

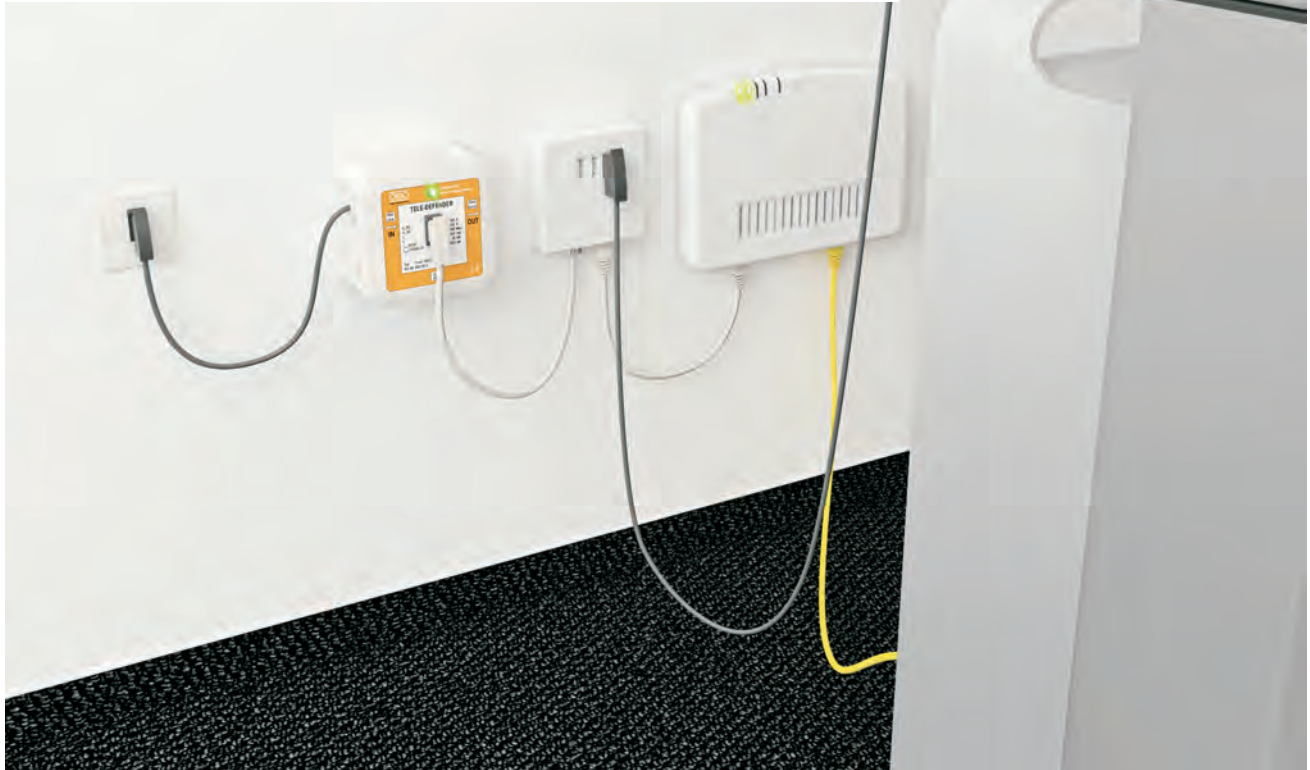
## The new Tele Defender generation protection for telecommunication-systems

**OBO**  
BETTERMANN



**THINK CONNECTED.**

## The Tele Defender with new voltage and current limiting technology



### High frequency bandwidth and high discharge durability due to new technology

The new Tele Defender, offers with its high frequency bandwidth of up to 100 MHz a wide range of applications for protection in telecommunication and measurement and control systems. With its new voltage and current limiting technology the Tele Defender allows high discharge durability for induced over voltages and for direct lightning currents.

### Visual function display

One of the new features is an optical function display designed with a flashing LED. The function of the Tele Defender can therefore be reviewed at any time.

### Splash-water protected and easy to assemble

The IP54 protected housing is developed for the use in cellar areas. The self-sealing plastic in combination with the push-in terminals allow a quick and easy installation of the signal lines.

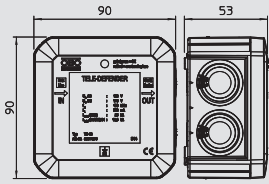
### Variants

The Tele Defender is available in two versions:

- TD-4/I for the classical assembly in cellars, at building entrances to handle lightning currents.
- TD-4/I-TAE-F for plug and play solution in combination with TAE-socket in living areas.
- TD-2/D-HS for hut mounting rail in cabinets or boxes to protect a single pair.



# Surge protection for telecommunication systems



## Tele-Defender

Type	Max. continuous operating voltage Vc/AC V	Max. continuous operating voltage Vc/DC V	Number of poles	Connection system	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>TD-4/I</b>	120	170	4	Terminal	1	11,000	<b>5081 69 0</b>

Plastic

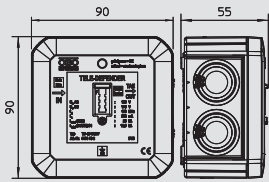
/pc.

Data cable protection devices for telecommunications equipment

- Low protection level at a high current load
- "Push-In" clamps for quick installation
- Bandwidth-optimised for secure transmission
- Surface mounting
- Optical function display

Application: DSL systems, ISDN or analogue telecommunications

<b>IP 54</b>	<b>LPZ 0→3</b>	<b>ISDN</b>	<b>DSL</b>
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## Tele-Defender TAE

Type	Max. continuous operating voltage Vc/AC V	Max. continuous operating voltage Vc/DC V	Number of poles	Connection system	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>TD-4/I-TAE-F</b>	120	170	4	Terminal	1	12,300	<b>5081 69 2</b>

Plastic

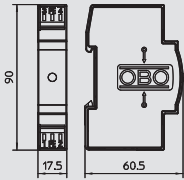
/pc.

Data cable protection devices for telecommunications equipment

- Low protection level at a high current load
- "Push-In" clamps for quick installation
- Bandwidth-optimised for secure transmission
- Pre-installed TAE-socket for Plug & Play
- Surface mounting
- Optical function display

Application: DSL systems, ISDN or analogue telecommunications

<b>IP 20</b>	<b>LPZ 0→3</b>	<b>ISDN</b>	<b>DSL</b>
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## Tele-Defender HS

Type	Max. continuous operating voltage Vc/AC V	Max. continuous operating voltage Vc/DC V	Number of poles	Connection system	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>TD-2/D-HS</b>	120	170	2	Terminal	1	4,800	<b>5081 69 4</b>

Plastic

/pc.

Data cable protection devices for telecommunications equipment

- Available as basic, medium and fine protection
- Low protection level at high current load
- Screwless terminals
- Bandwidth-optimised for secure transmission
- Quick mounting on hat rail or wall mounting

Application: DSL systems, ISDN or analogue telecommunications

<b>IP 20</b>	<b>LPZ 0→3</b>	<b>ISDN</b>	<b>DSL</b>
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		TD-4/I	TD-4/I-TAE-F	TD-2/D-HS
Maximum continuous voltage Vc/AC	V	120	120	120
Maximum continuous voltage Vc/DC	V	170	170	170
Lightning protection Zone LPZ		0→2	0→2	0→2
Number of poles		4	4	2
Nominal load current IL AC	A	0,14	0,14	0,14
Nominal load current IL DC	A	0,2	0,2	0,2
Capacity (wire-wire)		< 50 pF	< 50 pF	< 50pF
Capacity (wire-earth)		< 10 pF	< 10 pF	< 50pF
Serial impedance per path	Ω	9Ω ± 10 %	9Ω ± 10 %	9Ω ± 10 %
Total arrester peak current (8/20)	kA	25	25	10
Total impulse durability (10/350)	kA	D1: 12,5	D1: 12,5	D1: 5 kA
Protection level line-line (1a-ab/2a-2b)	V	300	300	300
Protection level line-earth (1a-ab/2a-2b-PE)	V	650	650	650
Protection level shield-earth (S-PE)	V	850	850	850
Temperature range	θ °C	-40 - +80	-40 - +80	-40 - +80
Installation type		Surface-mounted	Surface-mounted	DIN rail
Protection rating		IP54	IP20	IP20
Shielding connection available		Yes	Yes	No
Shield connection		Indirect	Indirect	Direct
Connection cross-section, flexible	mm <sup>2</sup>	0,14 - 0,75	0,14 - 0,75	0,14 - 2,5
Connection cross-section, multi-wire	mm <sup>2</sup>	0,14 - 0,75	0,14 - 0,75	0,14 - 2,5
Connection cross-section, rigid	mm <sup>2</sup>	0,14 - 0,75	0,14 - 0,75	0,14 - 2,5
Testing standard		IEC 61643-21	IEC 61643-21	IEC 61643-21
<b>Item No.</b>		<b>5081 69 0</b>	<b>5081 69 2</b>	<b>5081 69 4</b>

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