

HIITIO®



ZHEJIANG HIITIO NEW ENERGY CO.,LTD.

Room 1001, 10th Floor, Building 1, No.1125 Zhixing Road,
Ningwei Street, Xiaoshan District, HANGZHOU ZHEJIANG
311215, CHINA

T 400-667-9977

E sales@hiitio.com

W www.hiitio.com

HIITIO®



Relays Parts Catalog

ZHEJIANG HIITIO NEW ENERGY CO.,LTD.

HIITIO

18 years experience for HVAC/R parts

More Professional More Reliable More Helpful

Zhejiang Hecheng Smart Electric Co, Ltd. (referred to as Hecheng Electric) was established in 2004 and is now headquartered at No.1125, Zhixing Road, Xiaoshan Economic and Technological Development Zone, Hangzhou City Zhejiang Province. Hecheng headquarters base 30000 square meters. Hecheng is a leading supplier of new energy industry and industrial control solutions in the world. At present, another large production base of Hecheng Electric is located in Mingguang, Anhui Province, with an area of 14 acres and a plant area of 20000 square meters. Hecheng Electric focuses on new energy vehicles, photovoltaic, energy storage, HVAC/R, industrial control, etc. Hecheng's main R&D production and operation products include: ceramic high-voltage DC relay/contactor, high-voltage DC fuse, airconditioning contactor, IEC contactor, UL 489 circuit breaker and disconnect box, etc. Hecheng's products all have passed UL, CSA, INTERTEK CE, CCC and other certifications.

Hecheng Electric aims at product research and development, 10% of the company's annual revenue is spent on R&D and 2% on IT penetration. Currently, the proportion of R&D personnel with more than 10 years of working experience in the industry is as high as 35%.

In addition, Hecheng Electric has introduced advanced automatic production lines and advanced laboratory testing equipment. We strictly implemented the IATF16949 system in the whole process. PLM + ERP + MES technology realizes the digitalization and intellectualization of the factory. The whole process of R&D, production and sales is able to be traced.





APPLICATION AREA

Electrical System

Building Facilities Management

Industrial control

Machinery

HVAC

RELAY

About Hecheng Smart Electric
About US 01

01
JPR Series 05

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09
HCH3 Series 21

10
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RELAY SERIES

JPR Series Relay



Features

- ◇ 50A switching capability
- ◇ Has a variety of mounting positions
- ◇ With a variety of wiring
- ◇ Dust cover type packaging structure
- ◇ Used on heat pumps,vending machines,fans,and heating and heating and air conditioning

Standards/Approvals:

- ◇ UL 508 and CAN/CSA C22.2 NO.14-2010



Product model and specification

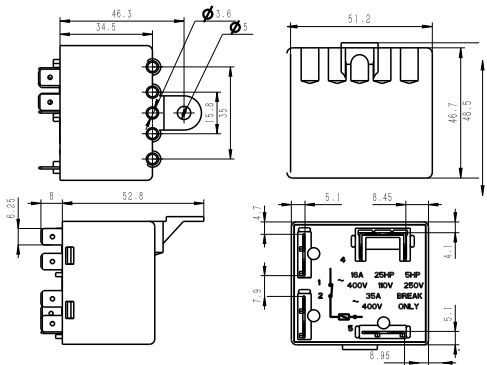
Item ID	JPR-549			JPR-550		JPR-555		JPR-556		JPR-559		JPR-561	
Rated voltage	170			332		375		395		420		500	
Coil resistance	1500			5600		7500		10000		10700		13800	
	H.P.U	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.	P.U.	D.O.
1	120-130	111-124	20-45										
2	130-140	120-134	20-45	132-148	40-90								
3	140-150	130-144	20-45	140-150	40-90								
4	150-160	140-153	20-45	150-163	40-90								
5	160-170	149-163	20-45	162-175	40-90								
6	170-180			171-184	40-90								
7	180-190			180-193	40-90			180-195	40-105				
8	190-200			186-215	40-90	180-195	40-105	189-205	40-105	180-195	60-121		
9	200-220			205-234	40-90	190-215	40-105	186-214	60-130	195-224	60-121		
10	220-240			224-252	40-105	208-239	50-110	204-233	60-130	204-233	60-121		
11	240-260			243-271	40-105	224-252	50-110	223-252	60-130	223-259	60-121		
12	260-280					239-270	50-110	242-272	60-140	242-272	60-121	239-268	60-135
13	280-300					260-289	50-110	262-290	60-141	262-290	60-121	258-287	60-135
14	300-320							280-310	60-142	280-310	60-121	277-305	60-135
15	320-340							300-328	60-143	300-328	60-121	295-324	60-135
16	340-360									318-347	60-121	314-342	60-135
17	360-380											323-352	60-135

RELAY SERIES

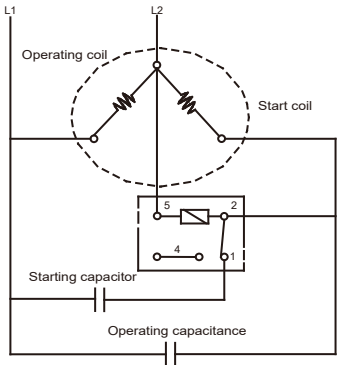
Product Characteristics

Maximum operating voltage	500VAC @-40℃~50℃	
	375VAC @-40℃~85℃	
Contact form	SPST-NC	
Contact resistance	≤50mΩ (@6V/1A)	
Contact material	AgCdO	
Rated load	35A 277VAC (breaking only)	
Maximum commutation voltage	500 VAC	
Maximum commutation current	50 A	
Input power	Holding power	≤5 VA
	Input power	≤21.5 VA
Mechanical durability	1X10 ⁶ Time	
Electrical durability	2.5X10 ⁵ Time (no-load / off 16A 277VAC, 1s on / 5s off) 2X10 ⁵ Time (no-load / off 16A 320VAC, 1s on / 5s off) 5X10 ⁴ Time (Turn on no-load / off 35A rated voltage, 1s on / 9s off) 6X10 ³ Time (Turn on no-load / off 50A rated voltage, 1s on / 9s off) 1X10 ⁴ Time (Turn on resistive load 16A rated voltage / turn off 16A rated voltage, 1s on / 5s off)	
Insulation resistance	500 MΩ (500VDC)	
Shock (stability)	98m/s ²	
Vibration	10Hz to 55Hz, 1.5mm double amplitude	
Humidity range	5% to 85% RH	
Temperature range	-40℃ to 85℃	
Lead out form	Quick connect	
Weight	About 98g	
Packaging method	Dust cover type	

Outline drawing unit: mm



Wiring diagram



RELAY SERIES

PR3 Series Relay

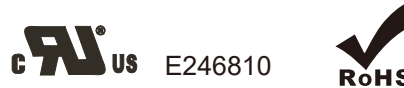


Features

- ◇ 25A switching capability
- ◇ Has a variety of mounting positions
- ◇ With a variety of wiring
- ◇ Dust cover type packaging structure
- ◇ Double break contact

Standards/Approvals:

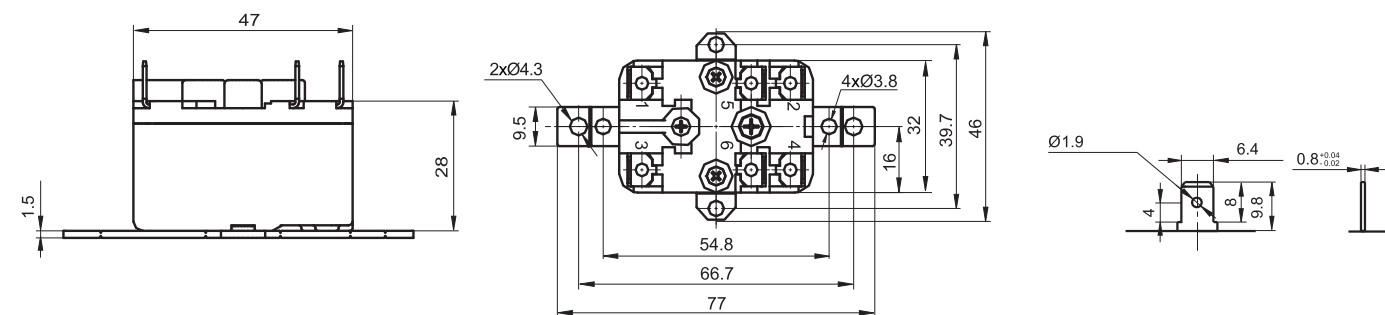
- ◇ UL 508 and CAN/CSA C22.2 NO.14-2010



Product model and specification

Item ID	Rated voltage (VAC)	Pick-Up (VAC)	Drop Out (VAC)	Coil resistance (Ω)	Contact resistance (mΩ)	Contact form
PR360	24	≤ 20.4	≥ 4.8	90× (1±10%)	≤ 50	SPST-NO
PR360	120	≤ 102.0	≥ 24	2000× (1±10%)	≤ 50	SPST-NO
PR364	240	≤ 204.0	≥ 48	7200× (1±10%)	≤ 50	SPST-NO
PR366	277	≤ 235	≥ 55.7	11000× (1±10%)	≤ 50	SPST-NO
PR370	24	≤ 20.4	≥ 4.8	90× (1±10%)	≤ 50	SPDT
PR372	120	≤ 102.0	≥ 24	2000× (1±10%)	≤ 50	SPDT
PR374	240	≤ 204.0	≥ 48	7200× (1±10%)	≤ 50	SPDT
PR376	277	≤ 235	≥ 55.7	11000× (1±10%)	≤ 50	SPDT
PR380	24	≤ 20.4	≥ 4.8	90× (1±10%)	≤ 50	SPST-NO+NC
PR382	120	≤ 102.0	≥ 24	2000× (1±10%)	≤ 50	SPST-NO+NC
PR384	240	≤ 204.0	≥ 48	7200× (1±10%)	≤ 50	SPST-NO+NC

Outline drawing (unit: mm)

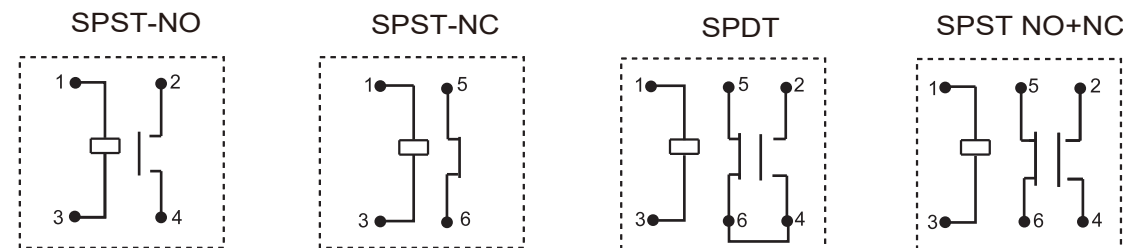


RELAY SERIES

Product Characteristics

Contact form	SPST -NO/SPDT /SPST NO+NC	
Contact resistance	≤50mΩ (@6V/1A)	
Contact material	AgCdO	
Rated load	18A 277VAC (breaking only)	
Maximum commutation voltage	277 VAC	
Maximum commutation current	25 A	
Maximum switching power	4000 VA	
Mechanical durability	1X10 ⁶ Time	
Electrical durability	5X10 ⁴ Time (25A 277VAC, resistive load, 65℃, 1s on / 9 s off) 3X10 ⁴ Time (3A 277VAC, general load, 65℃, 1s on / 9 s off)	
Insulation resistance	500 MΩ (500VDC)	
Dielectric Strength	Between coil and contact	2500VAC 1min
	Between disconnecting contacts	1000VAC 1min
Action time:	≤25ms	
Release time:	≤25ms	
Shock(stability)	98m/s ²	
Vibration	10Hz to 55Hz, 1.5mm double amplitude	
Humidity range	5% to 85% RH	
Temperature range	-40℃ to 85℃	
Lead out form	Quick connect	
Weight	About 75g	
Packaging method	Dust cover type	

Wiring diagram



RELAY SERIES

PR29 Series Relay



Features

- ◇ 16A switching capability
- ◇ Has a variety of mounting positions
- ◇ With a variety of wiring
- ◇ Dust cover type packaging structure

Standards/Approvals:

- ◇ UL 508 and CAN/CSA C22.2 NO.14-2010



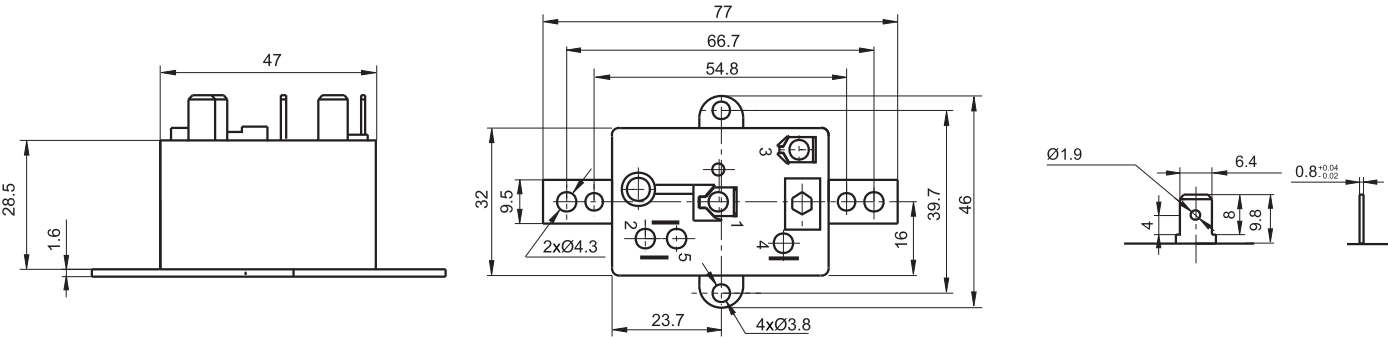
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Product model and specification

Item ID	Rated voltage (VAC)	Pick-Up (VAC)	Drop Out (VAC)	Coil resistance (Ω)	Contact resistance (mΩ)	Contact form
PR290Q	24	≤20.4	≥4.8	90×(1±10%)	≤50	SPST-NO
PR291Q	120	≤102.0	≥24	2000×(1±10%)	≤50	SPST-NO
PR292Q	240	≤204.0	≥48	7200×(1±10%)	≤50	SPST-NO
PR293Q	24	≤20.4	≥4.8	90×(1±10%)	≤50	SPDT
PR294Q	120	≤102.0	≥24	2000×(1±10%)	≤50	SPDT
PR295Q	240	≤204.0	≥48	7200×(1±10%)	≤50	SPDT

Outline drawing unit: mm

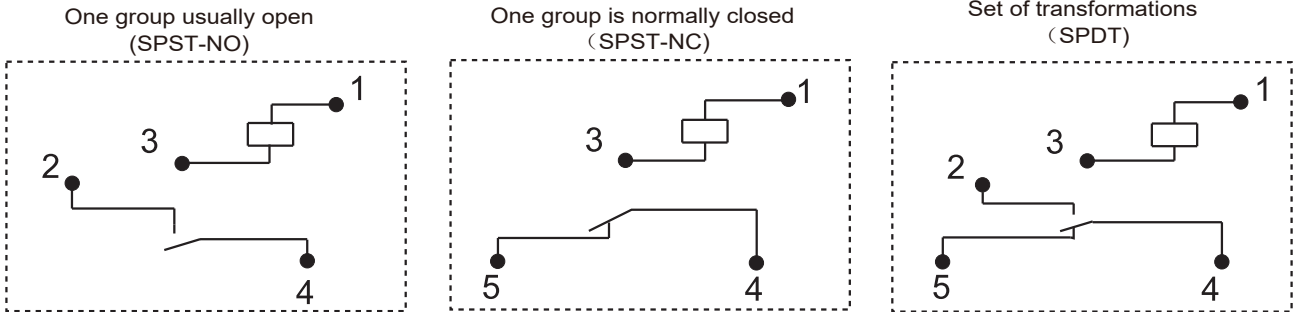


RELAY SERIES

Product Characteristics

Contact form	SPST-NO/SPST-NC/ SPDT (1 group normally open /1 group normally closed /1 group conversion)	
Contact resistance	≤50mΩ (@6V/1A)	
Contact material	AgCdO	
Rated load	16A 277VAC (breaking only)	
Maximum commutation voltage	277 VAC	
Maximum commutation current	16 A	
Maximum switching power	4000 VA	
Mechanical durability	1X10 ⁶ Time	
Electrical durability	1X10 ⁵ Time (16A 250VAC, general load, 65℃, 1s on / 9 s off) 3X10 ⁴ Time (8A 250VAC, general load, 40℃, 1s on / 9 s off) 1X10 ⁵ Time (16A 250VAC, general load, 65℃, 1s on / 9 s off)	
Insulation resistance	500 MΩ (500VDC)	
Dielectric Strength	Between coil and contact	2500VAC 1min
	Between disconnecting contacts	1000VAC 1min
Action time:	≤25ms	
Release time:	≤25ms	
Shock(stability)	98m/s ²	
Vibration	10Hz to 55Hz, 1.5mm double amplitude	
Humidity range	5% to 85% RH	
Temperature range	-40℃ to 85℃	
Lead out form	Quick connect	
Weight	About 74g	
Packaging method	Dust cover type	

Wiring diagram



RELAY SERIES

PR34 Series Relay

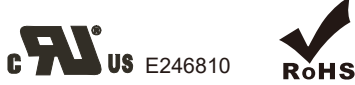


Features

- ◇ 25A switching capability
- ◇ Has a variety of mounting positions
- ◇ With a variety of wiring
- ◇ Dust cover type packaging structure
- ◇ Used on heat pumps, vending machines, fans, and heating and heating and air conditioning

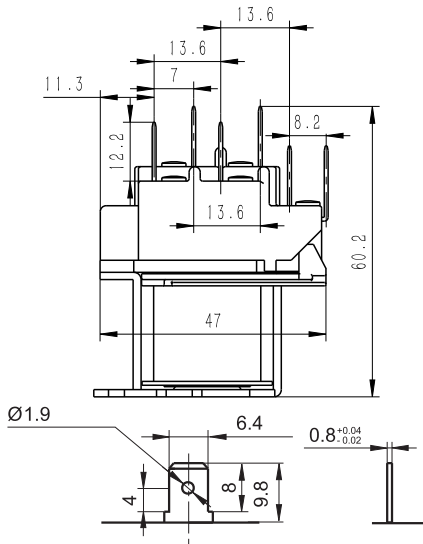
Standards/Approvals:

- ◇ UL 508 and CAN/CSA C22.2 NO.14-2010

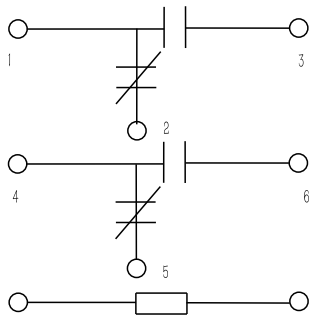


Product model and specification						
Item ID	Rated voltage (VAC)	Pick-Up (VAC)	Drop Out (VAC)	Coil resistance (Ω)	Contact resistance (mΩ)	Contact form
PR340	24	≤ 20.4	≥ 4.8	19× (1±10%)	≤ 50	DPDT
PR341	104/120	≤ 102.0	≥ 24	440× (1±10%)	≤ 50	DPDT
PR342	208/240	≤ 204.0	≥ 48	1600× (1±10%)	≤ 50	DPDT
PR343	24	≤ 20.4	≥ 4.8	19× (1±10%)	≤ 50	SPDT
PR344	104/120	≤ 102.0	≥ 24	440× (1±10%)	≤ 50	SPDT
PR345	208/240	≤ 204.0	≥ 48	1600× (1±10%)	≤ 50	SPDT
PR346	24	≤ 20.4	≥ 4.8	19× (1±10%)	≤ 50	SPDT
PR347	104/120	≤ 102.0	≥ 24	440× (1±10%)	≤ 50	SPDT
PR348	208/240	≤ 204.0	≥ 48	1600× (1±10%)	≤ 50	SPDT

Outline drawing unit: mm



Wiring diagram



RELAY SERIES

Product Characteristics

Contact form	SPST-NO/SPST-NC/ SPDT1 group normally open /1 group normally closed /1 group conversion DPST-NO/DPST-NC/ DPDT (2 group normally open /2 group normally closed /2 group conversion)	
Contact resistance	≤50mΩ (@6V/1A)	
Contact material	AgCdO	
Maximum commutation voltage	277 VAC	
Maximum commutation current	25 A	
Input power	Holding Power	9.5VA
	Input Power	21.5VA
Contact rating	12 FLA, 60 LRA, 15A resistive @ 125VAC; 6 FLA, 35 LRA, 15A resistive @ 250/277VAC; 3 FLA, 18 LRA, 12.5A resistive @ 480VAC; 3 FLA, 14 LRA @ 600VAC;	
Mechanical durability	1X10 ⁶ Time	
Electrical durability	2.5X10 ⁵ Time (at rated resistive loads) 1X10 ⁴ Time (at rated inductive loads)	
Insulation resistance	500 MΩ (500VDC)	
Dielectric Strength	Between coil and contact	2200VAC 1min
	Between disconnecting contacts	1000VAC 1min
Action time:	≤25ms	
Release time:	≤25ms	
Shock(stability)	98m/s ²	
Vibration	10Hz to 55Hz, 1.5mm double amplitude	
Humidity range	5% to 85% RH	
Temperature range	-40℃ to 85℃	
Lead out form	Quick connect	
Weight	About 173g	
Packaging method	Dust cover type	

RELAY SERIES

PR60 Series Relay



Features

- ◇ DPST-NO and DPDT configuration
- ◇ Meets 8mm creepage, 4kV dielectric
- ◇ Epoxy sealed versions available
- ◇ UL Class F (155°C) standard

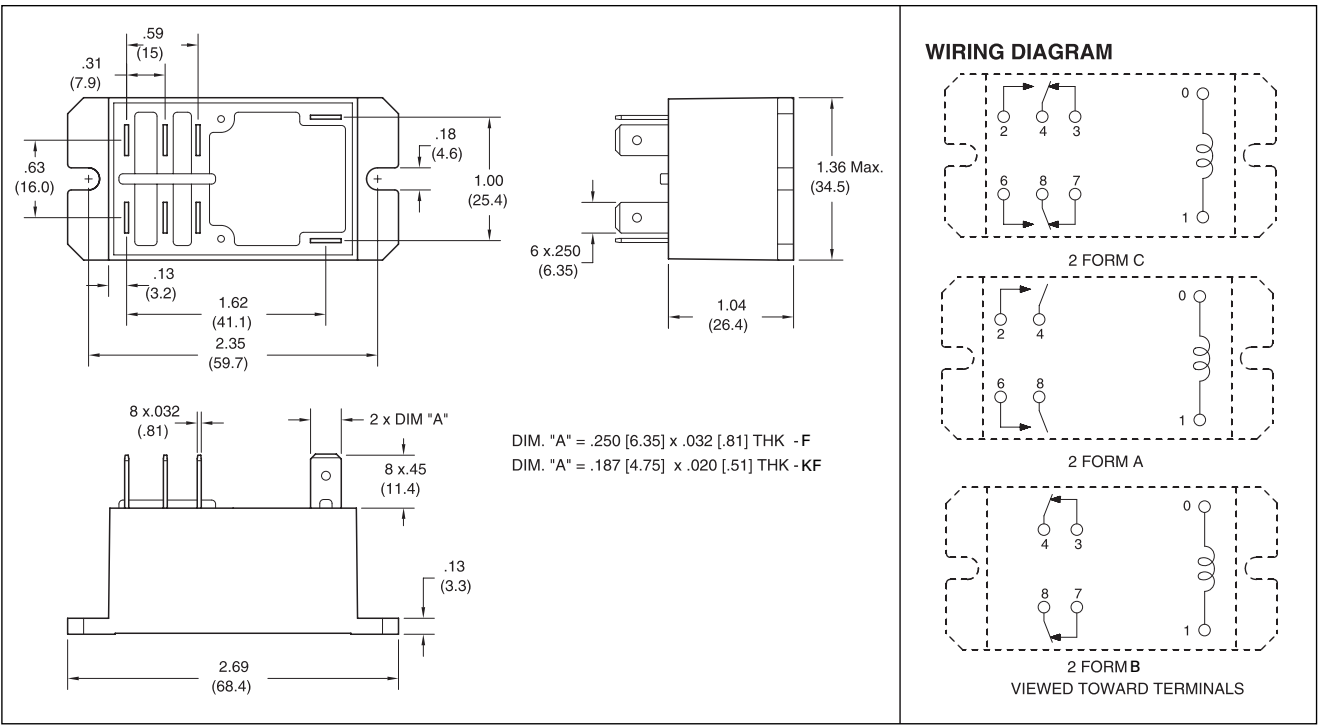
Standards/Approvals:

- ◇ UL 508 and CAN/CSA C22.2 NO.14-2010



PRODUCT MODEL					
PR60	2A	24	D	E	F
Relay type	Contact Form	Coil Voltage	Voltage specification	Protection regulation	Coil pin specification
	2A:2 groups normally open 2B:2 groups normally close 2C:2 groups conversion	DC:5/6/12/24/48/110 AC:12/24/120/240/277	D:DC A5:AC 50Hz A6:AC 50/60Hz	NII: No seals E: seal	F:6.35×0.8mm KF:4.75×0.5mm PF:PCB

MECHANICAL DATA



RELAY SERIES

GENERAL DATA

Life Expectancy	Mechanical 5×10^6 Minimum operations
	Electrical 1×10^5 at 30A, 277VAC Res. (N.O.)
Oper ate Time	15ms typical 25ms maximum with bounce
Release Time	10ms typical 25ms maximum with bounce (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	1500Vrms contact to contact 4000Vrms contact to coil 2000Vrms between contact sets
Insulation Resistance	10^9 ohms minimum at 500VDC
Dropout	DC:Gre ater than 10%of nominal coil voltage AC: Gre ater than 20%of nominal coil voltage
Ambiant Temperature Operating Storage	At nominal coil voltage DC:-40°C (-40°F) to 85°C (185°F) AC:-40°C (-40°F) to 65°C (149°F) -40°C (-40°F) to 105°C (221°F)
Vibration	0.062" (1.65mm) DA at 10~55Hz
Shock	Operational, 10g for 11ms 1/2 sine pulse Wno contact opening > 100usec) Non-destructive, 100g for 11ms 1/2 sine pulse
Enclosure	P.B.T. polyester
Terminals	Quick connect tabs Note: Allow suitable slack on leads when wiring.and do not subject the terminals to excessive force.
Max. Immersion Time	30 seconds
Weight	86 grams
Packing unit in pos	20 per plastic tray / 100 per carton box

CONTACTS

Arrangement	DPST(2 Form A) DPST(2 Form B) DPDT(2 Form C)
Ratings	Resisfive load: Max. switched power: 1200 W or 11080 VA Max. switched current: 40A (N.O.), 3A (N.C.) Max.switchedvoltage:30VDC*or 600VAC *Notertf switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Rated Load UL	Nomally open contacts (N.O.) 40A at 277VAC, Resistive, 30k cydes [1][2] 30A at 277VAC, General Use, 100k cycles [1][2] 10A at 600VAC, General Use, 6k cydes [1] 1HP at 120VAC, 100k cycles [1][2] 2.5HP at 240VAC, 100k cycles [1][2] 8FLA/ 26LRA at 277/480/600VAC, 30k cycles [1] Normally open contacts (N.O.), DC Coils only 25.3FLA/ 110LRA at 240VAC, 30k cycles [1][2] Nomally closed contacts (N.C.) 3A at 277VAC, General Use, 100k cycles [1][2] 2A at 480VAC, General Use, 6k cycles [1] 1A at 600VAC, General Use, 6k cycles [1] 3FLA/ 3LRA at 240VAC, 30k cycles [1] 2FLA/ 2LRA at 2 77/480VAC, 30k cycles [1] 1FLA/ 1LRA at 600VAC, 30k cycles [1]
Resistance	<50 milliohms initialy (24V, 1A voltage drop method)

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than "Must Operate" value.
3. Specifications subject to change without notice.

RELAY SERIES

PR90 Series Relay



Features

- ◇ 50A switching capability
- ◇ Has a variety of mounting positions
- ◇ With a variety of wiring
- ◇ Dust cover type packaging structure
- ◇ Used on heat pumps, vending machines, fans, and heating and air conditioning

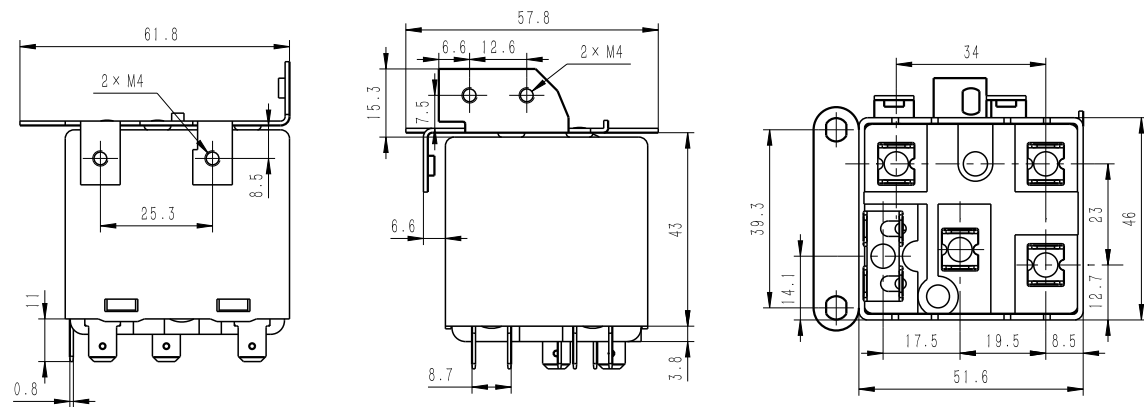
Standards/Approvals:

- ◇ UL 508 and CAN/CSA C22.2 NO.14-2010



Product model and specification					
Item ID	Rated voltage (VAC)	Pick-Up (VAC)	Drop Out (VAC)	Coil resistance (Ω)	Contact resistance (mΩ)
PR9026	395	180-195	50-100	7147×(1±10%)	≤50
PR9063	170	140-153	30-65	1399×(1±10%)	≤50
PR9064	395	245-275	60-140	7147×(1±10%)	≤50
PR9065	332	171-184	40-90	5180×(1±10%)	≤50
PR9066	395	208-239	60-130	7147×(1±10%)	≤50
PR9067	420	300-328	75-121	10000×(1±10%)	≤50
PR9068	395	323-352	75-180	11950×(1±10%)	≤50
PR9069	420	223-252	70-150	10000×(1±10%)	≤50
PR9071	332	180-193	55-115	5600×(1±10%)	≤50

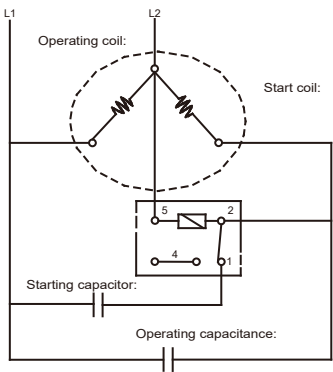
Outline drawing unit: mm



RELAY SERIES

Product Characteristics	
Maximum operating voltage	500 VAC@-40℃~50℃
	375 VAC@-40℃~85℃
Contact form	SPST-NC 1 group normally closed
Contact resistance	≤50mΩ (@6V/1A)
Contact material	AgCdO
Rated load	35A 277VAC (Breaking only)
Maximum commutation voltage	500 VAC
Maximum commutation current	50 A
Input power	Holding power ≤5VA
	Input power ≤21.5VA
Mechanical durability	1X10 ⁶ Time
Electrical durability	2.5X10 ⁵ Time (no-load/off 16A 277VAC, 1s on/5s off) 2X10 ⁵ Time (no-load/off 16A 320VAC, 1s on/5s off) 5X10 ⁴ Time (Turn on no-load/off 35A rated voltage, 1S on/9s off) 6X10 ³ Time (Turn on no-load/off 50A rated voltage, 1S on/9s off) 1X10 ⁴ Time (Turn on resistive load 16A rated voltage/turn off 16A rated voltage, 1s on/5s off)
Insulation resistance	500 MΩ (500VDC)
Shock(stability)	98m/s ²
Vibration	10Hz to 55Hz, 1.5mm double amplitude
Humidity range	5% to 85% RH
Temperature range	-40℃ to 85℃
Lead out form	Quick connect
Weight	About 98g
Packaging method	Dust cover type

Wiring diagram



RELAY SERIES

HCPH series relay

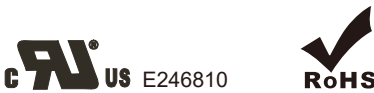


Features

- ◇ 17A switching capability
- ◇ Dust cover type packaging structure
- ◇ Applicable to UL certification

Standards/Approvals:

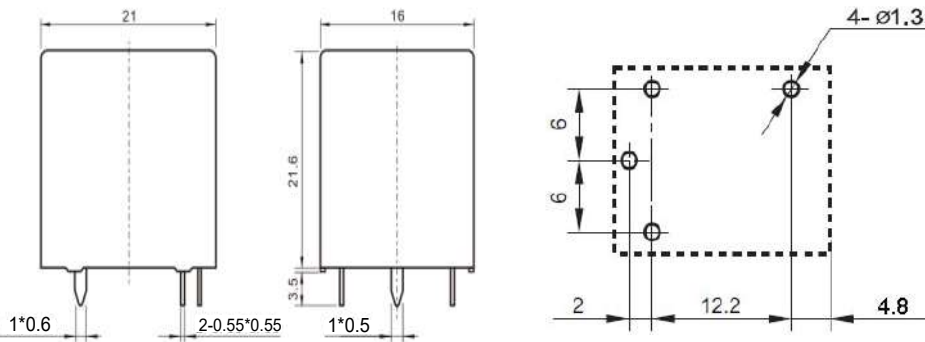
- ◇ UL 508 and CAN/CSA C22.2 NO.14-2010



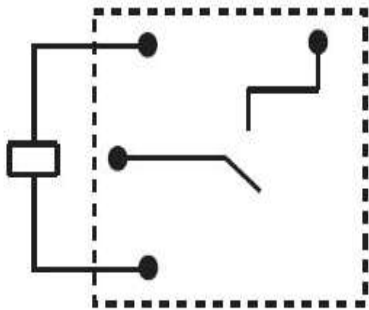
Product Model:

	HC	PH	S	- 105	A	2F
Company :	HECHENG					
Model:	PH Series relay					
S:	sealed					
	1 loop, coil voltage 5VAC					
A:	normally open contact					
Rated Current	1F:10A/250VAC, 2F:17A/250VAC					

Outline drawing unit: mm



Wiring diagram



RELAY SERIES

Product Characteristics	HCPH-S-105-A-1F(0.36W,10A)	HCPH-S-105-A-2F(0.36W,17A)
Contact rating	10A 250VAC	17A 250VAC
Max.Switching current	10A	17A
Max. contact capacity	2500VA	4250VA
Min. Applicable Load	1A 6VDC	
Contact resistance	≤100mΩ (1A 6VDC)	
Operate voltage	≤3.75VDC	
Release voltage	≥0.5VDC	
Operate time	≤15ms	
Release time	≤5ms	
Electrical Life	100,000 cycles ,Normal temperature condition , resistive load , Action frequency: 6 times / min, 10% duty cycle, 1 second on 9 seconds off	
Mechanical Life	1,000,000 cycles ,No load,300 cycles/minute	
Use/Storage Condition	Temperature: -40~+105℃ ,Humidity:20%~85%RH	
Coil Rated voltage	5VDC	
Coil resistance	70Ω±10% (at 23±1℃)	
Coil Rated power	0.36W	
Coil Max.allowable voltage	6.5V	
Installation direction	Terminal down	
Insulation resistance	Open contacts、Contacts and coil:1000MΩ Min (500VDC)	
Dielectric Strength	Open contacts: 1000VAC (1mA) (50/60Hz)1Min Contacts and coil: 2500VAC (1mA) (50/60Hz)1 Min	
Lead-outfoot strength	The relay shall not be abnormal if a 15N pull force of 6S is applied perpendicular to the direction of the lead pin.	

RELAY SERIES

NT90TP series relay



32.5(50.2)×27.5×28.2



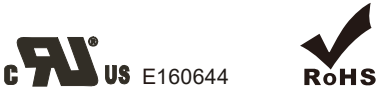
32.5(50.2)×27.5×20

Features

- ◇ Small size, lightweight.
- ◇ Low coil power consumption, heavy contact load.
- Strong anti-shock and anti-vibration, high reliability, long life.
- ◇ Suitable for automobile, machine, electronic equipment, air conditioner and household appliances applications

Standards/Approvals:

- ◇ UL 508 and CAN/CSA C22.2 NO.14-2010



Product Model:

NT90TP H L A D 12 C B 0.9

Model: NT90TP

Load : H:30A; N:40A

NIL: Standard ; L: Low profile type

Contact arrangement : A:1A ; B:1B; C:1C

Enclosure : D: Dust; E: Flux proof protected

Coil rated : AC:12,24, 110,120,220,240,277
DC:3,5,6,9,12,15,18,24,36,48,110

Contact material : S:AgSnO₂ ; C: AgCdO

Resist heat class : B:130℃; F:155℃

Coil power : 0.6:0.6W; 0.9:0.9W ; 2:2VA

Contact Data

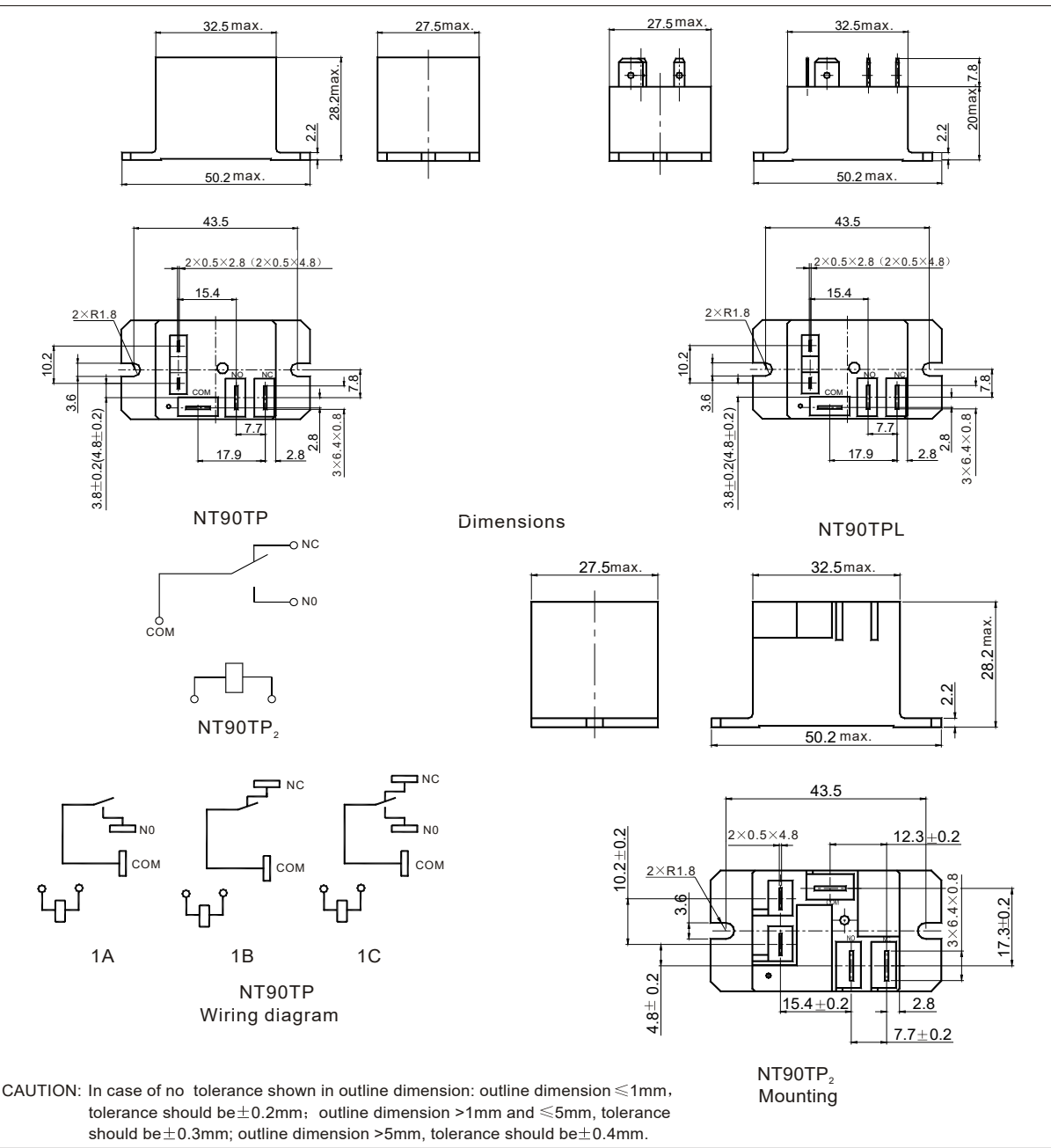
Contact Arrangement	1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M))		
Contact Material	AgSnO ₂ AgCdO		
Contact Rating (Resistive)	NO:30A/240VAC,14VDC; NC:20A/240VAC;30A/14VDC NO:40A/240VAC,30VDC; NC:30A/240V AC,30VDC (0.9W) NO:30A/277VAC;NC:20A/277VAC Motor Load: NO:2HP 250VAC ; NC:1.5HP 250VAC TV-5 5A/280VAC(Ballast)		
Max. Switching Power	1200W 7200VA (10000VA)		
Max. Switching Voltage	30VDC 280VAC	Max. Switching Current:40A	
Contact Resistance	≤30mΩ	Item 4.12 of IEC 61810-7	
Operation	Electrical	1×10 ⁵ Item 4.30 of IEC 61810-7	
Life	Mechanical	1×10 ⁷ Item 4.31 of IEC 61810-7	

RELAY SERIES

Coil Parameter

Dash numbers	Rated voltage V		Rated current mA	Coil resistance Ω ±10%	Pick-up voltage VAC(max) (75%of rated voltage)	Drop-out voltage VAC(min) (30%of rated voltage)	Coil power VA	Operate time ms	Release time ms
	Rated	Max							
012AC	12	15.6	166.6	27	9.0	3.6	2VA	—	—
024AC	24	31.2	83.3	120	18.0	7.2			
110AC	110	143	18.1	2360	82.5	33.0			
120AC	120	156	16.6	3040	90.0	36.0			
220AC	220	286	9.1	13490	165.0	66.0			
240AC	240	312	8.3	15740	180	72			
277AC	277	360.1	7.2	20300	207.8	83.1			

Dimensions



RELAY SERIES

HCH3 Automotive Relay

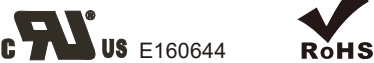


Features

- ◇ 40A&60A Switching capability
- ◇ 3 kinds of contact arrangement available
- ◇ Dust protected Type And Sealed Type Available

Standards/Approvals:

- ◇ UL 508 and CAN/CSA C22.2 NO.14-2010



Product Model:

HCH3 -S -1 12 -C -1 R

Model : HCH3

Structure : Nil:Dust Protected
S : Sealed

Contact Group : 1 Group

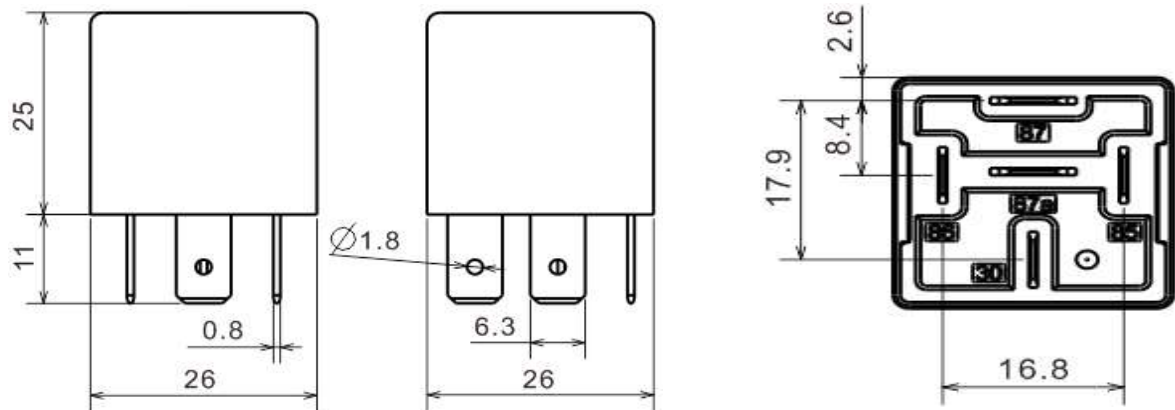
Coil Voltage : 12 : 12VDC 24 : 24VDC

Contact Form : A : NO B : NC C : NO/NC Conversion

Version 1 : Cover Without Bracket
2 : PCB layout
3 : Cover With Metal Bracket
4 : Cover With Plastic Bracket

Coil Derived Resistance : Nil : No Components
D1 : With Parallel Diode (anode connection pin # 86)
D2 : With Parallel Diode (anode connection pin # 85)
R : With Resistor

Outline Dimensions



RELAY SERIES

Contact Parameters

Contact Arrangement	1A, 1B, 1C	2A
Contact Material	Silver Alloy	
Voltage Drop(Initial)	Typ. 20mV, Max. 250mV (at 10A)	
Maximum continuous current	NO/NC:40A/30A	NO/NC:60A/45A NO:2×20A
Max. Switching Voltage	80VDC	
Electrical Life	1 See schedule 1	
Mechanical Life	1×10 ⁶ OPS	

Product Characteristics

Insulation Resistance	100MΩ (500VDC)
Dielectric Strength	Between Coil & Contacts: 500VAC 1min
	Between Open Contacts: 500VAC 1min
Operate Time	≤10ms
Release Time	≤5ms
Ambient Temperature	-40℃~+125℃
Vibration	10Hz~500Hz, 49m/s ² (5G)
Shock	Functional: 98m/s ² (10G)
	Destructive: 196m/s ² (20G)
Terminal Form	QC
Construction	Dust Protected, Sealed
Unit Weight	Approx. 33
Mechanical Data	Cover Retention: (Pull & Push) 200N
	Terminal Retention: (Pull & Push) 100N
	Terminal Resistance To Bending: (Front & Side) 10N

RELAY SERIES

HCQ-100 High Power Metering Relay

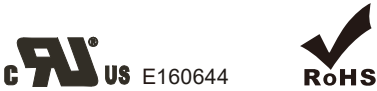


Features

- ◇ 100A switching capability
- ◇ 4KV Dielectric strength between coil & contacts
- ◇ Environmental friendly product(RoHS Compliant)
- ◇ Accessories can be welded according to customer

Standards/Approvals:

- ◇ UL 508 and CAN/CSA C22.2 NO.14-2010



Product Model:

	HCQ	-100	-1	12	-A	L1	-	R	XXX
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Model: HCQ

Load : 100 A

Contact Group : 1 Group

Coil Voltage : 05,06,09,12,24,48VDC

Contact Form : A : NO B : NC

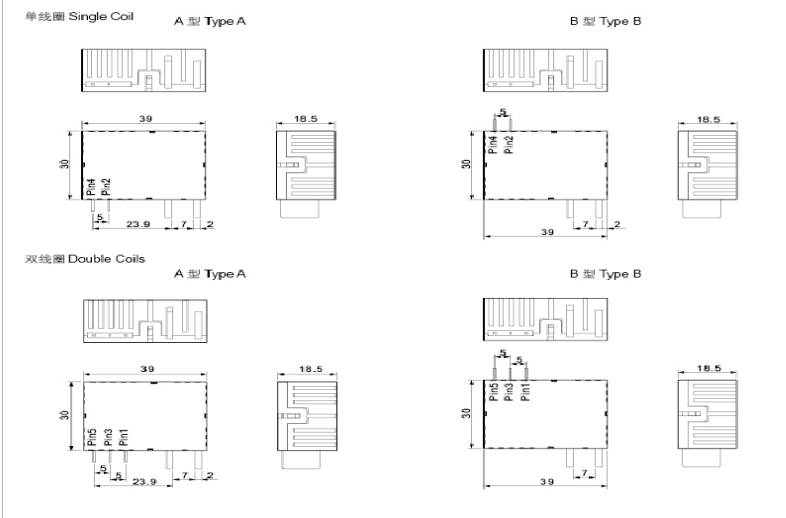
Coil Type L1 : Single Coil Latching
L2 : Double Coils Latching

Polarity: R : Negative Polarity
Nil : Positive Polarity

Special Code : Customer Special Requirement

外形尺寸 Outline Dimensions

单位 Unit: mm



RELAY SERIES

Contact Parameters

Contact Form	1A, 1B
Contact material	Silver Alloy
Contact Resistance	<1.0mΩ (1A 6VDC)
Contact Rating(Res.load)	100A 250VAC
Max. Switching Current	100A
Max. Switching Voltage	250VAC
Max. Switching Power	25000VA
Electrical Life	1x10 time OFS
Mectaning life	1x10 time OPS

Characteristics

Insulation Resistance		1000M2 Min.(500vDC)
Dielectric Strength		Between Coil & Contacts: 4000VAC 1min Belweer Open Contacts.2000AC 1min
Set Time		<20ms
Reset Time		≤20ms
Shock	Functional	98m/s²
	Destructive	980m/s²
Vibration		10H7~55Hz1 5mm (DA)
Humidity		5%~85%RH
Ambient Temperature		-40℃~+85℃
Construction		Dust Protected
Unit Weight		Approx.55g

接线图 Wiring Diagram

