

Microswitches for Protistor® fuse-links

Microswitches for square body AC and DC fuses

ACCESSORIES FOR FUSES & FUSE SYSTEMS

MICROSWITCHES



Microswitches systems are adapted to Mersen fuses only.
They are for all sizes and AC or DC fuses

All signalling systems are hand resettable and fitted with silverplated 3-terminal microswitch C, NO and NC.

Tests with sine vibrations carried out at ambient with scanning of the three main holder axes.

Spectrum: 1st segment (2 to 16 Hz) constant trip $x = 5$ mm peak. 2nd segment (16 to 250 Hz) constant acceleration $g = 5$ g peak.

Exponential scanning speed: 1 octave per minute. Duration: 2 hours per axis.

Warning: microswitch systems exclusively designed for Protistor® fuses, fitted with a patented trip-indicator, saving use of EDV.

Catalog Numbering system:

- o MC3E1-5 single pole microswitch
- o MC3E1-9 double pole microswitch
- o MCR, MC2R reinforced insulation microswitch

TECHNICAL DATA OVERVIEW

Ampere Range (A)	3 ... 5 A
Size per Standard	PSC sizes 44, 8x, 9x, 12x, 17x, 30x, 60x

FEATURES & BENEFITS

- Permanent indication of fuse state: conductive / blown
- Manual resetting
- Standard and low electrical level with different insulation levels
- Vapor and watertight model for use in corrosive atmosphere
- ET type "Etanche" for water tight (IP50)
- Each microswitch weights less than 100g: no fume and smoke grade required by EN45545 standard
- Fire class accordly to UL 94: H.B.
- Packaging: 1 or 3 pieces

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PRODUCT RANGE



MC3E1-5N

Remote signaling with 1250V AC/DC insulation voltage

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I _n	AC voltage withstand test ¹	Impulse withstand voltage U _{imp} 1.2/50μs ²	Indication System	Minimum positive operating voltage / current	Breaking capacity, Non inductive circuit, 30V / 110V / 250V	Breaking capacity, Inductive circuit: L/R=25ms, 30V / 110V / 250V	Package	Weight
MC3E1-5N	D310020	1250 V	5 A	15 kV	20 kV	standard	-	10A / 10A / 7A	- / - / 6A	3	32 g
MC3E1-5NBS	E310021	1250 V	3 A	15 kV	20 kV	Low level	10V, 10mA	3A / 3A / 3A	2A / 1A / 1A	3	39.5 g
MC3E1-9NBS	F310022	1250 V	3 A	15 kV	20 kV	Low level	10V, 10mA	3A / 3A / 3A	2A / 1A / 1A	3	31.6 g
MC3E1-5NETANCHE	L310027	1250 V	3 A	11 kV	16 kV	Watertight IP50	-	- / 3A / 3A	- / 1A / 1A	3	32 g

¹ Between power circuit and microswitch terminals as per IEC 60 and 694 and NFC 64010 (50/60 Hz 1 min duration in dry air)

² Between power circuit and microswitch terminals U_{imp}: impulse voltage as per IEC 60947-1

Remote signaling with insulation voltage up to 2000V AC/DC

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I _n	AC voltage withstand test ¹	Impulse withstand voltage U _{imp} 1.2/50μs ²	Indication System	Breaking capacity, Non inductive circuit, 30V / 110V / 250V	Breaking capacity, Inductive circuit: L/R=25ms, 30V / 110V / 250V	Package	Weight
MCR3E1-5N	G310023	2200 V	3 A	20 kV	30 kV	standard	5A / 0,5A / -	- / 1,6A / 0,3A	1	60 g
MCR3E1-5NBS	P310030	2200 V	3 A	20 kV	30 kV	Low level	3A / 3A / 3A	2A / 1A / 1A	1	58 g
MCR3E1-5NETANCHE	Q310031	2200 V	3 A	20 kV	30 kV	Watertight IP50	- / 3A / 3A	- / 1A / 1A	1	59 g
MCR3E1-9NBS	H310024	2200 V	3 A	23 kV	30 kV	Low level	3A / 0,5A / 0,25A	3A / 0,2A / 0,1A	1	67 g

¹ Between power circuit and microswitch terminals as per IEC 60 and 694 and NFC 64010 (50/60 Hz 1 min duration in dry air)

² Between power circuit and microswitch terminals U_{imp}: impulse voltage as per IEC 60947-1

Remote signaling with insulation voltage up to 6000V AC/DC

Catalog number	Item number	Rated voltage AC (IEC)	Rated current I _n	AC voltage withstand test ¹	Impulse withstand voltage U _{imp} 1.2/50μs ²	Indication System	Breaking capacity, Non inductive circuit, 30V / 110V / 250V	Breaking capacity, Inductive circuit: L/R=25ms, 30V / 110V / 250V	Package	Weight
MC2R3E1-5NBS	J310025	6000 V	3 A	24 kV	40 kV	Low level	3A / 0,5A / 0,25A	3A / 0,2A / 0,1A	1	76 g
MC2R3E1-5NETANCHE	N310029	6000 V	3 A	24 kV	40 kV	Watertight IP50	- / 0,5 / -	- / 0,2A / -	1	64.8 g
MC2R3E1-9NBS	K310026	6000 V	3 A	26 kV	40 kV	Low level	3A / 0,5A / 0,25A	3A / 0,2A / 0,1A	1	80 g

¹ Between power circuit and microswitch terminals as per IEC 60 and 694 and NFC 64010 (50/60 Hz 1 min duration in dry air)

² Between power circuit and microswitch terminals U_{imp}: impulse voltage as per IEC 60947-1

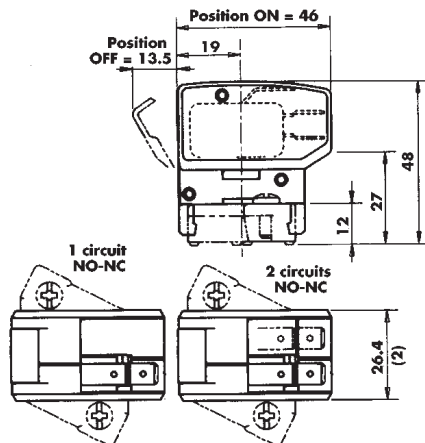
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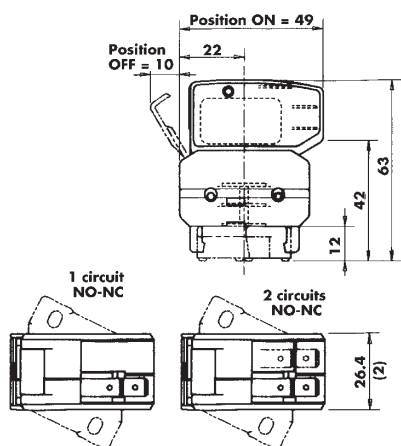
DIMENSIONS

Remote signaling with 1250 VAC/VDC insulation voltage



Dimensions in mm

Remote signaling with insulation voltage up to 2200 VAC/VDC



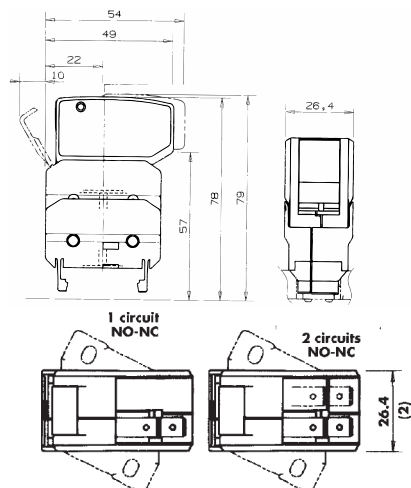
Dimensions in mm

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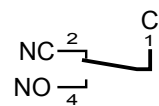
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DIMENSIONS

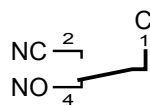
Remote signaling with insulation voltage up to 6000 VAC/VDC



Electrical diagram of each microswitch circuit



Non-blown fuse
Microswitch ON



Blown fuse
Microswitch OFF

The C terminal is on the top and connection is made via 6.35 mm clips except for watertight models whose clips are 4.8 mm wide.