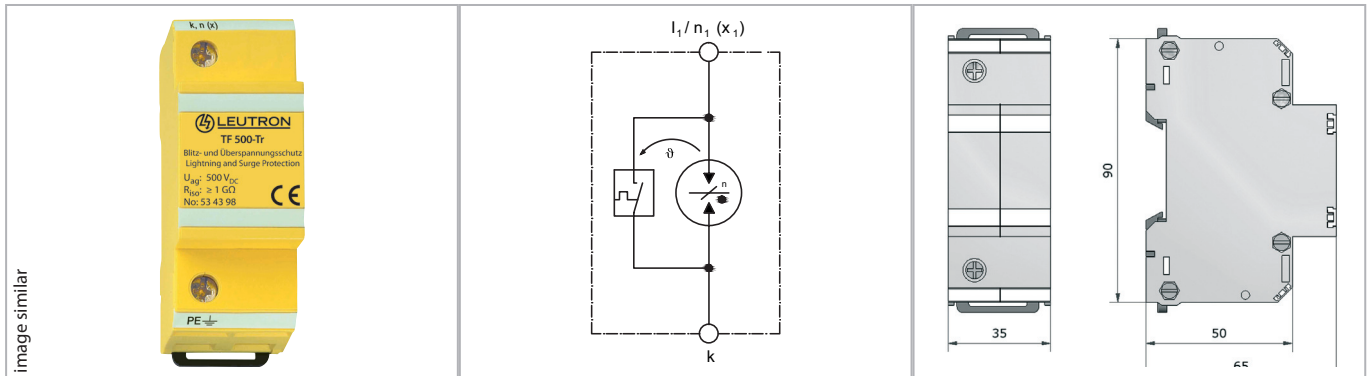


# Datasheet

## Rare-gas-filled insulation spark gaps

### DIN rail mounting



Protects measuring transformers; lightning and surge voltage protector for 1A respectively 5A cores in current transformers.

- Very high impulse and AC current resistivity
- No blow-out vents, thus, not requiring any safety clearance to other installations
- High insulation resistance Risol:  $\geq 1 \text{ G}\Omega$
- Very long service life
- Lightning impulse current discharge capacity 100 kA (10/350  $\mu\text{s}$ )
- EAC certification

Technical Data	TF 500-Tr	
DC spark-over voltage (100 V/s)	U <sub>ag</sub>	500 $\pm 20\%$ V=
Nominal AC sparkover voltage (50 Hz)	U <sub>aw</sub>	350 $\pm 20\%$ V
Impulse sparkover voltage typ. at 1 kV/ $\mu\text{s}$	U <sub>as</sub>	1000 / max. 1300 V=
Impulse sparkover voltage at 1 kV/ns (100 MHz)	U <sub>as</sub>	typ. 2800 / max. 3000 V
Capacitance	C	$\leq 6 \text{ pF}$
Insulation resistance at 10 V	Ris	$\geq 1 \text{ G}\Omega$
Nominal discharge current (8/20 $\mu\text{s}$ )	I <sub>n</sub>	10x 100 kA
Lightning impulse current (10/350) (limp) + long-time current 200 A/0.5 s/100 As	I <sub>peak</sub> / Q / W/R	1x 100 kA / 50 As / 2500 kJ/ $\Omega$
Lightning impulse current limp (10/45 $\mu\text{s}$ ) + half-wave 1.6 kA (DIN 48810)	I <sub>peak</sub> / Q / W/R	20x 60 kA / 10 As / 100 kJ/ $\Omega$
5x Nominal alternating discharge current at 50 Hz, 1 s, 3 min pause	I <sub>wn</sub>	100 A/s
Alternating current critical load (50 Hz) (1x 0.3s)	I <sub>wgr</sub>	3 Aeff/s
Operating temperature range	TU	-40 - +75 °C
Max. conductor cross section		50 mm <sup>2</sup> stranded/35 mm <sup>2</sup> flexible
Recommended conductor cross section		25 mm <sup>2</sup>
Max. connection torque for terminals		4,0 Nm
Degree of protection (IEC EN 60529)		IP 20
Enclosure material / colour		polycarbonate (halogen-free) UL 94-V0 / yellow
Mounting on		35 mm DIN rail (DIN EN 60715)

### Order Data

Product	TF 500-Tr
Article-No.	53 43 98