

Plug-in Relays S-RELAY Series 4



RS410024



RS410730



YRS78704



YRSLG230

Schrack-Info

S-RELAY

- Miniature industry-grade relay for multi-purpose application
- AC and DC coil
- Suitable for DIN rail mounted plug-in sockets, for use in control panel building or on PCBs (PCB and soldering connectors)
- Mechanical indicator and lockable test button
- Integrated insulated contact chambers for increased flash-over resistance
- Cadmium-free contact material
- Certificate: VDE

Socket YRS78704

- Socket for S-RELAY Series 4
- Suitable for mounting in electrical enclosures or for DIN rail mounting
- High-grade terminals preventing incorrect insertion
- Captive terminal screws

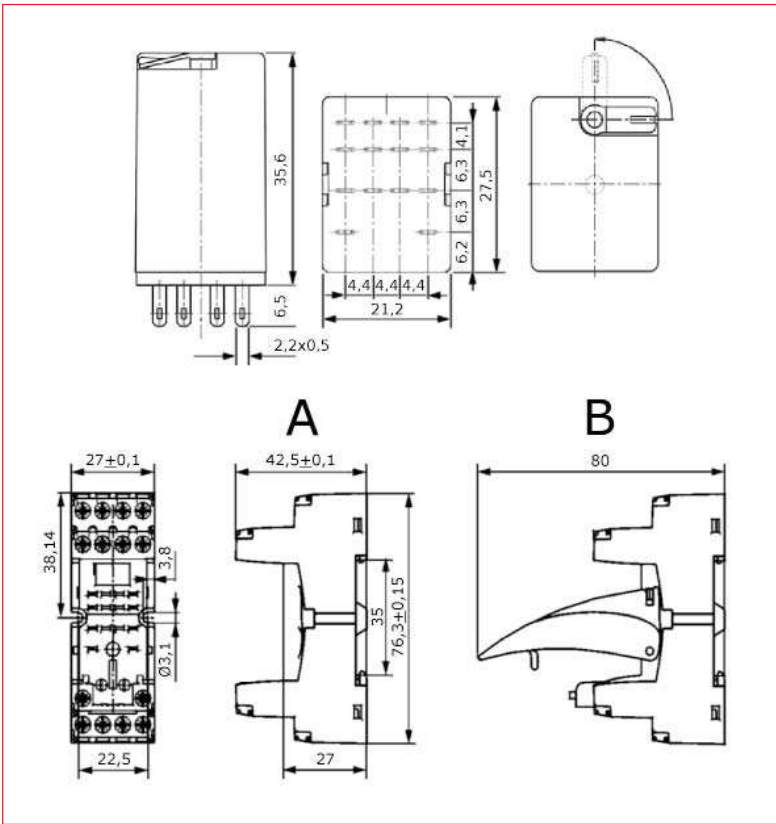
LED and protection modules

- Compatible with socket YRS78704
- LED DC modules with integrated protection diode
- Retrofittable

Plug-in Relays

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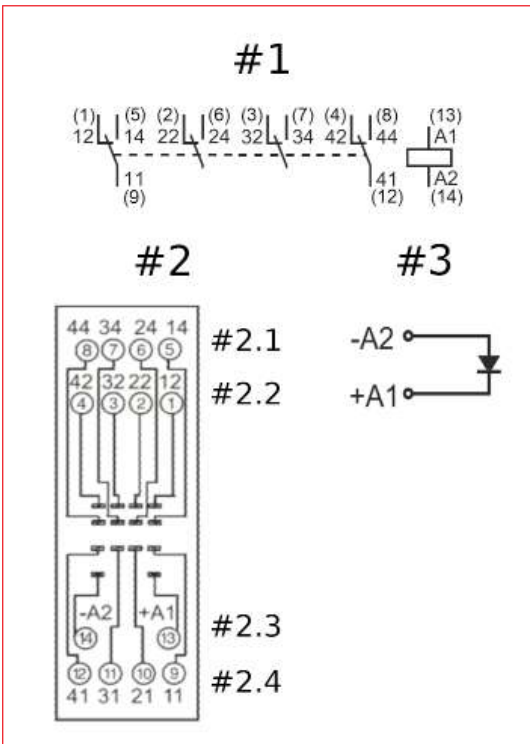
Dimensions (mm)



Dimensions

A	Standard socket
B	Socket with retainer/ retractor clip

Circuit Diagrams

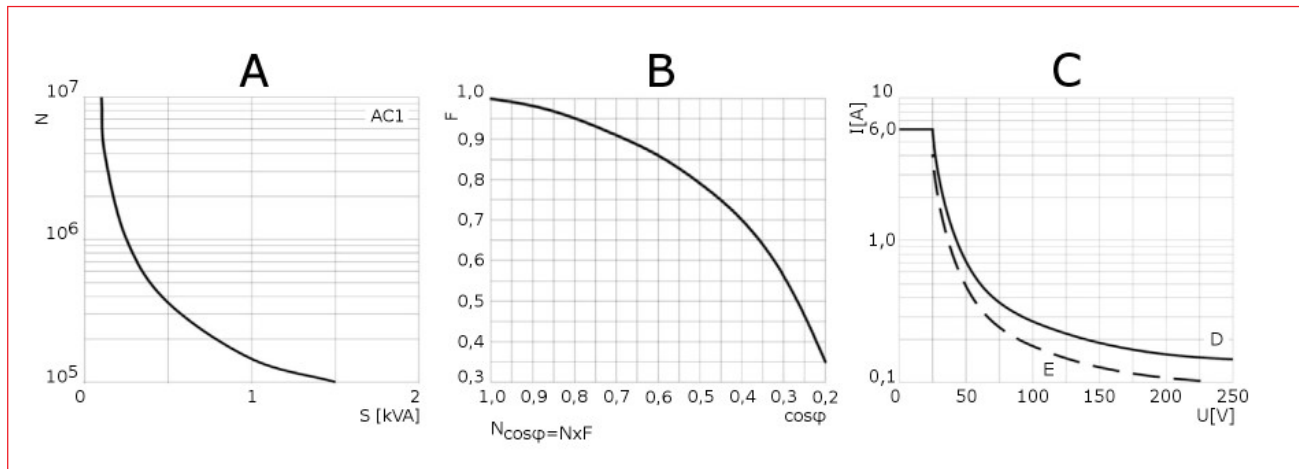


Circuit Diagrams

#1	Circuit diagram	S-RELAY
#2	Terminals	
#2.1	NO contacts	
#2.2	NC contacts	Socket
#2.3	Coil	
#2.4	Com	
#3	Circuit diagram	Protection diode module

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Rated Breaking Capacity, Reduction Factor & Coil Operating Voltage Range



Rated Breaking Capacity, Reduction Factor & Coil Operating Voltage Range

A	Electrical service life at AC resistive load, switching frequency: 1.200 cycles/ hour
B	Electrical service life reduction factor at AC inductive load
C	Max. DC rated breaking capacity
N	Number of cycles/ electrical service life at AC1
S	Rated breaking capacity in [kVA]
F	Reduction factor
cos phi	Power factor
D	Resistive load DC I
E	Inductive load L/R = 40 ms
I	DC current in [A]
U	DC current in [A]

Coil Types

COIL DATA - DC voltage version

Coil code	Rated voltage V DC	Coil resistance Ω at 20 °C	Acceptable resistance	Coil operating range V DC	
				min. (at 20 °C)	max. (at 55 °C)
024 / LC4	24	640	+10 %	19.2	26.4

COIL DATA - AC 50/60Hz voltage version

Coil code	Rated voltage V AC	Coil resistance Ω at 20 °C	Acceptable resistance	Coil operating range V AC	
				min. (at 20 °C)	max. (at 55 °C)
524, R24	24	158	+10 %	19.2	26.4
730 / T30	230	16100	+10 %	184.0	253.0

TECHNICAL DATA, Protection diode module



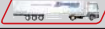

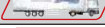
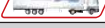








Voltage	6...230 V DC
Wiring	A1 + A2 -

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Technical Data

CONTACT DATA			
Number and type of contacts			4 CO
Contact material			AgNi
Rated/ max. switching voltage AC			250 / 250 V
Min. switching load			10 V (AgNi)
Rated load (capacity)	AC1		6 A / 250 V
	AC15		1.5 A / 120 V ; 0.75 A / 240 V (C300)
	AC3		125 W (single-phase motor)
	DC1		6 A / 24V DC
	DC13		0.22 A / 120 V DC; 0.1 A / 250 V DC (R300)
Min. switching current			5 mA
Max. inrush current			12 A
Rated current			6 A
Max. rated breaking capacity AC1			1500 VA
Min. rated breaking capacity			0.3 W (AgNi)
Contact resistance			≤ 100 mΩ
Max. operating capacity	At rated load	AC1	1200 cycles/hour
	No load		18000 cycles/hour
COIL DATA			
Rated voltage 50 / 60Hz	AC 50 / 60 Hz		6...240 V
	DC		5...220 V
Must release voltage	AC		≥ 0.2 U _N
	DC		≥ 0.1 U _N
Operating range of supply voltage			See table "Coil types"
Rated power consumption	AC		1.6 VA
	DC		0.9 W
Insulation			According to PN-EN 60664-1
Insulation class			B250
Insulation rated voltage			250 V
Rated surge voltage			2500 V; 1.2 / 50 μs
Overvoltage category			II
Insulation pollution degree			2
Dielectric strength	Between coil and contacts		2500 V (basic insulation)
	Contact clearance		1500 V (micro-disconnection clearance)
	Pole-pole		2000 V (basic insulation)
Contact - coil distance			
Clearance			≥ 1.6 mm
Creepage			≥ 3.2 mm
GENERAL DATA			
Operating/ release time (typical value)	AC		10 / 8 ms
	DC		13 / 3 ms
Electrical service life	Resistive AC1		> 10 ⁵ , 6 A / 250 V
	cos phi		See diagram
Mechanical service life (cycles)			> 2 x 10 ⁷
Dimensions (LxWxH)			27.5 x 21.2 x 35.6 mm
Weight			35g
Ambient temperature	Storage		-40...+85 °C
	Operating	AC	-40...+55 °C
		DC	-40...+70 °C
Cover degree of protection			IP40
Environmental protection			RTI
Shock resistance (NO/NC)			10 / 5 g
Vibration resistance			5g; 10...150 Hz
Solder bath temperature			max. 270 °C
Soldering time			max. 5 sec.

Plug-in Relays S-RELAY Series 4

DESCRIPTION	AVAILABLE	ORDER NO.
S-Relay 4 Poles, Series 4		
24V-DC, 4 CO, 6A		RS410024
24V-AC, 4 CO, 6A		RS410524
230V-AC, 4 CO, 6A		RS410730
24V-DC, 4 CO, 6A, with LED and protection diode		RS410LC4
24V-AC, 4 CO, 6A, with LED		RS410R24
230V-AC, 4 CO, 6A, with LED		RS410T30
Socket for S-Relay 4 Poles, Series 4		
Socket with screw terminals 14 pole, mounting on DIN-rail for 4 pole relays 6A		YRS78704
Retaining clip		YRS16016
Marking tag		YRS16040
Modules Matching Plug-in Socket for S-Relays, Series 4		
Protection diode module 6-230V DC, A1+		YRSFL230
LED+PD module, red, 6-24V DC, A1+		YRSLR024
LED+PD module, green, 6-24V DC, A1+		YRSLG024
LED module, red, 110-230V AC		YRSLR230
LED module, green, 110-230V AC		YRSLG230