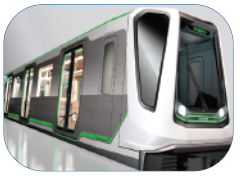
i-Autoc

Your Automation Partner










Innovation

Automation

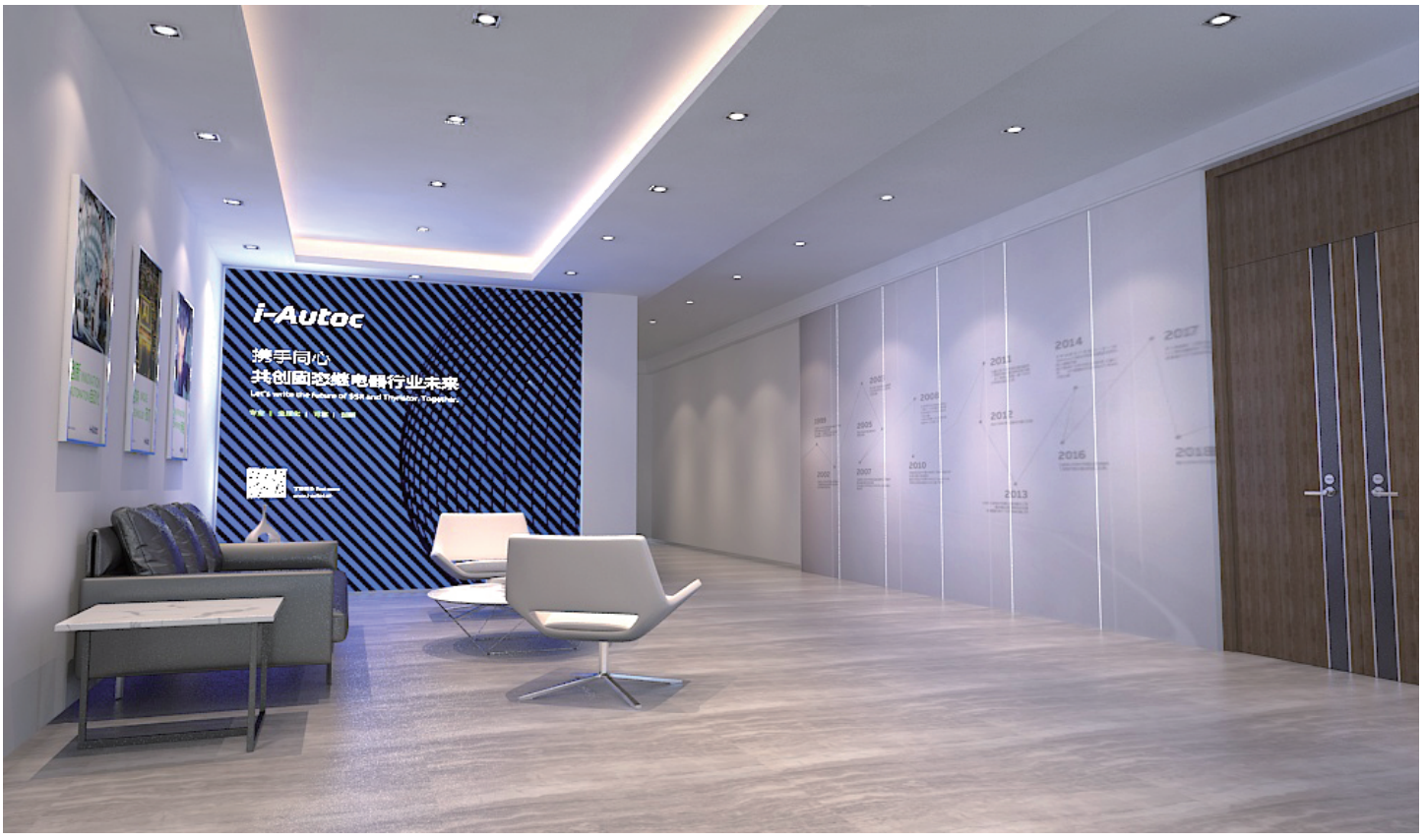
Unique

Technology

Optimization

Commitment

Product Selection



About us

Kudom Electronics is a national high-tech enterprise which is in compliance with the intellectual property management system. The company is an ISO9001: 2015, ISO14001: 2015 & ISO45001: 2018 certified enterprise, and has a professional R&D team with more than 20 years of experiences in the product design and the manufacturing process.

Kudom Electronics has a product testing center with complete facilities for a wide range of performance and reliability tests. Kudom Electronics provides more than 50 categories, with over 3000 kinds of specifications of various types of power semiconductor switching products. Kudom Electronics was the first company that launched the intelligent switching products with self-detection, self-diagnosis, and networked functions in the industry. Our products are in compliance with IEC62314, IEC60947, IEC60335, IEC61000, UL508 and other international standards, and most of the products are certified by CE, TUV, UL, CCC, S-mark and other safety approvals. We also provide customized products.

Our advantages:

★ ***Globalization:*** Our distribution network covers more than 50 countries and territories, which enables us to provide professional technical support with quick responses to our customers.

★ ***Professional:*** We own more than 40 patents. We not only specialize in the manufacturing of standard & intellectual solid state relays, but also keep researching and developing the high performance Triac & SCR, which are the key components of solid state relays.

★ ***Reliability:*** Most of our products are approved by CE, TUV, UL, CCC and S-mark. We are the reliable cooperation partner with high quality products and services, and we are also available to provide customized products.

★ ***Innovation:*** Based on the fundamental technology of SSR's, we also offer the intellectual, high-efficient and customized products, such as motor reversing modules, voltage regulator modules, industrial modules, etc.

Product Selection

PCB Mount

AC Output

DC Output

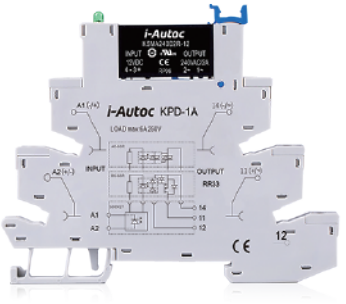
Panel Mount

Single Phase | AC Output

Single Phase | DC Output

Three Phase | AC Output

DIN Rail Mount

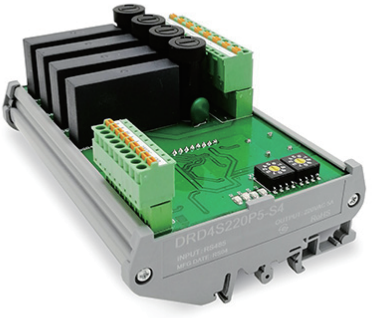


Industrial Module

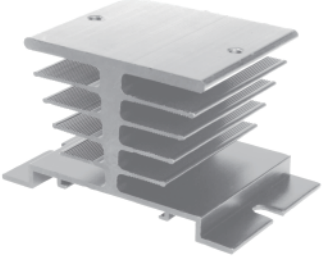
Motor Reversing

Voltage Regulator

Intelligent Module



Accessories



KSA Series AC Output

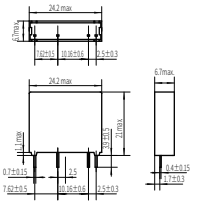
Output: AC **Current Range**: 2A

D: DC Control
Switching Mode: Blank: Zero Crossing, R: Random-on
Pin Layout: Blank: Standard Layout, T: T Type Layout

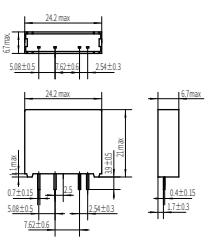
KSA | 240 | D | 2 | R | -24 | T | (XXX)

- 240: Load Voltage — 240: 24-280VAC
- 2: Load Current — 2: 2A
- -24: Control Voltage — 5: 4-6VDC; 12: 9.6-14.4VDC; 24: 19.2-28.8VDC; I: 10mA
- (XXX): Customized Code

Standard Layout



T Type Layout



KSB Series AC Output

Output: AC **Current Range**: 2A - 3A

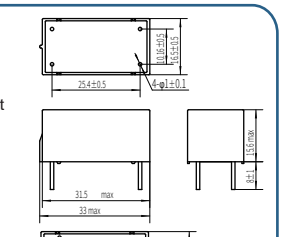
D: DC Control
Switching Mode: Blank: Zero Crossing, R: Random-on
PCB Layout: Blank: Standard Layout, T: T Type Layout
Customized Code

KSB | 380 | D | 3 | R | -H | N | T | M | (XXX)

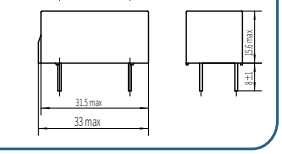
- 380: Load Voltage — 240: 24-280VAC; 380: 24-440VAC
- 3: Load Current — 2: 2A; 3: 3A
- -H: Control Voltage — L: 4-15VDC; H: 15-32VDC
- N: None: With RC; N: Wwithout RC
- M: Protection Type — Blank: Standard Type; M: MOV

Note: N or M has no UL.

Standard Layout



T Type Layout



KSC Series AC Output

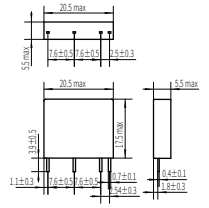
Output: AC **Current Range**: 1A - 2A

D: DC Control
Switching Mode: Blank: Zero Crossing, R: Random-on
Pin Layout: Blank: Standard Layout, T: T Type Layout

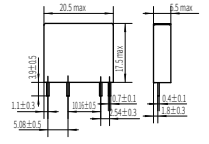
KSC | 240 | D | 1 | R | -5 | T | (XXX)

- 240: Load Voltage — 240: 24-280VAC
- 1: Load Current — 1: 1A; 2: 2A
- -5: Control Voltage — 5: 4-6VDC; 12: 9.6-14.4VDC; 24: 19.2-28.8VDC; I: 10mA-35mA
- (XXX): Customized Code

Standard Layout



T Type Layout



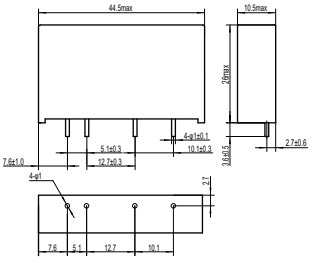
KSD Series AC Output

Output: AC **Current Range**: 5A

D: DC Control
Switching Mode: Blank: Zero Crossing, R: Random-on
Sealing Type: (037): Plastic Case

KSD | 480 | D | 5 | R | -H | (037) | (XXX)

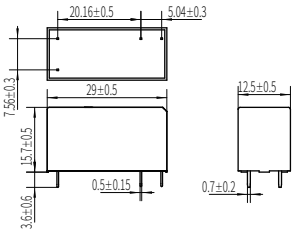
- 480: Load Voltage — 240: 24-280VAC; 380: 24-440VAC; 480: 24-530VAC
- 5: Load Current — 5: 5A
- -H: Control Voltage — H: 15-32VDC; W: 4-32VDC
- (XXX): Customized Code



KSG Series AC Output

Output: AC **Current Range**: 2A-3A

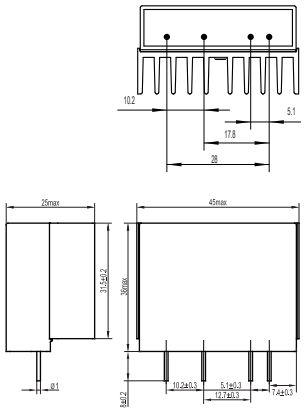
KSG	240	D	2	R	-5	D	(XXX)
	Load Voltage 240: 24-280VAC 380: 24-440VAC	D: DC Control	Load Current 2: 2A 3: 3A	Switching Mode Blank: Zero Crossing R: Random-on	Control Voltage 5: 4-6VDC 12: 9.6-14.4VDC 24: 19.2-28.8VDC	Blank: Without Socket D: With Socket	Customized Code



KSH Series AC Output

Output: AC **Current Range**: 25A

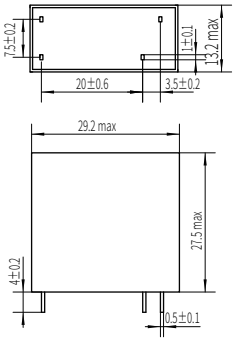
KSH	240	D	25	R	T	(XXX)
	Load Voltage 240: 24-280VAC 480: 24-530VAC 600: 24-660VAC	D: DC Control	Load Current 25: 25A	Switching Mode Blank: Zero Crossing R: Random-on	T: TVS	Customized Code



KSG3R Series AC Output

Output: AC **Current Range**: 2A-3A

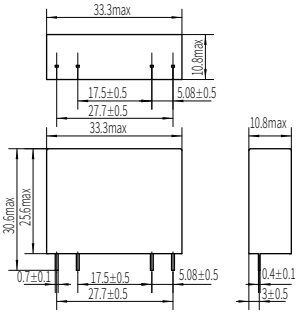
KSG3R	380	D	3	R	-5	D	(XXX)
	Load Voltage 240: 24-280VAC 380: 24-440VAC	D: DC Control	Load Current 2: 2A 3: 3A	Switching Mode Blank: Zero Crossing R: Random-on	Control Voltage 5: 4-6VDC 12: 9.6-14.4VDC 24: 19.2-28.8VDC	Blank: Without Socket D: With Socket	Customized Code



KSFA Series AC Output

Output: AC **Current Range**: 2A-3A

KSFA	380	D	3	R	-24	D	(XXX)
	Load Voltage 240: 24-280VAC 380: 24-440VAC	D: DC Control	Load Current 2: 2A 3: 3A	Switching Mode Blank: Zero Crossing R: Random-on	Control Voltage 5: 5VDC 12: 12VDC 24: 24VDC	Blank: Without Socket D: With Socket	Customized Code

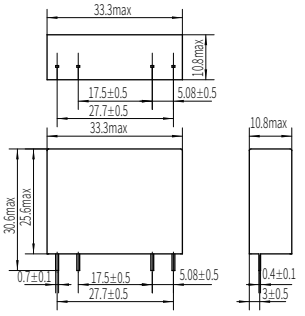


KSF Series DC Output

Output: DC **Current Range**: 5A

KSF	48	D	5	-24	(XXX)

- 48: Load Voltage — 48: 0-48VDC; 100: 0-75VDC
- D: DC Control
- 5: Load Current — 5: 5A
- -24: Control Voltage — 5: 4-6VDC; 12: 9.6-14.4VDC; 24: 19.2-28.8VDC; W: 4-32VDC
- (XXX): Customized Code



KSCD Series DC Output

Output: DC **Current Range**: 1A - 4A

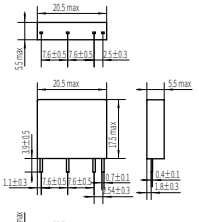
KSCD	30	D	1	-5	T	(XXX)

- 30: Load Voltage — 30: 3-30VDC; 60: 0-35VDC
- D: DC Control
- 1: Load Current — 1: 1A; 4: 4A
- -5: Control Voltage — 5: 4-6VDC; 12: 9.6-14.4VDC; 24: 19.2-28.8VDC
- T: Pin Type — Blank: Standard Layout; T: T Type Layout
- (XXX): Customized Code

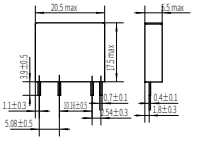
Models in detail

	1A	4A
5VDC	KSCD30D1-5(T)	KSCD60D4-5(T)
12VDC	KSCD30D1-12(T)	KSCD60D4-12(T)
24VDC	KSCD30D1-24(T)	KSCD60D4-24(T)

Standard Layout



T Type Layout

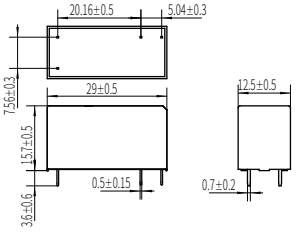


KSGD Series DC Output

Output: DC **Current Range**: 2A - 5A

KSGD	48	D	2	-5	(XXX)

- 48: Load Voltage — 24: 0-28.8VDC; 48: 0-36.6VDC
- D: DC control
- 2: Load Current — 2: 2A; 3: 3A; 4: 4A; 5: 5A
- -5: Control Voltage — 5: 4-6VDC; 12: 9.6-14.4VDC; 24: 19.2-28.8VDC; 48: 38.4-57.6VDC; 60: 48-72VDC
- (XXX): Customized Code

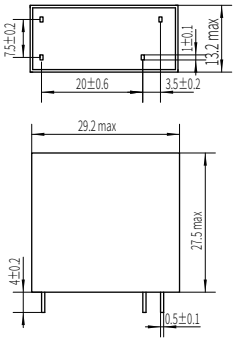


KG3RD Series DC Output

Output: DC **Current Range**: 2A

KG3RD	50	D	2	-5	D	(XXX)

- 50: Load Voltage — 50: 3-50VDC; 100: 3-100VDC
- D: DC control
- 2: Load Current — 2: 2A
- -5: Control Voltage — 5: 4-6VDC; 12: 9.6-14.4VDC; 24: 19.2-28.8VDC
- D: Blank: Without Socket; D: With Socket
- (XXX): Customized Code



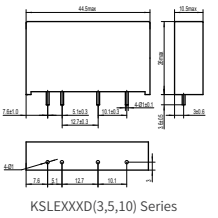
KSLE Series DC Output

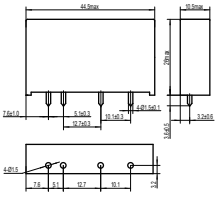
Output: DC **Current Range**: 3A-20A

KSLE	60	D	20	-L	(XXX)
	Load Voltage 60: 0~50VDC 100: 0~75VDC 200: 0~125VDC 400: 0~300VDC	D: DC Control	Load Current 3: 3A 5: 5A 10: 10A 20: 20A	Control Voltage L: 3-10VDC H:10-28VDC	Customized Code

Models in detail

	3A	5A	10A	20A
L	KSLE60D3-L KSLE400D3-L	KSLE200D5-L	KSLE60D10-L KSLE100D10-L	KSLE60D20-L
H	KSLE60D3-H KSLE400D3-H	KSLE200D5-H	KSLE60D10-H KSLE100D10-H	KSLE60D20-H


KSLEXXXD(3,5,10) Series

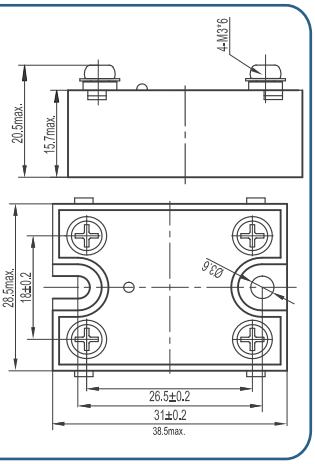

KSLEXXXD20 Series

Panel Mount

KSIM Series Mini Single Phase AC Output

Output: AC **Current Range**: 10A-25A

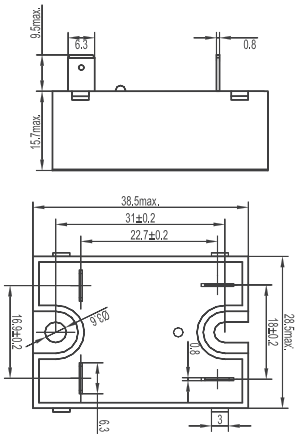
KSIM	380	D	25	R	-L	M	(XXX)
	Load Voltage 240: 24-280VAC 380: 24-440VAC	Control Voltage D: 4-32VDC	Load Current 10: 10A 16: 16A 25: 25A	Switching Mode Blank: Zero Crossing R: Random-on	L: LED	Protection Type Blank:Standard Type M: MOV T : TVS	Customized Code



KSIM (045) Series Mini Single Phase AC Output

Output: AC **Current Range**: 10A-25A

KSIM	240	D	25	R	-L	(045)	M	(XXX)
	Load Voltage 240: 24-280VAC 380: 24-440VAC	Control Voltage D: 4-32VDC	Load Current 10: 10A 16: 16A 25: 25A	Switching Mode Blank: Zero Crossing R: Random-on	L: LED	Quick-Connect Terminal	Protection Type Blank:Standard Type M: MOV T : TVS	Customized Code

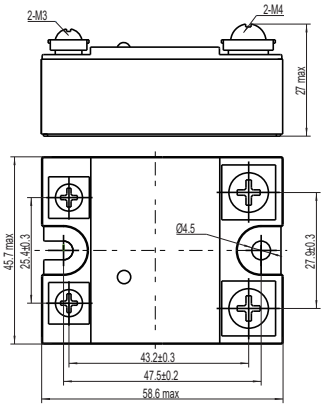


KSI Series Single Phase AC Output

Output: AC **Current Range**: 25A-60A

KSI	600	D	60	R	-L	M	(XXX)

- Control Voltage: A: 90-280VAC; D: 4-32VDC
- Switching Mode: Blank: Zero Crossing; R: Random-on
- Protection Type: Blank: Standard Type; M: MOV; T: TVS
- Load Voltage: 240: 48-280VAC; 480: 48-530VAC; 600: 48-660VAC
- Load Current: 25: 25A; 40: 40A; 60: 60A
- L: LED
- Customized Code



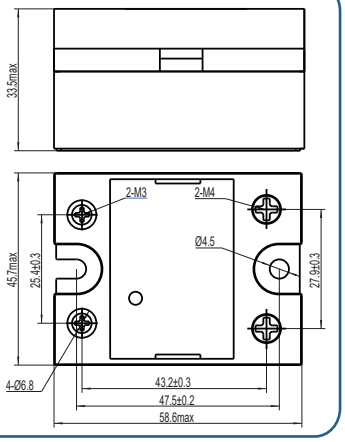
Note 1. No TUV for TVS type
2. KSI240Dxxx Series Control Voltage Range: 3-32VDC or 4-32VDC (Optional)

KSI(068) Series Single Phase AC Output

Output: AC **Current Range**: 25A-80A

KSI	240	D	25	R	-L	M	(068)	(XXX)

- Control Voltage: A: 90-280VAC; D: 4-32VDC
- Switching Mode: Blank: Zero Crossing; R: Random-on
- Protection Type: Blank: Standard Type; M: MOV; T: TVS
- Customized Code
- Load Voltage: 240: 48-280VAC; 480: 48-530VAC; 600: 48-660VAC
- Load Current: 25: 25A; 40: 40A; 60: 60A; 80: 80A
- L: LED
- IP20 Cover



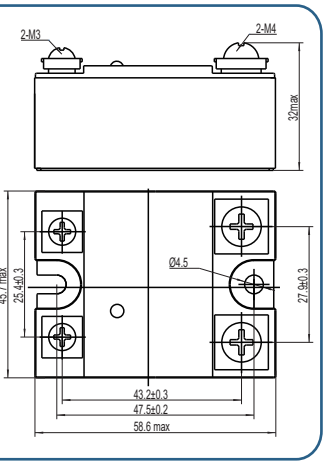
Note 1. No TUV for TVS type
2. KSI240Dxxx Series Control Voltage Range: 3-32VDC or 4-32VDC (Optional)

KSI(083) Series Single Phase AC Output

Output: AC **Current Range**: 80A-125A

KSI	240	D	125	R	-L	M	(083)

- Control Voltage: A: 90-280VAC; D: 4-32VDC
- Switching Mode: Blank: Zero Crossing; R: Random-on
- Protection Type: Blank: Standard Type; M: MOV; T: TVS
- Load Voltage: 240: 48-280VAC; 480: 48-530VAC; 600: 48-660VAC
- Load Current: 80: 80A; 100: 100A; 125: 125A
- L: LED
- 083: Higher Profile



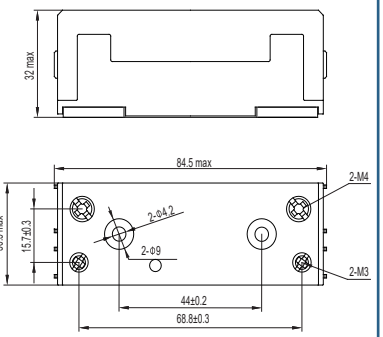
Note 1. No TUV for TVS type; No TUV for 100A or 125A
2. KSI240Dxxx Series Control Voltage Range: 3-32VDC or 4-32VDC (Optional)

KSU Series Single Phase AC Output

Output: AC **Current Range**: 30A-75A

KSU	600	D	30	R	-L	M	(XXX)

- Control Voltage: A: 90-280VAC; D: 4-32VDC
- Switching Mode: Blank: Zero Crossing; R: Random-on
- Protection Type: Blank: Standard Type; M: MOV; T: TVS
- Load Voltage: 600: 24-660VAC
- Load Current: 30: 30A; 50: 50A; 75: 75A
- L: LED
- Customized Code



KSIA Series Single Phase AC Output

Output: AC **Current Range**: 25A-100A
Built in Function: SCR Short Circuit, Open Circuit and Error Self-Inspection

Control Voltage
D: DC

Blank: Negative Trigger
P: Positive Trigger

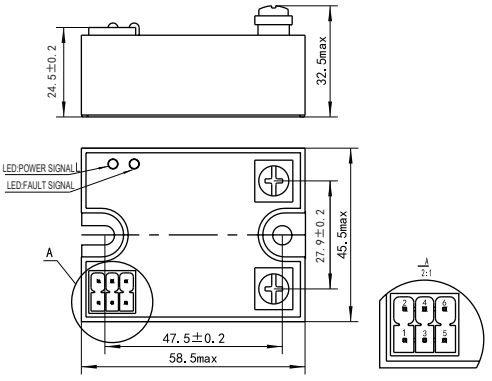
KSIA	600	D	25	-P	-L	(XXX)

Load Voltage
240: 150-280VAC
480: 150-530VAC
600: 300-660VAC

Load Current
25: 25A
40: 40A
60: 60A
80: 80A
100:100A

L: LED

Customized Code



KSID Series Dual Pole AC Output

Output: AC **Current Range**: 25A-75A

Control Voltage
LD: 4-15VDC
HD: 15-32VDC
D: 4-32VDC

Switching Mode
Blank: Zero Crossing
R: Random-on

Customized Code

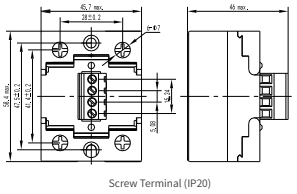
KSID	240	LD	25	R	P	(XXX)

Load Voltage
240: 24-280VAC
480: 24-530VAC
600: 24-660VAC

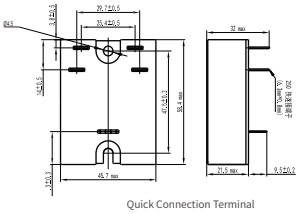
Load Current
25: 25A
40: 40A
50: 50A
75: 75A

Blank: Quick Connection
P: Screw Terminal

Note No TUV or S-mark for Quick Connection Terminal.



Screw Terminal (IP20)



Quick Connection Terminal

KSN Series AC Output

Output: AC **Current Range**: 40A-125A

D: DC Control
A: AC Control

Switching Mode
Blank: Zero Crossing
R: Random-on

Protection Type
Blank: Standard Type
M: MOV
T: TVS

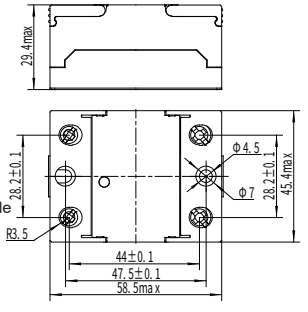
KSN	600	D	80	R	-L	M	(XXX)

Load Voltage
240:240VAC
480:480VAC
600:600VAC

Load Current
40: 40A
60: 60A
80: 80A
100: 100A
125: 125A

LED

Customized Code



KSJ Series Single Phase DC Output

Output: DC **Current Range**: 7A-100A

Control Voltage
D: 4-32VDC

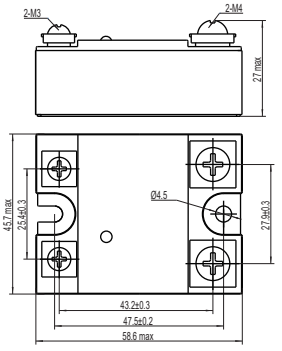
L: LED

KSJ	100	D	80	-L	(XXX)

Load Voltage
30: 0-24VDC
50: 0-36VDC
60: 0-48VDC
100: 0-75VDC
200: 0-120VDC
400: 3-300VDC
600: 3-500VDC
1200: 3-700VDC

Load Current
7: 7A
10: 10A
20: 20A
25: 25A
30: 30A
40: 40A
50: 50A
80: 80A
100: 100A

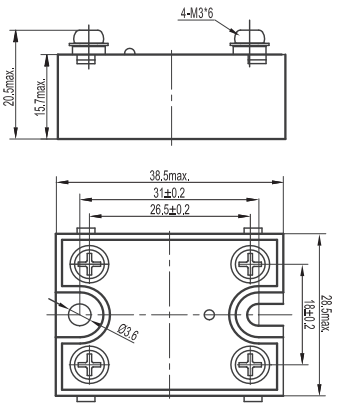
Customized Code



KSJM Mini Single Phase DC Output

Output: DC **Current Range**: 10A-50A

KSJM	60	D	10	-L	(XXX)
	Load Voltage 30: 0-24VDC 50: 0-36VDC 60: 0-48VDC 100: 0-75VDC 200: 0-120VDC	Control Voltage D: 4-32VDC	Load Current 10: 10A 20: 20A 40: 40A 50: 50A	L: LED	Customized Code

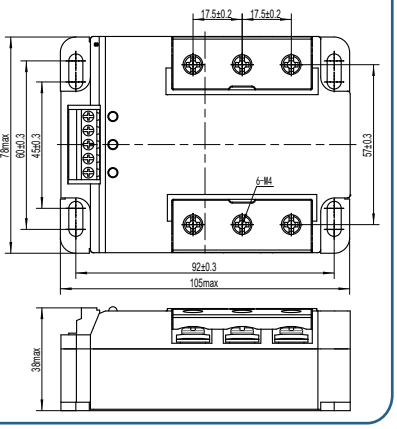


KSQF Series Three Phase AC Output

Output: AC **Current Range**: 25A-80A

KSQF	480	D	80	R	(XXX)
	Load Voltage 480: 24-530VAC 600: 24-660VAC	Control Voltage A: 90-280VAC D: 4-32VDC	Load Current 25: 25A 40: 40A 60: 60A 80: 80A	Switching Mode Blank: Zero Crossing R: Random-on	Customized Code

Note No TUV or S-mark for AC Control.

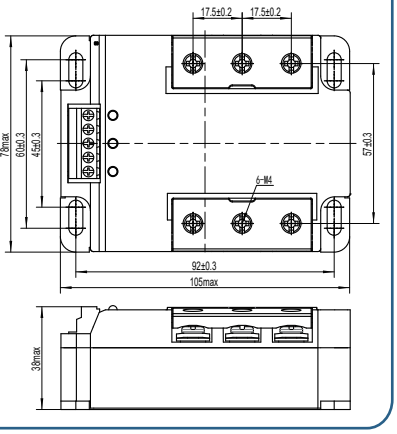


KSQC Series Three Phase AC Output

Output: AC **Current Range**: 25A-80A
Built in Function: Phase-loss Protection / Over Temperature Protection / SCR Fault Detection / Alarm Signal Output(optional)

KSQC	600	D	60	R	-C	(XXX)
	Load Voltage 480: 200-530VAC 600: 200-660VAC	Control Voltage D: 10-32VDC	Load Current 25: 25A 40: 40A 60: 60A 80: 80A	Switching Mode Blank: Zero Crossing R: Random-on	Blank: Without Alarm Signal Output C: With Alarm Signal Output (Optional)	Customized Code

Note Only C: With Alarm Signal Output have TUV and S-Mark certification



KSG***D Series AC Output

Output: AC **Current Range**: 2A - 3A

Switching Mode
Blank: Zero Crossing
R: Random-on

D: DC Control

D: With Socket

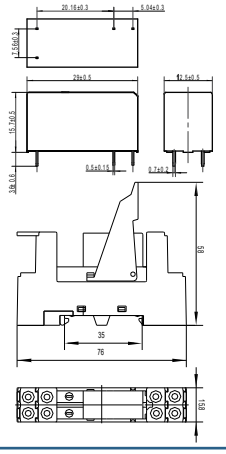
KSG	240	D	2	R	-5	D	(XXX)

Load Voltage
240: 24-280VAC
380: 24-440VAC

Load Current
2: 2A
3: 3A

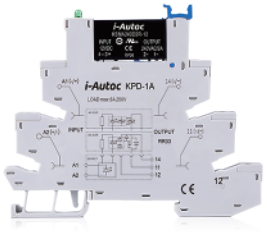
Control Voltage
5: 4-6VDC
12: 9.6-14.4VDC
24: 19.2-28.8VDC

Customized Code



KSMA***D Series Single Phase AC Output

Output: AC **Current Range**: 1A - 2A



Switching Mode
Blank: Zero Crossing
R: Random-on

A: AC Output

D: DC Control

D: With PLC Socket

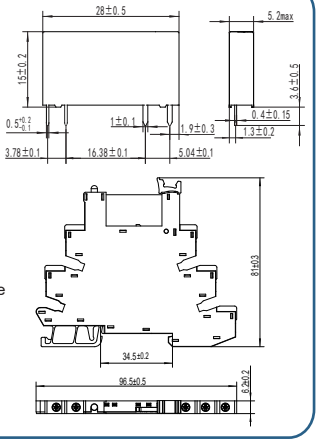
KSM	A	240	D	2	R	-24	D	(XXX)

Load Voltage
240: 24-280VAC

Load Current
1: 1A
2: 2A

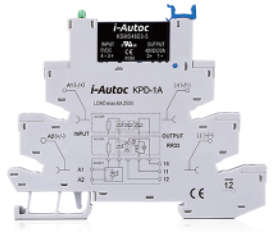
Control Voltage
5: 4-6VDC
12: 9.6-14.4VDC
24: 19.2-28.8VDC

Customized Code



KSMD***D Series Single Phase DC Output

Output: DC **Current Range**: 0.1A - 4A



Control Voltage
5: 4-6VDC
12: 9.6-14.4VDC
24: 19.2-28.8VDC
48: 38.4-57.6VDC
60: 48-72VDC

D: DC Output

D: DC Control

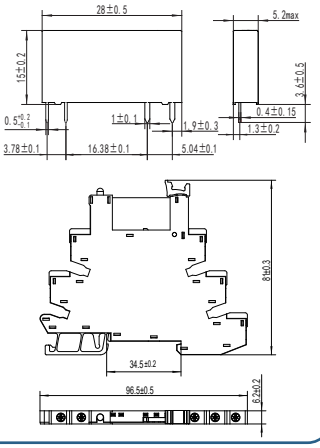
Customized Code

KSM	D	48	D	3	-24	D	(XXX)

Load Voltage
24: 3-28VDC
48: 3-58VDC

Load Current
0.1: 0.1A
2: 2A
3: 3A
4: 4A

D: With Socket



KSG3R***D Series AC Output

Output: AC **Current Range**: 2A - 3A

Switching Mode
Blank: Zero Crossing
R: Random-on

D: DC Control

D: With Socket

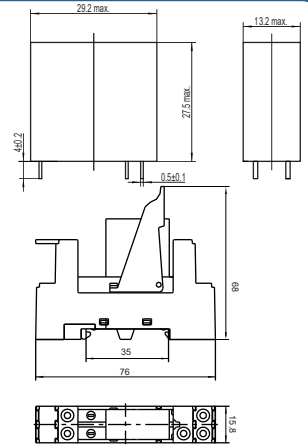
KSG3R	380	D	2	R	-5	D	(XXX)

Load Voltage
240: 24-280VAC
380: 24-440VAC

Load Current
2: 2A
3: 3A

Control Voltage
5: 4-6VDC
12: 9.6-14.4VDC
24: 19.2-28.8VDC

Customized Code

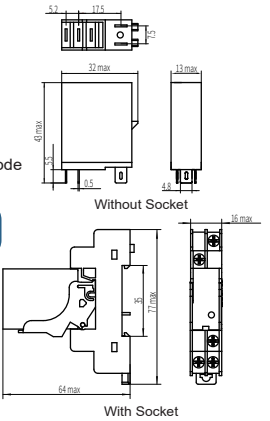


KSO Series AC Output

Output: AC **Current Range**: 5A

KSO	240	D	5	R	-W	T	D	(XXX)
	Load Voltage 240: 24-280VAC 600: 24-600VAC	D: DC control	Load Current 5: 5A	Switching Mode Blank: Zero Crossing R: Random-on	Control Voltage W：4-32VDC	T:TVS Blank: No Protection	Blank: Without Socket D: With Socket	Customized Code

(In Certification)

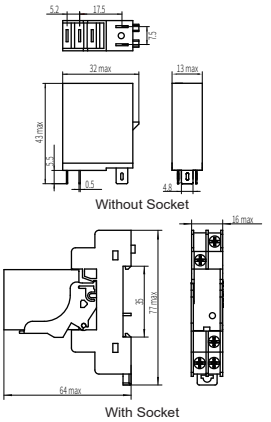


KSOB Series AC Output

Output: AC **Current Range**: 5A

KSOB	240	D	5	R	-W	D	(XXX)
	Load Voltage 240: 24-280VAC	D: DC control	Load Current 5: 5A	Switching Mode Blank: Zero Crossing R: Random-on	Control Voltage W：4-32VDC	Blank: Without Socket D: With Socket	Customized Code

(In Certification)



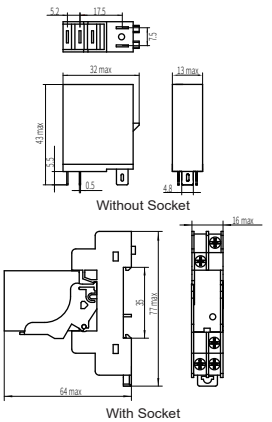
KSOD Series DC Output

Output: DC **Current Range**: 2A - 5A

KSOD	100	D	2	-W	D	(XXX)
	Load Voltage 50: 3-50VDC 100: 0-75VDC 200: 0-125VDC 400: 0-300VDC	D: DC control	Load Current 2: 2A 3: 3A 5: 5A	Control Voltage W: 4-32VDC	Blank: Without Socket D: With Socket	Customized Code

	2A	3A	5A
50VDC	KSOD50D2-W(D)		
100VDC		KSOD100D3-W(D)	KSOD100D5-W(D)
200VDC			KSOD200D5-W(D)
400VDC		KSOD400D3-W(D)	

(In Certification)

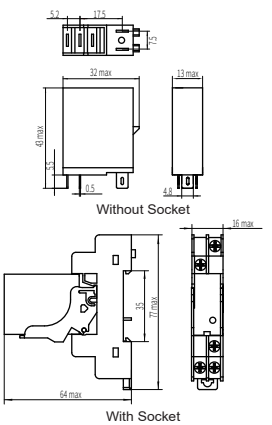


KSODB Series DC Output

Output: DC **Current Range**: 3A

KSODB	100	D	3	-W	D	(XXX)
	Load Voltage 100: 3-100VDC	D: DC control	Load Current 3: 3A	Control Voltage W: 4-32VDC	Blank: Without Socket D: With Socket	Customized Code

(In Certification)

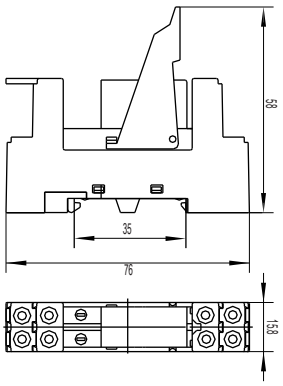


KSGD***D Series DC Output

Output: DC **Current Range**: 2A - 5A

KSGD | 48 | D | 2 | -5 | D | (XXX)

- 48: Load Voltage — 24: 0-28.8VDC; 48: 0-36VDC
- D: DC control
- 2: Load Current — 2: 2A; 3: 3A; 4: 4A; 5: 5A
- -5: Control Voltage — 5: 4-6VDC; 12: 9.6-14.4VDC; 24: 19.2-28.8VDC; 48: 38.4-57.6VDC; 60: 48-72VDC
- D: With Socket
- (XXX): Customized Code

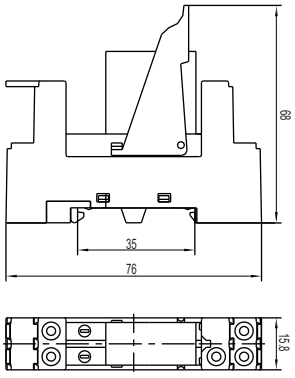


KG3RD***D Series DC Output

Output: DC **Current Range**: 2A

KG3RD | 50 | D | 2 | -5 | D | (XXX)

- 50: Load Voltage — 50: 3-50VDC; 100: 3-100VDC
- D: DC Control
- 2: Load Current — 2: 2A
- -5: Control Voltage — 5: 4-6VDC; 12: 9.6-14.4VDC; 24: 19.2-28.8VDC
- D: With Socket
- (XXX): Customized Code

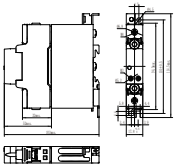


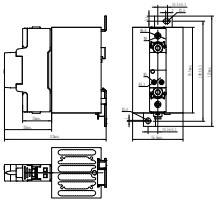
KSK Series AC Output

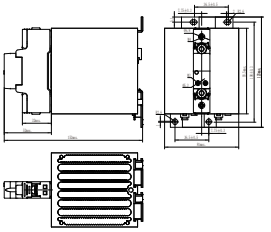
Output: AC **Current Range**: 15A-75A

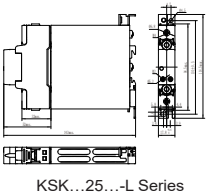
KSK | 240 | D | 25 | R | -M | (XXX) | -K | F24DC

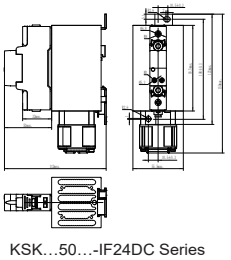
- 240: Load Voltage — 240: 240VAC; 480: 480VAC; 600: 600VAC
- D: Control Voltage — D: DC Control; E: AC 24V Control
- 25: Load Current — 15: 15A; 25: 25A; 50: 50A; 75: 75A
- R: Switching Mode — Blank: Zero Crossing; R: Random-on
- -M: Protection Type — Blank: Standard Type; M: MOV; T: TVS
- (XXX): Customized Code
- -K: Heatsink — K: KHS-K90 Heatsink; L: KHS-L90 Heatsink; I: KHS-I93 Heatsink; J: KHS-J93 Heatsink
- F24DC: Fan — Blank: Without Fan; F24DC: With 24VDC fan for KHS-I93 or KHS-J93 Heatsink

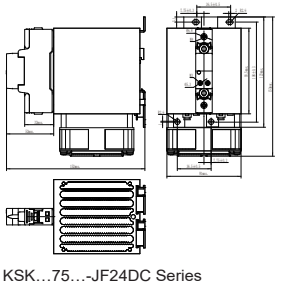

KSK…15…-K Series


KSK…50…-I Series


KSK…75…-J Series


KSK…25…-L Series


KSK…50…-IF24DC Series


KSK…75…-JF24DC Series

KSV Series Single Phase AC Output

Output: AC **Current Range**: 10A - 75A

A: AC Control
D: DC Control

Switching Mode
Blank: Zero Crossing
R: Random-on

Customized Code

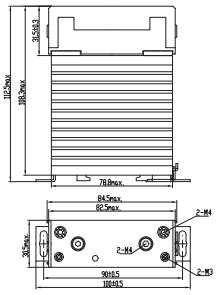
KSV	480	D	20	R	-L	M	(XXX)

Load Voltage
240: 24-280VAC
480: 24-530VAC
600: 24-660VAC

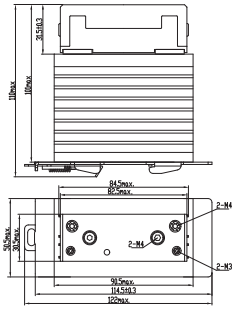
Load Current
10: 10A
20: 20A
30: 30A
40: 40A
50: 50A
75: 75A

L: LED

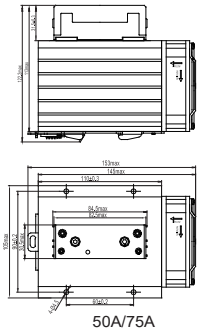
M:MOV
T:TVS
Blank: No Protection
(Optional)



10A-30A



40A



50A/75A

KST Series Dual pole AC Output

Output: AC **Current Range**: 10A-30A

D:DC Control

Switching Mode
Blank: Zero Crossing
R: Random-on

M:MOV
T:TVS
Blank: No Protection
(Optional)

Heatsink Type
Blank: KHS-H90 Series
S: KHS-P90 Series

KST	480	D	20	R	-L	M	H	S	(XXX)

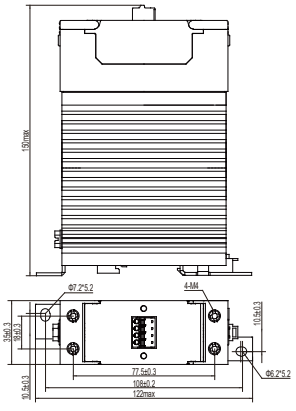
Load Voltage
240: 24-240VAC
480: 24-530VAC
600: 24-660VAC

Load Current
10: 10Amp
20: 20Amp
30: 30Amp

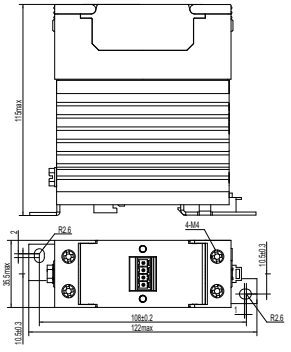
L:LED

Control Type
H: Two Channels Single Control
Blank: Two Channels Dual Control

Customized Code

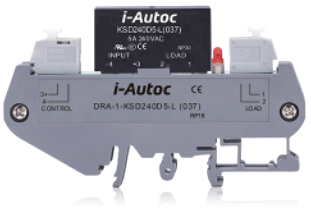


With KHS-H90 Heatsink



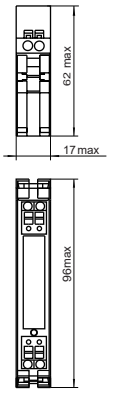
With KHS-P90 Heatsink

DRA-1-KSD Series 1 Channel AC Output



A: Mould A		SSR	Customized Code
DR	A	-1	-KSD240D5-L(037)	(XXX)

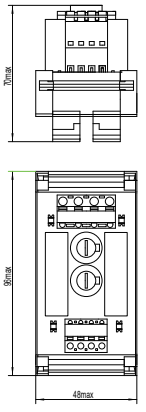
1: 1 Channel



DRA-2-KSD Series 2 Channels AC Output

A: Mould A		SSR	Customized Code
DR	A	-2	-KSD240D5-L(037)	(XXX)

2: 2 Channels

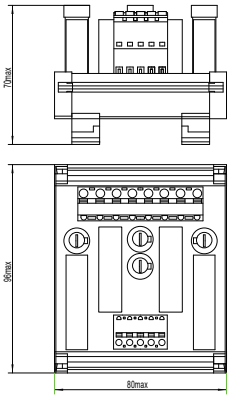


DRA-4-KSD Series 4 Channels AC Output

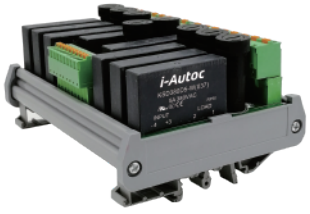
A: Mould A		SSR		Customized Code
DR	A	-4	K	-KSD240D5-L(037)	(XXX)

4: 4 Channels

A: Common Anode
K: Common Cathode



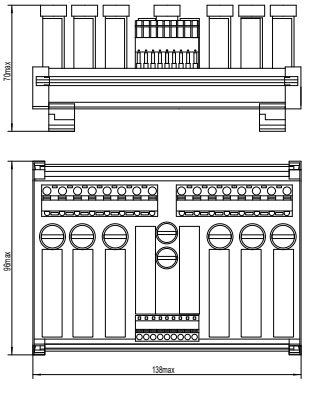
DRA-8-KSD Series 8 Channels AC Output



A: Mould A		SSR		Customized Code
DR	A	-8	K	-KSD240D5-W(037)	(XXX)

8: 8 Channels

A: Common Anode
K: Common Cathode

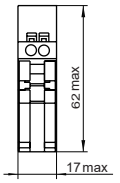


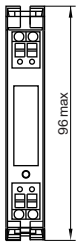
DRA-1-KSF Series 1 Channel DC Output

A: Mould A | SSR | Customized Code

DR | A | -1 | -KSF48D5 -W | (XXX)

1: 1 Channel



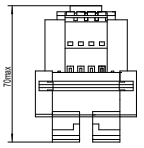


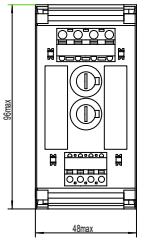
DRA-2-KSF Series 2 Channels DC Output

A: Mould A | SSR | Customized Code

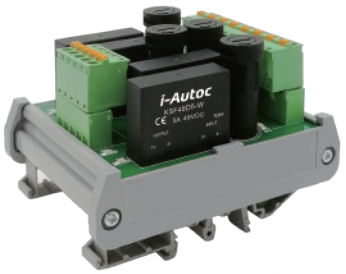
DR | A | -2 | -KSF48D5 -W | (XXX)

2: 2 Channels





DRA-4-KSF Series 4 Channels DC Output

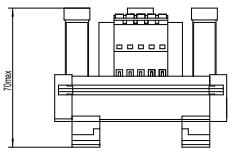


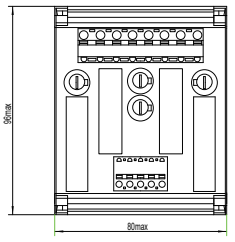
A: Mould A | SSR | Customized Code

DR | A | -4 | K | -KSF48D5 -W | (XXX)

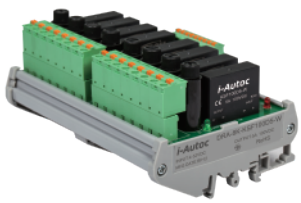
4: 4 Channels

A: Common Anode
K: Common Cathode





DRA-8-KSF Series 8 Channels DC Output

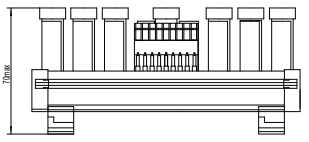


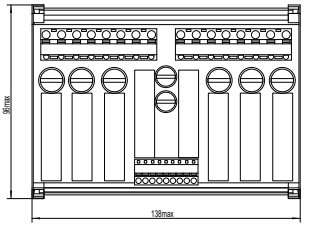
A: Mould A | SSR | Customized Code

DR | A | -8 | K | -KSF48D5 -W | (XXX)

8: 8 Channels

A: Common A node
K: Common Cathode

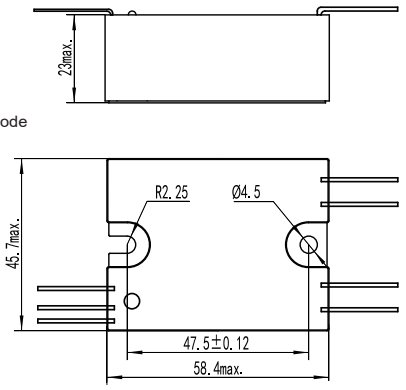




KGMB Series Three Phase Motor Reversing Module

Output: AC **Current Range**: 10A-20A

KGMB	380	D	10	-24	(XXX)
	Load Voltage 380: 24~440VAC 480: 24~530VAC	D: DC Control	Load Current 10: 10A 20: 20A	Control Voltage 12: 12VDC 24: 24VDC	Customized Code

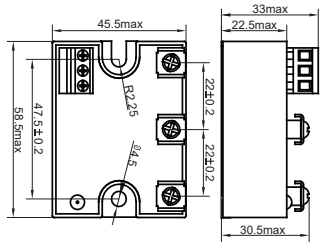


KMC Series Single Phase Motor Reversing Module

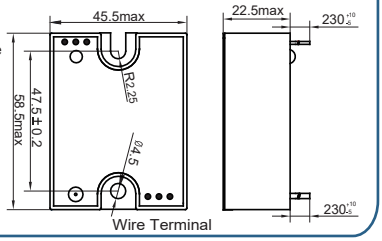
Output: AC **Current Range**: 10A-40A

KMC	380	D	10	P	-12	130	(XXX)
	Load Voltage 380: 24~440VAC	D: DC Control	Load Current 10: 10A 20: 20A 40: 40A	Control Mode Blank: Common Anode P: Common Cathode	Control Voltage 12: 12VDC 24: 24VDC	130: Wire Terminal None: Screw Terminal	Customized Code

Note Only Screw Terminal with load current 40A .



Screw Terminal

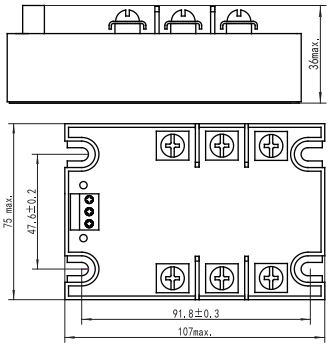


Wire Terminal

KMS Series Three Phase Motor Reversing Module

Output: AC **Current Range**: 25A-60A

KMS	380	D	25	P	-24	F	(XXX)
	Load Voltage 380: 24-440VAC 480: 24-530VAC	D: DC Control	Load Current 25: 25A 40: 40A 60: 60A	Control Mode Blank: Common Negative P: Common Positive	Control Voltage 24: 10-32VDC	Blank: Two-phase Switch F: Three-phase Switch	Customized Code



KSJD Single Phase DC to DC Motor Reversing Module

Output: DC **Current Range**: 10A

Load Voltage
30: 30VDC

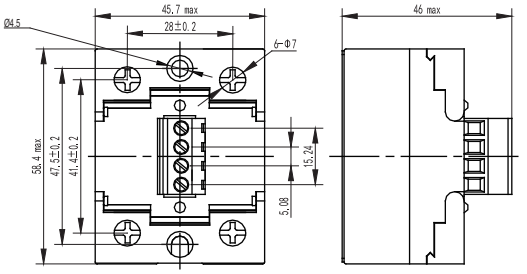
Load Current
10: 10Amp

KSJD | 30 | D | 10 | -24

KSJD Series

D: DC Control

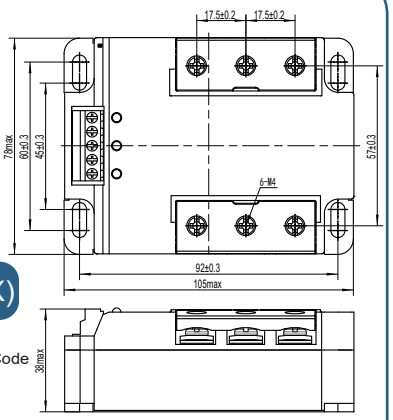
Control Voltage
12: 12VDC
24: 24VDC



KMTY Series Three Phase Motor Reversing Module

Output: AC **Current Range**: 25A-80A

Built in Function: Automatic Phase Correction / Phase-loss Protection(optional)



D: DC Control

Switching Mode
Blank: Zero Crossing
R: Random-on

Blank: Two Phase Switch
F: Three Phase Switch

24: 10-32VDC

KMTY | 600 | D | 60 | R | P | -24 | F | -N | (XXX)

Load Voltage
480: 24-530VAC
600: 24-660VAC

Load Current
25: 25A
40: 40A
60: 60A
80: 80A

Control Mode
Blank: Common Cathode
P: Common Anode

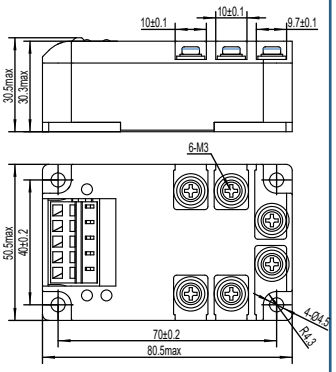
Customized Code

Blank: With Automatic Phase Correction & Phase-loss Correction Function
N: Without Automatic Phase Correction & Phase-loss Correction Function

KMTYM Series Mini Three Phase Motor Reversing Module

Output: AC **Current Range**: 15A-25A

Built in Function: Automatic Phase Correction / Phase-loss Protection(optional)



D: DC Control

Switching Mode
Blank: Zero Crossing
R: Random-on

Blank: Two Phase Switch
F: Three Phase Switch

24:10-32VDC

KMTYM | 380 | D | 25 | R | P | -24 | F | -N | (XXX)

Load Voltage
380: 24-440VAC

Load Current
15: 15A
25: 25A

Control Mode
Blank: Common Cathode
P: Common Anode

Customized Code

Blank: With Automatic Phase Correction & Phase-loss Correction Function
N: Without Automatic Phase Correction & Phase-loss Correction Function

KRB Bus Communication Intellectual Voltage Regulator

Output: AC **Current Range**: 40A

Load Voltage
240: 150-280VAC
380: 300-440VAC

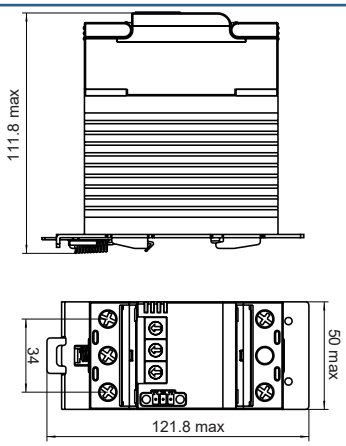
Load Current
40: 40A

Customized Code

KRB | 240 | D | 40 | -C | (XXX)

D: DC Control

Current Monitoring Function



KWR Non-isolated Single Phase Voltage Regulator

Output: AC **Current Range**: 10A-100A

Regulating Potentiometer
F: 150K/2W
G: 220K/2W
H: 470K/2W

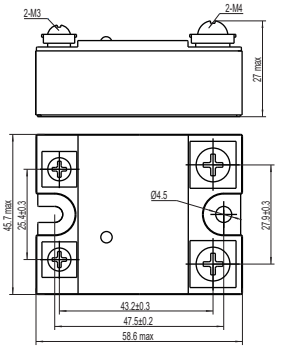
L: LED

KWR | 480 | F | 10 | -L | (XXX)

Load Voltage
480: 24-530VAC

Load Current
10: 10A
25: 25A
40: 40A
60: 60A
80: 80A
100: 100A

Customized Code



KYR Series Single Phase Voltage Regulator

Output: AC **Current Range**: 25A-80A
Note: Work with external power supply

Load Voltage
240: 176-280VAC
480: 300-530VAC

Load Current
25: 25A
40: 40A
60: 60A
80: 80A

M: MOV (Optional)

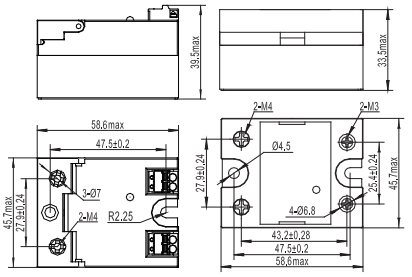
KYR | P | 480 | L | 25 | P | M | (XXX)

P: Power Proportional Output

Control Voltage
L: 0-5VDC
H: 0-10VDC
I : 4-20mA

P: IP20

Customized Code



KYRT Series Three Phase Voltage Regulator

Output: AC **Current Range**: 25A-80A

Load Voltage
480: 200-530VAC

Load Current
25: 25A
40: 40A
60: 60A
80: 80A

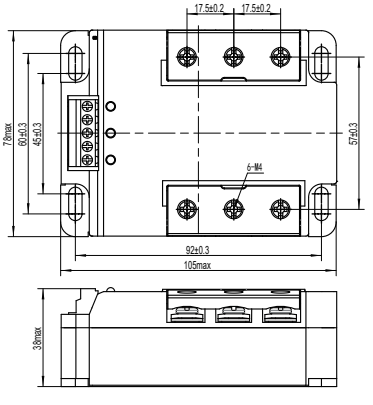
Customized Code

KYRT | P | 480 | L | 80 | -L | (XXX)

P: Power Proportional Output

Control Voltage
L: 0-5VDC/4-20mA
H: 0-10VDC/4-20mA

L: LED



KRE Series Three Phase Voltage Regulator

Output: AC **Current Range**: 25A-80A

Control Mode
W:4-20mA
0-5VDC
0-10VDC

Propotional Output
P: Power
C: Cycle

Characteristic Functions
M: Over-temperature Protection
SCR Fault Detection Function
Load Disconnection Detection Function
Phase-lack Detection Function
EMR Alarm Output

3: 3 Phase 3 Control
2: 3 Phase 2 Control

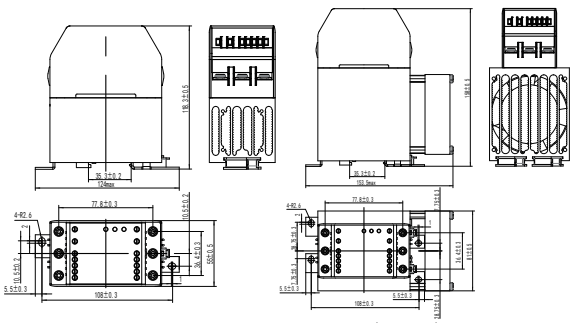
KRE	600	W	25	P	-D	M	F	-3

Load Voltage
380:200~440VAC
600:400~660VAC

Load Current
25:25A
40:40A
60:60A
80:80A

APS
D: 24VDC

F: 24VDC Fan
Blank: No Fan



KRE…25…　　KRE…(40, 60, 80)…F…

Intelligent Module

BCA Series Temperature Control Module

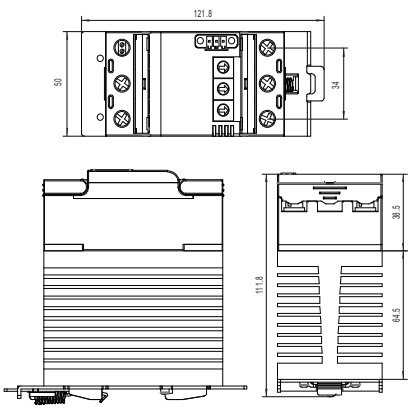
Load Voltage
240: 240VAC
380: 380VAC

Load Current
40: 40A

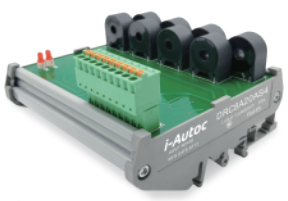
BCA	240	T	40	-S4

Temperature Sensor
T: Thermal Coupler

Control Mode
S4: RS 485



DRC Series Mod-Bus Current Detection Module



Channel
3: 3 Channels
8: 8 Channels

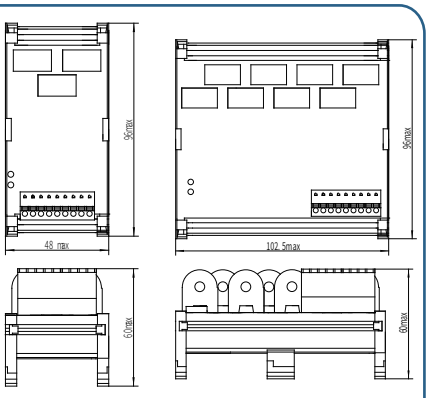
Rated Current
5:5A
20:20A
40:40A

Control Mode:
RS 485

DRC	8	A	20	A	S4

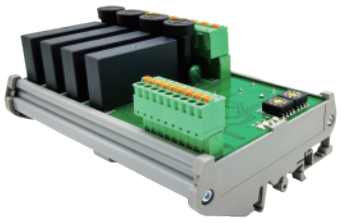
Current type
A: AC

Tolerance
A: ±5%

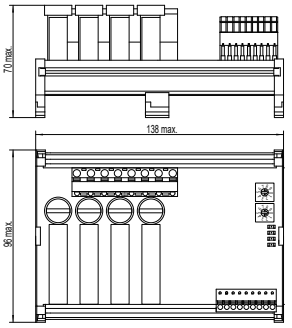


3: 3 Channels　　8: 8 Channels

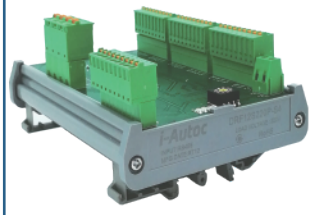
DRD Intelligent Module Voltage Regulator



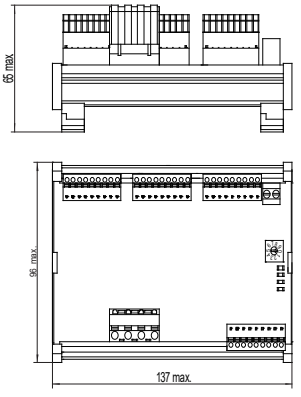
DRD	4	S	220	P	5	S4
	Channel 4: 4 Channels	Function S: Stablized Output	Load Voltage 220: 220VAC	Output Mode P: Power Proportional Output	Load Current 5: 5A	Control Mode S4: RS 485



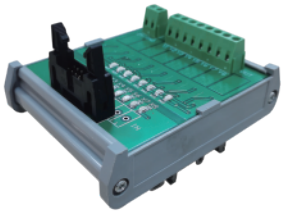
DRF Series Multi-channels Modbus Voltage Regulator



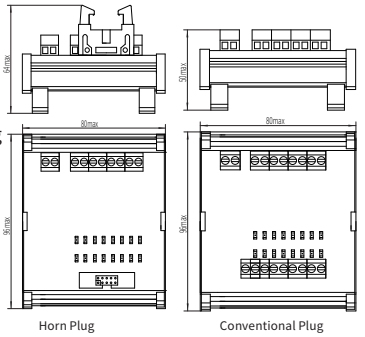
DRF	12	S	220	T	P	-S4	F	L
	Channel 12: 12 Channels	Function S: Steady Output Voltage	Load Voltage 220: 220VAC 380: 380VAC	Power Source Yype Blank: 3 Phase With N T: 3 Phase Without N	Output Mode P: Power Proportional Output	Control Mode S4: RS 485	Function F: Fan T: Temperature Compensation	L: LED



DRK Series Multi-channels Modbus Voltage Regulator



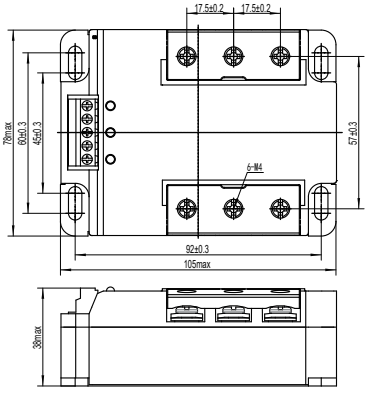
DRK	8	A	24	D	2	-24	N
	Channel 8: 8 Channels	A:Common Anode K:Common Cathode	Load Voltage 24: 14-28VDC	D: DC Control	Control Current 2: 2A	Control Voltage 24: 19.2-28.8VDC	N : Horn Plug None: Conventional Plug



KSJQ Series Single Phase DC Output

Functions: Overtemperature Protection
Load Short Circuit Protection
Fault Alarm Signal Output

KSJQ	850	D	50	-24
	Load Voltage 850: 12~850VDC	D: DC Control	Load Current 50: 50A	Control Voltage 24: 21.6~26.4VDC



KTA Series Triac

Package type
G: TO-3

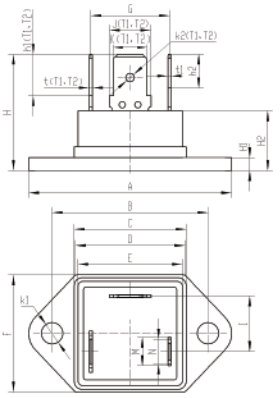
Trigger sensitivity
BW: 50mA

KTA | 25 | G | -600 | BW | (BS)

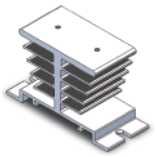
Current
25: 25A
40: 40A

Voltage
600: 600V
800: 800V

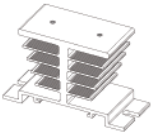
Customized Code
Blank: Ferroalloy base plate, standard terminal
B: Brass base plate, standard terminal
S: Ferroalloy base plate, terminal aperture 3.1mm
BS: Brass base plate, terminal aperture 3.1mm

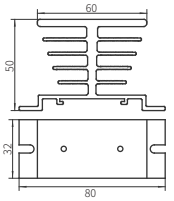


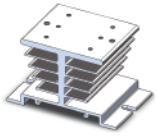
Heatsink



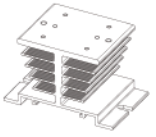
KHS-A32 Heatsink
Weight: 70g
Thermal Resistance: 2.8°C/W
Suitable for KSIM, KSJM

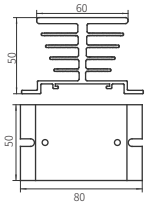


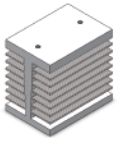




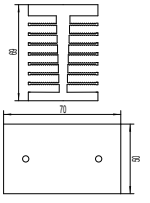
KHS-A50 Heatsink
Weight: 115g
Thermal Resistance: 2.1°C/W
Suitable for KSI, KSJ, KWR, KSIA, KYR, KSIM, KSJM

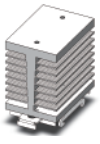




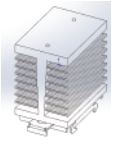


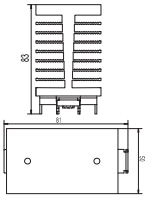
KHS-B70 Heatsink
Weight: 235g
Thermal Resistance: 1.9°C/W
Suitable for KSI, KSID, KSJ, KWR, KMB, KMC, KSIA, KYR, KSN

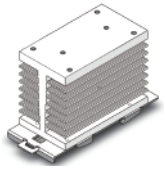




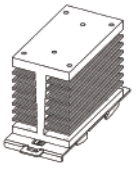
KHS-B70-D Heatsink with DIN Rail
Weight: 290g
Thermal Resistance: 1.9°C/W
Suitable for KSI, KSID, KSJ, KWR, KMB, KMC, KSIA, KYR, KSN

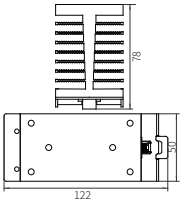


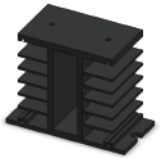




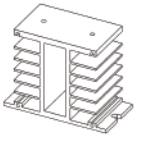
KHS-B90-D Heatsink
Weight: 390g
Thermal Resistance: 1.7°C/W
Suitable for KRB, KSI, KSID, KSN

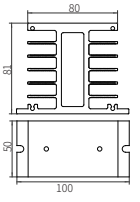


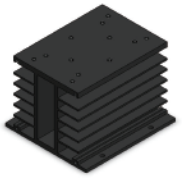




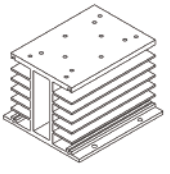
KHS-C49 Heatsink
Weight: 255g
Thermal Resistance: 1.7°C/W
Suitable for KSI, KSID, KSJ, KWR, KMB, KMC, KSIA, KYR, KSN

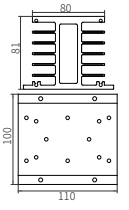


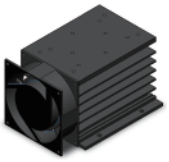




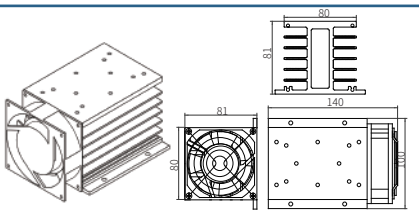
KHS-C110 Heatsink
Weight: 560g
Thermal Resistance: 0.9°C/W
Suitable for KSI, KSID, KSJ, KWR, KYR, KSIA, KSQC, KMS, KMT, KMTY, KSQF, KYRT, KMTYM, KRB, KSN

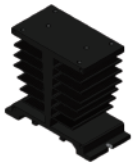




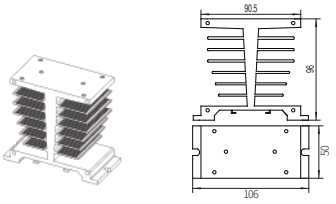


KHS-C110-F Heatsink with Fan
Weight: 830g
Thermal Resistance: 0.4°C/W
Suitable for KSQC, KSI, KSN, KSQF

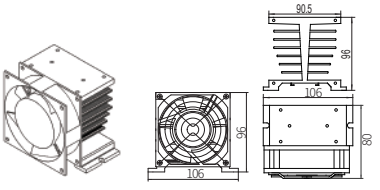


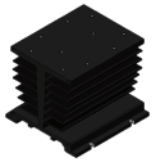


KHS-D50 Heatsink
Weight: 375g
Thermal Resistance: 1.6°C/W
Suitable for KSI, KSID, KSJ, KWR, KSIA, KYR, KSN

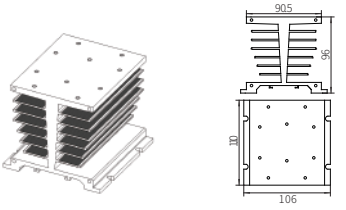


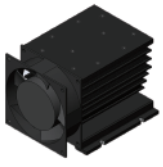
KHS-D50-F Heatsink with Fan
Weight: 645g
Thermal Resistance: 0.6°C/W
Suitable for KSI, KSID, KSJ, KWR, KSIA, KYR, KSN



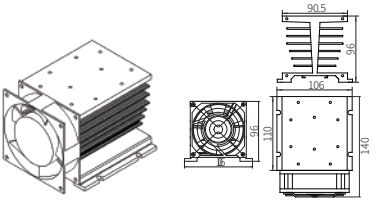


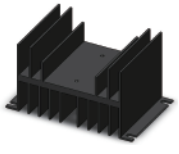
KHS-D110 Heatsink
Weight: 825g
Thermal Resistance: 0.8°C/W
Suitable for KSI, KSID, KSJ, KWR, KYR, KSIA, KSQC, KYRT, KSQF, KSN



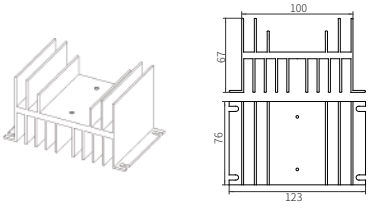


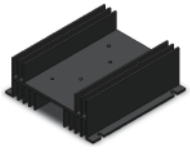
KHS-D110-F Heatsink with Fan
Weight: 1095g
Thermal Resistance: 0.35°C/W
Suitable for KSI, KSID, KSJ, KWR, KYR, KSIA, KSQC, KSQF, KYRT, KSN



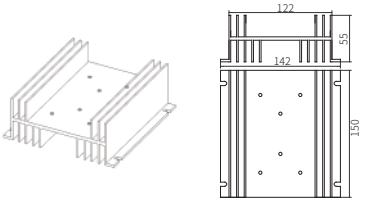


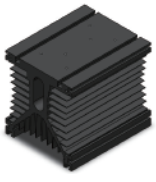
KHS-E76 Heatsink
Weight: 300g
Thermal Resistance: 1.4°C/W
Suitable for KSI, KSID, KSJ, KWR, KSIA, KYR, KSN



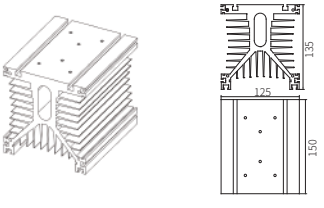


KHS-F150 Heatsink
Weight: 539g
Thermal Resistance: 1.1°C/W
Suitable for KSI, KSID, KSJ, KWR, KYR, KSIA, KSQC, KSQF, KYRT, KSN





KHS-G150 Heatsink
Weight: 2320g
Thermal Resistance: 0.4°C/W
Suitable for KSI, KSID, KSJ, KWR, KYR, KSIA, KSQC, KSQF, KYRT, KSN

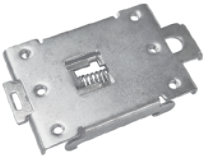


Thermal Pad KTP-0(A)

Thermal Pad KTP-1

Thermal Pad KTP-2

Din-Rail DR-1

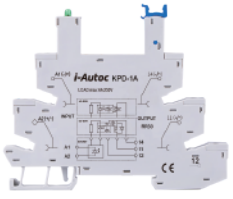


Din-Rail DR-3

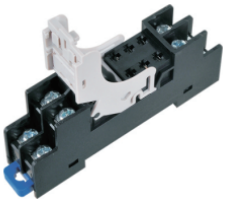
DIN Rail Socket KPD-3A
for KSG/KSGD

DIN Rail Socket KPD-4A
for KSG3R/KG3RD

DIN Rail Socket KPD-1A
for KSMA/KSMD



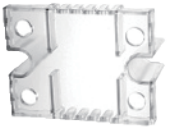
DIN Rail Socket KPD-5A
For KSO/KSOB/KSOD/
KSODB



1 Phase Protection
Cover KPC-0A

3 Phase Protection
Cover KPC-1A

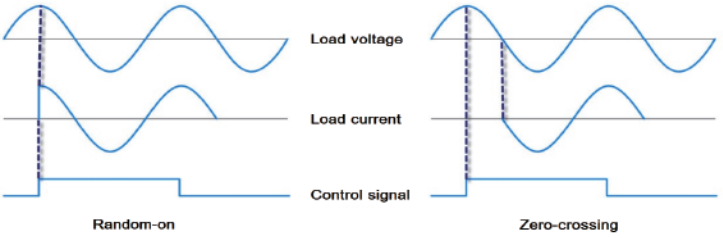
Mini 1 Phase Protection
Cover KPC-2A



1. What's the difference between zero crossing and random-on solid state relay?

Zero crossing: When there is a control signal, the load is connected at the zero-crossing point of AC voltage. Its advantage is that it can suppress the generation of electromagnetic noise and reduce the impact on the power grid. It is recommended for general applications.

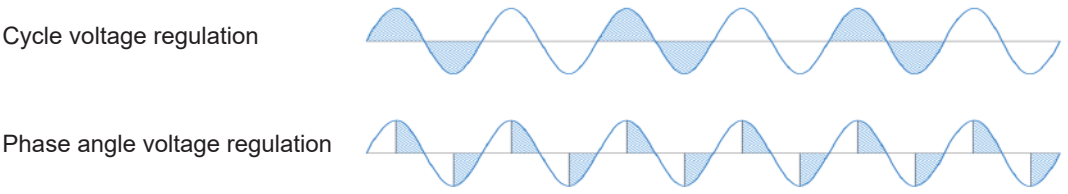
Random-on: When there is a control signal, the load is switched on immediately (at any AC voltage), which is mainly used in dimming and speed regulating applications.



2. What's the difference between cycle voltage regulation and phase angle voltage regulation?

Cycle voltage regulation: The voltage regulation module is controlled by on or off, the on / off time interval is multiple of power grid cycle, and the output power is adjusted by duty cycle. The advantage of the cycle voltage regulation is to be able to turn on/off the machine at the zero-crossing point in order to reduce the impact on the power grid.

Phase angle voltage regulation: The output voltage is controlled by adjusting the conduction angle of every half cycle.



3. Suggestion for the AC load control.

For AC output SSR, there are two switching modes zero-crossing and random-on. Except for some special application (for example phase angel control must apply random-on switching mode), zero-crossing SSR is recommended for resistive, capacitive, lighting control and small inductive loads. Random-on SSR is recommended for the inductive loads with power factor less than 0.8, or when there is a need to have the phase angle control. If there is any special requirement, please contact us for further technical support.

4. How to calculate the rating current of a resistive load?

Single-phase: I＝P/220 or I=P/380

Three-phase: I=P /380/$\sqrt{3}$

Considering the ambient temperature, heat dissipation and other conditions, it is recommended to choose the rated current as 1.4-1.6 times of the exact load current when it is a resistive load.

5. How to calculate the steady-state current of a motor load?

Single-phase motor: I=P/ 220/0.85

Three-phase motor: I=P /380 /$\sqrt{3}$ /0.85

When the motor turns on, the surge current could be 5-7 times of steady-state current and it will last for several seconds. Please consider the derating and contact with our technical team when choose the solid state relay for inductive load.

6. How to choose an appropriate MOV for overvoltage protection?

SSR is used for various applications, overvoltage may occur during its operation. We can use MOV to suppress the transient voltage on the output terminals to reduce the damage to SSR. To choose an appropriate MOV, first you must determine circuit conditions such as peak voltage and current during the event. You also must determine the number of surges the MOV must survive as well as the acceptable let-through voltage for the application.

The transient overvoltage endurance of a 380 series AC SSR is 800V, it can operate a 220VAC load or lower without MOV.

The transient overvoltage endurance of a 480 series AC SSR is 1200V, it can operate a 380VAC load or lower without MOV.

7. Over-current and short-circuit protection.

There is no over-current protection designed in our regular SSR. In order to protect the SSR, we recommend to series connect a fast fuse to the load circuit.

8. Ingress Protection (IP) protection level

The IP rating normally has two (or three) numbers:

Protection from solid objects or materials

Protection from liquids (water)

Protection against mechanical impacts (commonly omitted, the third number is not a part of IEC 60529)

For example, IP20 is used to prevent the human body from touching the terminal directly but not waterproof grade.

9. How to protect a DC SSR controlling an inductive load?

To protect a DC SSR from the electromagnetic field (EMF) when the inductive load is turned off, you need to place a freewheeling diode in reverse parallel across the load.Capacitive load will produce very high surge current at the moment of conduction, which may lead to the damage of solid state relay due to the excessive surge current. Therefore, if the actual load is capacitive, or the load has parallelled large capacitance, it is strongly recommended that NTC should be connected in series in the load loop to suppress surge current in order to avoid damage to the product.

10. Why do I see leakage current from the SSR when the relay is not on?

During the SSR is turned-off, we can observe an extremely small current when apply a voltage to SSR output, due to the power component has an impedance. Besides, the leakage current is caused by the snubber network which is a resistor and capacitor in series placed in parallel across the output of the SSR. This snubber protects the relay from static and commutating dv/dt. Therefore, it is recommended to choose SSR without RC for small power load.

11. Can SSR be used in parallel?

Yes, AC output SSR is not recommended for parallel output. DC output SSR with output in parallel can increase the total current carrying capacity.

12. Can SSR output be used in series?

Yes, but not recommended for series connection.

13. Can AC output SSR be applied to DC load?

No. SCR is usually used as power switch component for AC output SSR, and SCR is self-closing device at zero cross point, so it can only work under AC load.

14. Can DC output SSR be applied to AC loads?

No. AC load is usually controlled by AC output SSR. If you need DC output SSR for control, please contact us.

15. Why do I need to use a heat sink with an SSR? How to select an appropriate heatsink?

When an SSR is on, the SSR will generate heat due to the forward voltage drop across the output. Heat dissipation is an important issue in the use of SSR because it is directly affecting the max. load current and max. allowable ambient temperature of SSR. Usually, the user needs to fix the SSR firmly on the heatsink with a thermal pad or silicone grease in order to improve the heat dissipation performance. For high temperature operation, forced air cooling is also needed.

We can use a formula to calculate the heat dissipation.

Tj-Ta=P*Rja

Tj is junction temperature (℃)

Ta is ambient temperature (℃)

P is total power consumption (W)

Rja is thermal resistance from core to environment of power device (℃ / W)

Thermal resistance of SSR is composed of two parts: Rja = Rjc + Rca

Rjc is thermal resistance of junction to case

Rca is thermal resistance from case to the ambient

We take a relay as example. The Rjc of this product is about 1.7℃/W and Rca is about 8.5℃/W. the maximum allowable junction temperature is 125℃ and the power consumption is P = U * I. when the current is 10A below, the voltage drop of the product is about 1.1V. When the product is not operating with a heatsink, 125 - Ta =1.1*I*(1.7+8.5).

According to the above formula, the maximum load current of the product without heatsink is 8.9A at 25℃ and 5.8A at 60℃.

To select the proper sized heat sink, you need to know two things: the load current and the maximum ambient temperature the relay will be exposed to. Once you know these parameters and have selected the proper SSR, you can now use the thermal derating curves included in the data sheet of the particular model you have selected. For example: SSR # KSI240D60-L, if you want to use it load current at 36A, ambient temperature at 60°C, with this example we go to the data sheet and find 60 A thermal curve. On the left side we find 36A and draw a line straight across to the right then we find the ambient temperature of 60°C on the bottom and draw a line straight up until it intersects with the previous line. At this point we can see that the point falls between the 1.4°C/W and the 0.6°C/W line. You always pick the rating above your point since the heat sink rating below would not keep the relay cool enough. So therefore, we need a 0.6°C/W sized heat sink.

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