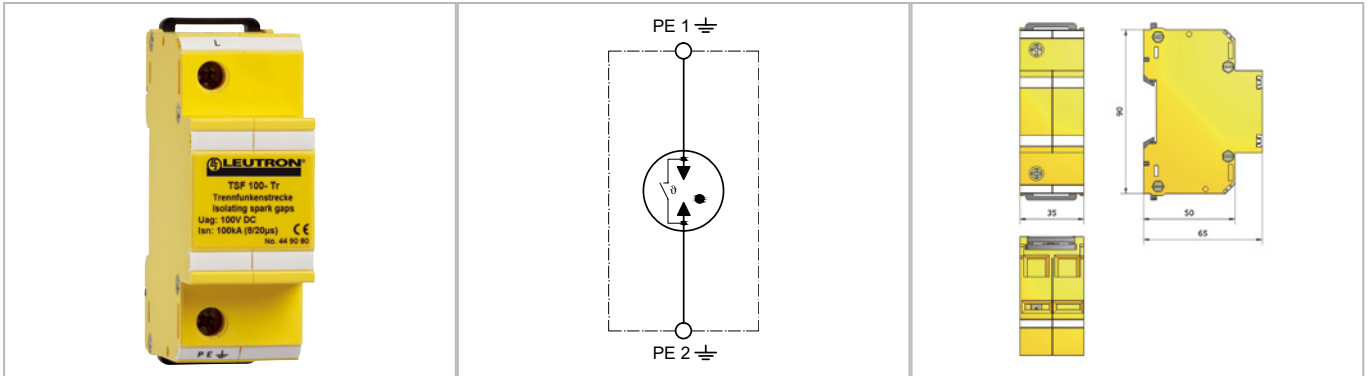


Rare-gas-filled insulation spark gaps

TSF for DIN-Rail



Rare-gas-filled spark gap for the lightning protection equipotential bonding, the insulation of electrically separated parts and the bridging of insulating flanges of gas pipelines.

- AC spark-over voltage : 70 V
- DC spark-over voltage : 100 V
- DC impulse spark-over voltage (1kV/μs): 650 V
- Light. imp. current resistance (10/350μs): 100 kA
- Mounting on 35 mm DIN rail
- Test standard EN 50164-3
- Degree of protection according to IEC EN 60529: IP 20

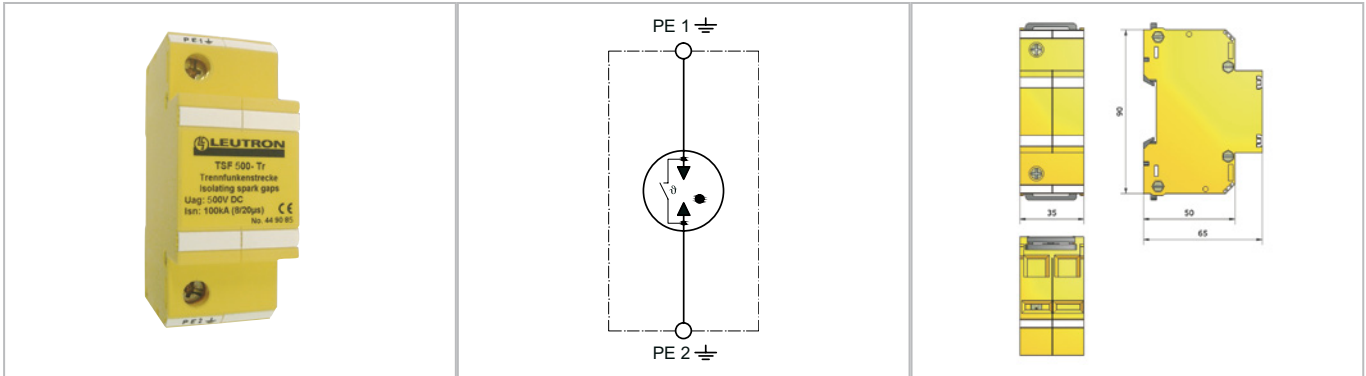
Technical Data		TSF 100-Tr
IEC category/EN type		class H
Nominal DC sparkover voltage at 100V/s	U _{agN}	100 ±20% V=
Nominal AC sparkover voltage (50 Hz)	U _{aw}	70 ±20% V
Typical impulse sparkover voltage	U _{as}	650 V
Max. impulse sparkover voltage	U _{as}	950 V
Lightning impulse current discharge capacity Iimp (10/350 μs)	I _{peak}	100 kA
Nominal impulse discharge current (10 x 8/20)	I _n	100 kA
5x Nominal alternating discharge current at 50Hz, 1s, 3min pause	I _{wn}	100 A
Nominal alternating discharge current (50 Hz)		200 A / 0,5s A
Alternating current critical load (50 Hz)	I _{wgr}	4.000 A / 0,25s A/s
Spark-gap extinguishing conditions	V _{ex}	<70V / < 20A V
Insulation resistance at 10V, 100V		>1 GΩ
Self-capacitance at 1 kHz		6 pF
Test category/climatic category		DIN IEC 60068-1 / 40/90/21
Relative humidity		10%...95% rh
Operating temperature range	TU	-40 - +80 °C
Max. conductor cross section		50mm ² stranded/35mm ² flexible
Mounting on		35 mm DIN rail (DIN EN 50 022)
Degree of protection		IP 20
3xlightning impulse current (10/350), long-duration current (CENELEC/BTTF 62-2)	I _{imp}	75kA / 38 As / 1,45 MJ /Ω + 150A / 0,5s /75 As kA

Order Data

Product	TSF 100-Tr
Article-No.	44 90 80

Rare-gas-filled insulation spark gaps

TSF for DIN-Rail



Rare-gas-filled spark gap for the lightning protection equipotential bonding, the insulation of electrically separated parts and the bridging of insulating flanges of gas pipelines.

- AC spark-over voltage : 350 V
- DC spark-over voltage : 500 V
- DC impulse spark-over voltage (1kV/μs): 950 V
- Light. imp. current resistance (10/350μs): 100 kA
- Mounting on 35 mm DIN rail
- Test standard EN 50164-3
- Degree of protection according to IEC EN 60529: IP 20

Technical Data		TST 500-Tr
IEC category/EN type		class H
Nominal DC sparkover voltage at 100V/s	U _{agN}	500 ±20% V=
Nominal AC sparkover voltage (50 Hz)	U _{aw}	350 ±20% V
Typical impulse sparkover voltage	U _{as}	950 V
Max. impulse sparkover voltage	U _{as}	1300 V
Lightning impulse current discharge capacity I _{imp} (10/350 μs)	I _{peak}	100 kA
Nominal impulse discharge current (10 x 8/20)	I _n	100 kA
5x Nominal alternating discharge current at 50Hz, 1s, 3min pause	I _{wn}	100/1 A
Nominal alternating discharge current (50 Hz)		200/0,5s A
Alternating current critical load (50 Hz)	I _{wgr}	4000/0,25 A/s
Spark-gap extinguishing conditions	V _{ex}	< 230 V / < 100 A V
Insulation resistance at 10V, 100V		> 1 GΩ
Self-capacitance at 1 kHz		4 pF
Relative humidity		10%-95% rh
Operating temperature range	TU	-40 - +80 °C
Terminals		50mm ² stranded/35mm ² flexible
Mounting on		35 mm DIN rail (DIN EN 50 022)
Degree of protection (IEC EN 60529)		IP 20
3x lightning impulse current (10/350), long-duration current (CENELEC/BTTF 62-2)	I _{imp}	75kA / 38 As / 1,45 MJ /Ω + 150A / 0,5s /75 As kA
20x lightning impulse current (10/45 μs) half-wave (DIN 48810)		60kA / 10 As / 0,1 MJ/Ω kA

Order Data

Product	TST 500-Tr
Article-No.	44 90 85