

## Surge Protection

### EnerPro C TN

**EP C TN 275 (/FM)**  
**EP C TNC 275 (/FM)**  
**EP C TNS 275 (/FM)**

Combined multi-pole Surge Protective Device (SPD) protection category **T2** (C)  
meeting the requirements of class II

used as Surge Protector in multi-pole TN - Power Net Systems



- Category **T2** Surge Protective Device (SPD)
- based on hermetically encapsulated gas filled Spark-Gaps
- Leakage-current-free to protect foundation grounding lines
- Can be co-ordinated with upstream installed **T1** lightning current SPD
- Optical front monitoring by LED
- Function control with potential-free (NC) remote signal contact (optional)

### Product description

Leutron leakage current free SPD's of series EP C... with surge voltage valve are single block SPD's, for different TN - Power Net Systems, usually installed in sub-distribution panels.

**EP C TN 275(/FM)** is a **two-pole** surge protector for TN - Power Net Systems.

**EP C TNC 275(/FM)** is a **three-pole** surge protector for TNC - Power Net Systems.

**EP C TNS 275(/FM)** is a **four-pole** surge protector for TNS - Power Net Systems.

These SPD's are used as surge protectors for electronic equipments and systems. They are fitted with a thermal protection NC contact, which respond if the varistor exceed a certain level of temperature due to thermal overload.

These thermal protection contact works in such a way, that they only cut off the SPD from the power supply whilst the electrical equipment will not suffer any functioning failure; in that case the green signal LED will go out.

Before this happens, the remote contact (optional) inside the housing will open and signalise that the SPD has to be replaced. The wire connection to the built in remote contact (/FM) is made by a plug-gable screw terminal block.

The protective circuit is installed in an easy-to-handle compact housing with snap-on clips for 35 mm DIN rail mounting with multifunctional screw terminals for wire and bus-bar connections.

**Protectes People and Valuables**



## Technical Data:

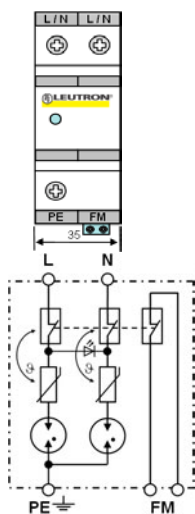
Type	Art. Nr.:	Remarks
EP C TN 275 EP C TN /FM	381 247 381 248	resp. one phase and neutral (L1 / N – PE) with remote signal contact
EP C TNC 275 EP C TNC 275 /FM	381 176 381 177	for three phases (L1 / L2 / L3 – PEN) with remote signal contact
EP C TNS 275 EP C TNS 275 /FM	381 178 381 179	for three phases and neutral (L1 / L2 / L3 / N – PE) with remote signal contact

Protection category acc. to E DIN VDE 0675-6 11/98-A1 and acc. to EN 61643-11 resp. IEC 61643-1			<b>T2 (C) class II</b>
Nominal voltage 50/60 Hz	$U_N$	[V]	230 / 400
Rated voltage (max. continuous operating voltage) 50/60 Hz	$U_C$	[V]	275
Max. permissible line- or backup fuse	$I$	[A]	100 A gL/gG
Voltage protection level at 5kA (8/20 $\mu$ s)	$U_P$	[kV]	$\leq 1.0$
Voltage protection level at $i_{sn}$ (8/20 $\mu$ s)	$U_P$	[kV]	$\leq 1.4$
Response time	$t_A$	[ns]	$< 25$
Nominal discharge current (8/20 $\mu$ s)	$i_{sn} (I_N)$	[kA]	10x 15
Max. discharge current (8/20 $\mu$ s)	$I_{max}$	[kA]	1x 40
Service life test current (10/700 $\mu$ s)	$i_L$	[A]	500x 100 100x 500 1x 1000
Operating temperature range	$t$	[°C]	-40 ... +85
Max. cross-sectional area		[mm <sup>2</sup> ]	50 stranded / 35 flexible
Recommended cross-sectional area		[mm <sup>2</sup> ]	25
Recommended connection torque		[Nm]	4,5
Max. cross-sectional area for remote signal contact terminal		[mm <sup>2</sup> ]	1,5
Max. switching capacity of remote signal contact (FM)		[V/A]	AC 250V 0.5A
Material of housing / colour	Polycarbonate (halogen free) UL94-V0 / yellow		
Ambient protection category (IEC/EN 60529)	IP 20		
Mounting on	DIN rail 35mm (DIN / EN 50022)		

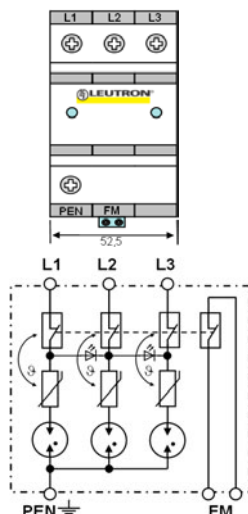
## Dimension in mm / Diagram

Dimension acc. DIN 43880

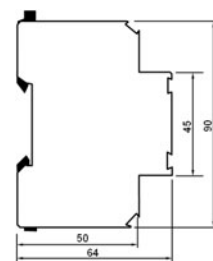
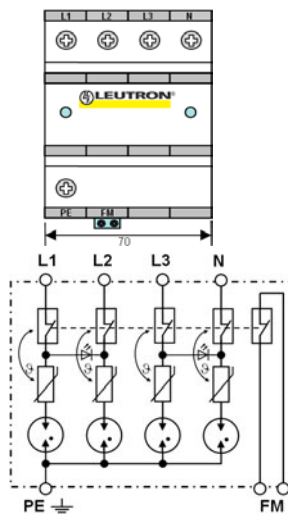
EP C (2 modules)



EP C TNC (3 modules)



EP C TNS (4 modules)



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Subject to technical modifications and delivery possibilities

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