

# JQX-116F-2

# MINIATURE HIGH POWER RELAY



File No.:E134517



File No.:R50031086



File No.:CQC02001001945



### Features

- 30 A switching capabilities
- SPST and DPST configurations
- 4KV dielectric strength coil to contacts
- Heavy load up to 7500VA
- Class F insulation
- 3mm contact gap available

### CONTACT DATA

Contact Arrangement	1A	2A
Initial Contact Resistance Max.	100mΩ (at1A 24VDC)	
Contact Material	Silver Alloy	
Contact Rating (Res. Load)	30A 250VAC 30A 28VDC	25A 250VAC 25A 28VDC
Max. switching voltage	277VAC/28VDC	
Max. switching current	30A	25A
Max. switching power	7500VA/840W	6250VA/700W
Mechanical life	1 x 10 <sup>7</sup> OPS	
Electrical life	1 x 10 <sup>5</sup> OPS	

### COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Coil Resistance Ω
3	2.25	0.3	4.7 ± 10%
6	4.50	0.6	18.8 ± 10%
12	9.00	1.2	75 ± 10%
24	18.0	2.4	300 ± 10%
48	36.0	4.8	1200 ± 10%
100	75.0	10.0	5200 ± 10%
110	82.5	12.0	6300 ± 10%
200	150	20.0	21000 ± 10%

### CHARACTERISTICS

Initial Insulation Resistance	1000MΩ, 500VDC	
Dielectric Strength	Between coil and contacts	4000VAC 1min
	Between open contacts	2000VAC 1min
Operate time (at nomi. Vot.)	Max. 30ms	
Release time (at nomi. Vot.)	Max. 30ms	
Shock Resistance	Functional	98 m/s <sup>2</sup>
	Destructive	980 m/s <sup>2</sup>
Vibration Resistance	1.5mm, 10 to 55Hz	
Ambient temperature	-55°C to +70°C	
Humidity	98%, +40°C	
Termination	PCB & QC, Screw	
Unit weight	Approx.120g	
Construction	Dust Cover	

Nominal Voltage VAC	Pick-up Voltage VAC	Drop-out Voltage VAC	Coil Resistance Ω
6	4.80	0.90	18.8 ± 10%
12	9.60	1.80	75 ± 10%
24	19.2	3.60	300 ± 10%
48	38.4	7.20	1200 ± 10%
120	96.0	18.0	5200 ± 10%
220	176	33.0	20800 ± 10%

### SAFETY APPROVAL RATINGS

UL	AgSnO <sub>2</sub>	30A 277VAC 1.5HP 120VAC, 3HP 240VAC 10A 120VAC Tungsten
	AgCdO	30A 277VAC 1.5HP 120VAC, 3HP 240VAC 10A 120VAC Tungsten TV-10,120VAC
Tüv		27A 240VAC cos phi=0.8 25A 240VAC cos phi=0.4 25A 240VAC cos phi=1

### COIL

Coil power	DC:1.9W AC:2.7VA
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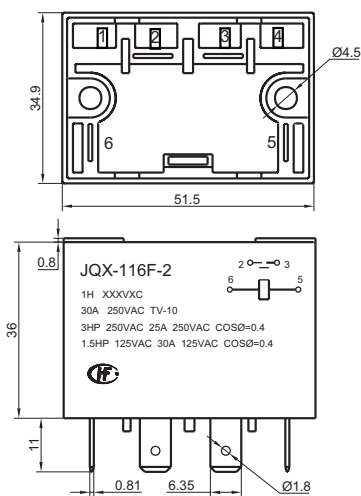
## ORDERING INFORMATION

Type	JQX-116F-2 / 018 D L 1H S T F W
Coil voltage	DC: 3 to 200VDC AC: 6 to 220VAC
Coil input	D: DC A: AC
Mounting	P: PCB L: Screw
Contact arrangement	1H: 1 Form A 2H: 2 Form A
Structure	S: Sealed IP67 NiL: Dust Cover
Contact Material	T: AgSnO NiL: AgCdO
Insulation System	F: ClassF NiL: ClassB
Contact Gap	W: 3.0mm

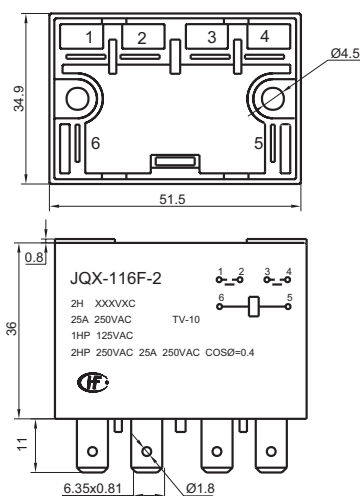
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Outline Dimensions

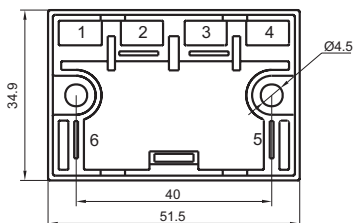
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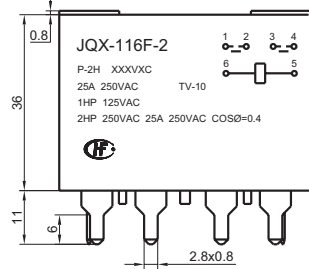
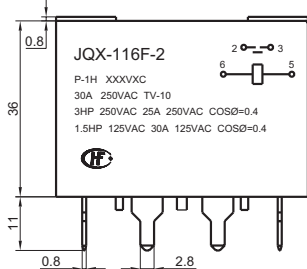
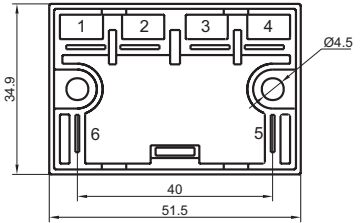
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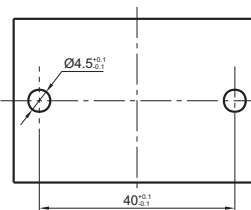
JQX-116F-2/□□□-□-P-1H-□-□



JQX-116F-2/□□□-□-P-2H-□-□



Mounting holes

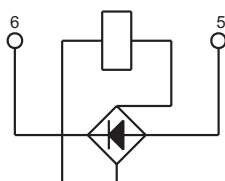


Wiring Diagram

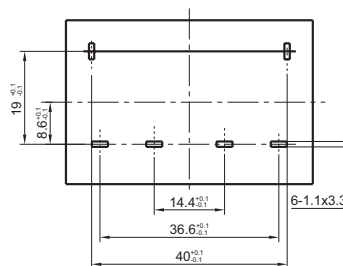
DC operation coil



AC operation coil



PCB layout



## CHARACTERISTICS CURVE

