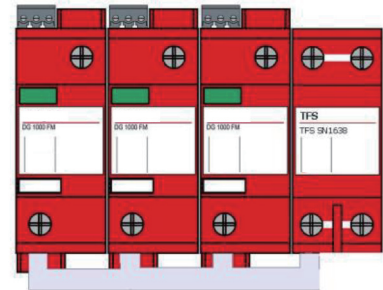
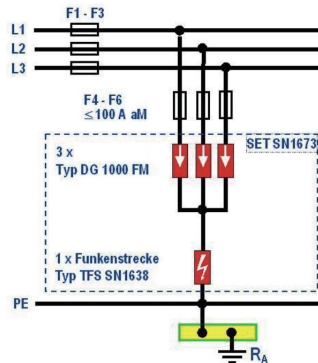
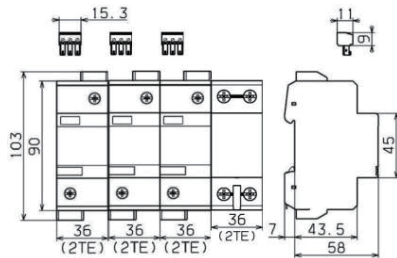




POWER SUPPLY SYSTEMS

Type 2 NEPTUNE circuit

SET SN1673t



"NEPTUNE" SPD combination for protecting the rotor and inverter of wind turbines consisting of ...

... 3 x DG 1000 FM	# 950 112
... 1 x TFS SN1638	# 900 222/S
... 1 x EB 1 4 7 SN1687	# 900 408

- Non-exhausting "NEPTUNE" SPD combination for protecting the rotor and inverter of wind turbines
- High 50 Hz power frequency withstand voltage prevents the response of the SPD combination up to 2.2 kV_{rms}
- High TOV resistance (Un + 1200V)
- Reliable insulation resistance of the arrester structure to equipotential bonding (PA/PE) due to lightning current carrying spark gap type TFS SN1638
- Nominal voltage up to 1000 V a.c.

Contains arresters in accordance with EN 61643-11/IEC 61643-1	DG 1000 FM	Type 2 / Class II
Contains arrester in accordance with EN 50164-3	TFS SN1638	Class H → [100 kA (10/350 μs)]
Nominal voltage a.c. Un	DG 1000 FM	1000 V
Max. continuous operating voltage a.c. Uc	DG 1000 FM	1000 V
Nominal discharge current In	DG 1000 FM	15 kA / circuit
Maximum discharge current Imax	DG 1000 FM	30 kA / circuit
Maximum total discharge current Imax	TFS SN1638	100 kA
Voltage protection level [L-L] Up		< 8.4 kV
Voltage protection level [L-PA] Up		< 10 kV
Power frequency sparkover voltage Uaw (50 Hz)	TFS SN1638	< 3.5 kV
Rated power frequency withstand voltage UW/AC (50Hz) / TOV resistance	TFS SN1638	2.2 kV
Response time tA (L-L)	DG 1000 FM	<25 ns
Response time tA (L-PA)	TFS SN1638	<100 ns
Maximum overcurrent protection up to 1000 V a.c.	DG 1000 FM	100 A aM
Maximum overcurrent protection for U<690V a.c.	DG 1000 FM	125 A gG
Short-circuit withstand capability for max. back-up fuse	DG 1000 FM	25 kA
Operating temperature range Tu		-40°C to +80°C
Operating state / fault indication	DG 1000 FM	green / red
Cross-sectional area (min)	DG 1000 FM	1.5mm ² solid/flexible
Cross-sectional area (max)	DG 1000 FM	35mm ² stranded / 25mm ² flexible
Cross-sectional area (min)	TFS SN1638	10mm ² solid/flexible
Cross-sectional area (max)	TFS SN1638	35mm ² stranded / 25mm ² flexible
Altitude		up to 2000 m a.s.l.
Installation on		35mm DIN rail in accordance with EN 60715



Material of the enclosure		thermoplastic, red, UL 94 V-0
Degree of protection		IP 20
Insulation resistance	TFS SN1638	> 10 ³ MΩ

Dimensions	DG 1000 FM	2 modules, DIN 43880
	TFS SN1638	2 modules, DIN 43880
	----- total	8 modules, DIN 43880
Type of remote signalling contact	DG 1000 FM	changeover contact
Switching capacity a.c.	DG 1000 FM	250 V/0.5 A
Switching capacity d.c.	DG 1000 FM	250 V/0.1 A; 125 V/0.2 A; 75 V/0.5 A
Cross-sectional area for remote signalling terminals	DG 1000 FM	max. 1.5mm ² solid/flexible
4-pole earthing clip for bridging 3 x DG 1000 FM and 1 x TFS SN1638		
Dimensions	EB 1 4 7	34 x 116 x 3 mm

Ordering information	
Type	SET SN1673
Part No.	S56890
Serial No.	SN1673