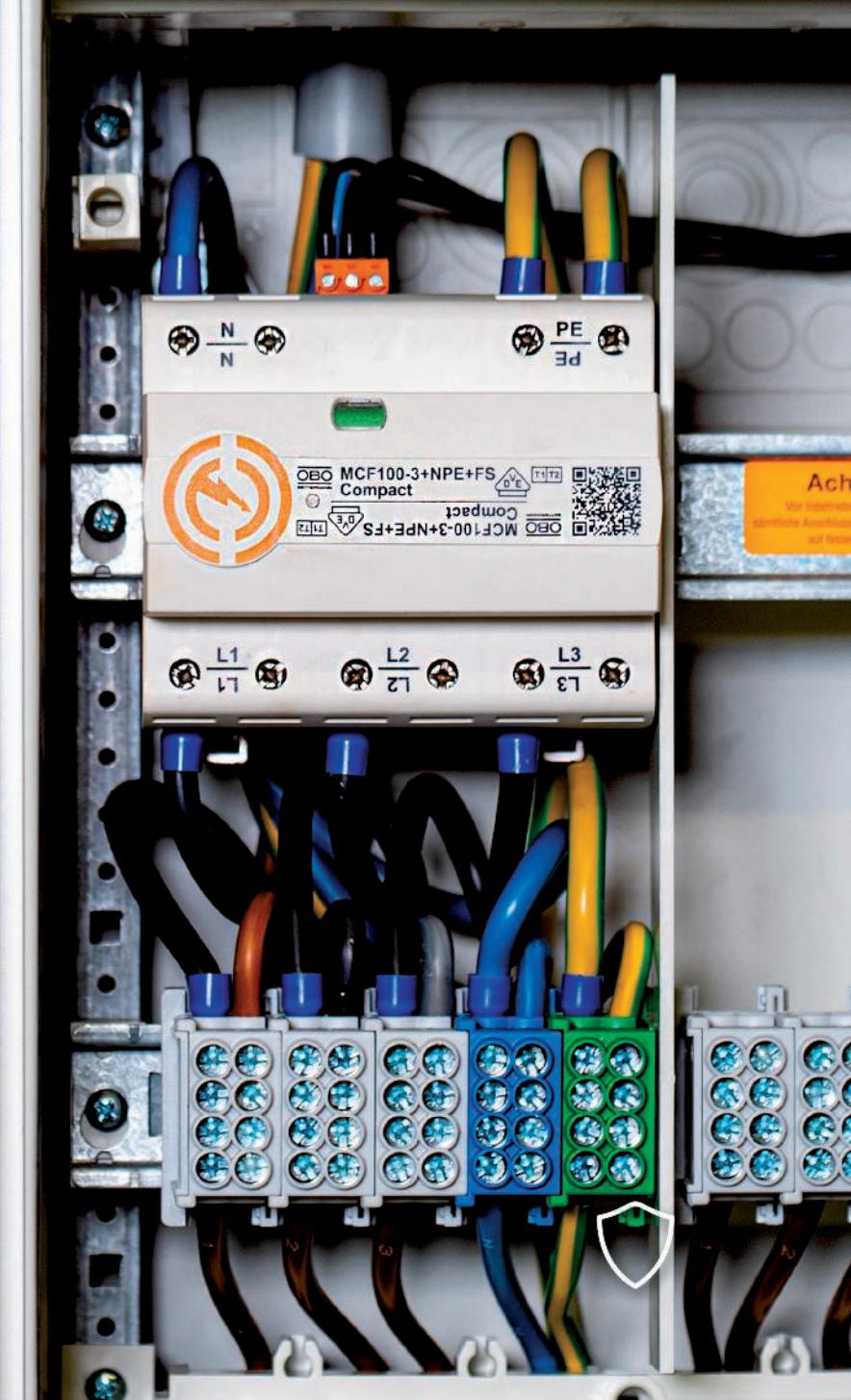




According to the IEC/EN standards
IEC 60364-4-44
IEC 60364-5-53
surge protection is frequently mandatory.



MCF Compact, V50 and V20

The team against surge voltages



Tested quality

Top of the agenda at the BET Test Centre is the expert testing of OBO's surge voltage and lightning protection systems. This also includes the testing of new developments, as well as the modifications to existing OBO lightning protection components, surge protective devices and lightning arresters.



OBO development

OBO production

External certification



Safety with surge protective devices

Surge protective devices (SPDs) increase safety and prevent dangerous surge voltage from entering the building via the power and telecommunication lines.

The SPDs reduce the surge voltage to a level which is not dangerous to terminals. This means they prevent short circuits and the resulting risk of fire.

Surge voltage damage

Damage from surge voltages occurs not only from direct lightning strikes, which can cause significant destruction. Serious damage to electronic devices and systems is more commonly caused by surge voltages from lightning strikes within a radius of two kilometres.

Building insurance generally offers protection against the costs of a direct lightning strike. For example, it will cover damage to the roof, masonry and also surge damage to permanently installed electrical installations, such as the heating controller. Surge damage to portable terminals such as computers, coffee machines or the TV is covered by the contents insurance. However, the insurance cannot prevent the annoyance when the devices fail. Additionally, the result of lightning strikes and the subsequent surge voltages can lead to costs from data loss and from loss of production.

Standards

IEC 60364-4-44 - Surge protection Required since October 2016

When is surge protection required?

- In every new electrical installation
- In every new or extended building
- Insurance companies demand surge protection

IEC 62305 - Lightning protection

When is a lightning protection system required?

- State building regulations (e.g. for schools, etc.)
- Risk analysis according to IEC 62305-2
- Insurance companies demand surge protection in general

Conclusion

Surge voltages endanger electronic devices and data

Surge protection is required for new buildings or modifications

This provides safety and protection for electrical installations and buildings

Type classes of surge protective devices



Building with lightning protection



Building with overhead line feed-in

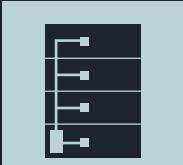


Type 1 + 2 combination arrester

Used at the feed point of the building



Buildings without lightning protection



Main and sub-distribution board



Type 2 surge protection

Used in main/sub distribution boards and switching cabinets.



Industry



Office, commercial
and residential
buildings



MCF Compact Lightning protection class I-IV

Fulfils the requirement of 100 kA (10/350) per
MCF Compact

Lightning protection class I - III



Office, commercial
and residential
buildings



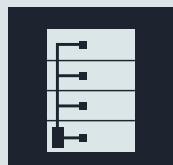
V50 Lightning protection class III-IV

Fulfils the requirement of 50 kA (10/350) per
V50

Lightning protection class III



Office, commercial
and residential
buildings



Main and sub-distribution board



V20

Used in main/sub distribution boards and
switching cabinets.

MCF-NAR combination arrester



- Tested according to VDE 0675-6-11 (EN 61643-11)
- Mounting on 40 mm busbars, TN and TT system
- Voltage protection level ≤ 1.5 kV to protect the terminals, with coordinated use for type 3 SPDs
- Lightning protection equipotential bonding according to VDE 0185-305 (IEC 62305)
- Lightning current discharge capacity up to 75 kA (10/350) 3-pin and up to 100 kA (10/350) 3+NPE
- Fulfils the requirements of VDE 0100-534 (IEC 60364-5-53)
- Follow current interrupt rating up to 50 kA and max. pre-fuse up to 315 A gLgG
- Visual display without power consumption
- Fulfils the requirements for use in main power supply systems before the meter



Matching adapter for voltage tapping

LightningController Compact MCF100



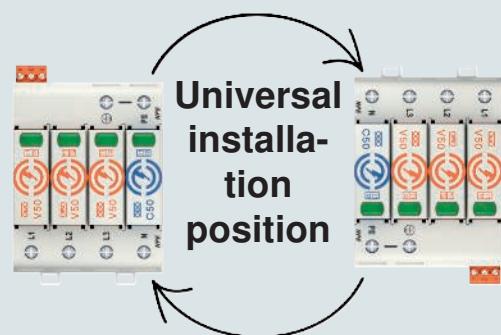
- Type 1 + 2 SPD: $I_{imp} = 25 \text{ kA}$ per pole and up to 100 kA in total
- Usable in buildings with lightning protection class 1-4
- Compact design, only 105 mm wide: Space savings of up to 25% for TNS and TT applications
- Protection level: < 1.5 kV, usable in coordination with type 3 SPD
- Safe up to mains following current of 50 kA
- Universally usable for industry, offices, commercial and residential buildings
- Quality according to EN 61643-11 certified by an external testing institute
- Corresponds to the pre-meter requirements VDE-AR-N 4100
- Usable for system protection up to 315 A without separate fusing
- Remote signalling, potential-free changeover contact
- Operating instructions always available online via QR code



V50 combination arrester



- Type 1 + 2 SPD: Imp = 12.5 kA per pole and up to 50 kA in total
- Usable in buildings with lightning protection class III + IV
- Protection level: < 1.3 kV, usable in coordination with type 3 SPD
- Quality according to EN 61643-11 certified by an external testing institute
- Universally usable for offices, commercial and residential buildings
- Can be installed universally through 90° labelling
- System protection up to 160 A usable without separate fusing
- Locking function with vibration protection
- Voltage variants: 150 V, 280 V, 320 V, 385 V
- Optional remote signalling, potential-free changeover contact
- Variants in one to four-pole versions
- Operating instructions always available online via QR code



Surge arrester V20



- Type 2 SPD: In = 20 kA (L-N) / 40 kA (N-PE), up to 60 kA
- Protection level: < 1.5 kV, usable in coordination with type 3 SPD
- Exceeds the increased requirements according to VDE 0100-443
- Quality according to EN 61643-11 certified by an external testing institute
- Universally usable for industry, offices, commercial and residential buildings
- Locking function with vibration protection
- System protection up to 160 A usable without separate fusing
- Can be installed universally through 90° labelling
- Voltage variants: 75 V, 150 V, 280 V, 320 V, 385 V, 440 V, 550 V
- Optional remote signalling, potential-free changeover contact
- Variants in one to four-pole versions
- Operating instructions always available online via QR code



OBO checklist



Complete lightning and surge protection

As a manufacturer, OBO offers both components for external lightning protection and earthing as well as for equipotential bonding and surge protection.



Support

For us, active customer proximity means offering help and advice whenever we are needed:

Customer Service Germany
Service hotline: +49 (0)2371 7899-2000
Fax: +49 (0)2373 89-1238
E-mail: export@obo.de
www.obo-bettermann.com



Brochures and selection aids

The OBO lightning protection guide and brochures offer support in the planning of lightning and surge protection systems.



Seminars and workshops

At the OBO Campus and also on-site, we are available to pass on our practical knowledge to you through seminars and planner days.



Expertise

At the BET Test Centre, highly qualified specialists test the OBO lightning protection components and surge protection devices in accordance with the relevant standards.



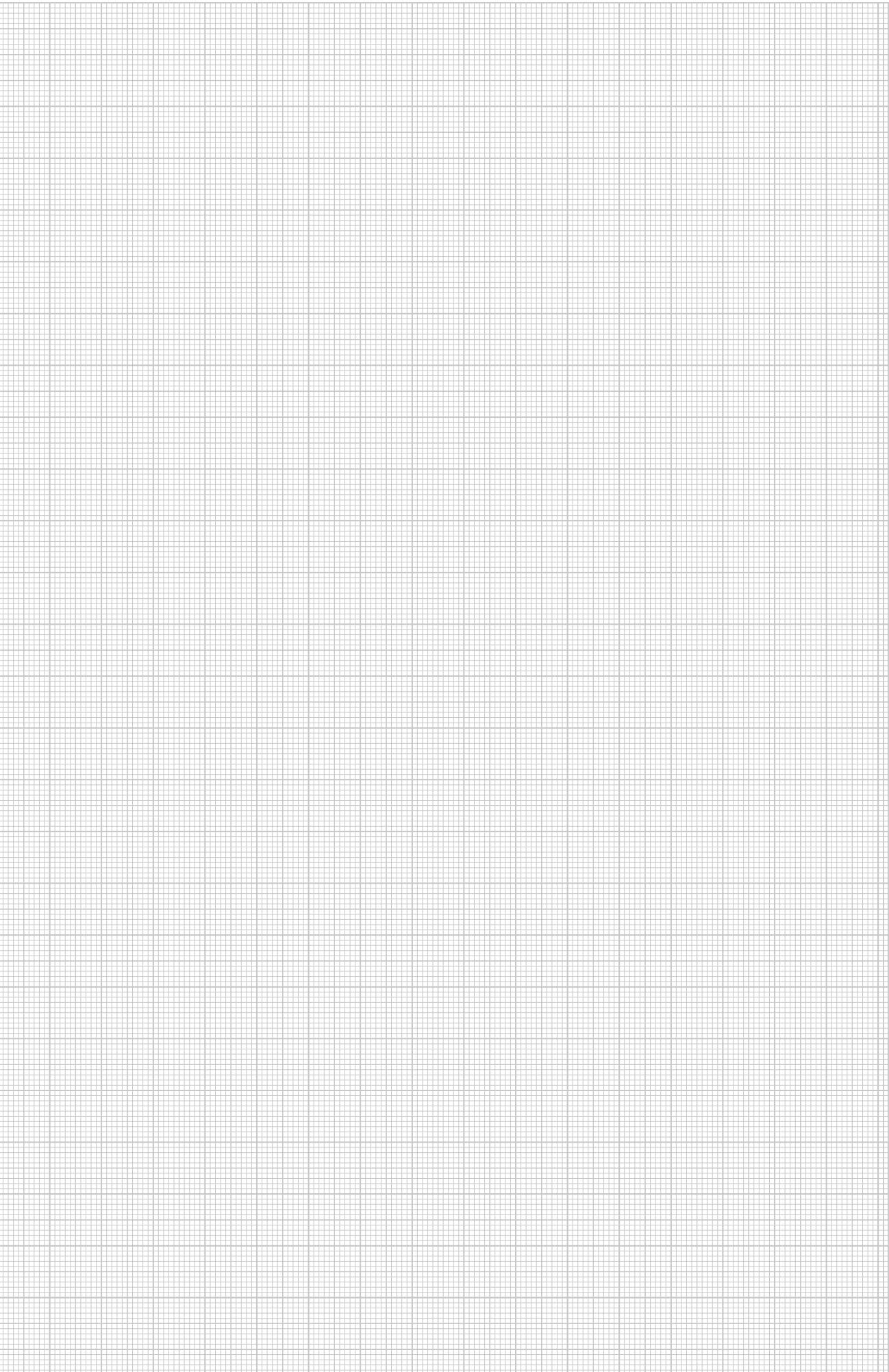
Certified

External tests, e.g. by VDE, ÖVE, KEMA and UL, are available for many products.



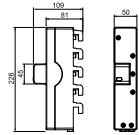
Warranty

OBO offers a high level of quality and surge protection devices with a 5-year warranty.



Main distributor

LightningController - MCF25-NAR-TNC



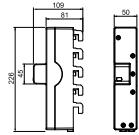
Type	Max. continuous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF25-NAR-TNC	255	3	IP20	1	100.800	5096950

Connection options

MCF25-NAR-TNC

Lightning surge current (10/350 µs)	I_{imp}	8.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	25 kA

LightningController - MCF25-NAR-TNC+FS



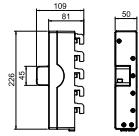
Type	Max. continuous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF25-NAR-TNC+FS	255	3	IP20	1	102.000	5096953

Connection options

MCF25-NAR-TNC+FS

Lightning surge current (10/350 µs)	I_{imp}	8.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	25 kA

LightningController - MCF30-NAR-TT



Type	Max. continuous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF30-NAR-TT	255	3+N/PE	IP20	1	107.504	5096961

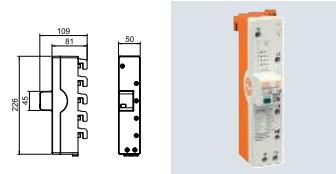
Connection options

MCF30-NAR-TT

Lightning surge current (10/350 µs)	I_{imp}	7.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	30 kA

LightningController - MCF30-NAR-TT+FS

Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF30-NAR-TT+FS	255	3+N/PE	IP20	1	107.600	5096963

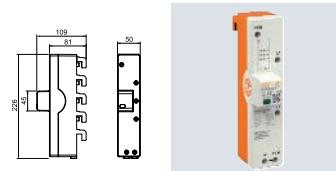

MCF30-NAR-TT+FS

Lightning surge current (10/350 µs)	I_{imp}	7.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	30 kA

Connection options

LightningController - MCF38-NAR-TNC

Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF38-NAR-TNC	255	3	IP20	1	100.800	5096971

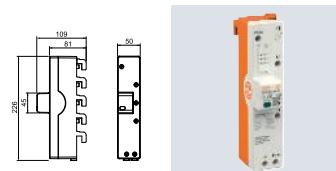

MCF38-NAR-TNC

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	38 kA

Connection options

LightningController - MCF38-NAR-TNC+FS

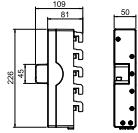
Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF38-NAR-TNC+FS	255	3	IP20	1	102.000	5096973


MCF38-NAR-TNC+FS

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	38 kA

Connection options

LightningController - MCF50-NAR-TT



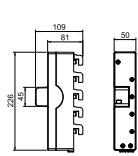
Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF50-NAR-TT	255	3+N/PE	IP20	1	106.700	5096975

Connection options

MCF50-NAR-TT

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	50 kA

LightningController - MCF50-NAR-TT+FS



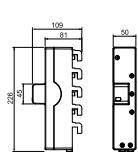
Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF50-NAR-TT+FS	255	3+N/PE	IP20	1	107.500	5096977

Connection options

MCF50-NAR-TT+FS

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	50 kA

LightningController - MCF75-NAR-TNC



Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF75-NAR-TNC	255	3	IP20	1	100.800	5096982

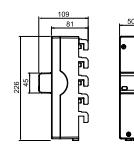
Connection options

MCF75-NAR-TNC

Lightning surge current (10/350 µs)	I_{imp}	25 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	25 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	75 kA

LightningController - MCF75-NAR-TNC+FS

Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF75-NAR-TNC+FS	255	3	IP20	1	102.000	5096983

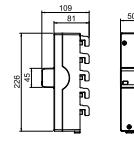

MCF75-NAR-TNC+FS

Lightning surge current (10/350 µs)	I_{imp}	25 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	25 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	75 kA

Connection options

LightningController - MCF100-NAR-TT

Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF100-NAR-TT	255	3+N/PE	IP20	1	107.200	5096985

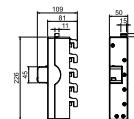

MCF100-NAR-TT

Lightning surge current (10/350 µs)	I_{imp}	25 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	25 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	100 kA

Connection options

LightningController - MCF100-NAR-TT+FS

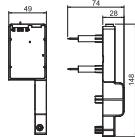
Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF100-NAR-TT+FS	255	3+N/PE	IP20	1	107.600	5096988


MCF100-NAR-TT+FS

Lightning surge current (10/350 µs)	I_{imp}	25 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	25 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	100 kA

Connection options

Voltage tap for MCF-NAR series



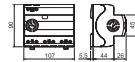
Type	Nominal voltage AC (50/60 Hz) V	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF-NAR-SMG	230	IP20	1	5.850	5096900

Adapter for voltage tap in power-side connection compartment

- Simple and space-saving voltage taps for the termination point meter position (APZ) and the space for additional applications (RZ)
- With spring contacts for easy connection of wires
- Includes 2 plug sockets
- Safety screw to prevent unwanted loosening
- Replaceable 5 A fine-wire fuse with a breaking capacity of 50 kA
- Fuse holder 6.3 x 32 mm

MCF, Type 1+2 combination arrester

LightningController Compact - MCF75



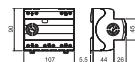
Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF75-3+FS	255	3	IP20	1	75.000	5096981

Connection options

MCF75-3+FS

Lightning surge current (10/350 µs)	I_{imp}	25 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	35 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	75 kA

LightningController Compact - MCF100



Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
MCF100-3+NPE+FS	255	3+N/PE	IP20	1	93.500	5096987

Connection options

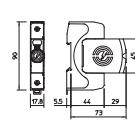
MCF100-3+NPE+FS

Lightning surge current (10/350 µs)	I_{imp}	25 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	35 kA
Protection level	U_p	1.5 kV
Lightning surge current (10/350)	I_{total}	100 kA

PA

Combination arrester V50, 1-pole 280 V

Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-1-280	280	1	IP20	1	16.400	5093500



V50-1-280

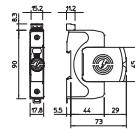
Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	30 kA
Lightning surge current (10/350)	I_{total}	— kA
Protection level	U_p	1.3 kV

Connection options

PA

Combination arrester V50, 1-pole with FS 280 V

Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-1+FS-280	280	1	IP20	1	16.600	5093502

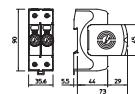


V50-1+FS-280

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	30 kA
Lightning surge current (10/350)	I_{total}	— kA
Protection level	U_p	1.3 kV

Connection options

Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-1+NPE-280	280	1+N/PE	IP20	1	32.929	5093522



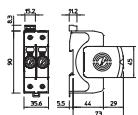
V50-1+NPE-280

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	30 kA
Lightning surge current (10/350)	I_{total}	25 kA
Protection level	U_p	1.3 kV

Connection options

V50, type 1 + 2 combination arrester

Combination arrester V50, 1-pole + NPE with FS 280 V



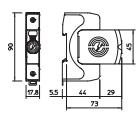
Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-1+NPE+FS-280	280	1+N/PE	IP20	1	30.600	5093531

Connection options

V50-1+NPE+FS-280

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	30 kA
Lightning surge current (10/350)	I_{total}	25 kA
Protection level	U_p	1.3 kV

Combination arrester V50, 3-pole 280 V



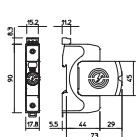
Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-3-280	280	3	IP20	1	46.500	5093511

Connection options

V50-3-280

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	30 kA
Lightning surge current (10/350)	I_{total}	37.5 kA
Protection level	U_p	1.3 kV

Combination arrester V50, 3-pole with FS 280 V



Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-3+FS-280	280	3	IP20	1	46.900	5093516

Connection options

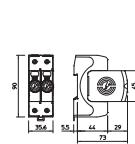
V50-3+FS-280

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	30 kA
Lightning surge current (10/350)	I_{total}	37.5 kA
Protection level	U_p	1.3 kV

V50, type 1 + 2 combination arrester

Combination arrester V50, 3-pole + NPE 280 V

Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-3+NPE-280	280	3+N/PE	IP20	1	58.800	5093526



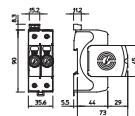
V50-3+NPE-280

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	30 kA
Lightning surge current (10/350)	I_{total}	50 kA
Protection level	U_p	1.3 kV

Connection options

Combination arrester V50, 3-pole + NPE with FS 280 V

Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-3+NPE+FS-280	280	3+N/PE	IP20	1	59.300	5093533



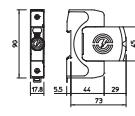
V50-3+NPE+FS-280

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	30 kA
Lightning surge current (10/350)	I_{total}	50 kA
Protection level	U_p	1.3 kV

Connection options

Combination arrester V50, 4-pole 280 V

Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-4-280	280	4	IP20	1	61.000	5093513



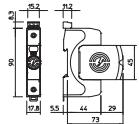
V50-4-280

Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n/L-N}$	30 kA
Lightning surge current (10/350)	I_{total}	50 kA
Protection level	U_p	1.3 kV

Connection options

V50, type 1 + 2 combination arrester

Combination arrester V50, 4-pole with FS 280 V



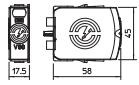
Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-4+FS-280	280	4	IP20	1	61.500	5093518

Connection options

V50-4+FS-280

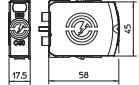
Lightning surge current (10/350 µs)	I_{imp}	12.5 kA
Nominal discharge current (8/20 µs)	$I_{n / L-N}$	30 kA
Lightning surge current (10/350)	I_{total}	50 kA
Protection level	U_p	1.3 kV

Plug-in arrester V50 280 V



Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V50-0-280	280	1	IP20	1	8.500	5093508

Plug-in arrester NPE-C50



Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
C50-0-255	255	N/P/E	IP20	1	7.215	5095609

V20, type 2 surge protection device

Surge arrester V20, 1-pole, 280 V



Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-1-280	280	1	IP20	1	12.900	5095161

Connection options

V20-1-280

Nominal discharge current (8/20 µs)	$I_{n / L-N}$	20 kA
Arrester surge current (8/20 µs) [total]	I_{total}	40 kA
Protection level	U_p	1.3 kV

Surge arrester V20, 1-pole with remote signalling, 280 V

Type	Max. contin- uous voltage AC V	Pole	Protec- tion version	rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-1+FS-280	280	1		IP20	1	13.100	5095281



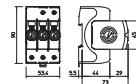
V20-1+FS-280

Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Arrester surge current (8/20 µs) [total]	I_{total}	40 kA
Protection level	U_p	1.3 kV

Connection options

Surge arrester V20, 1-pole + NPE, 280 V

Type	Max. contin- uous voltage AC V	Pole	Protec- tion version	rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-1+NPE-280	280	1+N/PE		IP20	1	24.300	5095251



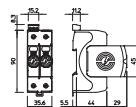
V20-1+NPE-280

Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Arrester surge current (8/20 µs) [total]	I_{total}	60 kA
Protection level	U_p	1.3 kV

Connection options

Surge arrester V20, 1-pole + NPE and remote signalling, 280 V

Type	Max. contin- uous voltage AC V	Pole	Protec- tion version	rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-1+NPE+FS-280	280	1+N/PE		IP20	1	24.600	5095331



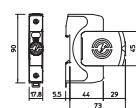
V20-1+NPE+FS-280

Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Arrester surge current (8/20 µs) [total]	I_{total}	60 kA
Protection level	U_p	1.3 kV

Connection options

Surge arrester V20, 3-pole, 280 V

Type	Max. contin- uous voltage AC V	Pole	Protec- tion version	rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-3-280	280	3		IP20	1	36.000	5095163



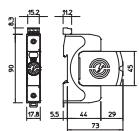
V20-3-280

Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Arrester surge current (8/20 µs) [total]	I_{total}	120 kA
Protection level	U_p	1.3 kV

Connection options

V20, type 2 surge protection device

Surge arrester V20, 3-pole with remote signalling, 280 V



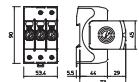
Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-3+FS-280	280	3	IP20	1	36.400	5095283

Connection options

V20-3+FS-280

Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Arrester surge current (8/20 µs) [total]	I_{total}	120 kA
Protection level	U_p	1.3 kV

Surge arrester V20, 3-pole + NPE, 280 V



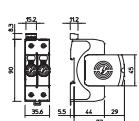
Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-3+NPE-280	280	3+N/PE	IP20	1	45.800	5095253

Connection options

V20-3+NPE-280

Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Arrester surge current (8/20 µs) [total]	I_{total}	60 kA
Protection level	U_p	1.3 kV

Surge arrester V20, 3-pole + NPE and remote signalling, 280 V



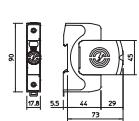
Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-3+NPE+FS-280	280	3+N/PE	IP20	1	46.300	5095333

Connection options

V20-3+NPE+FS-280

Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Arrester surge current (8/20 µs) [total]	I_{total}	60 kA
Protection level	U_p	1.3 kV

Surge arrester V20, 4-pole, 280 V



Type	Max. continuous voltage AC V	Pole version	Protection rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-4-280	280	4	IP20	1	47.000	5095164

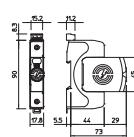
Connection options

V20-4-280

Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Arrester surge current (8/20 µs) [total]	I_{total}	160 kA
Protection level	U_p	1.3 kV

Surge arrester V20, 4-pole with remote signalling, 280 V

Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-4+FS-280	280	4	IP20	1	47.500	5095284

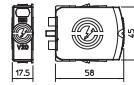

V20-4+FS-280

Nominal discharge current (8/20 µs)	$I_{n/L-N}$	20 kA
Arrester surge current (8/20 µs) [total]	I_{total}	160 kA
Protection level	U_d	1.3 kV

Connection options

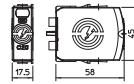
Plug-in arrester V20 280 V

Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
V20-0-280	280	1	IP20	1	5.000	5095364



Plug-in arrester C20

Type	Max. contin- uous voltage AC V	Pole version	Protec- tion rating	Pack Piece	Weight kg/100 pc.	Item no.
C20-0-255	255	N/PE	IP20	1	3.680	5095600



Lightning protection guide

Safely conducted

Reference work and planning aid for electrical installation engineers, lightning protection specialists and planners.

The surge protection guide is available to order or to download at www.obo-bettermann.com.



Basic knowledge

Expert knowledge

New selection aids

- Lightning and surge protection as part of fire protection
- New high-voltage-resistant, insulated isCon® conductors and selection aid
- Lightning protection in potentially explosive areas
- Protection angle calculation and protection rating recommendation
- Formation of equipotential areas
- Combination arrester type 1+2 in mains-side connection compartment
- Definition of construction material classes according to EN 13501-1
- Explanations of IEC 60364-4-44 and -5-53

Valuable

OBO support at your side



Service



Training



Handling



Certification

You can contact our Customer Service department on:

+44 7899-2000

Monday–Thursday
07.30–17.00

Friday
07.30–15.00

export@obo.de

Service – OBO can help

Everywhere and in every project phase:

- Competent hotline
- Product and system information, digitally or printed
- Selection and planning aids on the web, as an app, as a CAD application or in printed form
- 2D and 3D product data for planning
- Field service, branch offices and subsidiaries in 60 countries
- Engineering services for major projects

Training courses from OBO

- Seminars and workshops
- Local consultation and training courses
- Planner days

Handling – OBO delivers reliably

With optimised delivery processes:

- Reliable logistics
- Practical transport systems and packaging
- Loading gear handling and disposal concepts

Certification and guarantee

OBO offers safety. Our products fulfil the most important country-specific regulations:

- Conformity (e.g. IEC, VDE, CE, KEMA, KEUR, UL)
- Certification (e.g. DIN EN, DGNB)
- 5-year guarantee for surge protection products
- Guarantee management

OBO Bettermann Holding GmbH Co. KG

P.O. Box 1120
58694 Menden, Germany

Customer Service

Tel.: +49 23 73 89 - 17 00
Fax: +49 23 73 89 - 12 38
export@obo.de

www.obo-bettermann.com

Building Connections

