PCB Mount

Panel Mount

DIN Rail Mount

Motor Reversing Module

Intelligent SSR

SSR Accessories

PCB Mount

KS32 (AC Output)

Solid State Relay

Vertical Type

Horizontal Type

c**RU**us
Certificate NO.:E365647

CE

DESCRIPTION

KS32 is a set of SPST-NO AC output PCB or Socket mount mini type SSR. The SSR has four DC input options 5VDC, 12VDC, 24VDC and 60VDC for selection and provides 2500Vrms photoelectric isolation between input and output. Pins of the SSR are fully compatible with standard packaged electromechanical relays, thus it will be very convenient for users to install and use.

FEATURES

◆ Mini type SSR, PCB or socket mount
◆ Photoelectric isolation, dielectric strength 2500VAC
◆ Pin-compatible with standard package EMR
◆ TTL and CMOS compatible
◆ I/O modules for interface between PLC and input devices or loads

PRECAUTIONS

1. Soldering must be completed within 10s at 260°C or 5s at 350°C.

2. The SSR's case serves to dissipate the heat generated by the SSR itself. If poor ventilation is unavoidable, the load current must be derated. Please refer to the curve of Max. Load Current vs. Ambient Temperature for derating.

3. If the output transient voltage exceeds the nominal value, a varistor should be connected to the SSR's output terminal in parallel to prevent the SSR being broken down. The recommended varistor voltage is 470V.

4. Please do not use the SSR exceeding the limitation which is specified on this datasheet.

SELECTION GUIDE

KS32	24-	24	Z	1	-Y	H	(XXX)
Type	Control voltage	Load voltage	Switching mode	Load current	Overvoltage protection	Mounting mode	Customer special code
	5: 5VDC	24: 240VAC	Z: Zero-cross	1: 1A	Nil: Not included	H: Horizontal	
	12: 12VDC		P: Random	2: 2A	Y: Included	Nil: Vertical	
	24: 24VDC						
	60: 60VDC						

Note: Only below items are available: KS32/□□-24Z1, KS32/□□-24Z2, KS32/□□-24-Z2-H, KS32/□□-24P1, KS32/□□-24P2, KS32/□□-24P2-H, KS32/□□-24Z1-Y.

INPUT SPECIFICATIONS (Ta=25°C)

Control voltage range	5	4 ~ 6VDC
	12	9.6 ~ 14.4VDC
	24	19.2 ~ 28.8VDC
	60	48 ~ 72VDC
Must turn-on voltage	5	4VDC
	12	9.6VDC
	24	19.2VDC
	60	48VDC
Must turn-off voltage	Zero-cross	5	1VDC
		12	3VDC
		24	10VDC
		60	20VDC
	Random		1VDC
Max. input current		25mA
Max. reverse protection voltage	5	-6VDC
	12	-14.4VDC
	24	-28.8VDC
	60	-72VDC

OUTPUT SPECIFICATIONS (Ta = 25°C)

Load voltage range		48 ~ 280VAC
Max. transient voltage		600Vpk
Load current range	□ □ - □□ □1- □	0.1 ~ 1A
	□ □ - □□ □2- □	0.1 ~ 2A
Max. surge current (10ms)	□ □ - □□ □1- □	30A
	□ □ - □□ □2- □	80A
Max. on-state voltage drop		1.2Vr.m.s.
Max. I²t for fusing (10ms, A²s)	□ □ - □□ □1- □	4.5
	□ □ - □□ □2- □	32
Max. turn-on time	Zero-cross	1/2 Cycle + 1ms
	Random	1ms
Max. turn-off time		1/2 Cycle + 1ms
Frequency range		47 ~ 63Hz
Min. off-state dv/dt		100V/µs
Max. off-state leakage current		1.5 mA

GENERAL SPECIFICATIONS (Ta = 25°C)

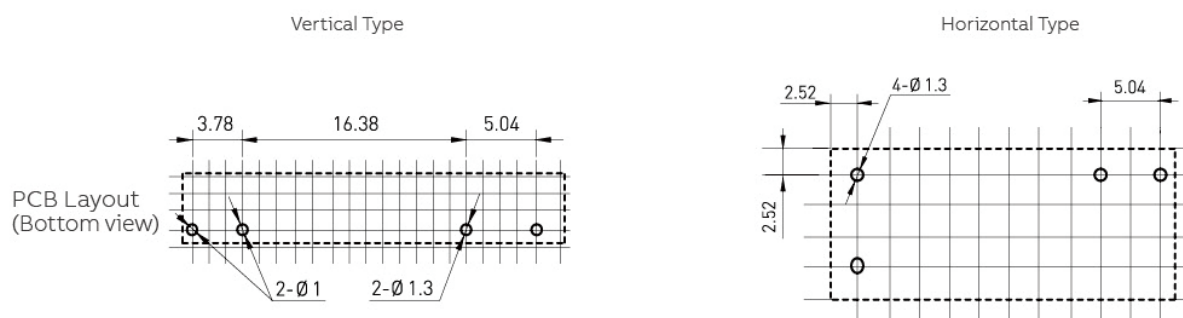|	
Dielectric strength (input/output)	2500VAC 1min
Insulation resistance	1000MΩ (500VDC)
Max. capacitance (input/output)	5pF
Vibration resistance	10 ~ 55HZ, 1.5mm, DA
Operating temperature	-30 ~ 80℃
Storage temperature	-30 ~ 100℃
Ambient humidity	45% ~ 85% RH
Unit weight	Horizontal type approx. 11g, vertical type approx. 4g
Shock resistance	Acceleration 980m/s², continuous surge 6ms

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT

Unit: mm

Outline Dimensions

Vertical Type

28.2 max
5.2 max
15 max
0.4±0.15
3.8±0.6
3.78 ±0.2
16.38±0.3
5.04±0.2

Horizontal Type

29.2 max
12.9 max
15.8 max
0.3±0.15
3.6±0.6
0.5±0.15
20.16±0.3
5.04±0.2
7.56±0.2

PCB and Socket Layout

Vertical Type

3.78
16.38
5.04
PCB Layout (Bottom view)
2-Ø 1
2-Ø 1.3

Horizontal Type

2.52
4-Ø 1.3
5.04
2.52

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OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT

Unit: mm
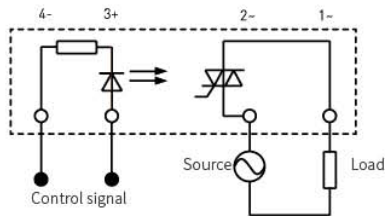
Socket Layout
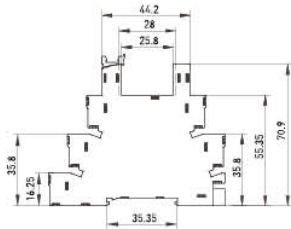
Socket Model: KRS32/V-SC-1 (Input 5/12/24V)
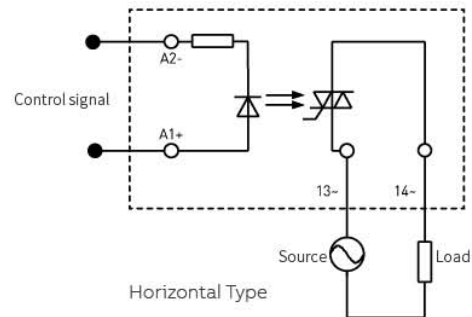KRS32/V-SC-2 (Input 60V)
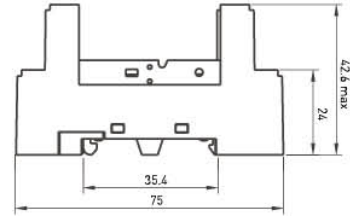
Socket Model: KRS32/H-SC

Wiring Diagram
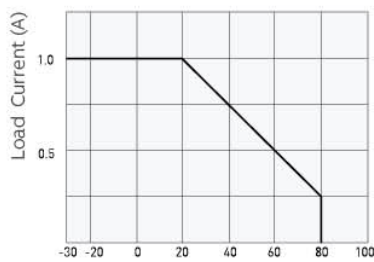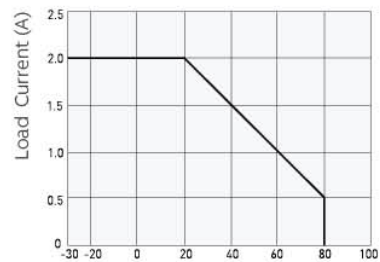

Vertical Type

Horizontal Type

CHARACTERISTIC CURVES
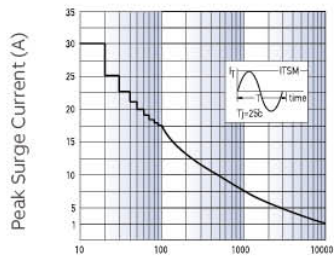

Max. Load Current
vs. Ambient Temperature (1A)

Max. Load Current
vs. Ambient Temperature (2A)

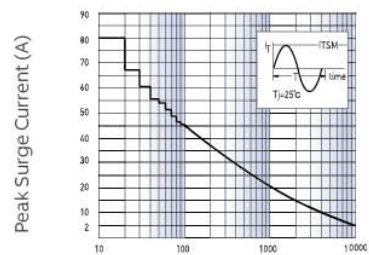Max. Permissible Non-repetitive
Peak Surge Current vs. Continuance Time (1A)

Max. Permissible Non-repetitive
Peak Surge Current vs. Continuance Time (2A)