

Features

- 6A switching capability
- Contact arrangement:3A1B,2A2B
- Contact structure of mandatory oriented:EN50205 compliant
- Low input power consumption:360mW
- UL insulation system:Class B, Class F
- Strong insulation ability:Surge voltage (Between coil&contacts) :10KV
Surge voltage(Between contact groups) (Waveform 1.2/50μs):5kV
- Environmental friendly product(RoHS compliant)



CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		3A1B, 2A2B
	Structural classification (According EN50205)		Class A mandatory orientation
	Contact resistance(initial)		≤100mΩ(6VDC 1A)
	Contact material		AgSnO ₂
Rated value	Rated load(Resistance load)		6A 277VAC/30VDC
	Max.switching voltage		400VAC
	Max.switching current		6A
	Max.switching capacity		1662VA/180W
	Min.allowing load		5VDC 10mA(Contacts Gold Plating)
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)
	Dielectric strength (initial)	Between open contacts	1500VAC
		Between coil&contacts	4000VAC, 1min
		Between contact groups	2500VAC, 1min(7-8/9-10) 4000VAC, 1min(Other)
	Operate time		≤20ms
Release time		≤20ms	
Mechanical performance	Shock resistance	Functional	98m/s ² (10g)
		Destructive	980m/s ² (100g)
	Vibration resistance		N0/NC:10Hz~55Hz 1.5mm DA N0:55Hz~200Hz ,98m/s ² NC:55Hz~200Hz ,49m/s ²
Creepage distance	Between coil&contacts		8mm
	Between contact groups		5.5mm
Air distance	Between coil&contacts		8mm
	Between contact groups		5.5mm
Endurance	Mechanical		1×10 ⁷ ops
	Electrical(Room temperature)		6A 277VAC/30VDC 1×10 ⁵ ops(ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40°C~85°C
	Humidity		5% to 85%
Termination			PCB
Unit weight			Approx.22g
Construction			Plastic sealed, Flux proofed

COIL DATA(23°C)

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 6V	≤4.50	≥0.30	60mA	100Ω	360mW	DC 7.8V
DC 9V	≤6.75	≥0.45	40mA	225Ω		DC 11.7V
DC 12V	≤9.00	≥0.60	30mA	400Ω		DC 15.6V
DC 18V	≤13.50	≥0.90	20mA	900Ω		DC 23.4V
DC 21V	≤15.75	≥1.05	17.1mA	1225Ω		DC 27.3V
DC 24V	≤18.00	≥1.20	15mA	1600Ω		DC 31.2V
DC 36V	≤27.00	≥1.80	10mA	3600Ω		DC 46.8V
DC 48V	≤36.00	≥2.40	7.5mA	6400Ω	420mW	DC 62.4V
DC 110V	≤82.75	≥5.50	3.81mA	28809Ω		DC 143V

ORDERING INFORMATION

FH55F -3A1B S T F -XXX DC12V

- ① Type:FH55F=4 sets of relay
- ② Contact arrangement:
3A1B=3 open contacts+1 close contacts
2A2B=2 open contacts+2 close contacts
- ③ Construction:Nil=Flux proofed,S=Plastic sealed
- ④ Contact material:T=AgSnO₂
- ⑤ Insulation system:Nil=Class A, F=Class F
- ⑥ Customer special code:numbers or letters denote customer's requirements, For example: G=Gold plating
- ⑦ Coil specification:DC6/9/12/18/21/24/36/48/110V

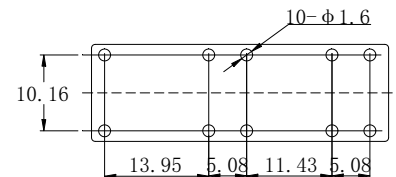
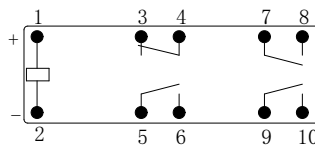
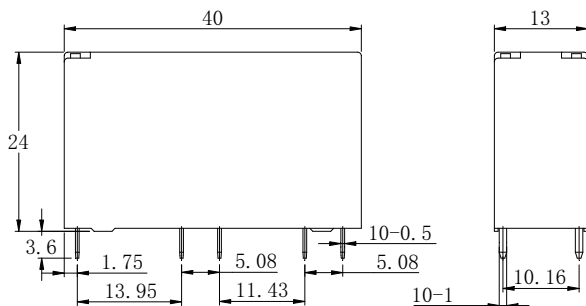
OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

3A1B

Outline Dimensions

Wiring Diagram
(Bottom view)

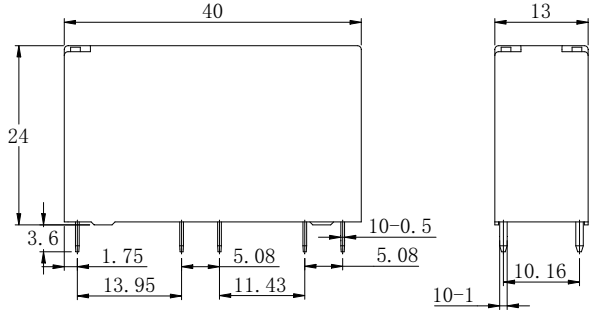
PCB Layout
(Bottom view)



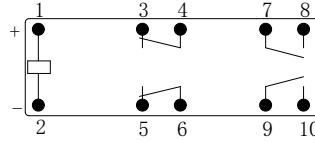
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT (Unit:mm)

2A2B

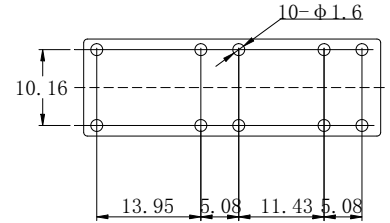
Outline Dimensions



Wiring Diagram
(Bottom view)



PCB Layout
(Bottom view)



Remark:(1)In case of no tolerance shown in outline dimension:outline dimension \leq 1mm,tolerance should be \pm 0.2mm;outline dimension $>$ 1mm and $<$ 5mm,tolerance should be \pm 0.3mm;outline dimension \geq 5mm,tolerance should be \pm 0.5mm.

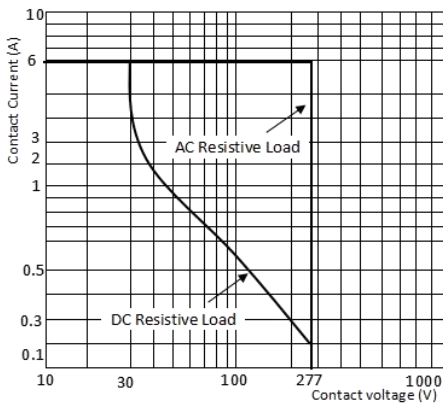
(2) The tolerance without indicating for PCB layout is always \pm 0.1mm.

SAFETY APPROVAL RATINGS

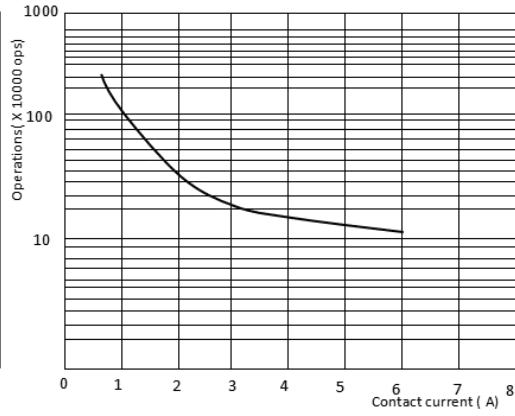
Approval	File No.	Contact arrangement	Approved ratings	
UL/C-UL	E475405	AgSnO ₂	NO/NC:6A 277VAC/250VAC/240VAC/125VAC	85℃
			NO/NC:6A 30VDC	85℃
			NO/NC:Pilot duty A300	55℃
			NO/NC:Pilot duty B300	55℃
TUV	R 50600537	AgSnO ₂	NO/NC:6A 277VAC/250VAC/240VAC/125VAC	85℃
			NO/NC:6A 30VDC	85℃
			NO/NC:2A 240VAC(AC-15)	55℃
			NO/NC:3A 120VAC(AC-15)	55℃
			N0/NC:1A 24VDC(DC-13)	55℃
CQC	CQC23002401216	AgSnO ₂	NO/NC:6A 277VAC/250VAC/240VAC/125VAC	85℃
			NO/NC:6A 30VDC	85℃

■ PERFORMANCE CURVES

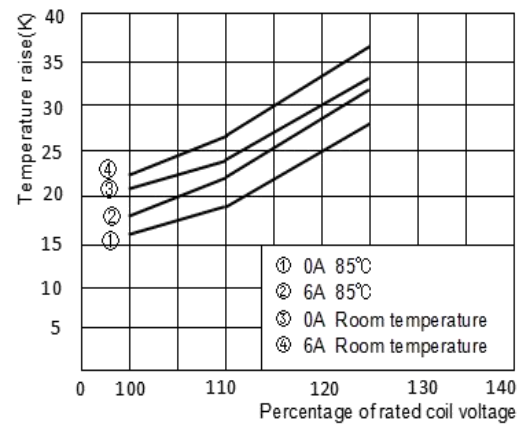
MAXIMUM SWITCHING POWER



ENDURANCE CURVE



Coil temperature rise



Test conditions:

1NO, Resistance load, 250VAC

Room temperature, ON/OFF=1s/9s

■ NOTICE

- ① In order to maintain the initial performance parameters of the relay, please be careful not to drop the product;
- ② The specification is for reference only. Specifications subject to change without notice.