Stock code: 301388

PRODUCT CATALOGUE

PROFESSIONAL MANUFACTURER OF INDUSTRIAL CONTROL COMPONENTS

Edition:2024.01A

www.c-lin.cn

C-Lin 欣灵电气

RELAY
SERIES

Stock code: 301388

C-Lin 欣灵电气

HHS Time relay series

HHS time relay is suitable for use as a delay element in control circuit with frequency of AC 50/60Hz, rated voltage of 380V and below or DC voltage of 24V, and it's used to connect or disconnect the circuit according to the preset time.

This series of relay not only has the characteristics of high delay accuracy and wide delay range, but also has two display modes: increasing and decreasing; there are multiple work modes including power-on delay, power-off delay, cycle delay, disconnection delay, star-delta start delay, release delay, etc. With great variety and novel appearance design, it is widely used in industrial automation control circuit.

This series of relay complies with GB/T14048.5 and JB/T10047 standards, and the products have passed CCC self-declaration.

☐ Precautions For time relay operation

A. Please confirm the supply voltage level of the product before use

B. When used in strong electric and magnetic field environments, please use shielded wires for reset and pause lines, and keep them as short as possible.

C. Reset, pause and control terminals are all switch inputs. Please do not input voltage, current or other signals externally.

Model description

HH S □ □ - □ □ / □ □ □

- Installation method (M-panel type, Z-installation type, Y-external type)
- Voltage level (380V, 220V, 127V, 110V, 36V, 24V)
- Power supply type (AC-alternating current, DC-direct current)
- Auxiliary specification
- Basic specification
- No code-increasing type, J-decreasing type
- Design number
- Time relay
- Enterprise code

HHS1(JS14S) Time relay

Supply voltage	DC24V; AC24V, AC220V, AC380V
Time delay range	9.9s 99s 99m 99.9s 9m59s 999s 999m 99.99s 9h59m 9999s 99m59s 99h59m
Repeat error	⩽ 1%
Operation mode	Power-on delay
Timing method	Positive count, digital display
Contact form	2 sets of delay with reset and pause function
Contact capacity	3A AC250V(resistive)
Dimension	52×104×114mm
Hole size	45×77mm
Installation method	Panel type

HHS1(JS14S) Improved Time relay

Supply voltage	DC24V; AC24V, AC220V, AC380V
Time delay range	0.01s~99h99m h-min-s setting
Repeat error	⩽ 1%
Operation mode	Power-on delay
Timing method	Countdown, digital display
Contact form	2 sets of delay (8-pin)
Contact capacity	3A AC250V(resistive)
Dimension	52×104×99mm
Hole size	45×77mm
Installation method	Panel type

HHS1-1(DH14S) Time relay

Supply voltage	DC24V; AC24V, AC220V, AC380V
Time delay range	0.01s~99h99m h-min-s setting
Repeat error	⩽ 1%
Operation mode	Power-on delay
Timing method	Positive count, digital display
Contact form	2 sets of delay with reset and pause function
Contact capacity	3A AC250V(resistive)
Dimension	52×104×114mm
Hole size	45×77mm
Installation method	Panel type

HHS1-1(DH14S) Improved Time relay

Supply voltage	DC24V; AC24V, AC220V, AC380V
Time delay range	0.01s-99h99m h-min-s setting
Repeat error	⩽ 1%
Operation mode	Power-on delay
Timing method	Countdown, digital display
Contact form	2 sets of delay with reset and pause (11-pin))
Contact capacity	3A AC250V(resistive)
Dimension	52×104×110mm
Hole size	45×77mm
Installation method	Panel type

HHS2(DH48L)
Time counter

Supply voltage	DC24V；AC24V, AC220V, AC380V
Counting range	999m59s 999h59m 9999.9m 9999.9h Optional
Display mode	5-digit display, with timing
Power-off memory	10 years
Control mode	Equipped with startup control terminal
Reset method	External terminal short-circuited or panel button reset
Dimension	48×48×118mm
Hole size	45×45mm
Installation method	Panel type, screw mounting type, 35mm DIN rail type

HHS3-M(AH2-Y)
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	1s，5s，10s，30s，60s，5min 10min，30min，60min，5h，10h
Repeat error	⩽ 1%
Operation mode	HHS3-M：Power-on delay HHS3G-M：Release delay HHS3C-M：Power-on delay with instant action
Contact form	HHS3-M,HHS3G-M HHS3C-M:1 set of delay contact and 1 set of instant contact
Contact capacity	3A AC250V(resistive)
Dimension	57×87×92mm
Hole size	51×63mm 75.5-2×Φ4.5mm
Installation method	Panel type

HHS2-1(DHC3L)
Time counter

Supply voltage	Self-contained power supply (with built-in lithium battery)
Counting range	99999.9h 99h59m59s 9999h59m 9999d23h 999999h59m 9999h59m59s
Display mode	6/8-digit LCD display, with timing
Power-off memory	6 years
Control mode	1, 2 terminals connected for timing
Reset method	3, 4 terminals short-circuited or button reset
Dimension	48×28×55mm
Hole size	45×22mm
Installation method	Panel type

HHS3(AH2-N)
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	1s，5s，10s，30s，60s，5min 10min，30min，60min，5h，10h
Repeat error	⩽ 1%
Operation mode	HHS3：Power-on delay HHS3G：Release delay HHS3C：Power-on delay with instant action
Contact form	HHS3,HHS3G:2 sets of delay HHS3C:1 set of delay with 1 set of instant action
Contact capacity	3A AC250V(resistive)
Dimension	50×78×92mm
Hole size	75.5-2×Φ4.5mm
Installation method	Screw mounting type

HHS2-2(DHC6J-L)
Time counter
Replace for HHS2-3

Supply voltage	DC24V；AC24V, AC220V, AC380V
Counting range	9999h59m 99999.9m 99999.9h 9999m59s
Display mode	6-digit display, with timing
Power-off memory	10 years
Control mode	5, 8 terminals connected for timing
Reset method	External terminal short-circuited or panel button reset
Dimension	96×48×84mm
Hole size	92×44mm
Installation method	Panel type

HHS4P
Time relay
Replace for JS14P series

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.99s 9.9s 99s 9.9m 99m 99h 99.9s 999s 99.9m 999m 999h
Repeat error	⩽ 1%
Operation mode	Power-on delay
Contact form	2 sets of delay contacts
Contact capacity	3A AC250V(resistive)
Dimension	45×82×90mm
Hole size	56-2×Φ4.5mm
Installation method	Screw mounting type or 35mm DIN rail type

HHS2-3(CSY-5E)
Time counter

Supply voltage	DC24V；AC24V, AC220V, AC380V
Counting range	999.999s 9999.99s 99999.9s 999999s 9999m59s 99h59m59s
Display mode	6-digit display
Power-off memory	None
Operation mode	Automatic reset and cumulative timing for selection
Control mode	Level (magnetic ring) and contact timing
Reset method	External terminal short-circuited or panel button reset
Dimension	96×48×84mm
Hole size	92×44mm
Installation method	Panel type

HHS4PF
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	9.9s 99s 99.9s 199s
Repeat error	⩽ 5%
Operation mode	Power-off delay
Contact form	2 sets of delay contacts
Contact capacity	3A AC250V(resistive)
Dimension	45×82×90mm
Hole size	56-2×Φ4.5mm
Installation method	Screw mounting type and 35mm DIN rail type

HHS4(JS14A，JS20)
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.5s~3600s
Repeat error	⩽ 1%
Operation mode	HHS4(JS14A，JS20):Power-on delay HHS4C(JS20/03):Power-on delay with instant action HHS4G:Release delay
Contact form	HHS4,HHS4G: 2 sets of delay HHS4C:1 set of delay contact and 1 set of instant contact
Contact capacity	3A AC250V(resistive)
Dimension	45×82×83mm
Hole size	56-2×Φ4.5mm
Installation method	Screw mounting type or 35mm DIN rail type

HHS5R(ST3PR)
Time relay
Replace for JSZ3R

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	6s/60s 10s/10min 30s/30min 60s/60min
Repeat error	⩽ 1%
Operation mode	Cycle delay
Contact form	1 set of delay contacts
Contact capacity	3A AC250V(resistive)
Dimension	40.5×54×86mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS5, C, G(ST3PA, C, G)
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.05s~24h classified into 7 specifications: -A, -B, -C, -D, -E, -F, -G
Repeat error	⩽ 1%
Operation mode	HHS5(ST3PA):Power-on delay HHS5C(ST3PC):Power-on delay with instant action HHS5G(ST3PG):Release delay
Contact form	HHS5，HHS5G：2 sets of delay HHS5C：1 set of delay contact and 1 set of instant contact
Contact capacity	3A AC250V(resistive)
Dimension	40.5×54×84mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS5P
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s~0.99s，0.01s~9.99s， 0.1s~9.9s，0.1s~99.9s， 1s~99s，1s~999s，0.1m~9.9m 0.1m~9.9m，1m~99m.....
Repeat error	⩽ 1%
Operation mode	Power-on delay
Contact form	2 sets of delay contacts
Contact capacity	3A AC250V(resistive)
Dimension	40.5×54×75.5mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS5F(ST3PF)
Time relay
Replace for JSZ3F

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	1s 5s 10s 30s 60s 120s 180s
Repeat error	⩽ 5%
Operation mode	Power-off delay
Contact form	HHS5F:set of delay contacts with reset HHS5F1:2 sets of delay contacts HHS5F2:1 set of delay contacts and 1 set of instant contacts
Contact capacity	3A AC250V(resistive)
Dimension	40.5×54×84mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS5PA
Time relay
replaces ST3PA and ST3PC products

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.1s-99h, 6 time bases adjustable
Repeat error	⩽ 1%
Operation mode	Power-on delay
Contact form	A：2 sets of delay contacts B：1 set of delay contact and 1 set of instant contact
Contact capacity	3A AC250V(resistive)
Dimension	40.5×54×75.5mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS5F3(ST3PFT3) Long delay
Time relay
Replace for JSZ3F

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	180s 300s 600s 1800s 3600s
Repeat error	⩽ 5%
Operation mode	Power-off delay
Contact form	1 set of delay contacts with reset
Contact capacity	3A AC250V(resistive)
Dimension	40.5×54×84mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS5PK，HHS5PY
Time relay
Replace for ST3PK and ST3PY products

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.1s-99h, 6 time bases adjustable
Repeat error	⩽ 1%
Operation mode	HHS5PK：Disconnection delay HHS5PY：Star-delta start delay
Contact form	HHS5PK：1 set of delay contacts HHS5PY：1 set of star-delta transfer contacts
Contact capacity	3A AC250V(resistive)
Dimension	41×55×76mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS5PR
Time relay
Replace for ST3PR product

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.1s-99h, 6 time bases adjustable
Repeat error	⩽ 1%
Operation mode	Cycle delay
Contact form	1 set of delay contacts
Contact capacity	3A AC250V(resistive)
Dimension	40.5×54×75.5mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS5PF
Time relay
Replace for ST3PF product

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.1s~9.9s, 1s~99s, 0.1s~99.9s 1s~199s
Repeat error	⩽ 5%
Operation mode	Power-off delay
Contact form	2 sets of delay contacts
Contact capacity	3A AC250V(resistive)
Dimension	40.5×54×75.5mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS5PG
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.1s-99h, 6 time bases adjustable
Repeat error	⩽ 1%
Operation mode	HHS5PG：Release delay
Contact form	HHS5PG：2 sets of delay
Contact capacity	3A AC250V(resistive)
Dimension	40.5×54×75.5mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS6
Time relay
Replace for JSS48A

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s~99h99m h-min-s setting
Repeat error	⩽ 1%
Operation mode	Power-on delay
Contact form	2 sets of delay with reset and pause terminal (11-pin)
Contact capacity	3A AC250V(resistive)
Dimension	48×48×115mm
Hole size	45×45mm
Installation method	Panel type, screw mounting type, 35mm DIN rail type

HHS6-1
Time relay
replaces DH48S

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s~99h99m h-min-s setting
Repeat error	⩽ 1%
Operation mode	Power-on delay
Contact form	1 set of delay with reset and pause terminal
Contact capacity	3A AC250V(resistive)
Dimension	48×48×105mm
Hole size	45×45mm
Installation method	Panel type, screw mounting type, 35mm DIN rail type

HHS6N-2
Time relay
Replace for DH48S-2Z and DH48S-2Z instant action

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s~99h99m h-min-s setting
Repeat error	⩽ 1%
Operation mode	Power-on delay
Contact form	A：2 sets of delay contacts B：1 set of delay contact and 1 set of instant contact
Contact capacity	3A AC250V(resistive)
Dimension	48×48×105mm
Hole size	45×45mm
Installation method	Panel type, screw mounting type, 35mm DIN rail type

HHS6R
Time relay
Replace for DH48S-S

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.1s-990h, 7 time bases adjustable
Repeat error	⩽ 1%
Operation mode	Infinite cycle delay (regular) 1-15 cycle work times can be ordered (please specify when ordering)
Contact form	HHS6R：1 set of delay with reset and pause terminal HHS6R-2：2 sets of delay contacts
Contact capacity	3A AC250V(resistive)
Dimension	48×48×105mm
Hole size	45×45mm
Installation method	Panel type, screw mounting type, 35mm DIN rail type

HHS6S-2
Time relay
Replace for JSS20-48AMS

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s-9990h (10 time bases adjustable)
Repeat error	For time delay range greater than 1s, Er ⩾ 1%; For time delay range less than 1s, Dr ⩽ 50ms
Operation mode	Power-on delay
Contact form	2 sets of delay contacts
Contact capacity	3A AC250V(resistive)
Dimension	48×48×105mm
Hole size	45×45mm
Installation method	Panel type, screw mounting type, 35mm DIN rail type

DH48S Improved
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s~99h99m h-min-s setting
Repeat error	⩽ 1%
Operation mode	Power-on delay
Timing method	Countdown, digital display
Contact form	DH48S:1 set of delay with reset and pause function DH48S-2Z:2 sets of delay contacts DH48S-S:1 set of delay with reset and pause terminal, 2 sets of delay contacts DH48S-2:2 sets of delay with reset and pause terminal (11-pin)
Contact capacity	3A AC250V(resistive)
Dimension	48×48×101.5mm
Hole size	45×45mm
Installation method	Panel type, screw mounting type, 35mm DIN rail type

HHS8
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	1s 5s 10s 30s 60s 120s 180s 5m 10m 30m 60m
Repeat error	⩽ 1%
Operation mode	HHS8(AH3-2)：Power-on delay HHS8C(AH3-3，ST2P)：Power-on delay with instant action HHS8G：Release delay
Contact form	HHS8G，HHS8(AH3-2)：sets of delay contacts HHS8C(AH3-3，ST2P)：1 set of delay contact and 1 set of instant contact
Contact capacity	3A AC250V(resistive)
Dimension	40.5×50.5×82mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

HHS6A
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s~99990h h-min-s setting
Repeat error	⩽ 1%
Operation mode	Power-on delay, release delay, memory/non-memory function optional
Timing method	Positive count/countdown, dual row display
Contact form	HHS6A: 2 sets of delay with reset and start function HHS6A-1: 1 set of delay with reset and start function HHS6A-2: 2 sets of delay contacts
Contact capacity	3A AC250V(resistive)
Installation method	48×48×115mm
Hole size	45×45mm
Installation method	Panel type, screw mounting type, 35mm DIN rail type

HHS13S
(ST6P-2) / 13S-1 (ST6P-4)
Time relay

Supply voltage	DC24V；AC24V，AC220V
Time delay range	0.1s-100h time base optional
Repeat error	⩽ 1%
Operation mode	Power-on delay
Contact form	HHS13S：2 sets of delay contacts HHS13S-1：4 sets of delay contacts
Contact capacity	HHS13S：5A AC250V(resistive) HHS13S-1：3A AC250V(resistive)
Dimension	22×28×70mm
Installation method	35mm DIN rail installation

Note: The supporting base fixed hook is dedicated HHS13S stainless steel hook

HHS6D/M
Multi-circuit time relay

Supply voltage	DC24V；AC24V；AC220V
Time delay range	0.01s-9999h
Repeat error	⩽ 0.5%, with Repeat error of less than 50ms when the delay time is ⩽ 1s
Operation mode	① Power-on delay ② Release delay ③ Cycle delay
Control circuit	1 circuit, 2 circuits, 3 circuits, 4 circuits
Contact capacity	3A AC250V(resistive)
Dimension	48×48×77.5mm
Hole size	45×45mm
Installation method	Panel type

HHS11(JS11S) Improved
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s~99h99m h-min-s setting
Repeat error	⩽ 1%
Operation mode	Power-on delay
Timing method	Countdown, digital display
Contact form	2 sets of delay and 1 set of instant contacts
Contact capacity	3A AC250V(resistive)
Dimension	95×95×101mm
Hole size	4-Φ5/70×70mm Φ81.2mm
Installation method	Panel type

HHS8-N □ (AH3-N □)
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	NA：1s/10s/1m/10m NB：3s/30s/3m/30m NC：6s/60s/6m/60m ND：1m/10m/1h/10h NE：3m/30m/3h/30h
Repeat error	⩽ 1%
Operation mode	Mode A: Power-on delay Mode B: Power-on delay with instant action
Contact form	Mode A: 2 sets of delay contacts Mode B: 1 set of delay contact and 1 set of instant contact
Contact capacity	3A AC250V(resistive)
Dimension	40.5×50.5×82mm
Installation method	By combining different sockets and accessories, screw mounting type, panel type and 35mm DIN rail installation can be achieved

JS11S
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s~9.99s 0.01s~99.99s；0.01s~99990h(h, min, s adjustable)
Contact form	2 sets of delay and 1 set of instant contacts
Contact capacity	3A AC250V(resistive)
Dimension	85×85×83mm
Hole size	4-Φ5/70×70mm Φ81.2mm
Installation method	Panel type

Note: If the delay requirement is not specified during the order, the product should be sent in the range of 0.01s-99990h (h, min, s adjustable)

HHS16F
Multi-circuit time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s~9999h
Repeat error	⩽ 1%
Operation mode	Power-on delay, release delay, cycle delay
Control circuit	1-8 circuits optional
Contact capacity	3A AC250V(resistive)single circuit
Dimension	72×27×78mm
Hole size	68×68mm
Installation method	Panel type

HHS17P/HHS17PR
Time relay

Supply voltage	AC/DC24V；AC/DC100V-240V
Time delay range	0.1s~99h
Repeat error	⩽ 1%
Operation mode	HHS17P:Power-on delay; HHS17PR:Cycle delay
Contact form	2 sets of delay contacts
Contact capacity	3A AC250V(resistive)
Dimension	33×78×68.5mm
Installation method	Screw mounting type or 35mm DIN rail type

HHS16B
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.01s-99990h 10 time bases optional
Repeat error	⩽ 1%
Operation mode	Power-on delay
Timing method	Positive count, digital display
Contact form	HHS16B: 2 sets of delay with reset and pause function HHS16B-C: 1 set of delay contact and 1 set of instant contact with reset and pause function
Contact capacity	3A AC250V(resistive)
Dimension	72×72×83mm
Hole size	68×68mm
Installation method	Panel type

HHS18
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.1s~120h
Repeat error	⩽ 1%
Operation mode	8 modes including power-on delay, release delay, etc
Contact form	HHS18: 2 sets of delay HHS18C: 1 set of delay, 1 set of instant action
Contact capacity	1A AC240V(resistive)
Dimension	24.5×85.5×90.5mm
Installation method	Screw mounting type or 35mm DIN rail type
Replace for	H3DS，RE11，DHC19-M，NJB1-S

HHS16R
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.1s-990h, 7 time bases adjustable
Repeat error	⩽ 1%
Operation mode	Infinite cycle delay (regular) 1-15 cycle work times can be customized, please specify when ordering
Contact form	2 sets of delay contacts with reset and pause terminal
Contact capacity	3A AC250V(resistive)
Dimension	72×72×83mm
Hole size	68×68mm
Installation method	Panel type

HHS18R
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	0.1s~100h
Repeat error	⩽ 1%
Operation mode	Cycle delay
Contact form	HHS18R：2 sets of delay HHS18RC：1 set of delay, 1 set of instant action
Contact capacity	3A AC250V(resistive)
Dimension	24.5×85.5×90.5mm
Installation method	Screw mounting type or 35mm DIN rail type
Replace for	DHC19S-S

HHS18F
Time relay

Supply voltage	DC24V；AC24V, AC220V, AC380V
Time delay range	1s，5s，10s，30s，60s 120s，180s
Repeat error	⩽ 5%
Operation mode	Power-off delay
Contact form	2 sets of delay transfer contacts with reset function
Contact capacity	1A AC250V(resistive)
Dimension	24.5×85.5×90.5mm
Installation method	Screw mounting type or 35mm DIN rail type

HHSC10
Steel bar cutting machine controller

Supply voltage	AC220V，AC380V
Time delay range	0.01s~0.99s
Repeat error	⩽ 1%
Operation mode	Power-on delay
Contact form	2 sets of delay transfer contacts; 1 set of counting signal contacts
Contact capacity	10A AC250V(resistive)
Dimension	45×82×108mm
Hole size	56-2×diameter 4.5mm
Installation method	Screw mounting type and 35mm DIN rail type

Counting relay/Meter counter/Tachometer/Line speed meter

Counter/meter counter is suitable for use as a counting element in control circuit with frequency of AC 50Hz, rated working voltage of 380V and below, or DC working voltage of 24V. It connects and disconnects the circuit according to preset numbers. The counter/meter counter adopts single chip microcomputer (SCM) circuit and high-performance counting chip, which has the advantages of wide counting range, positive count/countdown, multiple counting methods and counting signal inputs, stable and reliable counting performance, etc. It is widely used in industrial automation control.

This series of counters/meter complies with GB/T14048.5 and JB/T 8794 standards, and the products have passed CCC self-declaration.

ZN48
Counting and measuring relay

Supply voltage	AC/DC24V;AC220V;AC/DC 100~240V;AC380V
Function description	16 functions including time relay, time counter, tachometer, frequency meter, etc., totally 9 Time delay ranges
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	48×48×77.5mm
Hole size	45×45mm
Installation method	Panel type

HHJ1(with base)
Counting relay
Replace for JDM1-48
Both contact signal and photoelectric/ proximity switch can be counted

Supply voltage	AC/DC24V； AC220V； AC/ DC100~240V； AC380V
Operation mode	Positive count, 4-digit LED display
Counting speed	High frequency 100 times/s; low frequency 30 times/s
Counting range	(1-9999)×1,×10,×100 magnification
Input signal	Contact signal, PNP normally open photoelectric/proximity switch
Output mode	N, C, F, R, X system
Power-off memory	Memory settable
Dimension	48×48×115mm
Hole size	45×45mm
Installation method	Panel type

DH48J
Counting relay
Only for contact signal counting, if photoelectric switch/proximity switch counting is required, please choose the HHJ1 type

Supply voltage	AC/DC24V； AC/DC100~240V； AC380V
Operation mode	Positive count, 4-digit LED display
Counting speed	High frequency 100 times/s; low frequency 30 times/s
Counting range	(1-9999)×1,×10,×100 magnification
Input signal	Contact signal counting
Output mode	N, C, F, R, X system
Power-off memory	Memory settable
Dimension	48×48×105mm
Hole size	45×45mm
Installation method	Panel type

HHJ1-B(new type), HHJ1-F(rear-panel wiring)
Counting relay

N/C/F/X/R system combination type

Supply voltage	DC24V； AC24V,AC220V,AC380V
Operation mode	Positive count/countdown
Counting speed	High frequency 1000 times/s; Low frequency 30 times/s
Counting range	(1-99999)×1,×10,×100 magnification
Input signal	Contact signal, PNP normally open photoelectric/proximity switch
Output mode	N, C, F, R, X system
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	48×48×115(90)mm
Hole size	45×45mm
Installation method	Panel type

ZN72
Counting and measuring relay

Supply voltage	AC/DC24V;AC220V;AC/DC 100~240V;AC380V
Function description	16 functions including time relay, time counter, tachometer, frequency meter, etc., totally 9 Time delay ranges, reducing inventory specifications for dealers and saving cost
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	72×72×78mm
Hole size	68×68mm
Installation method	Panel type

HHJ2-8，HHJ2-8U
Counter
Replace for H7EC, DHC3J, JDM3

Supply voltage	Self-contained power supply (built-in non-rechargeable battery)
Operation mode	Positive count, 8-digit LCD display
Counting speed	High frequency 1000 times/s; low frequency 30 times/s
Counting range	1-99999999
Input signal	HHJ2-8：Contact signal HHJ2-8U：Level signal (DC4-30V)
Battery life	1 year
Dimension	48×22×55mm
Hole size	45×22mm
Installation method	Panel type

HHJ3
Counter
Replace for JDM11-6H
Only for contact or level signal counting, if photoelectric switch/ proximity switch counting is required, please choose the HHJ3-A type

Supply voltage	AC/DC24V；AC/DC100~240V
Operation mode	Positive count, 6-digit LED display
Counting speed	10, 30, 1000 times/s adjustable
Counting range	1-999999
Function description	HHJ3 replaces for JDM11-6H
Input signal	Contact signal (voltage-free type) Level signal (customized for voltage type DC4~30V)
Power-off memory	10 years
Dimension	58×42×82mm
Hole size	50×25mm
Installation method	Panel type

HHJ3-A
Counter
Contact and NPN normally open photoelectric switch/proximity switch counting

(5 wiring terminals)

Supply voltage	AC/DC24V；AC/DC100~240V
Operation mode	Positive count, 6-digit LED display
Counting speed	10, 30, 1000 times/s adjustable
Counting range	1-999999
Input signal	Contact signal, NPN normally open photoelectric/ proximity switch
Power-off memory	10 years
Dimension	58×42×82mm
Hole size	50×25mm
Installation method	Panel type

HHJ4-A
Counting relay

N/C/F/X/R system combination type

Supply voltage	DC24V；AC24V, AC220V, AC380V
Operation mode	Positive count, countdown
Counting speed	High frequency 1000 times/s Low frequency 30 times/s
Counting range	(1-999999)×1,×10,×100 magnification
Input signal	Contact signal, PNP normally open photoelectric/proximity switch
Output mode	N, C, F, X, R system
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	96×48×114mm
Hole size	92×45mm
Installation method	Panel type

HHJ4-D
Counting relay
With pre-delay and post-delay function

Supply voltage	DC24V；AC220V，AC380V
Work form	Positive count
Counting speed	High frequency 1000 times/s; low frequency 30 times/s
Counting range	1-99999999
Input signal	Contact signal, PNP normally open photoelectric switch/ proximity switch
Output mode	C system, Power-off memory 10 years
Operation mode	Pre-delay: 0.01-99.9 s Post-delay: 0.01-99.9 s
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	96×48×114mm
Hole size	92×45mm
Installation method	Panel type

JDM15B
Counting relay
Replace for JDM15G and AN-15

N/C/F/R system combination type

Supply voltage	DC24V；AC24V,AC220V,AC380V
Operation mode	Positive count, countdown, reversible A, B, C
Counting speed	High frequency 1000 times/s Low frequency 30 times/s
Counting range	(1-999999)×1,×10,×100 magnification
Input signal	Contact signal, meter wheel, rotary encoder PNP normally open photoelectric/ proximity switch
Output mode	N, C, F, R system
Power-off memory	10 years
Contact form	2 sets of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	72×72×81mm
Hole size	68×68mm
Installation method	Panel type

HHJ5-F，HHJ5-K
Counting relay

Total quantity without output

Total quantity with output

Supply voltage	AC/DC24V；AC/DC100-240V;AC380V
Work form	Positive count
Operation mode	Automatic component reset Total cumulative quantity or number of packages
Counting speed	High frequency 1000 times/s; low frequency 30 times/s
Counting range	1-999999
Input signal	Contact signal, PNP normally open photoelectric/proximity switch
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	72×72×81mm
Hole size	68×68mm
Installation method	Panel type

HHJM-72F，HHJM-72K
Counting relay
HHJM-72F total quantity without output;
HHJM-72K total quantity with output
HHJM-72F replaces for HHJ5-F and HHJ5-G;
HHJM-72K replaces for HHJ5-K

Supply voltage	AC/DC24V;AC220V;AC/DC100-240V;AC380V
Operation mode	Automatic component reset Total cumulative quantity or number of packages
Counting speed	1, 10, 30, 300, 1000 times/s
Counting range	1~999999
Input signal	Contact signal, normally open photoelectric/proximity switch
Output mode	N, C system
Power-off memory	10 years
Contact form	[HHJM-72F] 1 set of NO and NC contacts [HHJM-72K] 2 sets of NO and NC contacts
Dimension	72×72×78mm
Hole size	68×68mm
Installation method	Panel type

JDM9-4A
Counting relay

Supply voltage	AC/DC 24V;AC220V;AC/DC 100-240V;AC380V
Work form	Positive count
Counting speed	10, 30, 100, 300 times/s
Counting range	1-9999
Input signal	Contact signal, normally open photoelectric/proximity switch
Output mode	N, C system
Power-off memory	Settable
Contact form	1 set of NO and NC contacts, 2 sets customizable
Dimension	72×72×78mm
Hole size	68×68mm
Installation method	Panel type

JDM9-4
Counting relay
Counting speed 100 times/s

Supply voltage	AC/DC24V;AC220V;AC/DC100-240V;AC380V
Operation mode	Positive count, 4-digit LED display
Counting speed	100 times/
Counting range	1-9999
Input signal	Contact signal, PNP normally open photoelectric/proximity switch
Output mode	N or C system
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	72×72×81mm
Hole size	68×68mm
Installation method	Panel type

SJ
Counter
Replace for JDM1-6 and AN-6

Supply voltage	DC24V；AC220V，AC380V
Operation mode	Positive count
Counting speed	High frequency 1000 times/s Low frequency 30 times/s
Counting range	1-999999
Input signal	Contact signal, PNP normally open photoelectric/proximity switch
Power-off memory	10 years
Dimension	104×52×108mm
Hole size	76×45mm
Installation method	Panel type

JDM9-6
Counting relay
T system needs to be customized

N/C/F/X/R system combination type

Supply voltage	AC/DC24V;AC220V;AC/DC100-240V;AC380V
Operation mode	Positive count, countdown
Counting speed	High frequency 1000 times/s Low frequency 30 times/s
Counting range	(1-999999)x1,x10,x100 magnification
Input signal	Contact signal, PNP normally open photoelectric/proximity switch
Output mode	N, C, F, R, X system
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	72×72×81mm
Hole size	68×68mm
Installation method	Panel type

JDM11-5H
Counter
Contact and voltage signal counting, if proximity/photoelectric switch counting is required, please choose HHJ3-A

Supply voltage	DC24V；AC220V
Operation mode	Positive count
Counting speed	30 times/s
Counting range	1-99999
Input signal	Voltage-free type: contact signal Voltage type: Voltage signal (DC4-30V)
Power-off memory	10 years
Dimension	46.5×35×92mm
Hole size	38.5×27.5mm
Installation method	Panel type

Supply voltage

XJ-4（button type）
Counting relay

X/C system combination type

Supply voltage	AC220V
Operation mode	Positive count
Counting speed	Low frequency 30 times/s; high frequency 100 times/s
Counting range	1-9999
Input signal	Contact signal, PNP normally open photoelectric/proximity switch
Output mode	X, C system
Power-off memory	Memory settable
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	96×96×97.9mm
Hole size	92×92mm
Installation method	Panel type

HHM1-A
Counting relay

N/C/F/X/R system combination type

Supply voltage	DC24V；AC220V，AC380V
Operation mode	Positive count, countdown
Counting speed	High frequency 1000 times/s Low frequency 30 times/s
Counting range	1-999999
Qty. value factor	0.001-9.999
Input signal	Contact signal, meter wheel, PNP normally open photoelectric switch/proximity switch
Output mode	N, C, F, R, X system
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	96×48×114mm
Hole size	92×45mm
Installation method	Panel type

DH14J
Counting relay
Replace for JDM1-14

N or C system combination type

Supply voltage	DC24V；AC220V，AC380V
Operation mode	Positive count
Counting speed	100 times/s
Counting range	(1-9999)×1,×10,×100 magnification
Input signal	Contact signal, PNP normally open photoelectric/proximity switch
Output mode	N or C format
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	52×104×120mm
Hole size	45×76mm
Installation method	Panel type

HHM1-D
Counting relay

N/C/F/X/R system combination type

Supply voltage	DC24V；AC220V，AC380V
Operation mode	Positive count, countdown
Counting speed	High frequency 1000 times/s Low frequency 30 times/s
Counting range	1-999999
Qty. value factor	0.001-9.999
Input signal	Contact signal, meter wheel, PNP normally open photoelectric switch/proximity switch
Output mode	N, C, F, R, X system
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	72×72×81mm
Hole size	68×68mm
Installation method	Panel type

HHM1-B
Counting relay

N/C/F/X/R system combination type

Supply voltage	DC24V；AC220V，AC380V
Operation mode	Positive count, countdown
Counting speed	High frequency 3000 times/s; low frequency 30 times/s
Counting range	1-99999999
Qty. value factor	0.0001-9.9999
Input signal	Contact signal, meter wheel, PNP normally open photoelectric switch/proximity switch
Output mode	N, C, F, R, X system
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V((resistive)
Dimension	96×48×114mm
Hole size	92×45mm
Installation method	Panel type

HHM1-E
Counting relay

Supply voltage	DC24V；AC220V，AC380V
Operation mode	Positive count, countdown
Counting speed	High frequency 1000 times/s; low frequency 30 times/s
Counting range	1-999999
Qty. value factor	0.001-9.999
Input signal	Contact signal, meter wheel, PNP normally open photoelectric switch/proximity switc
Output mode	N, C, F system
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Dimension	72×72×81mm
Hole size	68×68mm
Installation method	Panel type

HHM2-H
Counting relay

High speed counting: 5000 times/s
When equipped with encoder and meter wheel, it can realize increasing counting in forward rotation and decreasing counting in reverse of the motor

Supply voltage	DC24V；AC220V，AC380V
Operation mode	Reversible B count, reversible C count
Counting speed	High frequency 5000 times/s; low frequency 30 times/s
Counting range	1-99999999
Qty. value factor	0.0001~9.9999
Input signal	Rotary encoder, meter wheel, PNP normally open photoelectric switch/proximity switch
Output mode	N, C, F, R, X system
Power-off memory	10 years
Contact form	1 set of NO and NC contacts
Dimension	HHM2-H：96×48×114mm
Hole size	HHM2-H：92×45mm
Installation method	Panel type

HHM3-H
Counting relay

High speed counting: 5000 times/s
When equipped with encoder and meter wheel, it can realize increasing counting in forward rotation and decreasing counting in reverse of the motor

Supply voltage	AC/DC24V;AC220V;AC/DC100-240V;AC380V
Operation mode	Reversible B count, reversible C count
Counting speed	High frequency 5000 times/s; low frequency 30 times/s
Counting range	1-99999999
Qty. value factor	0.0001~9.9999
Input signal	Rotary encoder, meter wheel, PNP normally open photoelectric switch/proximity switch
Output mode	N, C, F, R, X, T system
Power-off memory	10 years
Contact form	1 set of NO and NC contacts, and 1 set of NO contacts
Dimension	72×72×81mm
Hole size	68×68mm
Installation method	Panel type

HHJM-48
Counting relay

Replace for DH48J and HHJ1 HHJ1-B， HHJ1-F

Supply voltage	AC/DC24V;AC220V;AC/DC100~240V;AC380V
Operation mode	Positive count, reversible A, B, C
Counting speed	1, 10, 30, 300, 1000, 3000 times/s
Counting range	1~999999
Input signal	Contact signal, normally open photoelectric/proximity switch, meter wheel, rotary encoder
Output mode	N, C, F, R, X, T-N, T-C system
Power-off memory	Settable
Contact form	1 set of NO and NC contacts and 1 set of NO contacts
Dimension	48×48×77.5mm
Hole size	45×45mm
Installation method	Panel type

HHJM-96B
Counting relay

Replace for HHM1-A, HHM1-B, HHJ4-A

Supply voltage	AC/DC24V，AC220V;AC/DC100 ～ 240V，AC380V
Operation mode	Positive count, reversible A, B, C
Counting speed	1, 10, 30, 300, 1000, 3000 times/s
Counting range	1~999999
Input signal	Contact signal, normally open photoelectric/proximity switch, meter wheel, rotary encoder
Output mode	N, C, F, R, X, T-N, T-C system
Power-off memory	Settable
Contact form	1 set of NO and NC contacts and 1 set of NO contacts
Dimension	96×48×90mm
Hole size	92×44mm
Installation method	Panel type

HHJM-72
Counting relay

Replace for JDM9-4, JDM9-6, JDM15B, HHM1-D, HHM1-E

Supply voltage	AC/DC24V，AC220V;AC/DC100 ～ 240V，AC380V
Operation mode	Positive count, reversible A, B, C
Counting speed	1, 10, 30, 300, 1000, 3000 times/s
Counting range	1~999999
Input signal	Contact signal, normally open photoelectric/proximity switch, meter wheel, rotary encoder
Output mode	N, C, F, R, X, T-N, T-C system
Power-off memory	Settable
Contact form	2 sets of NO and NC contacts
Dimension	72×72×78mm
Hole size	68×68mm
Installation method	Panel type

HHX1，HHZ1
Line speed meter/tachometer

Without control output

Supply voltage	DC24V；AC220V，AC380V
Rev. speed Line speed	Max rev. speed: 1000 rps, 60000 rpm; Min rev. speed: 1 rps, 60 rpm;
Display Range	1-999999
Qty. value factor	0.001-9.999(HHZ1：none)
Input signal	PNP normally open Hall switch/proximity switch DC0-10V voltage signal
Dimension	96×48×114mm
Hole size	92×45mm
Installation method	Panel type

Liquid level relay series

The HHY series liquid level relay can be used as liquid level control component in control circuit with frequency of AC 50Hz and rated working voltage of 380V and below. It can connect and disconnect the water pump control circuit as required to achieve automatic water supply and drainage functions. It is widely used for automatic control between water tower and well in schools, industrial and mining enterprises, households and other places.

This series of liquid level relay complies with the GB/T14048.5 standard, and the product has passed the CCC self-declaration.

C61F-GP
Liquid level relay

Supply voltage	AC220V，AC380V
Operation mode	Water supply and drainage type
Water control distance	⩽ 100m
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	40×55×79mm
Installation method	Screw mounting type and 35mm DIN rail type

HHY11PG
Liquid level relay

Supply voltage	AC/DC 100~240V
Operation mode	Water supply and drainage type (short-circuited terminal optional)
Water control distance	⩽ 500m
Contact form	1 set of NO and NC contacts
Contact capacity	1A AC240V(resistive)
Dimension	24.5×85.5×90.5mm
Installation method	Screw mounting type or 35mm DIN rail type

HHY2G，HHY2P
Liquid level relay

Supply voltage	DC24V，AC24V，AC220V，AC380V
Operation mode	HHY2P: drainage type HHY2G: water supply type
Water control distance	⩽ 500m
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	40×55×79mm
Installation method	35mm DIN rail type and device type

HHY11PG-A
Liquid level relay

Supply voltage	AC/DC 100~240V
Operation mode	Water supply- ultra high alarm type Drainage-ultra high double row type Drainage-ultra low alarm type Water supply-ultra low self-locking type (Short-circuited terminal optional)
Water control distance	⩽ 200m
Contact form	Two NO contacts
Contact capacity	1A AC240V(resistive)
Dimension	24.5×85.5×90.5mm
Installation method	Screw mounting type or 35mm DIN rail type

HHY7G/7P
(JYB-714water supply/drainage type)
Liquid level relay

Supply voltage	DC24V，AC24V，AC220V，AC380V
Operation mode	HHY7G(JYB-714)water supply type HHY7P(JYB-714)drainage type
Water control distance	⩽ 100m
Contact form	1 set of NO and NC contacts
Contact capacity	3A AC250V(resistive)
Dimension	40×62×92mm
Installation method	35mm DIN rail type and screw mounting type

HHY14
Floating ball liquid level relay

Operation mode	Floating ball contact type
Water control distance	1 set of NO and NC contacts
Contact form	10A AC250V(resistive)
Contact capacity	1m, 2m, 3m, 4m, 5m 10m, other lengths customized
Dimension	160×80×45mm
Installation method	Fixed with heavy hammer

Time control switch series

The HHQ series time control switch adopts high-performance LCD display chip, which has the advantages of easy operation, clear display and high anti-interference capacity. It is a substitute product for various mechanical time control switches.

This series of product has a great variety, ranging from 8 groups per day to 80 groups per day, and it has various installation methods such as panel type, wall-mounted type, DIN rail type and socket type, which can meet the needs of various users. It is widely used in automatic control circuit for street lamps, neon lights, electric bells, broadcasting and television equipment, production equipment, and household appliances.

This series of time control switch complies with the GB/T 14048.5 standard or GB 14536.8 standard.

KG316T
Time control switch

Supply voltage	AC220V，AC380V
Time control range	1 min~168 h
Timing error	⩽ ±2 s/day
Contact capacity	⩽ 6kW （resistive load）
Programmable qty.	16 groups/day (with keyboard lock)
Battery	1 1.5V AAA battery
Dimension	71×105×48mm
Installation method	Screw mounting type, DIN rail type, wall-mounted type

HHQ4-G
Time control switch (light control/rain control)

Supply voltage	AC/DC 100V-240V
Time control range	1m-168h
Timing error	⩽ ±1s/day
Contact capacity	20A AC250V(resistive)
Programmable qty.	16 groups/day (with light control/ rain control)
Battery	1 1.5V AAA battery (external)
Dimension	72×120×48mm
Installation method	Screw mounting type, DIN rail type, wall-mounted type
Hole size of light/ rain control probe	2×Φ3.4+0.2/29.5±0.2mm

HHQ4-A
Time control switch

Supply voltage	AC220V 50Hz
Time control range	1 min~168 h
Timing error	⩽ ±1s/day
Contact capacity	20A AC250V(resistive)
Programmable qty.	16 groups/day switch programming (with keyboard lock)
Battery	1 1.5V AAA battery (external)
Dimension	72×120×48mm
Installation method	Screw mounting type, DIN rail type, wall-mounted type

HHQ4-J
Time control switch (latitude and longitude)

Supply voltage	AC220V
Operation mode	Longitude and latitude, time control
Timing error	⩽ ±1s/day
Programmable qty.	16 groups/day
Time control range	1m-16h
Contact capacity	3A AC250VC(resistive)
Battery	1.5V AAA battery (external)
Dimension	72×120×48mm
Installation method	Screw mounting type, DIN rail type, wall-mounted type

HHQ4-D
Time control switch (fully automatic bell)

Supply voltage	AC220V 50Hz
Ring duration	1s-23h59m59s
Timing error	⩽ ±1s/day
Contact capacity	20A AC250V(resistive)
Programmable qty.	80 times/day
Battery	1 1.5V AAA battery (external)
Dimension	72×120×48mm
Installation method	Screw mounting type, DIN rail type, wall-mounted type

HHQ8-1，HHQ8-2
Time controller

Supply voltage	AC220V 50Hz
Time control range	1 min~168 h
Timing error	⩽ ±1s/day
Programmable qty.	HHQ8-1: programming for 40 groups of switches HHQ8-2: programming for 40 groups of switches
Contact output	HHQ8-1: 1-circuit output HHQ8-2: 2-circuit output
Contact capacity	HHQ8-1 为 16A AC250V(resistive) HHQ8-2 为 3A AC250V(resistive)
Battery	Built-in high-energy lithium battery
Dimension	49.5×100×74mm
Installation method	35mm DIN rail type

HHQ8-4，HHQ8-6
Multi-circuit time controller

Working power supply	AC220V 50Hz
Time control range	1 min~168 h
Timing error	⩽ ±1s/day
Programmable qty.	Totally 40 groups
Active output	HHQ8-4: 4-circuit output HHQ8-6: 6-circuit output
Contact capacity	Single circuit ⩽ 500W
Battery	Built-in high-energy lithium battery
Dimension	49.5×100×74mm
Installation method	35mm DIN rail type

HHQ14(KG-2)
Automatic street light switch

Working power supply	AC220V 50Hz
Control mode	ON at night and OFF at day time; sensitivity adjustable
Wiring length of light control component	⩽ 100m
Active output	6-pin, 5-pin output
Contact capacity	3A AC250V(resistive)
Dimension	42×75×116mm
Installation method	Screw mounting type and 35mm DIN rail type
Hole size of light control probe	Φ16±0.2mm

HHQ9-1，HHQ9-2
Time controller

Working power supply	AC220V 50Hz
Time control range	1 min~168 h
Timing error	⩽ ±1s/day
Programmable qty.	HHQ9-1: programming for 40 groups of switches HHQ9-2: programming for 40 groups of switches
Contact output	HHQ9-1: 1-circuit output HHQ9-2: 2-circuit output
Contact capacity	HHQ9-1 为 16A AC250V(resistive) HHQ9-2 为 3A AC250V(resistive)
Battery	Built-in high-energy lithium battery
Dimension	51×51×108mm
Hole size	45×45mm
Installation method	Panel type, screw mounting type, 35mm DIN rail type

HHQ15(DHC15)
Time controller

Working power supply	AC220V 50Hz
Time control range	1 min~168 h
Timing error	⩽ ±1s/day
Contact capacity	16A AC250V(resistive)
Programmable qty.	16 groups/day switch programming
Battery	Built-in high-energy lithium battery
Dimension	36×78×68.5mm
Installation method	35mm DIN rail type

HHQ9-4，HHQ9-6
Multi-circuit time controlle

Working power supply	AC220V 50Hz
Time control range	1 min~168 h
Timing error	⩽ ±1s/day
Programmable qty.	Totally 40 groups
Active output	HHQ9-4: 4-circuit output HHQ9-6: 6-circuit output
Contact capacity	Single circuit ⩽ 500W
Battery	Built-in high-energy lithium battery
Dimension	51×51×108mm
Hole size	45×45mm
Installation method	Panel type, screw mounting type, 35mm DIN rail type

HHQ16(SDK-6)
Latitude and longitude street light controller

Working power supply	AC220V 50Hz
Operation mode	It automatically adjusts the time for turning on and off lights according to seasonal changes based on local latitude and longitude
Timing error	⩽ ±0.5 s/day
Control model	Full night light, automatic midnight light, two-stage light
Contact form	A,B 2-circuit output
Contact capacity	10A AC250V(resistive)
Battery	Built-in high-energy lithium battery
Dimension	165×111×63mm
Installation method	Screw mounting type, wall-mounted type

HHQ12-1(GUK-81)
HHQ12-2(GUK-82)
Street light control switch

Working power supply	AC220V 50Hz
Time control range	ON at night and OFF at day time; sensitivity adjustable
Contact capacity	HHQ12-1: 10A AC250V(resistive) HHQ12-2: 40A AC250V(resistive)
Dimension	50×78×59mm
Installation method	Screw mounting type or 35mm DIN rail type

HHQ16-A
Latitude and longitude street light controller

Working power supply	AC100-240V 50/60HZ
Operation mode	It automatically adjusts the time for turning on and off lights according to seasonal changes based on local latitude and longitude
Timing error	⩽ ±2min/year
Control model	Full night light, automatic midnight light, two-stage light, light control probe can be equipped to form light control type latitude and longitude intelligent street light controller
Contact form	Two-circuit solid-state relay output
Ambient temp.	-50°C ~+70°C
Contact capacity	3A AC250V(resistive)
Dimension	88×126×51mm
Installation method	Screw mounting type, wall-mounted type

Miniature electromagnetic relay and socket series

The HHC series miniature electromagnetic relay is suitable for electronic control equipment, household appliances, smart homes, office automation, security series, commercial machinery, communication equipment, automobiles, machine tools, construction, transportation equipment, instruments and meters. It can be used as remote control intermediate conversion or amplification element. The outlet terminal spacing and Dimension have been standardized and widely used both domestically and internationally.

This series of small electromagnetic relay complies with the GB/T14048.5 standard. The product has passed CCC self-declaration and UL certification in the United States.

Model description

HH C 68A Z L - 2Z 12A DC12V

- DC12V: Coil voltage: AC-alternating current DC-direct current
- 12A: Contact load (it can be ignored for some products)
- 2Z: Contact form: Z-conversion H-normally open D-normally closed
- L: L-with light X-anti-surge type LX-with light+anti-surge type
- Z: Z-rotating type T-clip type S-sealed type
- F-flange type P-PCB welding leg V-cover plate type
- O-general shell (white semi-frosted shell)
- None-wide foot (socket type)
- 68: Design number A-13F Series B-MY Series (52/53/54P)
- C: Electromagnetic relay
- HH: Enterprise code

HHC67E (T90)

Contact form	1H，1D，1Z
Contact load	NC：30A/240VAC 28VDC NO：40A/240VAC 28VDC NC：20A/240VAC 28VDC NO：30A/240VAC 28VDC
Coil power	DC：0.93W，AC：1.5VA
Coil spec.	DC：5V-110V AC：6V-220V
Dimension	32×27.5×19.8mm

HHC67G (T92 short)

Contact form	1H，1D，1Z
Contact load	NC：30A/240VAC 28VDC NO：40A/240VAC 28VDC NC：20A/240VAC 28VDC NO：30A/240VAC 28VDC
Coil power	DC：0.93W，AC：1.5VA
Coil spec.	DC：5V-110V AC：6V-220V
Dimension	32.4×27.4×28.6mm

HHC67F (T91)

Contact form	1H，1D，1Z
Contact load	NC：30A/240VAC 28VDC NO：40A/240VAC 28VDC NC：20A/240VAC 28VDC NO：30A/240VAC 28VDC
Coil power	DC：0.93W，AC：1.5VA
Coil spec.	DC：5V-110V AC：6V-220V
Dimension	32×27×28.6mm

HHC68ASP-2Z (JQX-13F/2Z,LY2) sealed type

Contact form	2H，2D，2Z
Contact load	10A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.8×21.7×38.1mm

HHC67G (T92 short)

Contact form	1H，1D，1Z
Contact load	NC：30A/240VAC 28VDC NO：40A/240VAC 28VDC NC：20A/240VAC 28VDC NO：30A/240VAC 28VDC
Coil power	DC：0.93W，AC：1.5VA
Coil spec.	DC：5V-110V AC：6V-220V
Dimension	32.4×27.4×28.6mm

HHC68AS-3H (JQX-13F/3H,LY3) sealed type

Contact form	3H，3D，3Z
Contact load	10A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	31.8×28×36.8mm

HHC68A-1Z (JQX-13F/1Z,LY1)

Contact form	1H，1D，1Z
Contact load	15A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×21×35mm

HHC68AZL-2Z (JQX-13FZ/2Z)

Contact form	2H，2D，2Z
Contact load	12A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×21×36.5mm

HHC68A-2Z (JQX-13F/2Z,LY2)

Contact form	2H，2D，2Z
Contact load	10A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×21×35mm

HHC68AZL-4Z (JQX-13F/4Z,LY4)

Contact form	4H，4D，4Z
Contact load	12A/240VAC 28VDC
Coil power	DC：1.5W；AC：3.0VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×41×36.5mm

HHC68A-3Z (JQX-13F/3Z,LY3)

Contact form	3H，3D，3Z
Contact load	10A/240VAC 28VDC
Coil power	DC：1.5W；AC：2.5VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×31×35mm

HHC68B-2Z (HH52P,MY2)

Contact form	2H，2D，2Z
Contact load	5A/240VAC 28VDC
Coil power	DC：0.9W AC：1.2VA
Coil spec.	DC：3V-220V AC：3V-380V
Dimension	27.3×21×35mm

HHC68A-4Z (JQX-13F/4Z,LY4)

Contact form	4H，4D，4Z
Contact load	10A/240VAC 28VDC
Coil power	DC：1.5W；AC：3.0VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×41×35mm

HHC68B-3Z (HH53P,MY3)

Contact form	3H，3D，3Z
Contact load	5A/240VAC 28VDC
Coil power	DC：0.9W AC：1.2VA
Coil spec.	DC：3V-220V AC：3V-380V
Dimension	27.3×21×35mm

HHC68AVL-2Z (JQX-13F/2Z)

Contact form	2H，2D，2Z
Contact load	12A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×21×36.5mm

HHC68B-4Z (HH54P,MY4)

Contact form	4H，4D，4Z
Contact load	3A/240VAC 28VDC
Coil power	DC：0.9W；AC：1.2VA
Coil spec.	DC：3V-220V AC：3V-380V
Dimension	27.3×21×35mm

HHC68BVL-2Z 10A (HH52P,MY2)

Contact form	2H，2D，2Z
Contact load	10A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×21×36.2mm

HHC68BZL-2Z 10A (HH52P,MY2)

Contact form	2H，2D，2Z
Contact load	10A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×21×36.2mm

HHC68BVL-2Z (HH52P)

Contact form	2H，2D，2Z
Contact load	6.5A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×21×36.2mm

HHC68BZL-2Z (HH52PZ)

Contact form	2H，2D，2Z
Contact load	6.5A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×21×36.2mm

HHC68BVL-4Z (HH54P)

Contact form	4H，4D，4Z
Contact load	5A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×21×36.2mm

HHC68BZL-4Z (HH54PZ)

Contact form	4H，4D，4Z
Contact load	5A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	27.3×21×36.2mm

HHC68BSL-2Z (HH52P,MY2) sealed type

Contact form	2H，2D，2Z
Contact load	5A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：3V-220V AC：3V-380V
Dimension	27.8×21.7×38.1mm

HHC69KTL-1Z

Contact form	1H，1D，1Z
Contact load	NC：12A/240VAC 28VDC NO：15A/240VAC 28VDC
Coil power	DC：0.53W，AC：1.0VA
Coil spec.	DC：5V-110V AC：6V-380V
Dimension	34×12.7×28.8mm

HHC68BSL-4Z (HH54P,MY4) sealed type

Contact form	4H，4D，4Z
Contact load	3A/240VAC 28VDC
Coil power	DC：0.9W，AC：1.2VA
Coil spec.	DC：3V-220V AC：3V-380V
Dimension	27.8×21.7×38.1mm

HHC69KTL-2Z

Contact form	2H，2D，2Z
Contact load	8A/240VAC 28VDC
Coil power	DC：0.53W，AC：1.0VA
Coil spec.	DC：5V-110V AC：6V-220V
Dimension	34×12.7×28.8mm

HHC69K-1Z

Contact form	1H，1D，1Z
Contact load	NC：12A/240VAC 28VDC NO：15A/240VAC 28VDC
Coil power	DC：0.53W，AC：1.0VA
Coil spec.	DC：5V-110V AC：6V-380V
Dimension	27×12.7×28.8mm

HHC69K-2Z

Contact form	2H，2D，2Z
Contact load	8A/240VAC 28VDC
Coil power	DC：0.53W，AC：1.0VA
Coil spec.	DC：5V-110V AC：6V-220V
Dimension	27×12.7×28.8mm

HHC69KP-1Z

Contact form	1H，1Z
Contact load	16A/277VAC 30VDC
Coil power	DC：0.53W；AC：1.0VA
Coil spec.	DC：5V-110V AC：6V-220V
Dimension	29×12.7×27.5mm

HHC69KP-2Z

Contact form	2H，2Z
Contact load	NO:12A 277VAC/30VDC NC:10A 277VAC/30VDC
Coil power	DC：0.53W；AC：1.0VA
Coil spec.	DC：5V-110V AC：6V-220V
Dimension	29×12.7×27.5mm

HHC70A(2Z)
(JQX-10F；JTX)

Contact form	2H，2D，2Z
Contact load	10A/240VAC 28VDC
Coil power	DC：1.8W；AC：2.7VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	35×35×53mm

HHC70A(3Z)
(JQX-10F；JTX)

Contact form	3H，3D，3Z
Contact load	10A/240VAC 28VDC
Coil power	DC：1.8W；AC：2.7VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	35×35×53mm

HHC70B
(MK 2P)

Contact form	2H，2D，2Z
Contact load	10A/240VAC 28VDC
Coil power	DC：1.8W；AC：2.7VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	35×35×53mm

HHC70B
(MK 3P)

Contact form	3H，3D，3Z
Contact load	10A/240VAC 28VDC
Coil power	DC：1.8W；AC：2.7VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	35×35×53mm

HHC71A
(JQX-30F)

Contact form	1H，1D，1Z，2H，2D，2Z
Contact load	30A/240VAC 28VDC
Coil power	DC：2.0W；AC：4.0VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	51.5×35.6×42mm

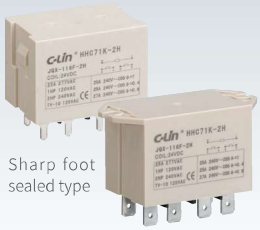
HHC71A1
(JQX-12F)

Contact form	1H，1D，1Z，2H，2D，2Z
Contact load	30A/240VAC 28VDC
Coil power	DC：2.0W；AC：4.0VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	53×46×41.3mm

HHC71B (JQX-38F)

Contact form	2H，2D，2Z，3H，3D，3Z
Contact load	40A/240VAC 28VDC 50A/240VAC 28VDC
Coil power	DC：2.5W；AC：6VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	42×50×58mm
Dimension	42.7×37.5×59.5mm

HHC71K-2H (JQX-116F-2H)



Sharp foot sealed type

Contact form	1H，2H
Contact load	30A/277VAC 30VDC 1.5A/220VDC
Coil power	DC：2.0W；AC：4.0VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	General: 50.6×33.4×39mm Flange type: 68×33.4×39mm

HHC71B(JQX-38F)

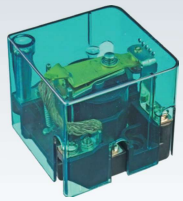
Sealed type

Contact form	2H，2D，2Z，3H，3D，3Z
Contact load	40A/240VAC 28VDC
Coil power	DC：2.5W；AC：6VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	42.7×37.5×59.5mm

HHC41-101Z HHC41-6 1Z

Contact form	1H，1Z
Contact load	6A/277VAC 24VDC 6A/10A
Coil power	0.17W/0.4W
Coil spec.	DC3-24V/DC3-60V
Dimension	28×5×18.6mm

HHC71F-1Z (JQX-62F/1Z)



Improved

Contact form	1H，1D，1Z
Contact load	100A/240VAC 28VDC
Coil power	DC：2.0W；AC：10.0VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	67×67×60.5mm

P41F05-E socket P41F05-S socket

Contact form	8A
Contact load	300V
Coil power	2500VAC/S
Coil spec.	HHC41F-1Z

HHC71F-2Z (JQX-62F/2Z)

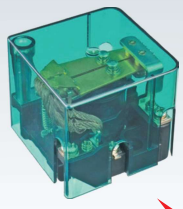
Improved

Contact form	2H，2D，2Z
Contact load	80A/240VAC 28VDC
Coil power	DC：2.0W；AC：10.0VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	85×68×65mm

PTF08A1 Socket

Load current	12A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HH64P LY2

HHC71FS-1Z (JQX-62FS/1Z)



Improved

Contact form	1H，1D，1Z
Contact load	120A/240VAC 28VDC
Coil power	DC：2.0W；AC：10.0VA
Coil spec.	DC：6V-220V AC：6V-380V
Dimension	67×67×60.5mm

PYF08A1 Socket

Load current	10A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HH52P MY2

PYF14A1 Socket

Load current	7A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HH54P MY4

PYF14A6 Socket

Load current	7A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC68BZ-4Z JQX-18F-4Z HHC68B-4Z HH54P MY4

PYF08A Socket

Load current	10A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC68BZ-2Z JQX-18F-2Z HHC68B-2Z HH52P MY2

PTF08A Socket

Load current	12A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC68A-2Z HHC68AZ-2Z JQX-13F-1Z JQX-13F-2Z HH61P HH62P LY1 LY2

PYF11A Socket

Load current	7A
Load voltage	300V
Dielectric strength	2000VAC/S
Applied relay	HHC68BZ-3Z JQX-18F-3Z HHC68B-3Z HH53P MY3

PTF11A Socket

Load current	12A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC68A-3Z JQX-13F-3Z HH63P LY3

PYF14A Socket

Load current	7A
Load voltage	300V
Dielectric strength	2000VAC/S
Applied relay	HHC68BZ-4Z JQX-18F-4Z HHC68B-4Z HH54P MY4

PTF14A Socket

Load current	12A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC68A-4Z JQX-13F-4Z HH64P LY4

PYF08A6 Socket

Load current	10A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC68BZ-2Z JQX-18F-2Z HHC68B-2Z HH52P MY2

38F-11A Socket

Load current	40A
Load voltage	300V
Dielectric strength	2000VAC/S
Applied relay	HHC71B HHC70-3 JQX-38F

P69F05E3 Socket
P69F08E3 Socket

Load current	10A/7A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC69A (JQX-14FC) HHC69B (JQX-14FF)

PF083A-E Socket
PF083A Socket

Load current	12A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC70A(JQX-10F) HHC70A(JTX-2C) HHC70B1(MK2P)

13F2C A Socket

Load current	12A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	Welded small seat HHC68A-1Z HHC68A-2Z HHC68AZ-2Z JQX-13F-1Z JQX-13F-2Z HH61P HH62P LY1 LY2

10F08B-E Socket
10F11B-E Socket

Load current	10A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC70A(JQX-10F) HHC70A(JTX-2C) HHC70A(JTX-3C) HHC70B1(MK2P) HHC70B1(MK3P)

18F2C A_2 Socket
18F3C A_2 Socket
18F4C A_2 Socket

Load current	7A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	Welded small seat HHC68B-2Z，3Z，4Z HHC68BZ-2Z，3Z，4Z JQX-18F-2Z，3Z，4Z HH52P，HH53P，HH54P MY2，MY3，MY4

14F1C-XZ1 Socket
14F2C-XZ1 Socket

Load current	10A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC69A (JQX-14FC) HHC69B (JQX-14FF)

PF113A-E Socket
PF113A Socket

Load current	12A
Load voltage	300V
Dielectric strength	2500VAC/S
Applied relay	HHC70A(JQX-10F) HHC70A(JTX-3C) HHC70B1(MK3P)

Three-phase power regulator series

The power regulator is a power controller based on thyristor module, with intelligent control circuit as the core, and it is also known as thyristor power regulator. The basic principle is to convert the DC signal output by the instrument into digital synchronous trigger signal to trigger the thyristor, change the conduction angle of the thyristor to regulate voltage and power, thereby achieving precise temperature control. It's widely used in heating industries such as industrial furnaces, glass melting furnaces, ovens, petrochemicals, shoe machines, etc.

HHT4-4/3825P

Control mode	Three options: 4-20mA, 0-5V, 0-10V
Output method	Phase output, phase shift range 0-150°
Load voltage	3-phase 380VAC (3-phase 3-wire)
Load current	25A
Protection function	Quick fuse
Alarm function	Phase failure, overtemp, relay output (1A/250VAC)
Dielectric strength	⩾ 2000VAC
Display function	LED panel displays SCR output percentage and work status
Installation method	Bolt installation
Use load	Fixed impedance heating wire, IR far infrared, UV lamp tube, etc
Dimension	150×130×175mm
Cooling method	Natural cooling

HHT4-4/3840P

Control mode	Three options: 4-20mA, 0-5V, 0-10V
Output method	Phase output, phase shift range 0-150°
Load voltage	3-phase 380VAC (3-phase 3-wire)
Load current	40A
Protection function	Quick fuse
Alarm function	Phase failure, overtemp, relay output (1A/250VAC)
Dielectric strength	⩾ 2000VAC
Display function	LED panel displays SCR output percentage and work status
Installation method	Bolt installation
Use load	Fixed impedance heating wire, IR far infrared, UV lamp tube, etc
Dimension	150×130×175mm
Cooling method	Forced air cooling

HHT4-4/3875P HHT4-4/38100P

Control mode	Three options: 4-20mA, 0-5V, 0-10V
Output method	Phase output, phase shift range 0-150°
Load voltage	3-phase 380VAC (3-phase 3-wire)
Load current	75，100A
Protection function	Quick fuse
Alarm function	Phase failure, overtemp, relay output (1A/250VAC)
Dielectric strength	⩾ 2000VAC
Display function	LED panel displays SCR output percentage and work status
Installation method	Bolt installation
Use load	Fixed impedance heating wire, IR far infrared, UV lamp tube, etc
Dimension	218×130×175mm
Cooling method	Forced air cooling

HHT4-4/38 125P,150P,200P

Control mode	Three options: 4-20mA, 0-5V, 0-10V
Output method	Phase output, phase shift range 0-150°
Load voltage	3-phase 380VAC (3-phase 3-wire)
Load current	125，150，200A
Protection function	Quick fuse
Alarm function	Phase failure, overtemp, relay output (1A/250VAC)
Dielectric strength	⩾ 2000VAC
Display function	LED panel displays SCR output percentage and work status
Installation method	Bolt installation
Use load	Fixed impedance heating wire, IR far infrared, UV lamp tube, etc
Dimension	295×148×210mm
Cooling method	Forced air cooling

PAK series three-phase SCR Power/Voltage regulating controller

PAK06 (3-phase 3-wire)

Rated voltage	3-phase 380VAC (3-phase 3-wire)
Trigger current	300mA can trigger thyristor of 1000A or below
Auxiliary power supply	PCB board operation power supply AC220V ± 10% 50/60Hz control terminal The L/N and N wires must be connected to the neutral wire
Input signal	Control signal (0-5VDC, 0-20mA, 1-5VDC, 4-20mA) optional
Usage environment	Temperature -10-55°C , humidity below 99% RH
Withstand voltage strength	Insulation withstand voltage AC2500V/1 min, input/output isolation voltage AC2000V
Alarm output	1 set of NO/NC output point (1A/250VAC)
Start-stop time	Soft start and soft stop time 1-41s adjustable
Protection function	Load phase loss detection, auxiliary power supply L/N reversed connection
Dimension	145×90×40mm

Single-phase solid-state voltage regulator (Resistance type)

HHT1-R/22(SSR-VA)
HHT1-R/38(SSR-VA)

Control mode	2W470-560KΩ potentiometer adjustment
Voltage regulation range	10-250VAC，10-440VAC
Load voltage	22：220VAC 38：380VAC
Load current	10A，15A，20A，25A 30A，40A，60A，80A
Min. cut-off	⩽ 10VAC
Isolation voltage	Not isolated
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC output terminal-heat dissipation board
Ambient temp	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A, and a fan of strong cooling or water cooling must be added for loads above 80A

Single-phase solid-state voltage regulator (Current type)

HHT1-L/22(SSR-VA)
HHT1-L/38(SSR-VA)

Control mode	4-20mA adjustment
Phase shift range	0-175 degrees
Voltage regulation range	22:10-250VAC，38: 10-440VAC
Load voltage	250VAC，440VAC
Load current	10A，15A，20A，25A，30A，40A，60A，80A
Min. cut-off	⩽ 3VAC
Isolation voltage	Passive type fully isolated
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

Fully isolated single-phase AC voltage regulation module

HHT3-U/22/38(SSR-VA)

Control mode	0-5VDC 0-10VDC 4-20mA
Voltage regulation range	22:10-250VAC，38: 10-380VAC
Load voltage	250VAC，380VAC
Load current	10A，20A，30A，40A，100A
On-state voltage drop	⩽ 1.6VAC
Isolation voltage	Active type fully isolated
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	106×75×35mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A 0-5 (10) VDC manual or automatic adjustment

Intelligent solid-state voltage regulator

HHT3-3/38(25-125A)
3-phase 3-wire voltage regulation (2023 model)

Control mode	Three options: 0-5VDC, 0-10VDC, 4-20mA
Rated voltage	380VAC
Phase shift angle	0~150°
Voltage regulation range	0-380VAC
Isolation voltage	Active type fully isolated
Load current	25A，40A，75A，100A，125A
Min. cut-off	⩽ 3.0VAC
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2000VAC
Ambient temp.	-30~80°C
Dimension	106×75×41mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

Intelligent solid-state voltage regulator

HHT3-3/38 25-180A（SSR-VA)
3-phase 3-wire voltage regulation (2023 type)

New type

Control mode	0-5VDC, 0-10VDC, 4-20mA manual potentiometer control
Rated voltage	380VAC
Phase shift angle	0~150°
Voltage regulation range	0-380VAC
Isolation voltage	Active type fully isolated
Load current	25A，40A，75A，100A，125A，150A，180A
Min. cut-off	40A 以下⩽ 10VAC 60A 以上⩽ 30VAC
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2000VAC
Ambient temp.	-30~80°C
Dimension	106.4×75.4×43.3mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

Intelligent solid-state voltage regulator

HHT3-5/22 25-180A(SSR-VA)
3-phase 4-wire voltage regulation (2023 type)

New type

Control mode	0-5VDC, 0-10VDC, 4-20mA manual potentiometer control
Rated voltage	220VAC
Phase shift angle	0~180°
Voltage regulation range	0-220VAC
Isolation voltage	Active type fully isolated
Load current	25A，40A，75A，100A，125A，150A，180A
Min. cut-off	40A 以下⩽ 10VAC 60A 以上⩽ 30VAC
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2000VAC
Ambient temp.	-30~80°C
Dimension	106.4×75.4×43.3mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

Solid-state relay series

The HHG series solid-state relay adopts internationally popular circuits and technologies: input includes linear control, constant current control and AC control, LED indicating work status, bidirectional thyristor output or unidirectional thyristor anti-parallel output, zero voltage connection, zero current disconnection. Optoelectronic isolation between input and output, with built-in absorption circuit. It's widely used in industrial automation control equipment, power plant and substation electromechanical protection system.

This series of solid-state relay complies with the GB/T14048.5 standard and has passed CCC self-declaration and UL certification in the United States.

DC controls AC
DC controls DC

HHG41-0/032F-06(SSR-DD)
HHG41-1/032F-22/38(SSR-DA)

New type

Adaptive socket41F-1Z-C2N 5V

Control voltage	3-32VDC
Control current	5-20mA
Load voltage	06：5-60VDC 22：24-240VAC 38：24-440VAC
Load current	1A，2A
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6VAC
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	28×18.5×5mm
Installation form	Single line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
DC controls DC

HHG1D-1/032F-22 (SSR-DA)
HHG1D-1/032F-38 (SSR-DA)
HHG1D-0/032F-20 (SSR-DD)

Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22：24-240VAC 38：24-440VAC 20：12-200VDC
Load current	3A，4A
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6VAC
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	43×12×25.5mm
Installation form	Single line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
DC controls DC

HHG41-0/032F-06-D(SSR-DD)
HHG41-1/032F-22/38-D(SSR-DA)

New type

Control voltage	3-32VDC
Control current	5-20mA
Load voltage	06：5-60VDC 22：24-240VAC 38：24-440VAC
Load current	1A，2A
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6VAC
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	97×82×6.2mm
Installation form	-D：DIN Rail installation
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
DC controls DC

HHG1D-1/032F-22 (SSR-DA)
HHG1D-1/032F-38 (SSR-DA)
HHG1D-0/032F-20 (SSR-DD)

Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22：24-240VAC 38：24-440VAC 20：12-200VDC
Load current	5A (with heat dissipation plate)
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6VAC
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	43×12×34mm
Installation form	Single line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
DC controls DC

HHG1D-0/032F-06 1A /2A(SSR-DD)
HHG1D-1/032F-22 /38 1A/2A(SSR-DA)

Control voltage	3-32VDC
Control current	5-20mA
Load voltage	06：5-60VDC 22：24-240VAC 38：24-440VAC
Load current	1A，2A
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6VAC
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	25×7×20mm
Installation form	Single line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
DC controls DC

HHG1-1/032F-22 (SSR-DA)
HHG1-1/032F-38 (SSR-DA)
HHG1-0/032F-20 (SSR-DD)

Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22：24-240VAC 38：24-440VAC 20：12-200VDC
Load current	1A
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6VAC
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	32.5×17.5×18.5mm
Installation form	Dual line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
DC controls DC

HHG1-1/032F-22 (SSR-DA)
HHG1-1/032F-38 (SSR-DA)
HHG1-0/032F-20 (SSR-DD)

Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22：24-240VAC 38：24-440VAC 20：12-200VDC
Load current	2A，3A，4A
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6VAC
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	34×26.5×18mm
Installation form	Dual line plug-in
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
DC controls DC

HHG63-0/032F-20(SSR-DD)
HHG63-1/032F-22/38(SSR-DA)
Adaptive socket P69F05E/P69F05A1

New type

Control voltage	3-32VDC
Control current	5-25mA
Load voltage	22：24-240VAC 38：24-440VAC 20：12-200VDC
Load current	5A (aluminum shell)
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6V
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	28.8×12.8×38.5mm
Installation form	Dual in-line insertion and rail installation
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
DC controls DC

HHG1-1/032F-22 (SSR-DA)
HHG1-1/032F-38 (SSR-DA)
HHG1-0/032F-20 (SSR-DD)

Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22：24-240VAC 38：24-440VAC 20：12-200VDC
Load current	5A
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6VAC
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	42×31×20mm
Installation form	Dual line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

Dual output solid-state relay

HHG68-0/032F-20 1-5A-2
(SSR-DD)(DC controlls DC)
HHG68-1/032F-22，38 1-5Z-2
(SSR-DA)(DC controls AC)

New type

Control voltage	3-32VDC
Control current	Each circuit ＜ 5-25mA
Load voltage	24-240VAC 24-440VAC 12-200VDC
Load current	1A，2A，3A，4A，5A (dual output) aluminum shell
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.5V
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Installation form	Dual line direct plug-in and DIN rail installation
Dimension	27×21×39.5mm
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
DC controls DC

HHG62-1/032F-22(SSR-DA)
HHG62-1/032F-38(SSR-DA)
HHG62-0/032F-20(SSR-DD)
Adaptive socket RX78624

Control voltage	3-32VDC
Control current	5-25mA
Load voltage	22：24-240VAC 38：24-440VAC 20：12-200VDC
Load current	1A，2A，3A，4A
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6VAC
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5ms AC ⩽ 10ms
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	29×12.6×28mm
Installation form	Dual line direct plug-in and DIN rail installation
Instruction	Installed next to well ventilated heat dissipation window

Single output solid-state relay

HHG68-0/032F-06 3-8A-1
(SSR-DD)(DC controls DC)
HHG68-1/032F-22，38 3-8Z-1
(SSR-DA)(DC controls AC)

New type

Control voltage	3-32VDC
Control current	DA＜5-25mA DD＜7-45mA
Load voltage	24-240VAC 24-440VAC 5-60VDC
Load current	3A，5A，8A (single output) aluminum shell
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.5V
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Installation form	Dual line direct plug-in and DIN rail installation
Dimension	27×21×39.5mm
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
DC controls DC

HHG63-0/032F-20(SSR-DD)
HHG63-1/032F-22/38(SSR-DA)
Adaptive socket P69F05E/P69F05A1

Control voltage	3-32VDC
Control current	5-25mA
Load voltage	22：24-240VAC 38：24-440VAC 20：12-200VDC
Load current	1A，2A，3A，4A
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6VAC
On-off time	DC ⩽ 5ms AC ⩽ 10ms
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA
Dielectric strength	⩾ 1500VAC
Ambient temp.	-30~80°C
Dimension	30.6×12.8×33mm
Installation form	Dual line direct plug-in and DIN rail installation
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC
(Small volume)

HHG5-1/032F-22 (SSR-DA)
HHG5-1/032F-38 (SSR-DA)

Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22：24-240VAC 38：24-440VAC
Load current	5A，10A，15A
On-state voltage drop	⩽ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	38.5×28.7×18mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A

Single-phase solid-state relay (DC controls DC)

HHG1-0/032F-20(SSR-DD)
HHG1-0/032F-06(SSR-DD)

Control voltage	5-32VDC
Control current	10-45mA
Load voltage	20: 12-250VDC 06: 5-60VDC
Load current	20：10A，15A，20A，25A，30A，40A，60A 06：100A
On-state voltage drop	⩽ 1.2VDC
On-off time	⩽ 5ms
Off-state leakage current	⩽ 5mA
Dielectric strength	⩾ 2000VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A

Single-phase solid-state relay (DC controls AC)

HHG1-1/032F-22 (SSR-DA)
HHG1-1/032F-38 (SSR-DA)

Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22：24-240VAC 38：24-440VAC
Load current	10A，15A，20A，25A，30A 40A，60A，80A，100A
On-state voltage drop	⩽ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

Single-phase solid-state relay (AC controls AC)

HHG1-1/250F-22 (SSR-AA)
HHG1-1/250F-38(SSR-AA)

Control voltage	90-250VAC
Control current	6-20mA
Load voltage	22：24-240VAC 38：24-440VAC
Load current	10A，15A，20A，25A，30A 40A，60A，80A，100A
On-state voltage drop	⩽ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

Dual control solid-state relay (DC controls AC)

HHG1-2/032F-38 (SSR-DA)

Control voltage	3-32VDC
Control current	Single circuit ⩽ 15mA
Load voltage	38：24-440VAC
Load current	10A，15A，20A，25A，30A，40A(single-circuit)
On-state voltage drop	⩽ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	57×44×30mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A

DC controls AC (Anti-interference type)

HHG1M-1/032F-22(SSR-DA)
HHG1M-1/032F-38(SSR-DA)

Anti-interference type

Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22：24-240VAC 38：24-440VAC
Load current	10A，15A，20A，25A，30A，40A，60A，80A，100A
On-state voltage drop	⩽ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

Three-phase solid-state relay (DC controls AC)

HHG1-3/032F-38 (SSR-DA)

Control voltage	3-32VDC
Control current	16-30mA
Load voltage	24-440VAC
Load current	10A，15A，20A，25A，30A，40A，60A，80A，100A，120A
On-state voltage drop	⩽ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	106×75×40mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

DC controls AC (Single-phase thyristor anti-parallel)

HHG1H-1/032F-38(SSR-DA)
HHG1H-1/032F-120(SSR-DA)

Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22：24-440VAC 38：40-1200VAC
Load current	60A，80A，100A，120A
On-state voltage drop	⩽ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

Three-phase solid-state relay (AC controls AC)

HHG1-3/250F (SSR-AA)

Control voltage	90-250VAC
Control current	8-30mA
Load voltage	24-440VAC
Load current	10A，15A，20A，25A，30A，40A，60A，80A，100A，120A
On-state voltage drop	⩽ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	106×75×40mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

DC controls AC (Three-phase forward and reverse)

HHG1F-3/005F-38(SSR-DA)
HHG1F-3/024F-38(SSR-DA)

Control voltage	5VDC/12-32VDC
Control current	⩽ 50mA
Load voltage	24-440VAC
Load current	10A，15A，20A，25A，30A，40A，(60A，80A enhanced type)
On-state voltage drop	⩽ 1.6VAC
On-off time	Input terminal forward and reverse interlock delay of 100ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	106×75×41mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

DC controls AC (Three-phase forward and reverse)

HHG1F-3/024F-38(common-anode)

Control voltage	12-32VDC
Control current	⩽ 60mA
Load voltage	24-440VAC
Load current	10A，15A，20A，25A，30A，40A
On-state voltage drop	⩽ 1.6VAC
On-off time	Input terminal forward and reverse interlock delay of 100ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	106×75×32mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A

DC controls AC (Industrial grade)

HHG1S-1/032F-120
(SSR-DA) water-cooled type

Control voltage	3-32VDC
Control current	5-25mA
Load voltage	120：60-1200VAC
Load current	500A，600A，800A，1000A
On-state voltage drop	＜ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	500-600A：150×53×68mm 800A：160×63×75mm 1000A：185×66×81mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

DC controls AC (Industrial grade)

HHG1A-1/032F-38(SSR-DA)
HHG1C-1/032F-120(SSR-DA)

Control voltage	5VDC/12-32VDC
Control current	⩽ 50mA
Load voltage	24-440VAC
Load current	60A，80A，100A，120A，150A
On-state voltage drop	⩽ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	94×25×38mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

DC controls AC (Industrial grade)

HHG1A-1/032F-38(SSR-DA)
HHG1C-1/032F-120(SSR-DA)

Control voltage	3-32VDC
Control current	5-25mA
Load voltage	38：40-440VAC 120：60-1200VAC
Load current	200A，250A，300A，350A，400A
On-state voltage drop	⩽ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	(200-350A)94×34×43mm (400A)96×39×43mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

DC controls AC (Industrial grade)

HHG1K-1/032F-120
(SSR-DA)air-cooled type

Control voltage	3-32VDC
Control current	5-25mA
Load voltage	120：60-1200VAC
Load current	500A，600A，800A，1000A
On-state voltage drop	＜ 1.6VAC
On-off time	⩽ 10ms
Off-state leakage current	⩽ 10mA
Dielectric strength	⩾ 2500VAC
Ambient temp.	-30~80°C
Dimension	500-600A：115×53×60mm 800A：125×63×70mm 1000A：149×66×76mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A;A fan of strong cooling or water cooling must be added for loads above 80A

HHN-RA □ Signal relay module

Model description

HHN -	R	A1		04
Enterprise code	Relay type R: Electromagnetic relay	Design number A: Signal relay A1: 50mm width signal relay module A2: 80mm width signal relay module A3: 3124 signal relay module	A4: G6B signal relay module A5: 41F port type signal relay module A6: 41F-H type signal relay module A7: 41F-Z type signal relay module	Number of relay control units 02: 2-bit 04: 4-bit 06: 6-bit 08: 8-bit

A -		N	D24 /	***
Input/output port type A: Screw type terminal B: MIL connector T: T-shaped spring leaf type terminal C: B+A combination	D: B+T combination F: A+B combination G: T+B combination	Output end protection method N: Without protection C: Surge suppression	Operating voltage D12: 12VDC D24: 24VDC	Configured relay brand PAN: Panasonic OMR: Omron TYC: Tyco HF: Hongfa

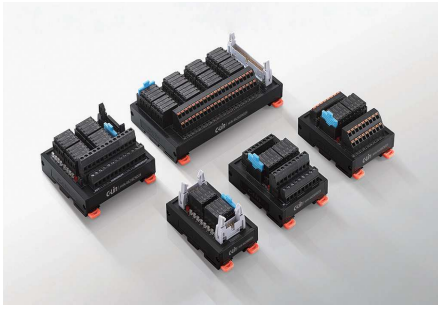
HHN-RA1 Signal relay module

Specification parameter

Rated voltage	DC24V
Rated current	7.5mA, 8.3mA
Operating voltage	≧75% (normal temperature environment)
Release voltage	≦5% (normal temperature environment)
Operation time	20ms or less
Release time	10ms or less
Contact resistance	30mΩ or less (DC6V 1A) 100mΩ or less(DC6V 1A)
Insulation impedance	1000mΩ(500VDC)

Contact material	Silver alloy
Electrical performance	5A/250VAC，5A/30VDC
Mechanical durability	5000000 times

HHN-RA2 signal relay module



Specification parameter

Rated voltage	DC24V
Rated current	7.5mA, 8.3mA
Operating voltage	≧75% (normal temperature environment)
Release voltage	≦5% (normal temperature environment)
Operation time	20ms or less
Release time	10ms or less
Contact resistance	30mΩ or less (DC6V 1A) 100mΩ or less (DC6V 1A)
Insulation impedance	1000mΩ(500VDC)

Contact material	Silver alloy
Electrical performance	5A/250VAC，5A/30VDC
Mechanical durability	5000000 times

HHN-RA3 Signal relay module

Specification parameter

Rated voltage	DC24V
Rated current	7.5mA, 8.3mA
Operating voltage	≧75% (normal temperature environment)
Release voltage	≦5% (normal temperature environment)
Operation time	20ms or less
Release time	10ms or less
Contact resistance	30mΩ or less (DC6V 1A) 100mΩ or less (DC6V 1A)
Insulation impedance	1000mΩ(500VDC)

Contact material	Silver alloy
Electrical performance	5A/250VAC，5A/30VDC
Mechanical durability	5000000 times

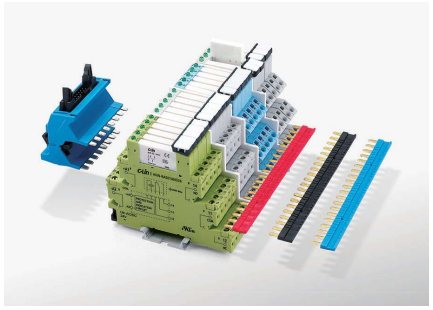
HHN-RA □ Signal relay module

HHN-RA4 Signal relay module

Specification parameter

Contact resistance		100mΩ or less
Operation time (effectiveness)		10ms or less (approx. 3ms)
Reset time (effectiveness)		15ms or less (approx. 4ms)
Insulation resistance		100mΩ or above (DC500V megohmmeter)
Shock	Duration	1000m/s^2
	Misoperation	100m/s^2
Mechanical life		⩾ 500000 times (switching frequency 18000 times/h)
Electrical life		⩾ 100000 times (rated load, switching frequency 1800 times/h)

HHN-RA5 Signal relay module



Specification parameter

Contact	1 CO
Switching current	6A 250V AC
Minimum load	100mA / 12V
Switching Capacity	DC-1 30V：180W；AC-1 230V：1500VA；DC-15 230V：300VA
Surge current	15A / 2.5ms
Mechanical life	10×10^6
Electrical life	3×10^4
Operating voltage	0.8~1.25Un
Delay/release time	7 / 15ms

HHN-RA6/7 Signal relay module

Specification parameter

Rated voltage	24VDC (with permissible variation range of 80%~110%)
Single circuit operating power consumption	Approx. 216mW
Polarity requirement for wiring	No polarity requirement
Number of control channels	4,8,12,16
Relay model	41F
Contact type	RA6：1H；RA7：1Z
Rated voltage	250VAC/30VDC
Rated current	6A/circuit
Operation time	<6ms
Release time	<3.0ms

HHN-RB □ /RC □ /RD □ Power relay module

Model description

HHN -	R	B1	
Enterprise code	Relay type R: Electromagnetic relay	Design number B1：C-Lin 69KTL-1Z relay （socket RB69-1Z） B2：C-Lin 69KTL-2Z relay （socket RB69-2Z） B3：C-Lin 69K-1Z relay （socket RB69-1Z） B4：C-Lin 69K-2Z relay （socket RB69-2Z） B5：C-Lin 69K-1Z relay （socket HT1S-61） B6：C-Lin 69K-2Z relay （socket HT2S-61） C1：C-Lin 69KP-1Z relay （socket HT2S-62-2） C2：C-Lin 69KP-2Z relay （socket HT2S-62-2） C3：C-Lin 115F-1Z relay （socket HT2S-62-1） C4：C-Lin 115F-2Z relay （socket HT2S-62-1） C5：C-Lin 69KP-1Z relay （socket 14F-2Z-A1+14F-H3） C6：C-Lin 69KP-2Z relay （socket 14F-2Z-A1+14F-H3） C7：C-Lin 115-2Z relay （socket 14F-2Z-A1+14F-H3） D1：C-Lin 68AVL-2Z relay （socket 13F-2Z-A2） D5：C-Lin 68AVL-2Z relay （socket HT2S-A2/13F） D2：C-Lin 68BVL-2Z relay （socket 18F-2Z-A2） D6：C-Lin 68BVL-2Z relay （socket HT2S-A2）	D3：C-Lin 68BVL-3Z relay （socket 18F-3Z-A2） D7：C-Lin 68BVL-3Z relay （socket HT3S-A2） RE1:HHC66A-1Z/10A universal type RE1:HHC66A-1Z/10A optocoupler isolation type RE1:HHC66A-1Z/15A universal type RE1:HHC66A-1Z/15A optocoupler isolation type RF1:HHC67E-1Z/30A universal type RF2:HHC67E-1Z/30A optocoupler isolation type RF3:HHC67E-1Z/40A universal type RF4:HHC67E-1Z/30A optocoupler isolation type H1:HHC69K-1Z conversion type H2:HHC69K-2Z conversion type H3:HHC69KP-1Z(275) conversion type H4:HHC69KP-2Z(275) conversion type H5:HHC69KP-1Z conversion type H6:HHC69KP-2Z conversion type I1:HHC69D-1H/10A universal type I2:HHC69D-1H/10 optocoupler isolation type I3:HHC69D-1H/12A universal type I4:HHC69D-1H/12 optocoupler isolation type I5:HHC69D-1H/16A universal type I6:HHC69D-1H/16A optocoupler isolation type

04	A -	N	D24 /	＊＊＊
Number of relay control units 02：2-bit 04：4-bit 06：6-bit 08：8-bit	Input/output port type A: Screw type terminal T: T-shaped spring leaf type termina Q: Plug-in type terminal V: Grille type terminal	Output protection method N: Without protection C: Surge suppression F: Fuse protection	Operating voltage D12：12VDC D24：24VDC A220：220VAC	Configured relay brand OMR: Omron TYC: Tyco IDE: Izumi HON: Honeywell

HHN-RB1/2/3/4 Power relay module

Specification parameter

Drive mode	NPN/PNP compatible
Rated voltage	5VDC, 12VDC, 24VDC, 36VDC 12VAC, 24VAC, 36VAC, 110VAC, 220VAC
Single circuit rated power consumption	DC:0.53W AC:1.0VA
Operating voltage	Rated voltage×70%
Release voltage	Rated voltage×10%
Operation time	⩽ 15ms
Release time	⩽ 10ms

Contact type	1Z NO: 15A 277VAC/30VDC; 1Z NC: 12A 277VAC/30VDC; 2Z: 8A 277VAC/30VDC 1/3HP
Electrical life	1×10^5
Mechanical life	1×10^7
Contact material	Silver alloy
Contact resistance	⩽ 100mΩ(6VDC 1A)
Protection circuit	RC, varistor, fuse optional

HHN-RB5/6 Power relay module

Specification parameter

Drive mode	NPN/PNP compatible
Rated voltage	5VDC, 12VDC, 24VDC, 36VDC 12VAC, 24VAC, 36VAC, 110VAC, 220VAC
Single circuit rated power consumption	DC:0.53W AC:1.0VA
Operating voltage	Rated voltage×70%
Release voltage	Rated voltage×10%
Operation time	⩽ 15ms
Release time	⩽ 10ms

Contact type	1Z NO: 15A 277VAC/30VDC; 1Z NC: 12A 277VAC/30VDC; 2Z: 8A 277VAC/30VDC 1/3HP
Electrical life	1×10^5
Mechanical life	1×10^7
Contact material	Silver alloy
Contact resistance	⩽ 100mΩ(6VDC 1A)
Protection circuit	RC, varistor, fuse optional

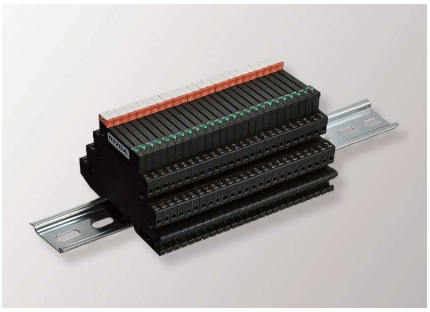
HHN-SG □ /SM □ /SL □ Optical MOS and solid-state relay module

Model description

HHN -	S	G1	
Enterprise code	Relay type Optical MOS and solid-state relay modules	Design number G1: C-Lin HHG41 port type solid-state relay module G2: C-Lin HHG63 solid-state relay module G3: C-Lin HHG41 solid-state relay module M1: Optical MOS relay module (1.2A/60V-4590A) M2: Optical MOS relay module (2A/100V-3546A) M3: Optical MOS relay module (3.5A/100V-3546A) M4: Optical MOS relay module (4A/60V-3545A) M5: Optical MOS relay module (5A/30V-3543A)	L1: PLC DC amplification type L2: PLC AC amplification type L3: PLC DC high-power amplification type L4: PLC AC high-power amplification type L5: PLC DC amplification type with short-circuit protection L6: PLC DC high-power amplification type with short-circuit protection

04	A -	N	D24 /	＊＊＊
Number of relay control units 02：2-bit 04：4-bit 06：6-bit 08：8-bit	Input/output port type A: Screw type terminal B: MIL connector T: T-shaped spring leaf type C: B+A combination D: B+T combination F: A+B combination G: T+B combination	Output end protection method N: Without protection C: Surge suppression F: Fuse protection R: Surge suppression+fuse protection	Operating voltage 5VDC 12DC 24DC	Configured relay brand C-Lin: HHC

HHN-SG1 Solid-state relay module



Specification parameter

Product model	HHN-SG101 □□ D24/DA	HHN-SG101 □□ D24
Operation time	1/2 cycle of load power supply+1ms or less	1ms or less
Reset time	1/2 cycle of load power supply+1ms or less	1ms or less
Insulation resistance	100MΩ or above (500V megohmmeter)	
Control voltage	3-32VDC	
Control current	5-20mA	
Load voltage	24-240VAC 24-440VAC 5-60VDC	
Load current	1A, 2A	
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6V	
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA	
Dielectric strength	⩾ 1500VAC	
Isolation withstand voltage	AC2500V 50/60Hz 1 min	

HHN-SG2 Solid-state relay module

Specification parameter

Rated operating voltage	3-32VDC
Rated operating current	5-25mA
Wiring polarity	No polarity requirement (NPN/PNP double polarity compatible)
Wiring type	European type terminal, spring leaf type direct plug-in terminal, MIL connector
Load voltage	24~220VAC；24~400VAC（50/60Hz）；12-200VDC
Load current	0.1~5A（AC-12） 0.1~5A
Surge current	⩽ 10ms for 60A, ⩽ 10ms for 30A
Peak voltage	900V 400V
Number of control channels	2，4，8，10，12，16，32

HHN-RC1/2/5/6 Power relay module

Specification parameter

Drive mode	NPN/PNP compatible
Rated voltage	5VDC, 12VDC, 24VDC, 36VDC
Single circuit rated power consumption	DC: 0.53W AC: 1.0VA
Operating voltage	Rated voltage ×70%
Release voltage	Rated voltage ×10%
Operation time	⩽ 15ms
Release time	⩽ 10ms

Contact type	1Z NO: 16A 250VAC/30VDC; 2Z: 10A 250VAC/30VDC
Electrical life	1×10^5
Mechanical life	1×10^7
Contact material	Silver alloy
Contact resistance	⩽ 100mΩ(6VDC 1A)
Protection circuit	RC, varistor, fuse optional

HHN-RC3/4/7/8 Power relay module

Specification parameter

Drive mode	NPN/PNP compatible
Rated voltage	5VDC, 12VDC, 24VDC, 36VDC
Single circuit rated power consumption	DC: 0.53W AC: 1.0VA
Operating voltage	Rated voltage ×70%
Release voltage	Rated voltage ×10%
Operation time	⩽ 15ms
Release time	⩽ 10ms

Contact type	1Z NO: 16A 250VAC/30VDC; 2Z: 10A 250VAC/30VDC
Electrical life	1×10^5
Mechanical life	1×10^7
Contact material	Silver alloy
Contact resistance	⩽ 100mΩ(6VDC 1A)
Protection circuit	RC, varistor, fuse optional

HHN-RD □ Power relay module

Specification parameter

Model	HHN-RD1,2,3,4,5,6,7,8							
Contact composition	2Z; 3Z; 4Z							
Contact resistance (initial)	⩽ 100mΩ							
Contact material	Silver alloy							
Rated control capacity (resistive load)	6.5A(HHN68B), 10A(HHN68BVL),12A(HHN68AVL) 5A 240VAC 28VDC(HHN68B,HHN68BVL)							
Maximum allowable voltage of contact	240VAC 28VDC							
Insulation resistance (initial)	1000mΩ (500VDC)							
Coil temperature rise value (at 70°C)	⩽ 85K							
Operation time (at 20°C)	⩽ 20ms							
Reset time (at 20°C)	⩽ 15ms (DC type), ⩽ 25ms (AC type)							
Mechanical life	⩾ 10^7 (frequency 300 times/min)							
Electrical life (at rated control capacity)	⩾ 10^5 (frequency 1s on, 1s off)							
Rated voltage (V)	DC12V	DC24V	DC110V	DC220V	AC12V	AC24V	AC110V	AC220V
Rated current ±10% (MA)	75	37.5	8	4	100	50	10.9	5.4
Coil resistance ±10% (Ω)	160	640	13750	55000	42	168	3532	14259
Rated power consumption (W)	0.9W				1.2VA			
Maximum pull-on voltage (V)	⩽ 75%				⩽ 80%			
Maximum release voltage (M)	⩾ 10%				⩾ 30%			
Maximum allowable voltage (V)	Rated voltage ×110%							

RE Power relay module

Specification parameter

Drive mode	NPN/PNP compatible
Rated voltage	12VDC/24VDC/220VAC
Single circuit rated power consumption	DC:0.36W
Operating voltage	Rated voltage ×80%
Release voltage	Rated voltage ×10%
Action time	⩽ 10ms
Release time	⩽ 15ms

Contact type	1C: 10A 15A 250VAC/30VDC
Electrical life	1×10^5
Mechanical life	1×10^7
Contact material	Silver alloy
Contact resistance	⩽ 100mΩ(6VDC 1A)
Protection circuit	RC, varistor, fuse optional

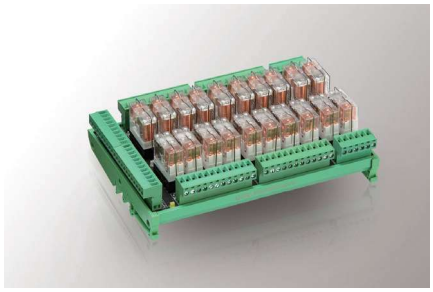
RF Power relay module

Specification parameter

Drive mode	NPN/PNP compatible
Rated voltage	12VDC/24VDC/220VAC
Single circuit rated power consumption	DC:0.93W
Operating voltage	Rated voltage ×80%
Release voltage	Rated voltage ×10%
Action time	⩽ 10ms
Release time	⩽ 15ms

Contact type	30A 40A 250VAC/30VDC
Electrical life	1×10^5
Mechanical life	1×10^7
Contact material	Silver alloy
Contact resistance	⩽ 100mΩ(6VDC 1A)
Protection circuit	RC, varistor, fuse optional

RH Power relay module

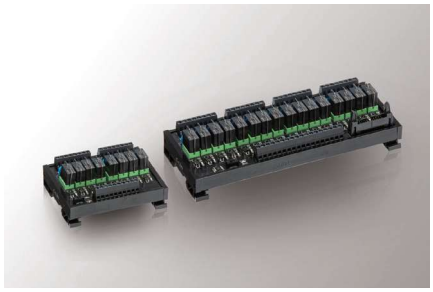


Specification parameter

Drive mode	NPN/PNP compatible
Rated voltage	12VDC/24VDC/220VAC
Single circuit rated power consumption	DC:0.93W AC:1.0VA
Operating voltage	Rated voltage ×70%
Release voltage	Rated voltage ×10%
Action time	⩽ 15ms
Release time	⩽ 10ms

Contact type	1Z:16A 15A 250VAC/30VDC 2Z:10A 8A 250VAC/30VDC
Electrical life	1×10^5
Mechanical life	1×10^7
Contact material	Silver alloy
Contact resistance	⩽ 100mΩ(6VDC 1A)
Protection circuit	RC, varistor, fuse optional

RI Relay module



Specification parameter

Drive mode	NPN/PNP compatible
Rated voltage	12VDC/24VDC/220VAC
Single circuit rated power consumption	DC:0.45W
Operating voltage	Rated voltage ×80%
Release voltage	Rated voltage ×10%
Action time	⩽ 10ms
Release time	⩽ 15ms

Contact type	1A:10A 12A 15A 250VAC/30VDC
Electrical life	1×10^5
Mechanical life	1×10^7
Contact material	Silver alloy
Contact resistance	⩽ 100mΩ(6VDC 1A)
Protection circuit	RC, varistor, fuse optional

HHN-SG3 Solid-state relay module

Specification parameter

Product model	HHN-SG3 □□□□ D24/DA	HHN-SG3 □□□□ D24
Operation time	1/2 cycle of load power supply+1ms or less	1ms or less
Reset time	1/2 cycle of load power supply+1ms or less	1ms or less
Insulation resistance	100MΩ or above (500V megohmmeter)	
Control voltage	3-32VDC	
Control current	5-20mA	
Load voltage	24-240VAC 24-440VAC 5-60VDC	
Load current	1A, 2A	
On-state voltage drop	DC ⩽ 1.2V AC ⩽ 1.6V	
Off-state leakage current	DC ⩽ 5mA AC ⩽ 10mA	
Dielectric withstand voltage	⩾ 1500VAC	
Isolation withstand voltage	AC2500V 50/60Hz 1min	

HHN-SM Optical MOS module

Specification parameter

Rated operating voltage	5VDC，12VDC，24VDC				
Rated operating current	5mA				
Wiring polarity	With polarity (pay attention to the wiring sequence)				
Load current	1A	2A	3A	4A	5A
Load voltage	60VDC	100VDC	100VDC	60VDC	30VDC
Surge current	1A	2A	3A	4A	5A
Maximum working frequency	1kHz				
Maximum voltage drop (-40~100℃)	0~0.8V				
Peak voltage	2500V				
Number of control channels	4，8，16，32				
Insulation resistance	100MΩ（500VDC）				
Conduction time (10~90%)	0.5ms				
Off time (10~90%)	0.03ms				
Isolation withstand voltage	3750Vrms				

HHN-SL1 PLC DC amplifier board

Specification parameter

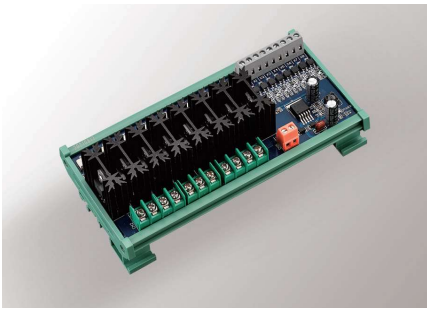
Control component	Original imported MOS transistor
Input voltage	24V (default 24V, control range 3V~24V, please specify if other requirements are needed)
Input signal	Compatible with NPN (valid OV input signal) and PNP (valid 24V input signal)
Installation method	Standard DIN rail installation (can be installed on NS35/7.5 or NS32 guide slot)
Load current (per circuit)	Resistive load ⩽ 3A (instant 8A, customizable); inductive load ⩽ 2A (instant 8A, customizable)
Input minimum driving current	⩾ 15mA
Input response time	⩾ 0.2ms
Mechanical life	⩾ 1 亿次
Circuit insulation	Optocoupler isolation
Short circuit protection	10A

HHN-SL2 PLC AC amplifier board

Specification parameter

Control component	Original imported thyristor
Input voltage	24V (default 24V, control range 3V~24V, please specify if other requirements are needed)
Contact form	Contactless
Input signal	Compatible with NPN (valid OV input signal) and PNP (valid 24V input signal)
Installation method	Standard DIN rail installation (can be installed on NS35/7.5 or NS32 guide slot)
Load current (per circuit)	Resistive load ⩽ 2A (instant 5A, customizable); inductive load ⩽ 1.5A (instant 5A, customizable)
Input minimum driving current	⩾ 15mA
Input response time	⩾ 20ms
Mechanical life	⩾ 100 million times
Circuit insulation	Optocoupler isolation
Short circuit protection	10A

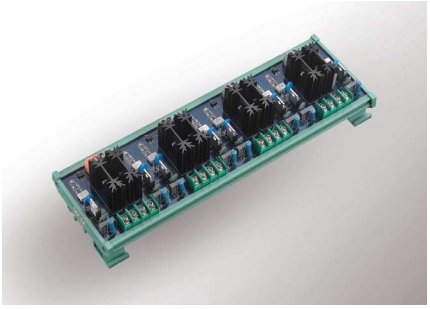
HHN-SL3 PLC DC High-power amplifier board



Specification parameter

Input form	Compatible with PNP or NPN (positive and negative control compatible)
Output form	Low level output (OV)
Input minimum driving current	⩾ 15mA
Switching frequency	⩽ 50K
Control component	Original imported IR2807 (max. driving current of 82A and withstand voltage of 75V for US IR)
Service life	⩾ 100 million times (1 million hours for driving tube)
Load current	Long term 6A

HHN-SL4 PLC AC High-power amplifier board



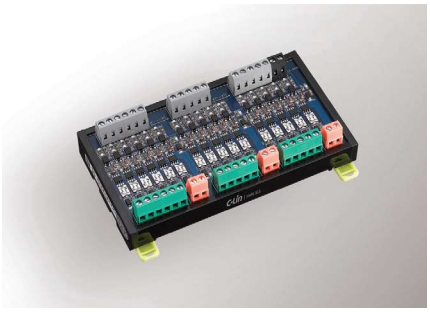
Specification parameter

Input form	Compatible with PNP or NPN
Output form	220VAC
Input signal voltage	24V (default 24V, control range is 3V-24V, please specify if other requirements are needed)
Input response time	⩽ 0.2ms
Working frequency	50Hz-60Hz
Non-repetitive surge peak on-state current	65-72A
Input minimum driving current	⩾ 15mA
Switching frequency	⩽ 50K
Control component	Original imported thyristor (TR2807)
Service life	⩾ 100 million times (1 million hours for driving tube)
Load current	Long term 10A (instant 30A)

HHN-SL5/SL6

PLC DC Amplifier board with short-circuit protection

PLC DC High-power amplifier board with short-circuit protection



Specification parameter

Control component	Imported high-power MOSEFET
Input voltage	24V (default 24V, control range 3V~24V, please specify if other requirements are needed)
Input signal	Compatible with NPN (valid OV input signal) and PNP (valid 24V input signal)
Installation method	Standard DIN rail installation (can be installed on NS35/7.5 or NS32 guide slot)
Load current (per circuit)	Resistive load ⩽ 2.5A (instant 10A); inductive load ⩽ 2A (instant 10A)
Input minimum driving current	⩾ 5mA
Input response time	⩾ 0.3ms
Mechanical life	⩾ 100 million times
Circuit insulation	Optocoupler isolation
Short circuit protection	SL5: 3A SL6: 5A
Instant impulse current	10A
self-reset protection (per circuit)	⩾ 3A
Continuous operating current	Within 2A

SL7/SL8 transistor DC amplification board PLC

Specification parameter

Control component	Original imported MOS transistor
Input voltage	24V (default 24V, control range 3V~24V, please specify if other requirements are needed)
Input signal	Compatible with NPN (valid OV input signal) and PNP (valid 24V input signal)
Installation method	Standard DIN rail installation (can be installed on NS35/7.5 or NS32 guide slot)
Load current (per circuit)	Resistive load ⩽ 2A; inductive load ⩽ 1A
Input minimum driving current	⩾ 15mA
Input response time	⩾ 0.2ms
Mechanical life	⩾ 100 million times
Circuit insulation	Optocoupler isolation
Short circuit protection	10A

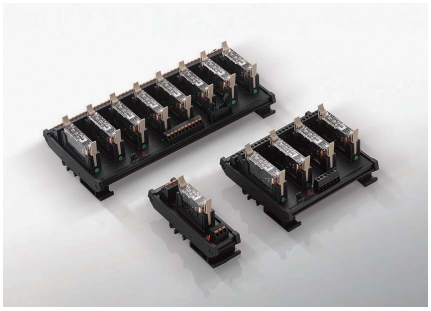
HHN-RQ safety relay module

Model description

HHN -	R	Q1	04
Enterprise code	Relay type Electromagnetic relay	Design number Q1：3A1B type safety relay module Q2：2A2B type safety relay module Q3：3A3B type safety relay module Q4：4A2B type safety relay module Q5：5A1B type safety relay module	Number of relay control units 02：2-bit 04：4-bit 06：6-bit 08：8-bit

A -	N	D24 /	＊＊＊
Input/output port type A: Screw type terminal T: T-shaped spring leaf type termina	Output protection method N: No protection	Operating voltage D12 12VDC D24 24VDC	Configured relay brand None: Omron G7SA relay

HHN-RQ safety relay module



Specification parameter

Drive mode	NPN/PNP compatible					
Rated voltage	DC12V	DC18V	DC21V	DC24V	DC48V	DC100V
4P rated current (mA)	30	20	17.1	15	7.5	3.8
4P power consumption (mW)	About 360					About 420
6P rated current (mA)	41.7	27.8	23.8	20.8	10.4	5.3
6P power consumption (mW)	About 500					About 580
Operating voltage	Around 75% of rated voltage					
Release voltage	Around 10% of rated voltage					
Operation time	⩽ 20ms					
Release time	⩽ 10ms					
Resistive load	AC250V 6A ； DC30V 6A					
Inductive load switch performance	AC15V AC240V 2A； DC13V DC24V 1A； DC48V 0.5A； DC110V 0.2A					
Electrical life	⩾ 100000 times (rated load)					
Mechanical life	⩾ 10 million times					
Maximum switching frequency	Mechanical 36000 times/h Rated load 1800 times/h					
Contact material	Silver alloy					
Contact resistance	⩽ 100mΩ					