

Auxiliary Relays

Monostable Relay – 7PA26

Description

7PA26 is a monostable relay with 8 change-over contacts.

The relay has been tested according to IEC and EN standards and has the CE marking.

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Benefits

Mechanically sturdy contacts, high insulation resistance, high making and breaking power, and a high continuous current enable direct switching in high-voltage and medium-voltage systems.

Applications

The design, quality and high durability of the relays ensure reliable usability under highly demanding conditions such as in power plants, generator stations, transformer stations and railroads.

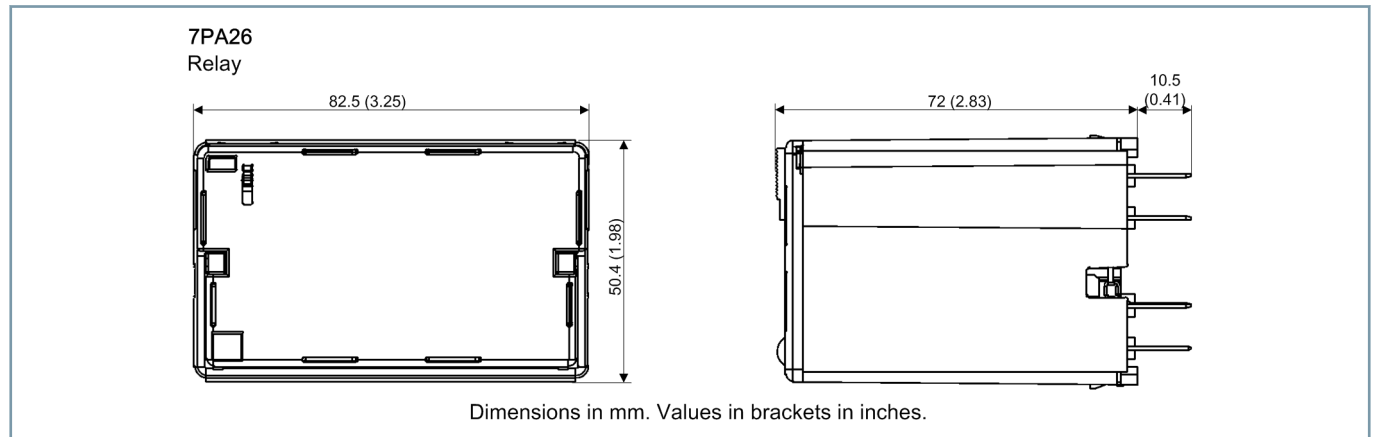


[ph_7PA26, 1, ---]

Figure 2.2/1 Auxiliary Relay 7PA2642

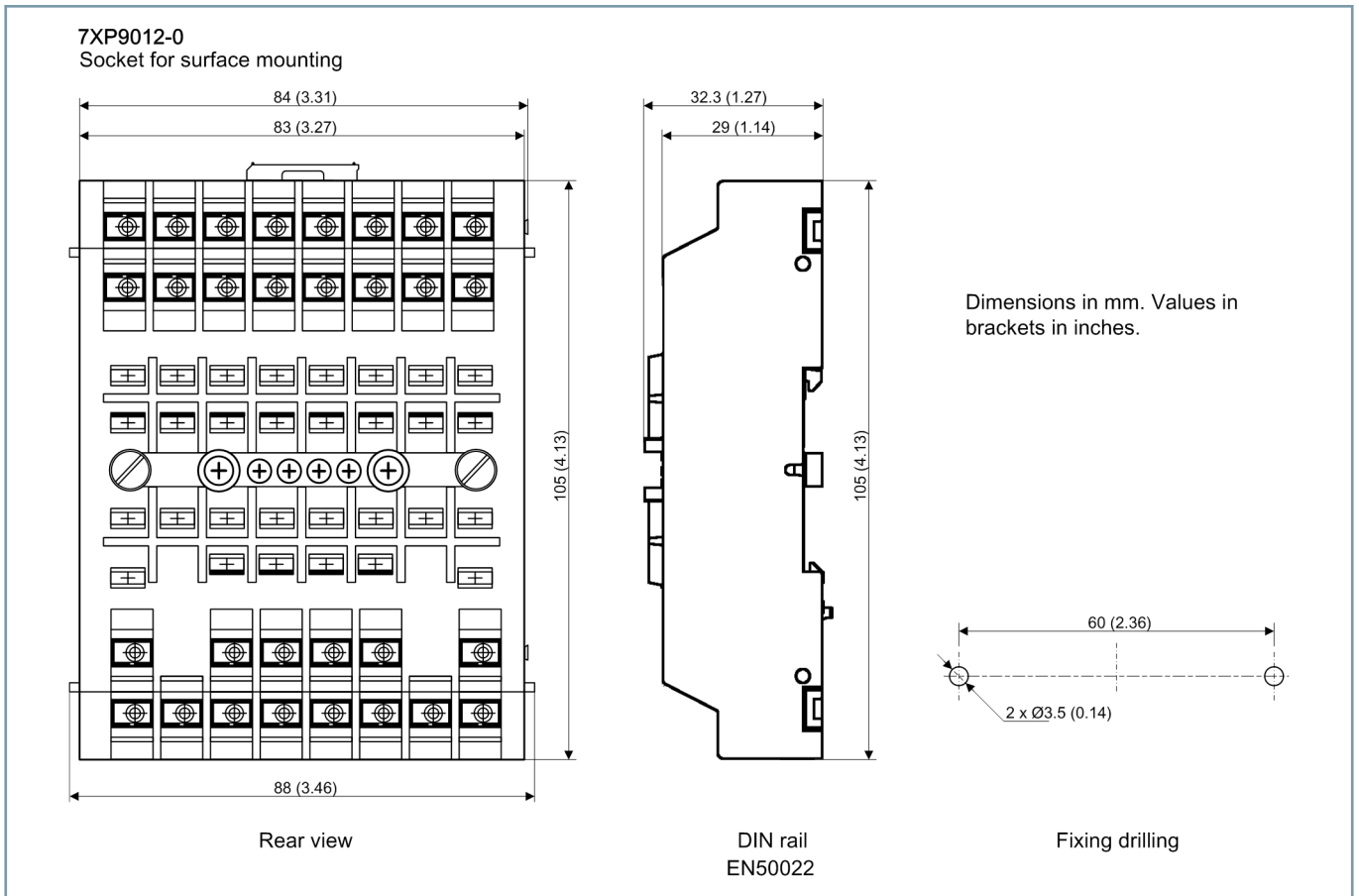
They are suitable for use in energy systems and process control systems for large-scale industry applications, the petrochemical sector, steel and cement factories, and many more.

Dimensions and Connections



[dw_7pa26_dimensions_and_panel-mounting-cutout, 2, en_US]

Figure 2.2/2 Dimensions and Installation Dimensions



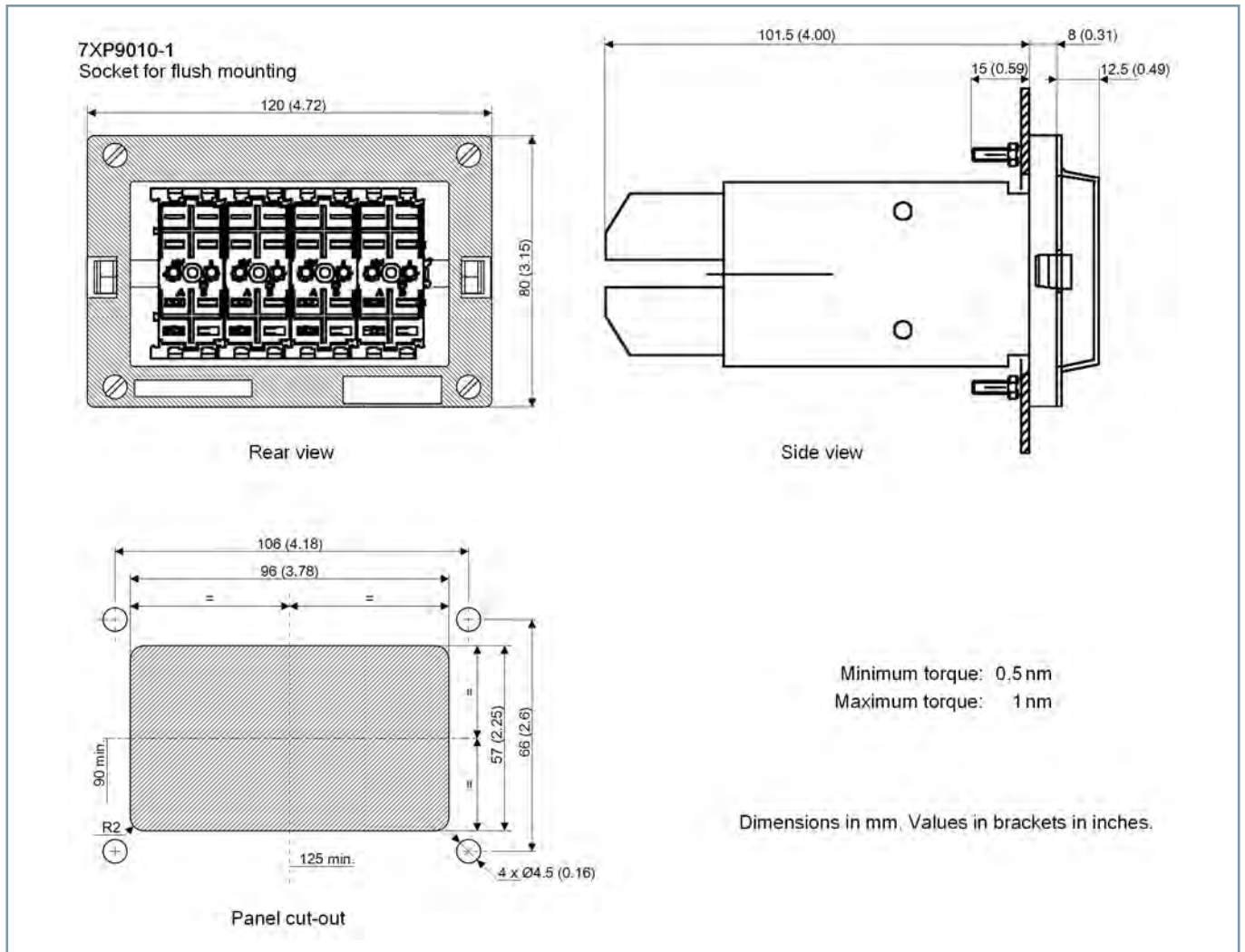
[dw_7pa26_socket_for_surface-mounting_2_en_US]

Figure 2.2/3 Surface-Mounting Base – 7XP9012-0

Auxiliary Relays

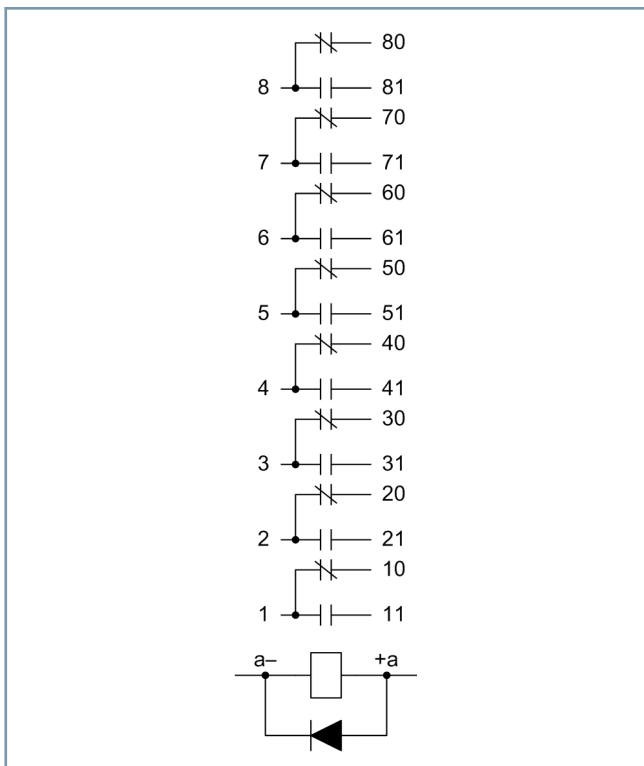
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[dw_7pa26_socket_for_flush-mounting, 2, en_US]

Figure 2.2/4 Flush-Mounting Base – 7XP9010-3



[dw_7pa26_connection_2_en_US]

Figure 2.2/5 Connections 7PA26

Technical Data

Rated voltage and internal consumption 7PA26 □20				
V_N (VDC)	Voltage range (VDC)	Internal consumption (mA)	Excitation voltage (VDC) between ¹⁾	De-excitation voltage (VDC) between ¹⁾
24/30	17 to 37	288	8.4 and 13.2	3.6 and 9
48	33.6 to 60	144	16.8 and 26.4	7.5 and 17
60	42 to 75	115	21 and 33	9 and 21
110/125	77 to 156	63	38.5 and 60.5	16.5 and 38.5
220	154 to 275	31	77 and 121	33 and 77

- (1) Excitation and de-excitation voltages for the 7PA26*20 are specified for an ambient temperature of 23 °C and a cold relay. These values change with temperature.

Rated voltage and internal consumption 7PA26 □21					
V_N (VDC)	Voltage range (VDC)	Internal consumption (mA)		Excitation voltage (VDC) between ¹⁾	De-excitation voltage (VDC) between ¹⁾
		Stand ard [mA]	Peak		
24/30	19 to 33	66	0.8 A/20 ms	16 and 19	9 and 14
48	38.4 to 52.8	32	0.3 A/20 ms	23.8 and 33.6	14.4 and 21.6
60	48 to 66	28		36 and 42	18 and 27
110/125	88 to 137	13	0.3 A/20 ms	66 and 77 V	38 and 42 V
220	176 to 242	8		132 and 154	66 and 99

Rated voltage and internal consumption 7PA26 □21					
24/30	19 to 33	66	0.8 A/20 ms	16 and 19	9 and 14
48	38.4 to 52.8	32		23.8 and 33.6	14.4 and 21.6
60	48 to 66	28	0.3 A/20 ms	66 and 77 V	38 and 42 V
110/125	88 to 137	13		132 and 154	66 and 99
220	176 to 242	8			

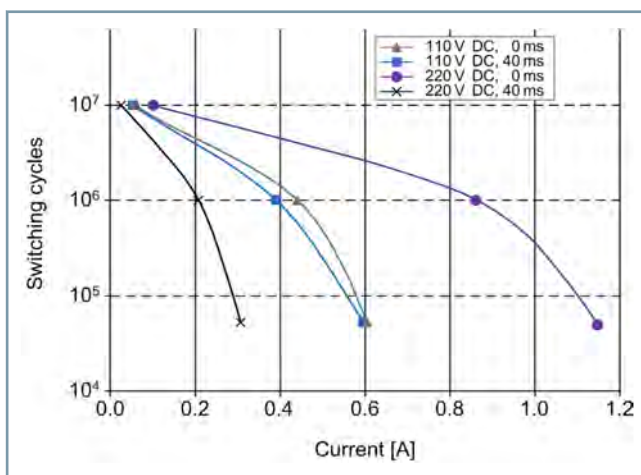
- (1) Excitation and de-excitation voltages for the 7PA26*21 are specified for an ambient temperature of 23 °C and a cold relay. These values change with temperature.

Pre-arcing time	
For excitation	
7PA26 □20	<20 ms
7PA26 □21	<10 ms
For de-excitation	
	< 40 ms

Contacts	
Continuous current	10 A
Overload capacity	80 A/200 ms
	200 A/10 ms
Switching power	40 A/0.5 s, 110 VDC

Breaking power for 10 ⁵ switching cycles				
VDC	Not inductive		Inductive, 40 ms	
	1 contact [A]	2 contacts in series [A]	1 contact [A]	2 contacts in series [A]
24	18	>20	8.1	>20
48	6.9	>20	3.3	18
60	3.4	>20	1.85	13
125	0.9	4	0.47	2
220	0.55	1.5	0.24	0.43

For details, refer to diagram



[dw_7PA26_27_curve_2_en_US]

Figure 2.2/6 Diagram

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Monostable Relay – 7PA26

V_{max} , open-circuited contact	250 VDC/400 VAC
Mechanical endurance	10 ⁷ switching cycles
Operating temperature	-25 °C +70 °C
Storage temperature	-40 °C +85 °C
Max. humidity	93%/40 °C

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Weights and packaging	
7PA26	500 g
Carton	150 x 124 x 84 mm
7XP9010-3	400 g
7XP9012-0	225 g

Design guidelines	
Electrical tests according to	IEC 60255-27
Insulation	2 kV/50 Hz/1 min
Surge immunity	5 kV/1.2/50 µs
Insulation resistance	> 100 MΩ/500 VDC
Flame resistance	
Plastics	UL94: V0
Protection class	IEC 60529, EN60529
Relays	IP40
Flush-mounting base	IP10
Surface-Mounting Base	IP10
Environmental conditions	IEC 60068-2
Dry cold, in operation	-25 °C
Dry heat, in operation	+70 °C
Storage and transportation	-25 °C + 85 °C

EMC Tests	
High-frequency test: Test level: 1 MHz, 400 imp/s, 2 s Common mode: 2.5 kV Differential mode: 1 kV	EN 60255-22-1
Fast transient bursts Test level: 4 kV, 2.5 kHz, 1 min•2 kV, 5 kHz, 1 min	EN 61000-4-4
Energy surge voltages 8/20 µs. (current) - 1.2/50 µs. (voltage) - 8/20 µs. (current) Common mode: 2 kV - differential mode: 1 kV	EN 61000-4-5

EMC Tests	
Radiated HF field interference, amplitude-modulated: Test level: 80-1000 MHz, 10 V/m, 80% AM (1 kHz)	EN 61000-4-3
Radiated HF field interference, pulse-modulated: Test level: 900 ±5 MHz, 10 V/m, 50% (200 Hz) 1.89 GHz ±10 MHz, 10 V/m, 50% (200 Hz)	EN 61000-4-3
Line-conducted HF amplitude-modulated: Test level: 0.15-80 MHz, 10 V, 80% AM (1 kHz)	EN 61000-4-6
Electrostatic discharge test: Test level: Contact ±15 kV, air mode ±15 kV	EN 61000-4-2
Magnetic Field with Energy Frequency Test level: 100 A/m 1 min•1000 A/m 1 s.	EN 61000-4-8
Emitted interference tests: Test level: Cover: 30-230 MHz, 40 dB (µV/m) (quasi peak) - 10 m 230-1000 MHz, 47 dB (µV/m) (quasi peak) - 10 m Power supply: 0.15-0.5 MHz, 79 dB (µV) (quasi peak)/66 dB average 0.5-5 MHz, 73 dB (µV) (quasi peak)/60 dB average 5-30 MHz, 73 dB (µV) (quasi peak)/60 dB average	EN 55011 Class A

Selection and Ordering Data

Description	Order no.															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Monostable relay with 8 change-over contacts	7	P	A	2	6	□	2	-	□	A	A	0	0	-	□	
						▲			▲				▲			
<i>Rated voltage</i>																
DC 24/30 V						1										
DC 60 V						2										
DC 110/125 V						3										
DC 220 V						4										
DC 48 V						8										
Standard, 20 ms									0							
Fast-acting, 10 ms									1							
<i>Base</i>																
Without base													0			
With base 7XP9010-3 (flush mounting)													1			
With base 7XP9012-0 (surface mounting)													2			
5 x retaining bracket for auxiliary relay with surface mounting base (1 required for each relay/ surface mounting base)	A	Y	R	:	E	4	5

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