

SURGYS® RS-3, mA-3, TEL-3

Low current surge arresters

for data and telecommunication networks



SURGYS RS-3 et SURGYS TEL-3

SURGYS mA-3x2

The solution for

- > Data centre
- > Healthcare
- > Energy
- > Infrastructure & Transport
- > Industry
- > Building

Strong points

- > 1-pair or 2-pair version («x2» model)
- > Plug-in modules.
- > End of life signal
- > Direct earthing
- > Common/differential protection modes.

Conformity to standards

- > NF EN 61643-21
- > IEC 61643-21



Function

SURGYS RS-3, mA-3 et TEL-3 surge arresters are designed for transient surge protection of equipment connected to telecommunications and data transmission networks.

These surge arresters must be installed on a symmetrical DIN rail and are available for most transmission lines: line voltage 170 V, throughput up to 10 Mbit/s. These products consist of 1 or 2 pairs with a detachable module for easy maintenance.

Advantages

1-pair or 2-pair version («x2» model)

Ultra-compact design if multi-pair protection is needed.

Plug-in modules.

Quick maintenance on end-of-life modules.

End of life signal

Line interruptions trigger an alert.

Direct earthing

Earth bonding is made using a DIN rail fixing clip.

Common/differential protection modes.

Differential mode offers more efficient protection.

General characteristics

- DIN rail plug-in surge protector.
- 1 or 2-pair.
- U_n : 12 V (SURGYS RS-3), 48 V (SURGYS mA-3), 170 V (SURGYS TEL-3).
- Impulse current I_{imp} : 5 kA.
- Shield wire protection.
- Plug-out without line cut-off.
- Exclusive technology.
- Complete protection.
- End of life management.
- Easy maintenance.

SURGYS mA-3

- For industrial buses.
- Network versions 12 V.

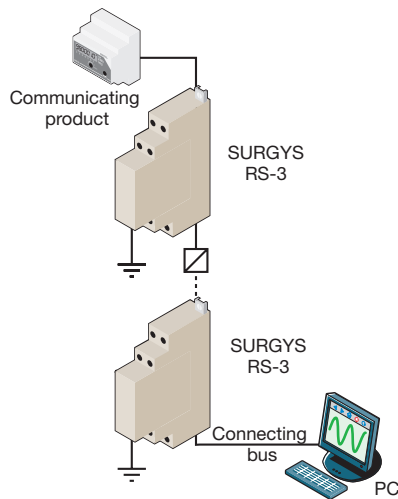
SURGYS TEL-3

- For RTC, ADSL2, VDSL2 networks for analogue telephone lines.
- Modes MC or MC/MD.

Applications

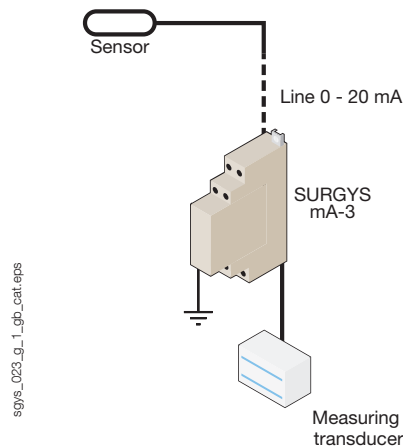
SURGYS® RS-3

- Protection of the RS422/RS485 connections.
- Digital telephone line T2.
- ETHERNET connection (10 baseT).



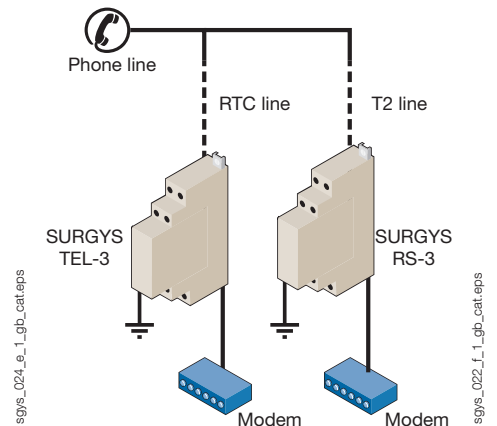
SURGYS® mA-3

- Field bus:
 - Profibus (DP, PA, FMS...),
 - Fieldbus (H1, H2),
 - LONworks,
 - Interbus,...
- Measurement loops, measurement acquisition cards:
 - current loops 0 / 4-20 mA,
 - analog signals 0 to 10 V.
- Regulation, control loops.
- RS232 connections.
- Numeris network (RNIS-T0).
- Specialised telephone connections.

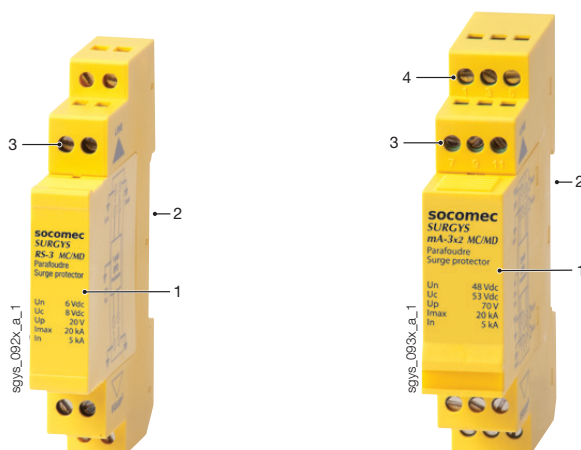


SURGYS® TEL-3

- Analogue telephone line:
 - modem,
 - automatic switch,
 - telephone alarm,
 - DSL.



Front panel



1. Plug-in module
2. Mounting on DIN rail ensuring earthing
3. Connection 1 pair
4. Connection 2 pairs

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Caractéristiques

SURGYS®	RS-3	mA-3	TEL-3
Utilisation	RS422/RS485/Télécom T2/Ethernet 10baseT	4-20 mA, bus de terrain	réseau téléphonique
Tension nominale de ligne U_n	12 V	48 V	150 V
Tension maximale U_c	15 V	53 V	170 V
Fréquence maximum d'utilisation	20 MHz	20 MHz	2 KHz
Niveau de protection U_p	30 V	75 V	220 V
Impédance de ligne	50 - 150 Ohms	50 - 150 Ohms	600 Ohms

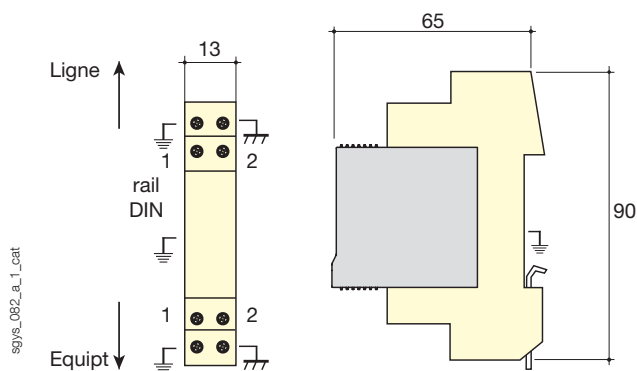
Caractéristiques	
Configuration protégée	2 fils ou 4 fils (version "x2")
Intensité maximale de ligne	300 mA ⁽¹⁾
Courant de décharge maximal (1 choc 8/20 μ s) I_{max}	20 kA
Courant de décharge nominal (20 chocs 8/20 μ s) I_n	5 kA
Type de protection	éclateur / diode d'écrêtage
Fin de vie	court-circuit à la terre

Conditions d'utilisation	
Température de fonctionnement	-40 ... +85 °C
Température de stockage	-40 ... +85 °C

(1) Courant de ligne de l'équipement à protéger supérieur à 200 mA ou autre application à courant continu : nous consulter

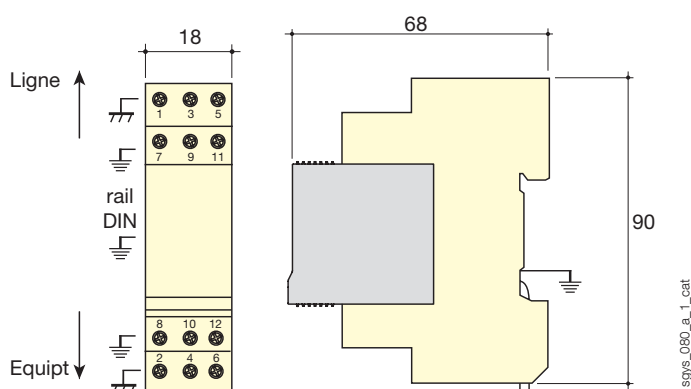
Switch body

Version 1 pair



Type	modulaire
Dimensions L x H x P	13 x 90 x 65 mm
Indice de protection du boîtier	IP20
Indice de protection des borniers	IP20
Matière du boîtier	thermoplastique PEI UL94-V0
Section de raccordement	0,4 ... 1,5 mm ²
Section de raccordement à la terre	0,4 ... 1,5 mm ²

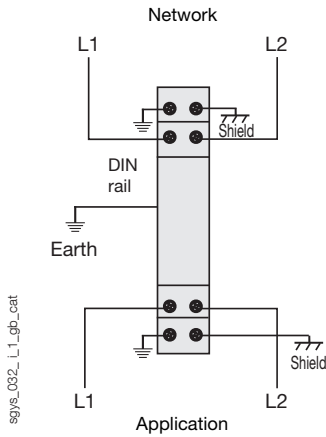
Version 2 pairs



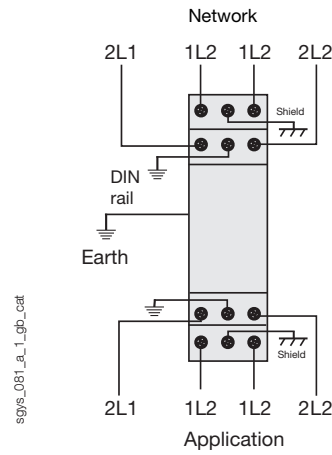
Type	modulaire
Dimensions L x H x P	18 x 90 x 68 mm
Indice de protection du boîtier	IP20
Indice de protection des borniers	IP20
Matière du boîtier	thermoplastique PEI UL94-V0
Section de raccordement	0,4 ... 1,5 mm ²
Section de raccordement à la terre	0,4 ... 1,5 mm ²

Connections

Version 1 pair



Version 2 pairs



References

SURGYS	Versions 1 pair			Versions 2 pairs		
	RS-3 Reference	mA-3 Reference	TEL-3 Reference	RS-3x2 Reference	mA-3x2 Reference	TEL-3x2 Reference
Protection of high speed data and telephone networks	4986 3020			4986 3021		
Protection of measurement-control-regulation circuits and field bus		4987 3420			4987 3421	
Protection of telephone networks			4985 3170			4985 3171

Description of accessories	RS-3 Reference	mA-3 Reference	TEL-3 Reference	RS-3x2 Reference	mA-3x2 Reference	TEL-3x2 Reference
Spare plug-in module m-RS-3	4986 3029					
Spare plug-in module m-mA-3		4987 3429				
Spare plug-in module m-TEL-3			4985 3179			
Spare plug-in module m-RS-3x2				4986 3028		
Spare plug-in module m-mA-3x2					4987 3428	
Spare plug-in module m-TEL-3x2						4985 3178