

Mounting instruction for Reed Relay MRX series

Manufacturer: StandexMeder Electronics GmbH, Friedrich-List-Str. 15, 78234 Engen-Welschingen, Germany

Those Reed Relays serve as galvanic isolation of intrinsically safe circuits and not intrinsically safe circuits within operating devices which are installed outside an explosive area.

The coil or the contacts can be connected with the intrinsically safe circuit. The circuits controlled by these contacts can only be of 1 type – i.e. intrinsically safe or not intrinsically safe. Mixing of circuits is not permitted. Connection of more intrinsically safe circuits, by means of the relay contacts, is permitted only when the intrinsic safety is not lost in the process.

Scope

Types	Operating Temperature (functional)
MRX**-*A71 (or *A71/3) (-BV*****)	-20 ~ +85°C
MRX**-*A66 (-BV*****)	-20 ~ +85°C
MRX**-*A79 (-BV*****)	-40 ~ +85°C
MRX**-*A85 (-BV*****)	-40 ~ +85°C
MRX**-1C90 (or 1C94) (or 1C21) (-BV*****)	-20 ~ +85°C
MRX**-2C90 (-BV*****)	-20 ~ +70°C

Relays with contacts A71, A66, A85 and A79 may be constructed as 1-pole, 2-pole or 4-pole.

Relays with contacts C90, C94 and C21 may be constructed as 1-pole or 2-pole.

When operating the Relays, it is important that the maximum temperature of 100°C, combined from self-heating and maximum ambient temperature, is never exceeded.

The maximum coil voltage may be calculated from the coil resistance and thermal resistance stated on the individual datasheets.

The relays must be installed in such way that the connection pins are provided with a degree of protection of at least IP20.

Valid contact data

		A71 (A66)	A85 (A79)	C90 (C94)	C21
Contact Rating	max.	10 W	50 W	7 W	5 W
Switching Voltage	max.	200 VDC	375 VDC	30 VDC	100 VDC
Switching Current	max.	0,5 A	0,7 A	0,25 A	0,05 A

Any combination of the above named switching current and switching voltage must not exceed the maximum rated power.

Attention should be paid to the combination of nominal current and nominal inductivity of the relay coil. Both is ignitable acc. gas group IIC. In case that the coil drive want to be designed into the application acc. „intrinsic safety“, the coil inductivity must be eliminated by e.g. two parallel diodes. The diodes must be interference robust, acc. paragraph 7.6 of EN 60079-11: 2012, and must be connected to the relay coil, acc. paragraph 8.8.

Standards:	IEC 60079-0: 2017	EN IEC 60079-0: 2018
	IEC 60079-11: 2011	EN 60079-11: 2012

Marking

Date code (according to EN 60062 / 2-digit)

Company label

Type description

Short symbol of the inspection authority

Number of the certificate

Type of protection



II (1) G [Ex ia Ga] IIC