

Miniature General Purpose Relay HY

- General purpose 5,7 amp Plug in Power Relay, available in 2PCO, 3PCO and 4PCO
- Arc barriers prevent flashover between contacts
- Manual operator for circuit testing with latch facility colour coded for AC/DC identification
- Mechanical flag indicator showing armature operation
- LED indicators showing coil energisation
- UL and cUL approvals
- RoHS Approved
- Range of Sockets in Socket Section



Options and ordering codes

HY	4	1	PN	G	230VAC
General purpose power relay					For coil voltage see table
Contact Form				Contact material	
2 pole changeover	2			G AgCe + Au plated	
3 pole changeover	3			NIL AgCe	
4 pole changeover	4				
Plug in	1		PN Mechanical indicator/test latch LED		
PCB	2		XN Indicator only		
Flange	5		PX Test only		
			XX No indication or test		

Specification

Type	HY21 Resistive	HY31 Resistive	HY41 Resistive
Contact configuration	2PCO	3PCO	4PCO
Rated load at 250VAC/30VDC	7A	7A	5A
Rated current	7A	7A	5A
Max. switching voltage	250	250	250
Max. breaking capacity	1750VA	1750VA	1250VA
Operate time	25ms	25ms	25ms
Release time	25ms	25ms	25ms
Dielectric Strength	Coil to contact		
		1500VAC	1500VAC
Ambient temperature	-55°C to +70°C	-55°C to +70°C	-55°C to +70°C
Mechanical life	2 x 10 ⁷ ops	2 x 10 ⁷ ops.	2 x 10 ⁷ ops
Electrical life	1 x 10 ⁶ ops	1 x 10 ⁶ ops	1 x 10 ⁶ ops
Protection degree	IP40	IP40	IP40
Contact material	See ordering info	See ordering info	See ordering info
Voltage range	80-110%	80-110%	80-110%
Power consumption	1.2VA AC: 0.9W DC	1.2VA AC: 0.9W DC	1.2VA AC: 0.9W DC
Weight	37g	37g	37g

Coil Data

Rated Voltage AC 50/60Hz	Coil resistance ±10% at 20°C Ω
12VAC	46
24VAC	184
48VAC	735
110VAC	4550
230VAC	14400
12VDC	160
24VDC	650
48VDC	2600
110VDC	1100

Safety Approval Ratings

UL&CUR	2C: 7A 250VAC/30VDC 3C, 4C: 5A 250VAC/30VDC
TÜV	2C, 3C: 7A 250VAC/30VDC 4C: 5A 250VAC/30VDC

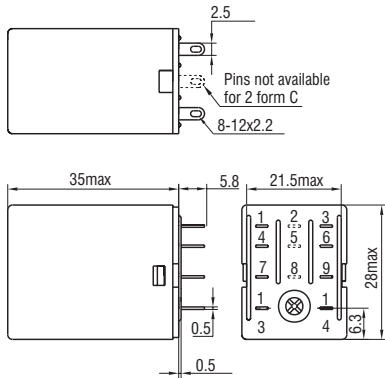
Miniature General Purpose Relay HY



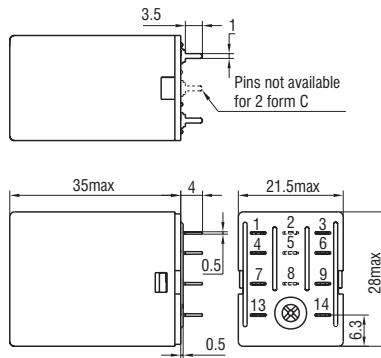
Outline dimensions

Wiring diagram and PC Board layout

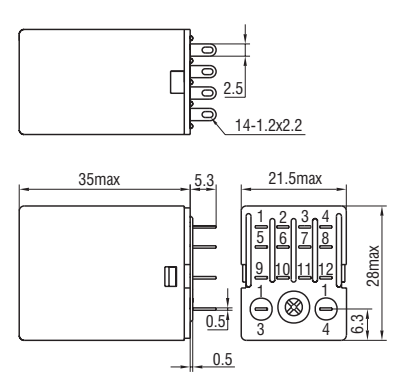
2 Pole/3 Pole Plug-in



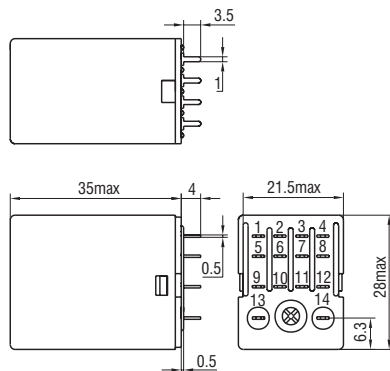
2 Pole/3 Pole PCB



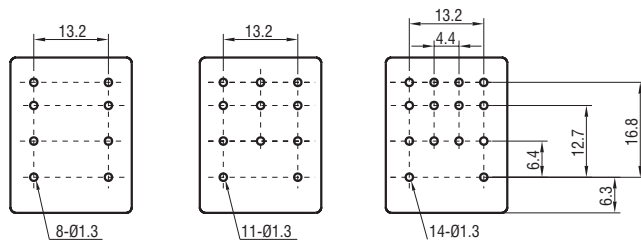
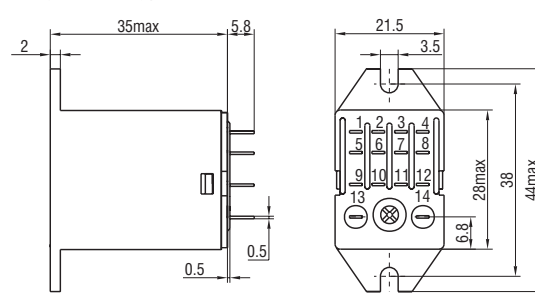
4 Pole Plug-in



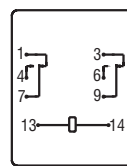
4 Pole PCB



Flange Mount, Type 5

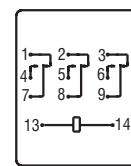


2 Pole (DPDT)



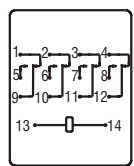
2 Pole (DPDT)

3 Pole (3PDT)



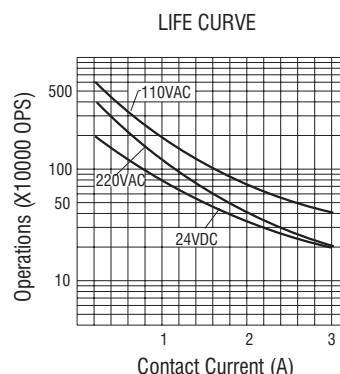
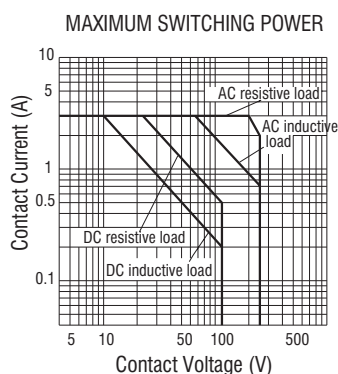
3 Pole (3PDT)

4 Pole (4PDT)



4 Pole (4PDT)

Characteristic Curve



SRN2-D

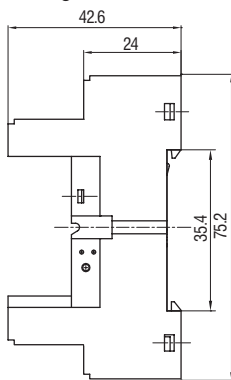


Characteristics

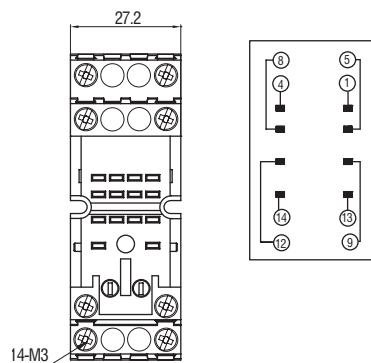
Ambient temperature	-40 to 70 °C
Rated voltage	300VAC
Rated current	12A (Per pole)
Insulation voltage	>5KV
Protection degree	IP20
Socket material	Self-extinguishing-PA66+GF (V0)
Contacts spring material	QSn6.5-0.1
Hold down spring	Plastic
Stew Torque	0.6Nm
Wire strip length	7mm



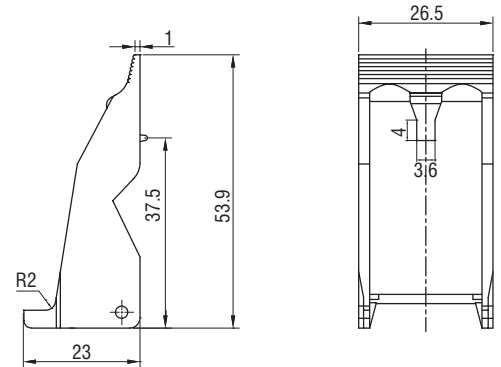
Mounting dimension



Inter connection



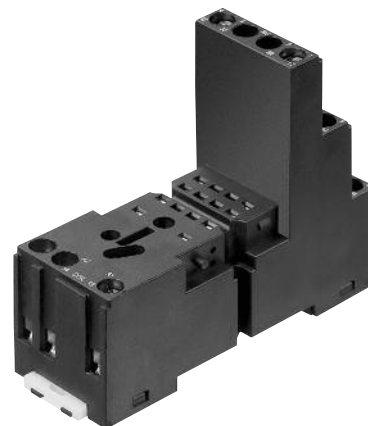
Retainer dimension



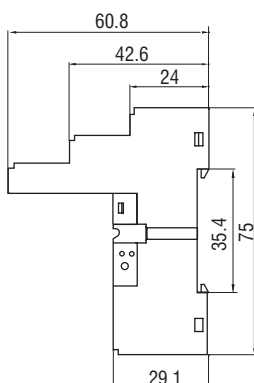
SRN2-S Panel mount or 35mm Din Rail (EN50022)

Characteristics

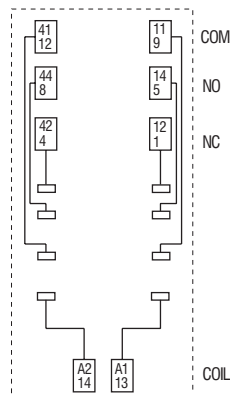
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Protection degree	IP20
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Contacts spring material	QSn6.5-0.1
Hold down spring	Plastic
Stew Torque	0.6Nm
Wire Strip length	7mm



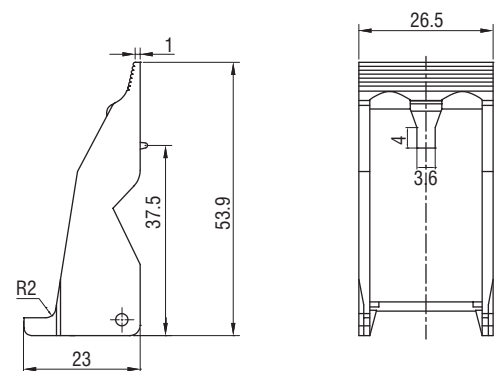
Mounting dimension



Inter connection



Retainer dimension



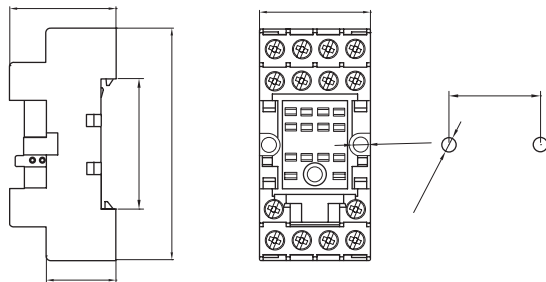
SRN4-C Panel mount or 35mm Din Rail (EN50022)

Characteristics

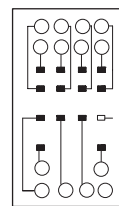
Ambient temperature	-40 to 70 °C
Rated voltage	300VAC
Rated current	12A (Per pole)
Insulation voltage	>5KV
Protection degree	IP20
Socket material	Self-extinguishing-PA66+GF (V0)
Contacts spring material	QSn6.5-0.1
Stew Torque	0.6Nm
Wire strip	7mm



Mounting dimension



Inter connection



General Purpose Power Relay QY

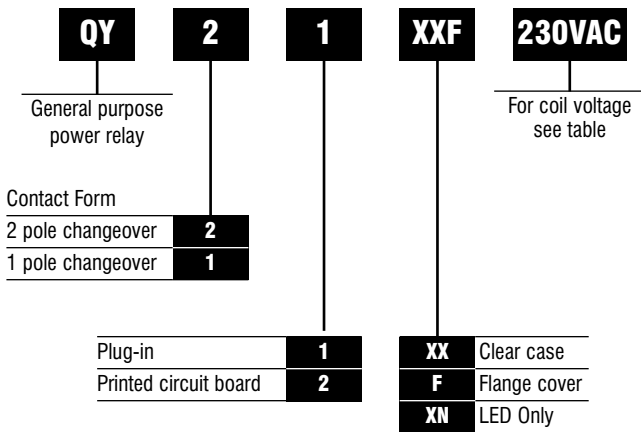


General purpose 10 amp Power Relay available in 1 and 2PCO Plug-in, PCB, chassis mount and Flange

- Arc barriers prevent flashover between contacts
- High reliability/long life expectancy
- UL/cUL approved
- RoHS Approved



Options and ordering codes



Specification

Contact arrangement	2C	1C
Contact Resistance	100m (at 1A 6VDC)	
Contact material	Silver alloy	
Contact rating (res, load)	1C: 15A 250VAC/30VDC 2C: 10A 250VAC/30VDC	
Max. switching voltage	250VAC/30VDC	
Max. switching current	15A	10A
Max. switching power	3750VAC/450W	2200VAC/280W
Mechanical endurance	2 x 10 ⁷ OPS	
Electrical endurance	1 x 10 ⁵ OPS (See approval reports for details)	

Coil Data

Rated Voltage	AC Coils. Coil resistance	DC Coils. Coil resistance
12	46	160
24	184	650
110	4550	11000
230	14400	-

Characteristics

Initial Insulation Resistance	500M @ 500VDC	
Dielectric Strength	Between coil & contact	1500VAC 1min.
	Between open contacts	1000VAC 1min.
	Between contact sets	1500VAC 1min.
Operate time (at nomi. voltage)	25ms	
Release time (at nomi. voltage)	25ms	
Temperature rise (at nomi. voltage)	60K max.	
Shock resistance	Functional	100m/s ²
	Destructive	1000m/s ²
Vibration resistance	1mm DA, 10 to 55Hz	
Humidity	98%, +40°C	
Ambient temperature	-40°C to +70°C	
Termination	PCB, Plug-in	
Unit Weight	Approx. 37g	
Construction	Dust protected	

Safety Approval Ratings

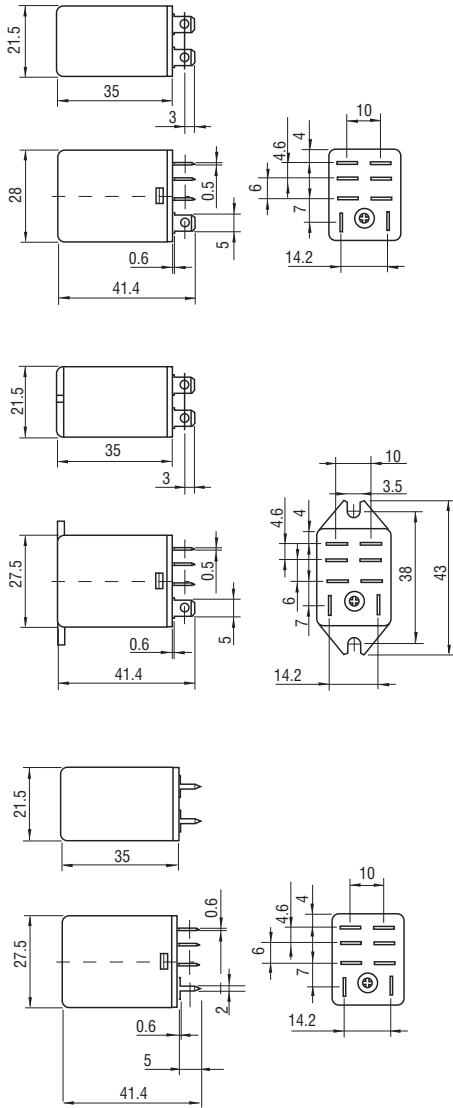
UL&CUR	1 Form C: 15A 250VAC/30VDC
	2 Form C: 10A 250VAC/30VDC 1/3HP 240VAC/120VAC
TÜV	2C: 10A 250VAC/30VDC

General Purpose Power Relay QY

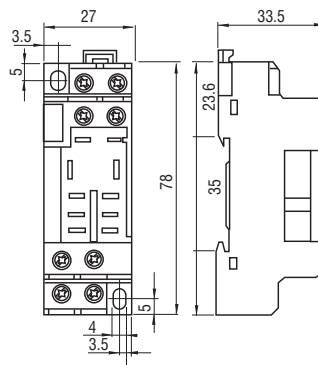


Outline dimensions

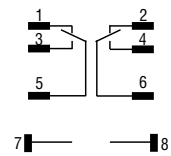
Wiring diagram and PC Board layout



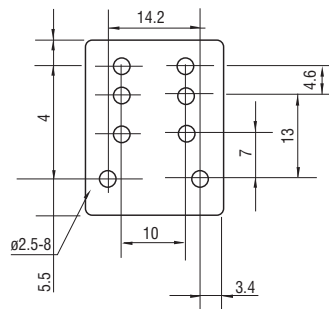
DIN Socket SRH2-C



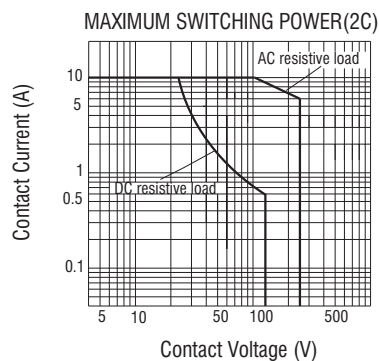
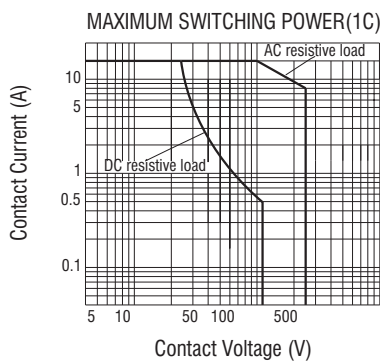
Terminal arrangement



PCB layout



Characteristic Curve



SRH2-C Panel mount or 35mm Din Rail (EN50022)

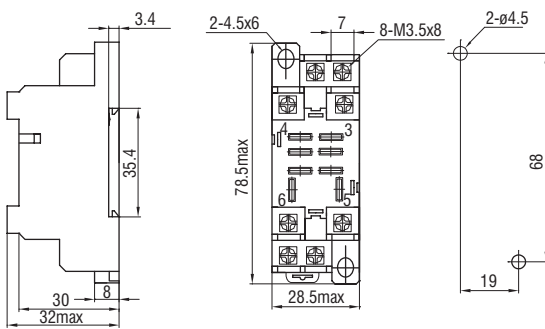


Characteristics

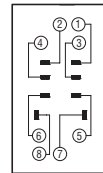
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Protection degree	IP20
Socket material	Self-extinguishing-PA66+GF (V0)
Contacts spring material	QSn6.5-0.1
Hold down spring	Steel
Stew Torque	1.0Nm
Wire Strip length	7mm



Mounting dimension



Inter connection



Retainer dimension

