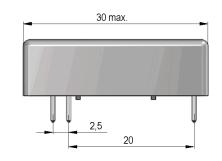
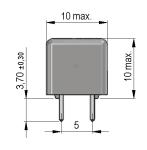


## Series Datasheet – MRX Reed Relays

#### www.standexmeder.com

# MRX Series Reed Relays





- Features: Ex-Approved for Intrinsic Safety Circuits
- Applications: Process Automatization in Refineries, Mining and Chemical Industry & Others
- Markets: Explosive Environment & Others



Nominal Voltage	Contact QTY	Contact Form	Switch Model
05, 12, 24	1, 2, 4	A, C	21, 71, 79, 90

Customer Options Contact Data		Switch Model			I I m i h
		71	79	90	Unit
Rated Power (max.) Any DC combination of V&A not to exceed their individual max.'s	5	10	10	7	W
Switching Voltage (max.) DC or peak AC	100	200	250	28	V
Switching Current (max.) DC or peak AC	0.25	0.5	0.5	0.24	А
Carry Current (max.) DC or peak AC	0.5	1.25	1	0.5	А
Contact Resistance (max.) @ 0.5V & 50mA	150	150	150	150	mOhm
Breakdown Voltage (min.) According to EN60255-5	0.25	0.3	0.4	0.25	kVDC
Operating Time (max.) Incl. Bounce; Measured with w/ Nominal Voltage	2.5	0.5	0.5	2	ms
Release Time (max.) Measured with no Coil Excitation	2	0.1	0.2	2	ms
Insulation Resistance (typ.) Rh<45%, 100V Test Voltage	10 <sup>9</sup>	10 <sup>10</sup>	10 <sup>11</sup>	10 <sup>9</sup>	Ohm
Capacitance (typ.) @ 10kHz across open Switch	0.8	0.3	0.4	1.0	pF



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Coil	Data	Coil Voltage	Coil Resistance	Pull-In Voltage	Drop-Out Voltage	Nominal Coil Power
Contact Form	Switch Model	(nom.)	(typ.)	(max.)	(min.)	(typ.)
Uı	nit	VDC	Ohm	VDC	VDC	mW
	1A 71 79*	05	360	3.8	1.0	70
1Δ		12	305	9	2	110
		24	5,880	18	3.5	100
21	71 79**	05	250	3.8	1.0	100
		12	890	9	2	260
	75	24	1,000	18	3.5	165
4A	71	24	1,780	18	3.5	320
1C	21***	05	360	3.8	1.0	70
		12	305	9	2	110
	30	24	5,880	18	3.5	100

The Pull-In / Drop-Out Voltage and Coil Resistance will change at rate of 0.4% per °C.

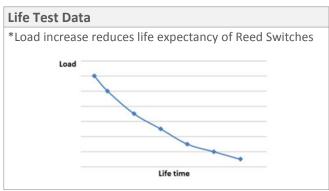
<sup>\*1</sup>A79 only available with Coil Voltage 12 \*\* 2A79 only available with Coil Voltage 24 \*\*\*1C21 only available with Coil Voltage 05 & 12

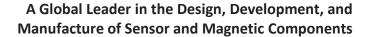
<b>Environmental Data</b>	Unit	
Shock Resistance (max.) 1/2 sine wave duration 11ms	50	g
Vibration Resistance (max.)	20	g
Operating Temperature	-20 to 85	°C
Storage Temperature	-40 to 105	°C
Soldering Temperature (max.) 5 sec. max.	260	°C

#### **Handling & Assembly Instructions**

- Switching inductive and/or capacitive loads create voltage and/or current peaks, which may damage the relay. Protective circuits need to be used.
- External magnetic fields needs to be taken into consideration, including a too high packing density. This may influence the relays' electrical characteristics.
- Mechanical shock impacts e.g. dropping the relays may cause immediate or post-installation failure.
- Wave soldering: maximum 260°/5 seconds.
- Reflow soldering: Recommendations given by the soldering paste manufacturer need to be considered as well as the temperature limits of other components/processes.









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Glossary Contact Form				
Form A	NO = Normally Open Contacts SPST = Single Pole Single Throw			
Form B	NC = Normally Closed Contacts SPST = Single Pole Single Throw			
Form C	Changeover SPDT = Single Pole Double Throw			

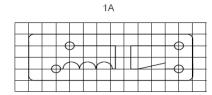






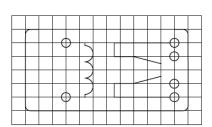
#### Pin Out

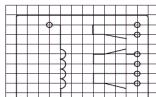
Top View



1C

2 A





4 A



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