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## Type 2 surge protection plug - F-MS 80 ST - 2921307

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Type 2 surge protection plug with N-PE total current spark gap.

### Key Commercial Data

Packing unit	10 STK
Minimum order quantity	10 STK
GTIN	 4 046356 290838

### Technical data

#### Dimensions

Height	47 mm
Width	17.7 mm
Depth	67.3 mm
Horizontal pitch	1 Div.

#### Ambient conditions

Degree of protection	IP20
	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (half sinus / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	7.5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

#### General

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012
IEC test classification	II
	T2
EN type	T2
IEC power supply system	TT

# Type 2 surge protection plug - F-MS 80 ST - 2921307

## Technical data

### General

	TN-S
Number of ports	One
SPD design	Voltage-switching type
Mode of protection	N-PE
Mounting type	On base element
Color	jet black RAL 9005
Housing material	PA 6.6
	PBT
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	Male
Surge protection fault message	optical

### Protective circuit

Nominal voltage $U_N$	240/415 V AC (TN-S)
	240/415 V AC (TT)
Nominal frequency $f_N$	50 Hz (60 Hz)
Maximum continuous voltage $U_C$	264 V AC
Residual current $I_{PE}$	$\leq 5 \mu A$
Standby power consumption $P_C$	$\leq 1.3 \text{ mVA}$
Nominal discharge current $I_n$ (8/20) $\mu s$	40 kA
Maximum discharge current $I_{max}$ (8/20) $\mu s$	80 kA
Impulse discharge current (10/350) $\mu s$ , charge	5 As
Impulse discharge current (10/350) $\mu s$ , specific energy	25 kJ/ $\Omega$
Impulse discharge current (10/350) $\mu s$ , peak value $I_{imp}$	10 kA
Follow current interrupt rating $I_{fi}$	100 A (264 V AC)
Voltage protection level $U_p$	$\leq 1.7 \text{ kV}$
Residual voltage $U_{res}$	$\leq 0.6 \text{ kV}$ (at $I_n$ )
	$\leq 0.5 \text{ kV}$ (at 10 kA)
	$\leq 0.5 \text{ kV}$ (at 5 kA)
	$\leq 0.4 \text{ kV}$ (at 3 kA)
Front of wave sparkover voltage at 6 kV (1.2/50) $\mu s$	$\leq 1.7 \text{ kV}$
TOV behavior at $U_T$	1200 V AC (200 ms / withstand mode)
Response time $t_A$	$\leq 100 \text{ ns}$

### UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV (N-G)	264 V AC
Mode of protection	N-G
Power distribution system	1
Nominal frequency	50/60 Hz

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## Technical data

### UL specifications

Measured limiting voltage MLV (N-G)	2600 V
Nominal discharge current I <sub>n</sub> (N-G)	20 kA

## Classifications

### eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130805
eCl@ss 7.0	27130805
eCl@ss 8.0	27130805

### ETIM

ETIM 2.0	EC000941
ETIM 3.0	EC000472
ETIM 4.0	EC000941
ETIM 5.0	EC000941

### UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

## Approvals

### Approvals

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#### Approvals

KEMA-KEUR / CCA / IECCEB Scheme / GL / UL Recognized / cUL Recognized / EAC / cULus Recognized

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#### Ex Approvals

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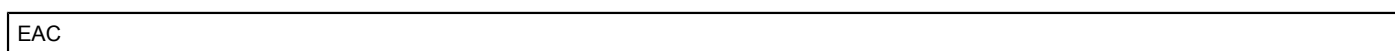
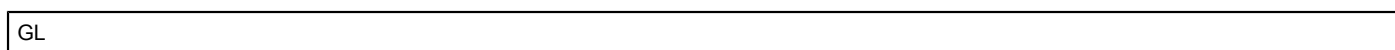
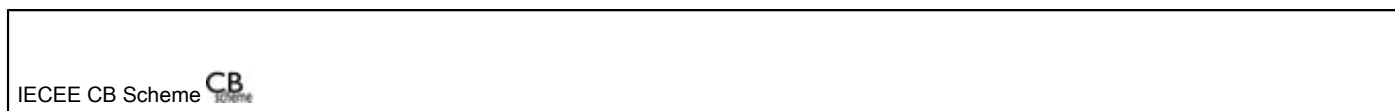
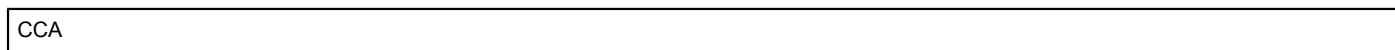
#### Approvals submitted

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### Approval details

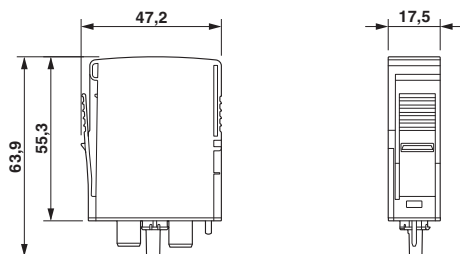
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## Approvals



## Drawings

Dimensional drawing



Circuit diagram



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