office buildings and agricultural buildings

Spare module

PIVM7-75/M	10 522
PIVM7-150/M	10 523
PIVM7-275/M	10 524
PIVM7-320/M	10 525
PIVM7-385/M	10 526
PIVM7-440/M	10 527
B25M/M	30 126

TE - dividing unit (17,5 mm)

Housing material - Polyamide PA6

Recommended cable cross-section of the connected conductors for B25, B50, B80, PIV and PIVM (at tightening torque of clamps 4Nm)

25 mm² (solid), 16 mm² (flexible)

Recommended cable cross-section of the connected conductors for B100 (at tightening torque of clamps 4Nm)

35 mm² (solid), 25 mm² (flexible)