

JQX-115F

MINIATURE HIGH POWER RELAY



File No.:15008



File No.:E134517



File No.:116934



File No.:CQC02001001951



Features

- Low height 15.7 mm
- 16A switching capabilities
- 1&2 pole configurations
- 5KV dielectric coil to contacts
- Creepage distance 10mm
- Sealed IP67& unsealed types available

CONTACT DATA

Contact Arrangement	1A, 1B, 1C	2A, 2B, 2C
Initial Contact Resistance Max.	50mΩ (at1A / 6VDC)	
Contact Material	See ordering info.	
Contact Rating (Res. Load)	12A/ 16A 250VAC 10A/ 24VDC	8A/ 250VAC 8A/ 24VDC
Max. switching voltage	440VAC/ 125VDC	
Max. switching current	12A/ 16A	8A
Max. switching power	3000VA/ 4000VA	2000VA
Mechanical life	1 x 10 ⁷ OPS	
Electrical life	1 x 10 ⁵ OPS	

COIL

Coil power	0.4W
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COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. allowable Voltage VDC(at 20°C)	Coil Resistance Ω
5	3.50	0.5	7.5	62 ± 10%
6	4.20	0.6	9.0	90 ± 10%
9	6.30	0.9	13.5	202 ± 10%
12	8.40	1.2	18	360 ± 10%
18	12.60	1.8	27	810 ± 10%
24	16.80	2.4	36	1,440 ± 10%
48	33.60	4.8	72	5,760 ± 15%
60	42.00	6.0	90	7,500 ± 15%
110	77.00	11.0	165	25,200 ± 15%

CHARACTERISTICS

Initial Insulation Resistance	1000MΩ (500 VDC)	
Dielectric Strength	Between coil and Contacts	5,000VAC 1min.
	Between open contacts	1,000VAC 1min.
	Between contact sets	2,500VAC 1min.
Surge voltage between coil and contacts	10KV (1.2X50μs)	
Operate time (at nomi. Volt.)	Max.15ms	
Release time (at nomi. Volt.)	Max. 8ms	
Temperature rise (at nomi. Volt.)	55°C	
Shock Resistance	Functional	100 m/s ²
	Destructive	1000m/s ²
Vibration Resistance	10 to150 Hz 10g/5g	
Humidity	35% to 85%	
Ambient temperature	-40°C to +85°C	
Termination	PCB	
Unit weight	13.5g	
Construction	Sealed IP67& Unsealed	

SAFETY APPROVAL RATINGS

FIMKO	8A/ 250VAC
	12A/ 250VAC
	16A/ 250VAC



SAFETY APPROVAL RATINGS

VDE

	Specifications	Ratings	Ambient Temp
AgCdO	JQX-115F....2(H;Z)(S)4(G)(F)	8A /250VAC	-40 to 70°C
	JQX-115F....1H(S)(1;2)(G)(F)	12A /250VAC	-40 to 70°C
		10A/ 250VAC 100k ops	-40 to 70°C
	JQX-115F....1Z(S)(1;2)(G)(F)	12A /250VAC	-40 to 70°C
	JQX-115F....1H(S)3(G)(F)	16A/ 250VAC	-40 to 70°C
		10A/ 250VAC 100k ops	-40 to 70°C
9A/ 250VAC cosphi=0.4		-40 to 70°C	
JQX-115F....1Z(S)3(G)(F)	16A/ 250VAC	-40 to 70°C	
	9A/ 250VAC cosphi=0.4	-40 to 70°C	
AgNi	JQX-115F....2(H;Z)(S)4B(G)(F)	8A/ 250VAC	-40 to 85°C
	JQX-115F....1(H;Z)(S)3B(G)(F)	9A/ 250VAC cosphi=0.4	-40 to 70°C
		16A/ 250VAC	-40 to 85°C
	JQX-115F....1H(S)(1;2)B(G)(F)	12A/ 250VAC	-40 to 85°C
10A/ 250VAC		-40 to 85°C	
AgSnO ₂	JQX-115F....1(H;Z)(S)(1;2)A(G)(F)	12A/ 250VAC	-40 to 85°C
	JQX-115F....1(H;Z)(S)3A(G)(F)	16A/ 250VAC	-40 to 85°C
		9A/ 250VAC cosphi=0.4 NO	-40 to 70°C
		9A/ 250VAC cosphi=0.4 CO	-40 to 70°C
JQX-115F....2(H;Z)(S)4A(G)(F)	8A/ 250VAC	-40 to 85°C	

UL

Version 1 or 2 (AgCdO)	12A/ 277VAC
	1/2HP, 250VAC
	1/3HP, 125VAC
Version 1A or 2A (AgSnO ₂)	12A/ 277VAC
	B300
	R300
Version 1B or 2B (AgNi)	12A/ 277VAC
Version 3 (AgCdO)	16A/ 277 VAC
Version 3A(AgSnO ₂)	9A/ 250VAC, T=105°C
	1HP, 250VAC
	1/2HP, 125VAC
	TV-5 125VAC
	16A/ 277 VAC
Version 3B (AgNi)	B300
	R300
	16A/ 277VAC
Version 4(AgCdO)	10A/ 250VAC
	8A/ 277VAC
	1/2HP, 250VAC
	1/4HP, 125VAC
Version 4A (AgSnO ₂)	8A/ 277VAC
Version 4B (AgNi)	8A/ 277VAC

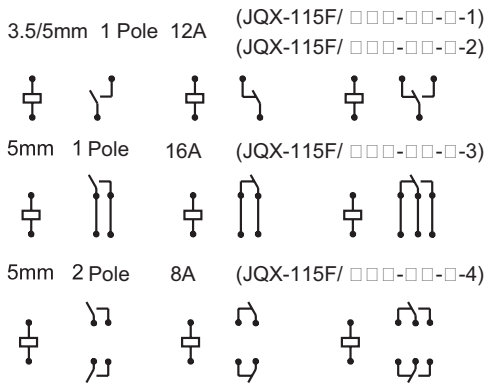
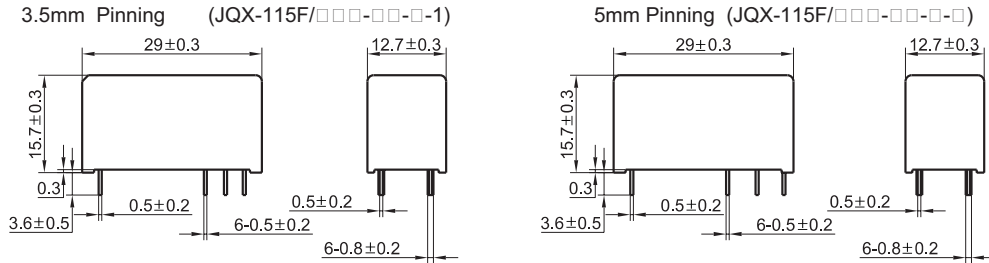
ORDERING INFORMATION

Type	JQX-115F / 012 1H S 1 A F
Coil voltage	5, 6, 9, 12, 18, 24, 48, 60, 110VDC
Contact arrangement	1H: 1 Form A 1D: 1 Form B 1Z: 1 Form C 2H: 2 Form A 2D: 2 Form B 2Z: 2 Form C
Structure	Nil: Unsealed S: Sealed IP67
Version	1: 3.5mm 1 pole 12A, 2: 5.0mm 1 pole 12A 3: 5.0mm 1 pole 16A, 4: 5.0mm 2 pole 8A
Contact Material	A: AgSnO ₂ , B: AgNi10, Nil: AgCdO12, G: Au plated
Insulation Standard	NIL: Class B 130°C F: Class F 155°C

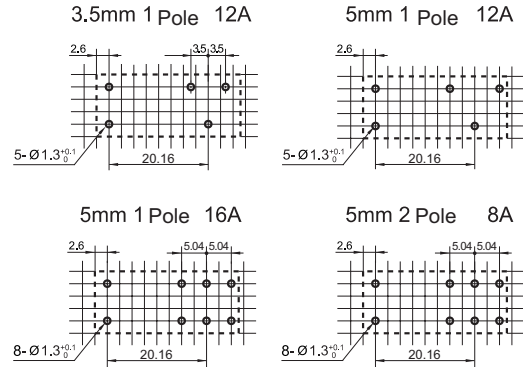
*For gold plated type, the min. switching current and min. switching voltage is 100mA@5Vdc

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Outline Dimensions

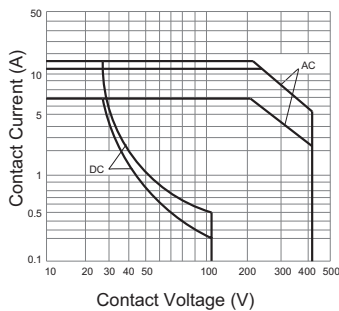


(T=2.52±0.02mm)

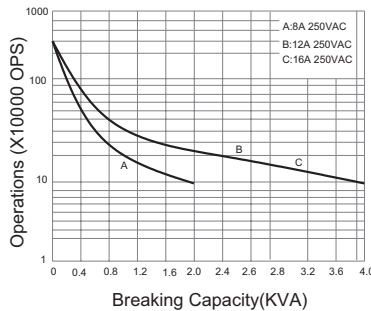


CHARACTERISTICS CURVE

MAXIMUM SWITCHING POWER



LIFE CURVE



COIL OPERATING RANGE(DC)

