

# Plug-in relays Ex9JM

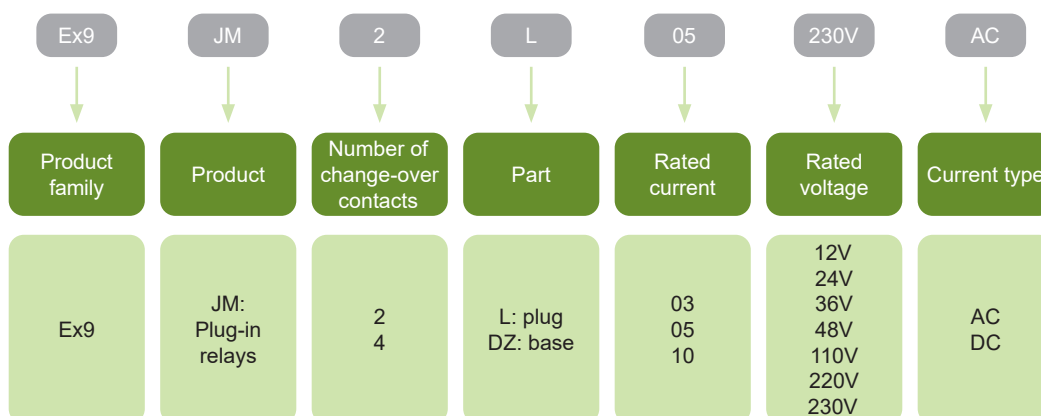


- Meet requirements of IEC / EN 61810-1
- Rated current 3, 5 or 10 A
- Two versions with 2 change-over contacts (5 or 10 A) and version with 4 change-over contact (3 A)
- Plugs and bases offered separately
- Locking button on a plug
- Status indicator

General purpose plug-in relays Ex9JM are suitable for various industrial applications. Reliable and cost effective switching of smaller loads in control circuits is their main usage. Quick installation and easy maintenance make them convenient to use.

AC and DC versions are available with multiple contact configurations. This relay series is available in 12 – 230 V variants of 3, 5 or 10 A rated current — two versions with two change-over contacts (5 or 10 A) and version with four change-over contacts (3 A). Plug and base are sold separately. Locking the relay in one position is enabled by a manually operated locking button on the front side.

## Type Key



## Certification marks



# Plug-in relays Ex9JM

## Bases, 2 change-over contacts, 10 A



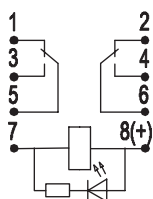
Control voltage	Number of change-over contacts	Rated current	Article No.	Type	Packing
all	2	10 A	110302	Ex9JM2DZ-10	1/10/270

## Plugs, 2 change-over contacts, 10 A



Control voltage	Number of change-over contacts	Rated current	Article No.	Type	Packing
12 V DC	2	10 A	110291	Ex9JM2L10 12VDC	1/20/480
24 V DC	2	10 A	110292	Ex9JM2L10 24VDC	1/20/480
36 V DC	2	10 A	110293	Ex9JM2L10 36VDC	1/20/480
48 V DC	2	10 A	110294	Ex9JM2L10 48VDC	1/20/480
110 V DC	2	10 A	110295	Ex9JM2L10 110VDC	1/20/480
220 V DC	2	10 A	110296	Ex9JM2L10 220VDC	1/20/480
24 V AC	2	10 A	110297	Ex9JM2L10 24VAC	1/20/480
36 V AC	2	10 A	110298	Ex9JM2L10 36VAC	1/20/480
48 V AC	2	10 A	110299	Ex9JM2L10 48VAC	1/20/480
110 V AC	2	10 A	110300	Ex9JM2L10 110VAC	1/20/480
230 V AC	2	10 A	110301	Ex9JM2L10 230VAC	1/20/480

### Wiring diagram



# Plug-in relays Ex9JM

## Bases, 2 change-over contacts, 5 A



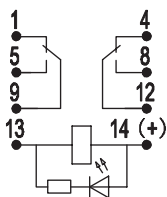
Control voltage	Number of change-over contacts	Rated current	Article No.	Type	Packing
all	2	5 A	110314	Ex9JM2DZ-05	1/10/300

## Plugs, 2 change-over contacts, 5 A



Control voltage	Number of change-over contacts	Rated current	Article No.	Type	Packing
12 V DC	2	5 A	110303	Ex9JM2L05 12VDC	1/20/480
24 V DC	2	5 A	110304	Ex9JM2L05 24VDC	1/20/480
36 V DC	2	5 A	110305	Ex9JM2L05 36VDC	1/20/480
48 V DC	2	5 A	110306	Ex9JM2L05 48VDC	1/20/480
110 V DC	2	5 A	110307	Ex9JM2L05 110VDC	1/20/480
220 V DC	2	5 A	110308	Ex9JM2L05 220VDC	1/20/480
24 V AC	2	5 A	110309	Ex9JM2L05 24VAC	1/20/480
36 V AC	2	5 A	110310	Ex9JM2L05 36VAC	1/20/480
48 V AC	2	5 A	110311	Ex9JM2L05 48VAC	1/20/480
110 V AC	2	5 A	110312	Ex9JM2L05 110VAC	1/20/480
230 V AC	2	5 A	110313	Ex9JM2L05 230VAC	1/20/480

### Wiring diagram



# Plug-in relays Ex9JM

## Bases, 4 change-over contacts, 3 A



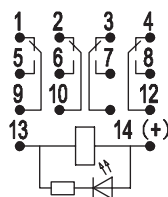
Control voltage	Number of change-over contacts	Rated current	Article No.	Type	Packing
all	4	3 A	110326	Ex9JM4DZ-03	1/10/270

## Plugs, 4 change-over contacts, 3 A



Control voltage	Number of change-over contacts	Rated current	Article No.	Type	Packing
12 V DC	4	3 A	110315	Ex9JM4L03 12VDC	1/20/480
24 V DC	4	3 A	110316	Ex9JM4L03 24VDC	1/20/480
36 V DC	4	3 A	110317	Ex9JM4L03 36VDC	1/20/480
48 V DC	4	3 A	110318	Ex9JM4L03 48VDC	1/20/480
110 V DC	4	3 A	110319	Ex9JM4L03 110VDC	1/20/480
220 V DC	4	3 A	110320	Ex9JM4L03 220VDC	1/20/480
24 V AC	4	3 A	110321	Ex9JM4L03 24VAC	1/20/480
36 V AC	4	3 A	110322	Ex9JM4L03 36VAC	1/20/480
48 V AC	4	3 A	110323	Ex9JM4L03 48VAC	1/20/480
110 V AC	4	3 A	110324	Ex9JM4L03 110VAC	1/20/480
230 V AC	4	3 A	110325	Ex9JM4L03 230VAC	1/20/480

### Wiring diagram



# Technical Data Ex9JM

## Plug-in relays Ex9JM

### General parameters

Plug and base offered separately
Locking button on a plug
Status indicator

### Electrical parameters

	Ex9JM2L10	Ex9JM2L05	Ex9JM4L03
Tested according to	IEC/EN 61810-1		
Control coil voltage $U_c$			
AC	24, 36, 48, 110, 230 V AC		
DC	12, 24, 36, 48, 110, 220 V DC		
Maximal coil voltage $U_{cmax}$	110% $U_c$		
Pick-up voltage (AC / DC)	$\leq 80\%$ / $\leq 75\%$ $U_c$		
Drop-off voltage (AC / DC)	$\geq 20\%$ / $\geq 10\%$ $U_c$		
Maximal switching voltage $U_e$	250 V AC / 30 V DC		
Switching time	$\leq 25$ ms		
Rated insulation voltage $U_i$			
main contacts	500 V AC		
coil to main contacts	1500 V AC		
Rated current AC-1	10 A	5 A	3 A
Controlled power AC-1	2500 VA / 300 W	1250 VA / 150 W	750 VA / 90 W
Electrical service life	100 000 operating cycles		
Initial contact resistance	100 m $\Omega$		
Coil power consumption	1.8 VA / 0.9 W		

### Mechanical parameters PLUG

	Ex9JM2L10	Ex9JM2L05	Ex9JM4L03
Device width	21.5 mm		
Device length	27.5 mm		
Device height	37 mm		
Contact material	Ag alloy		
Mechanical service life	10 000 000 operating cycles		
Ambient temperature	-25 — +55°C		
Pollution degree	2		
Weight	0.033 kg		

### Mechanical parameters BASES

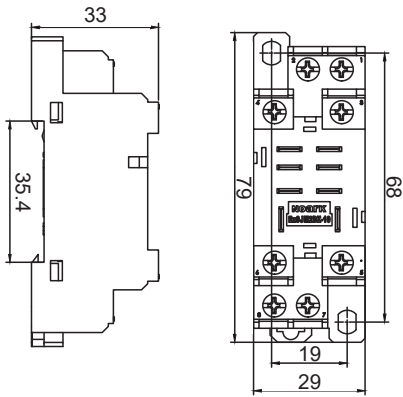
	Ex9JM2DZ-10	Ex9JM2DZ-05	Ex9JM4DZ-03
Device width	29 mm	23 mm	30 mm
Device length	79 mm	72 mm	72 mm
Device height	33 mm	31 mm	31 mm
Terminals	M3 screws		
Mounting	easy fastening onto 35 mm device rail (DIN) or onto panel		
Mounting position	any		
Installation class	II		
Weight	0.050 kg	0.035 kg	0.049 kg

# Technical Data Ex9JM

## Plug-in relays Ex9JM

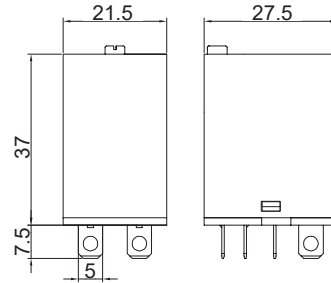
### Dimensions

Ex9JM2DZ-10

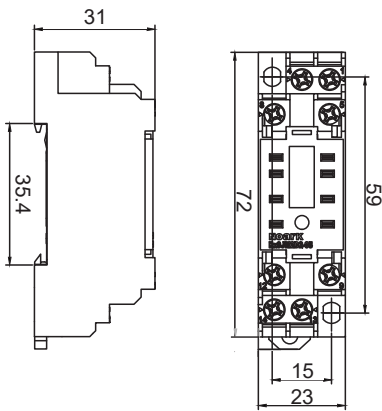


Ex9JM2L10

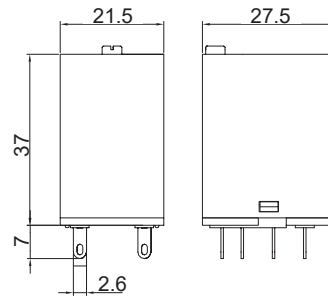
mm



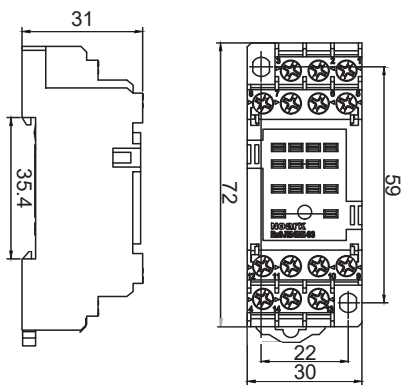
Ex9JM2DZ-05



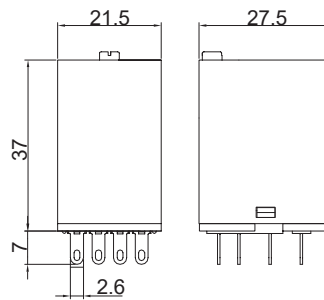
Ex9JM2L05



Ex9JM4DZ-03

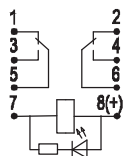


Ex9JM4L03

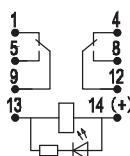


### Wiring diagrams

Ex9JM2L10



Ex9JM2L05



Ex9JM4L03

