

1 & 2 CO industrial style power relays

For socket mount

Type QJS2 ---- 2 CO 8A

Type QJS1 ---- 1 CO 12A

AC coils & DC coils

Available with: mechanical indicator & LED indicator

8mm, 6kV (1.2/50μ s) isolation, coil-contacts

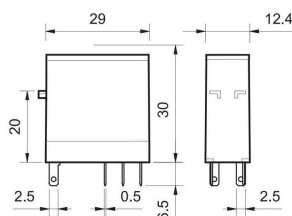
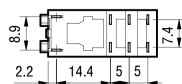
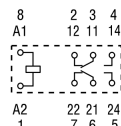
Cadmium free contacts

QJSS series 35 mm rail (EN 60715) Screw, Screwless Push-in terminals, and PCB mount sockets

QJS2



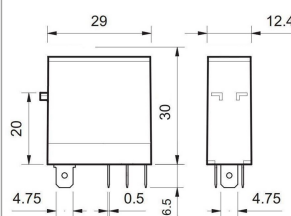
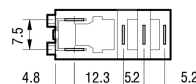
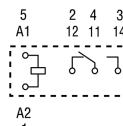
- 2 CO 8 A
- Plug-in/Solder terminals



QJS1



- 1 CO 12 A
- Plug-in/Solder terminals



Contact specification

Contact configuration		2 CO (DPDT)	1 CO (SPDT)
Rated current/Maximum peak current	A	8/15	12/19
Rated voltage/Maximum switching voltage	V AC	250/440	250/440
Rated load AC1	VA	2000	4000
Rated load AC15 (230 V AC)	VA	350	750
Single phase motor rating (230 V AC)	kW	0.37	0.55
Breaking capacity DC1: 30/110/220 V	A	6/0.5/0.15	12/0.5/0.15
Minimum switching load	mW (V/mA)	300 (5/5)	300 (5/5)
Standard contact material		AgNi	AgNi

Coil specification

Nominal voltage (U _N)	V AC (50/60 Hz)	12 - 24 - 48 - 110 - 220 - 240	
	V DC	12 - 24 - 48 - 110 - 125	
Rated power	VA/W	1.2/0.5	1.2/0.5
Operating range	AC	(0.8...1.1)U _N	(0.8...1.1)U _N
	DC	(0.73...1.1)U _N	(0.73...1.1)U _N
Holding voltage	AC/DC	0.8 U _N / 0.4 U _N	0.8 U _N / 0.4 U _N
Must drop-out voltage	AC/DC	0.2 U _N / 0.1 U _N	0.2 U _N / 0.1 U _N

Technical data

Mechanical life AC/DC	cycles	10 · 10 ⁶	10 · 10 ⁶
Electrical life at rated load AC1	cycles	100 · 10 ³	100 · 10 ³
Operate/release time	ms	10/3	15/5
Insulation between coil and contacts (1.2/50 μs)	kV	6 (8 mm)	6 (8 mm)
Dielectric strength between open contacts	V AC	1000	1000
Ambient temperature range	°C	-40...+70	-40...+70
Environmental protection		RT II	RT II

Approvals (according to type)

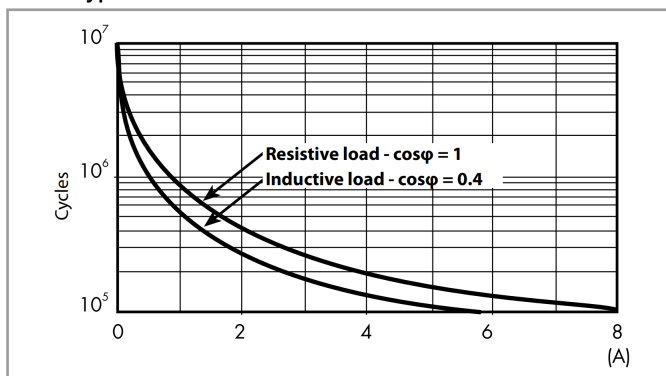
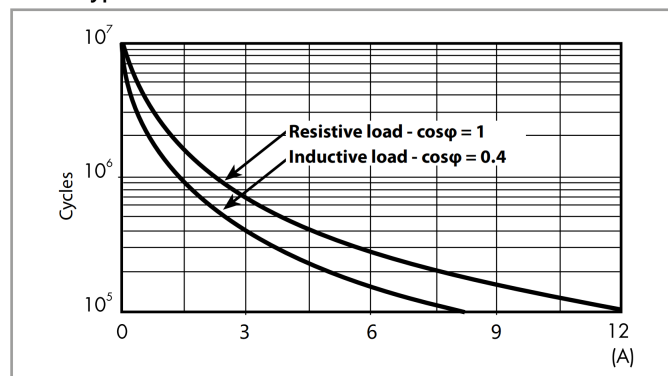


the maximum peak current is 80 A - 5 ms on normally open contact.

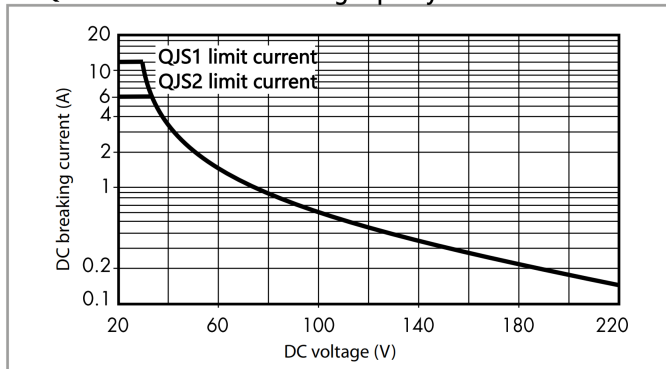
Technical data

Insulation according to EN 61810-1					
		1 pole		2 pole	
Nominal voltage of supply system	V AC	230/400		230/400	
Rated insulation voltage	V AC	250	400	250	400
Pollution degree		3	2	3	2
Insulation between coil and contact set					
Type of Insulation		Reinforced (8 mm)		Reinforced (8 mm)	
Overvoltage category		III		III	
Rated impulse voltage	kV (1.2/50 μs)	6		6	
Dielectric strength	V AC	4000		4000	
Insulation between adjacent contacts					
Type of insulation		—		Basic	
Overvoltage category		—		III	
Rated impulse voltage	kV (1.2/50 μs)	—		4	
Dielectric strength	V AC	—		2000	
Insulation between open contacts					
Type of disconnection		Micro-disconnection		Micro-disconnection	
Dielectric strength	V AC/kV (1.2/50 μs)	1000/1.5		1000/1.5	
Insulation between coil terminals					
Rated impulse voltage (surge) differential mode (according to EN 61000-4-5)	kV (1.2/50 μs)	2			
Other data		QJS1		QJS2	
Bounce time: NO/NC	ms	2/6		1/4	
Vibration resistance (10...150)Hz: NO/NC	g	20/12		20/15	
Shock resistance	g	20		20	
Power lost to the environment	without contact current	W	0.6	0.6	
	with rated current	W	1.6	2	
Recommended distance between relays mounted on PCB	mm	≥ 5			

Contact specification

F-QJS2 - Electrical life (AC) v contact current
Type QJS2F-QJS1 - Electrical life (AC) v contact current
Type QJS1

H-QJS - Maximum DC1 breaking capacity



- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of $\geq 100 \cdot 10^3$ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.

Note: the release time for the load will be increased.

Coil specifications

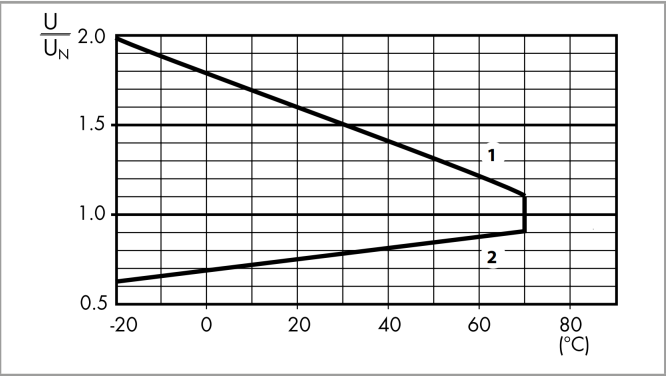
DC coil data

Nominal voltage U_N	Coil code	Operating range		Resistance R	Rated coil consumption I at U_N
		U_{min}	U_{max}		
V		V	V	Ω	mA
12	LD12	8.8	13.2	300	40
24	LD24	17.5	26.4	1200	20
48	LD48	35	52.8	4800	10
110	LD110	80	121	23500	4.7

AC coil data

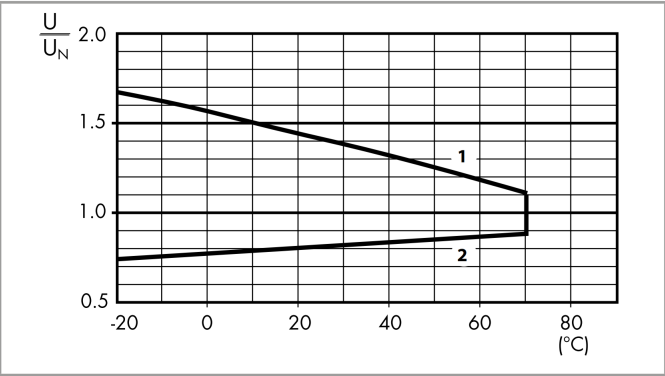
Nominal voltage U_N	Coil code	Operating range		Resistance R	Rated coil consumption I at U_N
		U_{min}	U_{max}		
V		V	V	Ω	mA
12	LA12	9.6	13.2	80	90
24	LA24	19.2	26.4	320	45
48	LA48	38.4	52.8	1350	21
110	LA110	88	121	6900	9.4
230	LA220	184	253	28000	5

R 46 - DC coil operating range v ambient temperature



- 1 - Max. permitted coil voltage.
- 2 - Min. pick-up voltage with coil at ambient temperature.

R 46 - AC coil operating range v ambient temperature



- 1 - Max. permitted coil voltage.
- 2 - Min. pick-up voltage with coil at ambient temperature.

Product model information

Example: QJS series Miniature industrial relay, 1 CO, 24VDC coil, LED indicator and mechanical indicator.

QJS

1

- LD

24

Series

Type

S = QJS Series Socket

1 = 1 pole, 16A Spade/blade terminal Faston 187 (4.8x0.5)mm

2 = 2 poles, 8A Spade/blade solder terminal (2.5x0.5)mm

Coil version

LD = DC mechanical indicator & LED indicator (DC non-polarized)

LA= AC (50/60Hz) mechanical indicator & LED indicator

Coil voltage

12=12V

24=24V

48=48V

110=110/120V

220=220/240V

QJS

S

- 05

SL

Series

Type

S = QJS Series Socket

Number of relay pins

05=5Pins

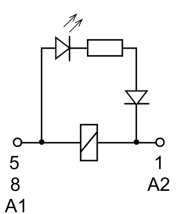
08=8Pins

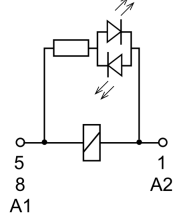
Type

S=Screw Socket

SL=Screwless Push-in terminal Socket

LA/LD Descriptions:





TYPE Option LA= LED (AC)

TYPE Option LD= LED (DC, non-polarized)



QJSS-08S

Approvals
(according to type):

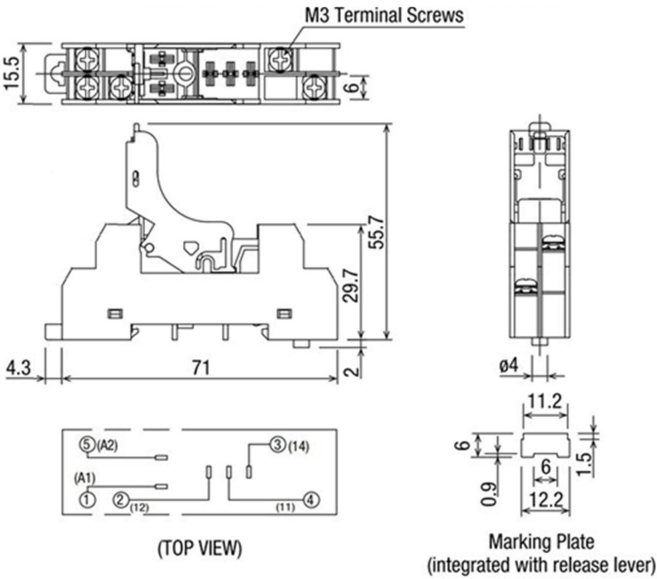


QJSS-05S

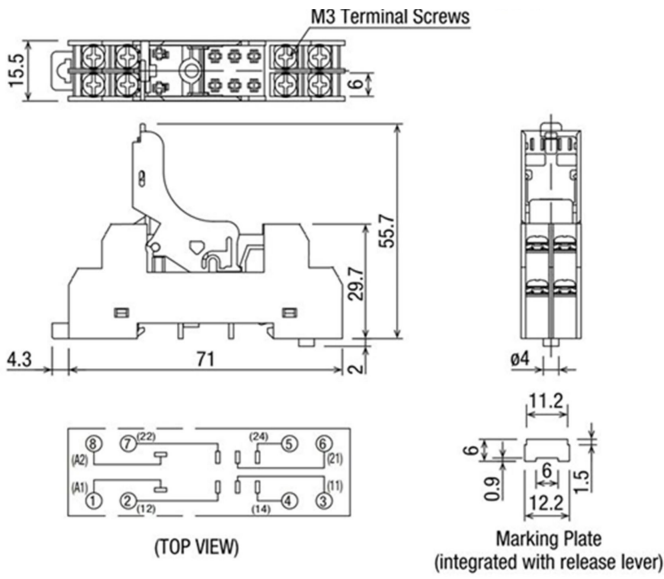
Approvals
(according to type):



Screw terminal socket 35mm DIN Rail Mount	QJSS-05S	QJSS-08S
For relay type	QJS1	QJS2
Accessories	Supplied with socket	
Plastic retaining and release clip		
Technical data		
Rated values	12A-250VAC	8A-250VAC
Dielectric strength	6 kV (1.2/50 μs) between coil and contacts	
Protection category	IP 20	
Ambient temperature	°C -40...+70	



QJSS-05S SOCKET 12A



QJSS-08S SOCKET 8A



QJSS-08SL

Approvals
(according to type):

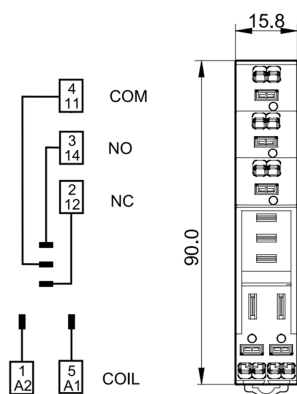


QJSS-05SL

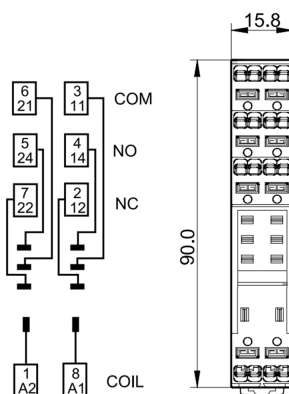
Approvals
(according to type):



Screwless Push-in terminal socket 35mm DIN Rail Mount	QJSS-05SL	QJSS-08SL
For relay type	QJS1	QJS2
Accessories		
Plastic retaining and release clip and Identification tag	Supplied with socket	
Technical data		
Rated values	12A-300 V AC	10A-300 V AC
Dielectric strength	6 kV (1.2/50 μs) between coil and contacts	
Protection category	IP 20	
Ambient temperature	°C −40...+70	
Wire strip length	mm 8	
Min. wire size for QJSS-05SL/08SL socket	solid wire	stranded wire
	mm² 0.5	0.5
	AWG 21	21
Max. wire size for QJSS-05SL/08SL socket	solid wire	stranded wire
	mm² 2 x 1.5 / 1 x 2.5	2 x 1.5 / 1 x 2.5
	AWG 2 x 16 / 1 x 14	2 x 16 / 1 x 14



QJSS-05SL



QJSS-08SL

