



Automatización Eléctrica
Especialistas en Automatización

At the end of this document you will find links to products related to this catalog. You can go directly to our shop by clicking [HERE](#). [HERE](#)

Surge protection device - TT-2-PE-M-24DC - 2920641

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Modular terminal block with two-stage surge protection for one operated floating double conductor, disconnect knife on both signal paths, separate ground connection, nominal voltage: 24 V DC.

Why buy this product

- Versions with and without disconnect knife
- Protection of a floating double wire
- Protection of two signal wires with common reference potential
- Multi-stage modular terminal blocks with screw connection technology
- Disconnection of signal circuits by disconnect knife



Key Commercial Data

Packing unit	14 STK
GTIN	 4 046356 160193

Technical data

Dimensions

Height	94.8 mm
Width	6.2 mm
Depth	69.1 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 80 °C
---------------------------------	------------------

General

Housing material	PA 6.6
Flammability rating according to UL 94	V-0
Color	jet black RAL 9005
Mounting type	DIN rail: 35 mm

Surge protection device - TT-2-PE-M-24DC - 2920641

Technical data

General

Type	Double-level terminal block with PE foot – separate PE connection
Number of positions	2
Direction of action	Line-Line & Line-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous voltage U_C	30 V DC
	21 V AC
Nominal current I_N	300 mA (40°C)
Operating effective current I_C at U_C	$\leq 5 \mu A$
Residual current I_{PE}	$\leq 2 \mu A$
Nominal discharge current I_n (8/20) μs (Core-Core)	5 kA
Nominal discharge current I_n (8/20) μs (Core-Earth)	5 kA
Pulse discharge current I_{imp} (10/350) μs (core-ground)	500 A
Total surge current (8/20) μs	10 kA
Nominal pulse current I_{an} (10/1000) μs (Core-Core)	30 A
Nominal pulse current I_{an} (10/1000) μs (Core-Earth)	100 A
Impulse discharge current (10/350) μs , peak value I_{imp}	500 A
Output voltage limitation at 1 kV/ μs (Core-Core) spike	$\leq 45 V$
Output voltage limitation at 1 kV/ μs (Core-Earth) spike	$\leq 650 V$
Output voltage limitation at 1 kV/ μs (Core-Core) static	$\leq 45 V$
Output voltage limitation at 1 kV/ μs (Core-Earth) static	$\leq 650 V$
Residual voltage at I_n (conductor-conductor)	$\leq 45 V$
Residual voltage with I_{an} (10/1000) μs (conductor-conductor)	$\leq 50 V$
Voltage protection level U_p (core-core)	$\leq 45 V$ (C1 - 500 V / 250 A)
	$\leq 55 V$ (C2 - 10 kV/5 kA)
Response time t_A (Core-Core)	$\leq 1 ns$
Response time t_A (Core-Earth)	$\leq 100 ns$
Input attenuation aE, sym.	typ. 0.6 dB ($\leq 500 kHz / 50 \Omega$)
	typ. 0.2 dB ($\leq 200 kHz / 150 \Omega$)
Cut-off frequency f_g (3 dB), sym. in 50 Ohm system	typ. 6 MHz
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 2 MHz
Capacity (Core-Core)	$< 2.5 nF$
Resistance in series	$3.3 \Omega \pm 20 \%$
Max. required back-up fuse	315 mA (e.g. T in acc. with IEC 127-2/III)
Impulse durability (conductor-conductor)	C2 - 10 kV/5 kA
Impulse durability (conductor-ground)	C2 - 10 kV/5 kA

Surge protection device - TT-2-PE-M-24DC - 2920641

Technical data

Protective circuit

	D1 - 500 A
--	------------

Connection data

Connection method	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M3
Tightening torque	0.6 Nm
Stripping length	8 mm
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14

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	27130807
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807
eCl@ss 9.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943

UNSPSC

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

Surge protection device - TT-2-PE-M-24DC - 2920641

Approvals

Approvals

Approvals

EAC / EAC / UL Listed


Ex Approvals

Approvals submitted

Approval details

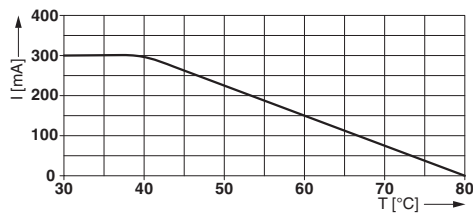
EAC

EAC

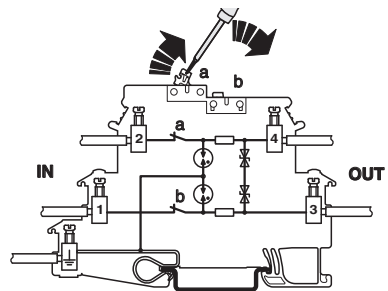
UL Listed 

Drawings

Diagram

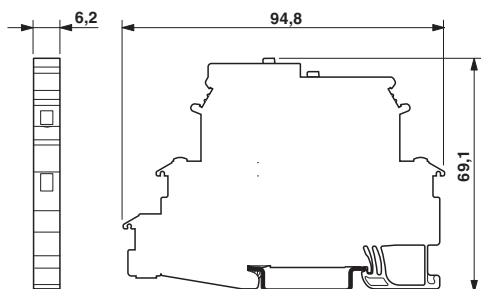


Connection diagram

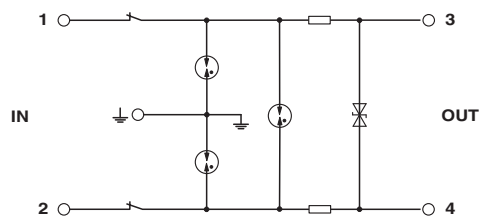


Surge protection device - TT-2-PE-M-24DC - 2920641

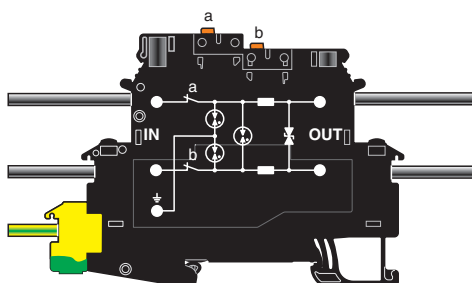
Dimensional drawing



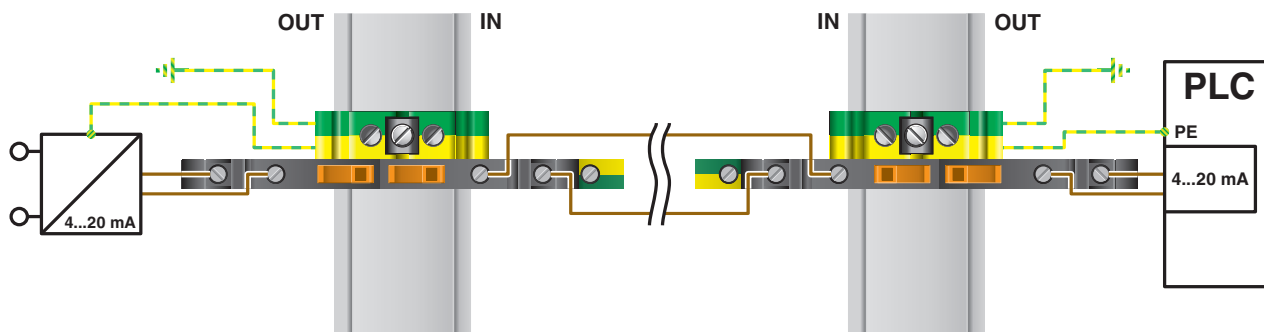
Circuit diagram



Schematic diagram



Application drawing





Below is a list of articles with direct links to our shop Electric Automation Network where you can see:

- Quote per purchase volume in real time.
- Online documentation and datasheets of all products.
- Estimated delivery time enquiry in real time.
- Logistics systems for the shipment of materials almost anywhere in the world.
- Purchasing management, order record and tracking of shipments.

To access the product, [click on the green button.](#)

Product	Code	Reference	Product link
Modular terminal block with two-stage surge protection for one operated floating double conductor, disconnect knife on both signal paths, separate ground connection, nominal voltage: 24 V DC.	2920641	TT-2-PE-M-24DC	Buy on EAN