



SHIZUMA

RELAY CATALOG




SZM1

SZM2

Product features

- Small size, easy to assemble
- High contact load, 1-S 12A; 2-S 8A
- High sensitivity
- Plug-in installation

Model Number Structure

SZM□-□□-□

Contact form(Riveted contact) —————

1: 1PDT

2 :2PDT

S: Product type —————

Type —————

L: LED

Coil voltage —————

DC 3~110V

AC 6~240V

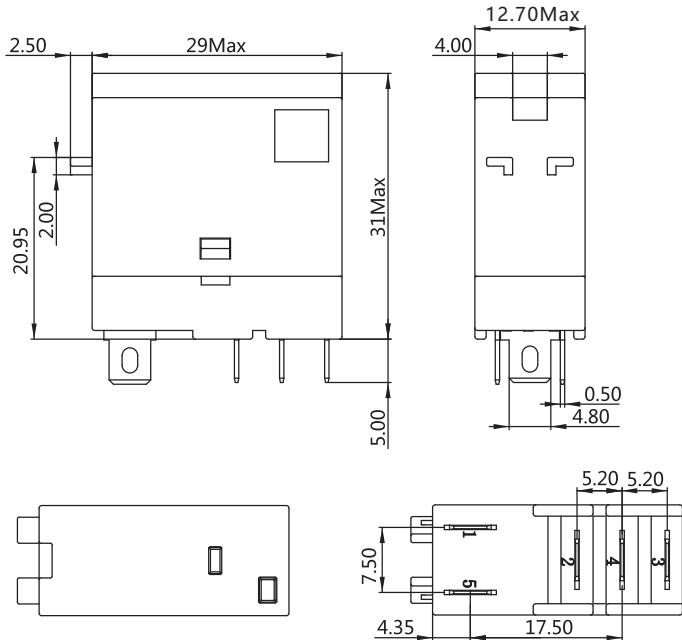
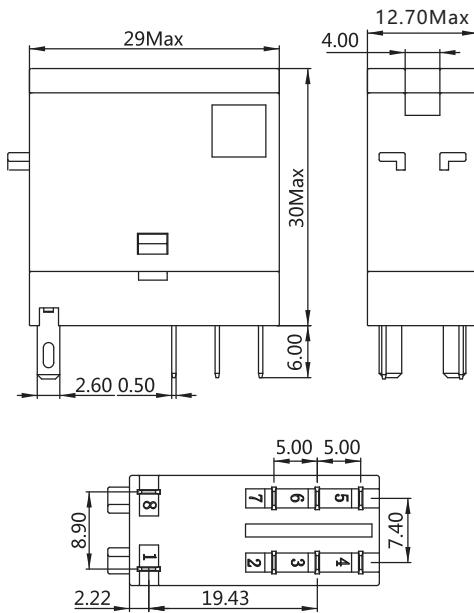
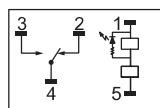
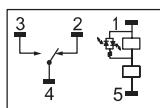
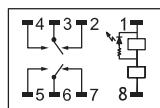
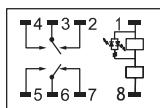
Specifications

Contact Ratings	Contact form	1PDT	2PDT
	Rated load(Resistive load)	12A/250VAC, 30VDC	8A/250VAC, 30VDC
	Switching power(Resistive load)	3000VA, 360W	2000VA, 240W
	Contact resistance(initial)	≤50mΩ	
	Contact materials	Ag alloy	
	Electrical life	1×10 ⁵ times	
	Mechanical life	AC:3×10 ⁷ times DC:5×10 ⁷ times	
	Must-operate voltage (23°C)	DC:≤75% (rated voltage), AC:≤80% (rated voltage) 50/60Hz(rated voltage)	
Dielectric Strength	Must-release voltage (23°C)	DC:≥10% (rated voltage), AC:≥30% (rated voltage) 50/60Hz(rated voltage)	
	Maximum voltage (23°C)	110% (rated voltage)	
	Coil power consumption	DC (W) Approx. 0.53 AC (VA) Approx. 0.9	
	Operate time (rated voltage)	≤20ms	
	Release time (rated voltage)	AC ≤25ms DC ≤10ms, Built in freewheeling diode type: ≤20ms	
	Insulation resistance	1000MΩ (500VDC)	
	Dielectric Strength	Between contacts of same polarity 1000VAC/1min Between contacts of different polarity 3000VAC/1min (Leakage current 1mA) Between contact and coil 5000VAC/1min (Leakage current 1mA)	
	Ambient temperature	-40~70°C	
Shock resistance	Ambient humidity	5%~85%RH	
	Atmospheric pressure	86~106KPa	
	stability	98m/S ²	
	strength	980m/S ²	
	Vibration resistance	10~55Hz double amplitude:	
	Installation mode	Plug-In type	
	Packaging form	Dust cover type	
	Weight	Approx. 20g	

Coil Ratings (23°C)

Rated Voltage V.DC	6	12	24	36	48	100~110
Coil resistance Ω	68	270	1080	2440	4300	18800
Rated Voltage V.AC	6	12	24	48	115	230
Coil resistance Ω	16	62	240	1080	6000	23000

Note: Coil resistance tolerance: Nominal value of coil rated voltage < 110V $\pm 10\%$ Ω, $\geq 110V$ $1\pm 15\%$ Ω.

Dimensions (mm)
SZM1-SL

SZM2-SL

Connecting diagram
SZM1-SL AC

SZM1-SL DC

SZM2-SL AC

SZM2-SL DC



SZU2

SZU4

SZU2T

SZU4T

Product features

- Load 2-Z 8A;4-Z 5A
- Various specifications, equipped with LED indicator device
- With mechanical indicator window
- Plug-in installation

Model Number Structure

SZU□-□□-□

Contact form(Riveted contact) —————

2 : 2PDT

4 : 4PDT

2T : 2PDT with test trigger

4T : 4PDT with test trigger

Z : Product type —————

Type —————

L: LED

Coil voltage —————

DC 6~220V

AC 6~380V

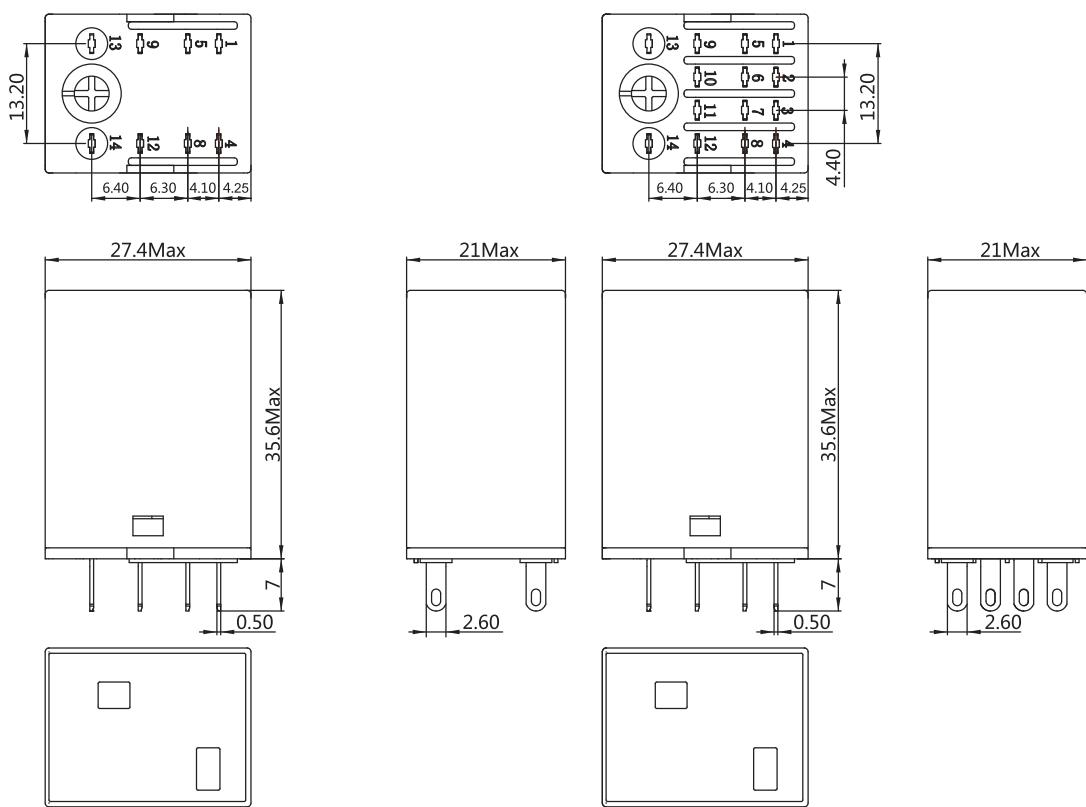
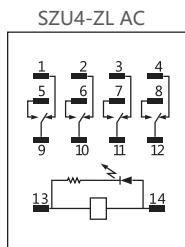
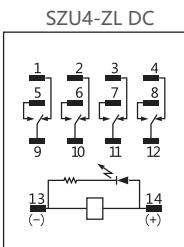
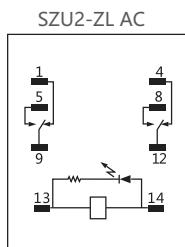
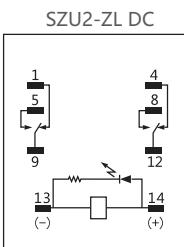
Specifications

Contact Ratings	Contact form	2PDT	4PDT
	Rated load(Resistive load)	8A/250V AC, 30VDC	5A/250VAC, 30VDC
	Switching power(Resistive load))	2000VA, 240W	1250VA, 150W
	Contact resistance(initial)	$\leq 50\text{m}\Omega$	
	Contact materials	Ag alloy	
	Electrical life	1×10^5 times	$AC: 2 \times 10^7$ times
	Mechanical life		$DC: 5 \times 10^7$ times
Must-operate voltage (23°C)		DC: $\leq 75\%$ (rated voltage), AC: $\leq 80\%$ (rated voltage) 50/60Hz(rated voltage)	
Must-release voltage (23)		DC: $\geq 10\%$ (rated voltage),AC: $\geq 30\%$ (rated voltage) 50/60Hz(rated voltage)	
Maximum voltage (23)		110% (rated voltage)	
Coil power consumption	DC (W)	Approx. 0.9	
	AC (VA)	Approx. 1.2	
Operate time (rated voltage)		$\leq 20\text{ms}$	
Release time (rated voltage)	AC	$\leq 25\text{ms}$	
	DC	$\leq 15\text{ms}$: Built in freewheeling diode type: $\leq 25\text{ms}$	
Insulation resistance		1000M Ω (500VDC)	
Dielectric Strength	Between contacts of same polarity	1000VAC/1min	
	Between contacts of different polarity	2Z: 2000VAC/1min (Leakage current 1mA)	
	Between contact and coil	4Z: 1500VAC/1min (Leakage current 1mA)	
Ambient temperature		$-40\sim 70^\circ\text{C}$	
Ambient humidity		5%~85%RH	
Atmospheric pressure		86~106KPa	
Shock resistance	stability	98m/S ²	
	strength	980m/S ²	
Vibration resistance		10~55Hz double amplitude: 1mm	
Installation mode		Plug-In type	
Packaging form		Dust cover type	
Weight		Approx. 32g	

Coil Ratings (23°C)

Rated Voltage V.DC	6	12	24	48	100~110	220
Coil resistance Ω	41	165	662	2725	11440	53780
Rated Voltage V.AC	12	24	48	110~120	220~240	
Coil resistance Ω	45	180	785	4430	15900	

Note: Coil resistance tolerance: Nominal value of coil rated voltage < 110V ± 10%Ω, ≥ 110V 1 ± 15%Ω.

Dimensions (mm)

Connecting diagram


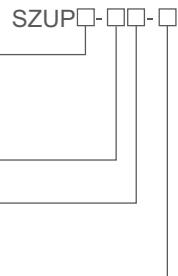

SZUP2-CL

SZUP2T-CL

Product features

- › Load 2-C 10A
- › Various specifications, equipped with LED indicator device
- › With mechanical indicator window
- › Plug-in installation

Model Number Structure



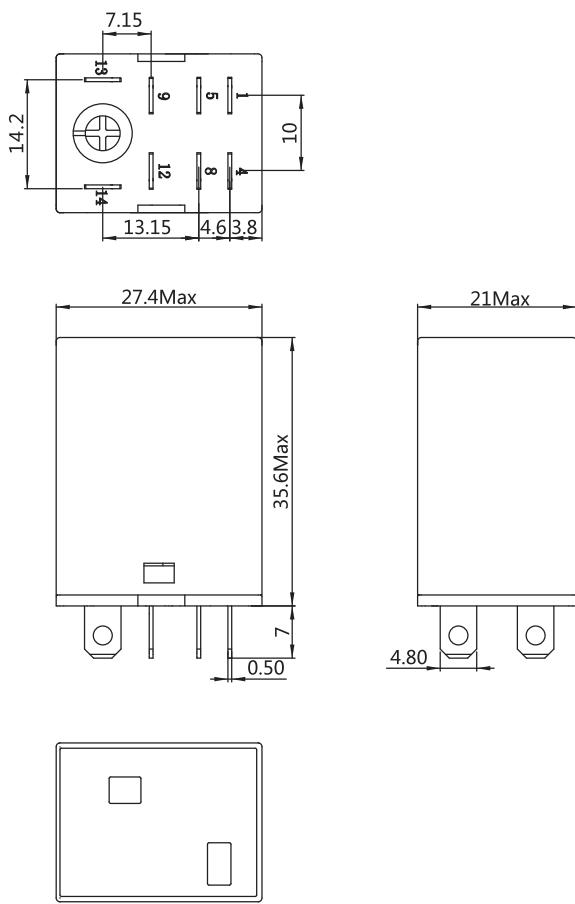
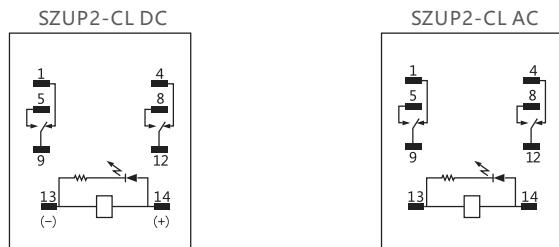
Specifications

Contact Ratings	Contact form	2PDT
	Rated load(Resistive load)	10A/250VAC, 30VDC
	Switching power(Resistive load)	2500VA, 300W
	Contact resistance(initial)	$\leq 50\text{m}\Omega$
	Contact materials	Ag alloy
	Electrical life	1×10^5 times
	Mechanical life	AC: 1×10^7 times
Must- operate voltage(23°C)		DC: $\leq 75\%$ (rated voltage), AC: $\leq 80\%$ (rated voltage) 50/60Hz(rated voltage)
Must-release voltage (23)		DC: $\geq 10\%$ (rated voltage), AC: $\geq 30\%$ (rated voltage) 50/60Hz(rated voltage)
Maximum voltage(23)		110% (rated voltage)
Coil power consumption	DC (W)	Approx. 0.9
	AC (VA)	Approx. 1.2
Operate time (rated voltage)		$\leq 20\text{ms}$
Release time (rated voltage)	AC	$\leq 25\text{ms}$
	DC	$\leq 15\text{ms}$, Built in freewheeling diode type: $\leq 25\text{ms}$
Insulation resistance	Between contacts of same polarity	1000M Ω (500VDC)
Dielectric Strength	Between contacts of different polarity	2000VAC/1min (Leakage current 1mA)
	Between contact and coil	2000VAC/1min (Leakage current 1mA)
Ambient temperature		-40~70°C
Ambient humidity		5%~85%RH
Atmospheric pressure		86~106KPa
Shock resistance	stability	98m/S ²
	strength	980m/S ²
Vibration resistance		10~55Hz double amplitude: 1mm
Installation mode		Plug-In type
Packaging form		Dust cover type
Weight		Approx. 32g

Coil Ratings (23°C)

Rated Voltage V.DC	6	12	24	48	100~110	220
Coil resistance Ω	41	165	662	2725	11440	53780
Rated Voltage V.AC	12	24	48	110~120	220~240	
Coil resistance Ω	45	180	785	4430	15900	

Note: Coil resistance tolerance: Nominal value of coil rated voltage < 110V $\pm 10\%$ Ω, $\geq 110V$ $1\pm 15\%$ Ω.

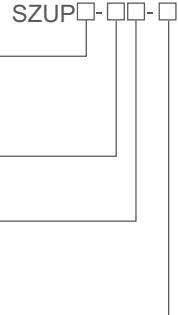
Dimensions (mm)

Connecting diagram



SZUP4-CL

Product features

- Load 3-C 10A;4-C 10A
- Various specifications, equipped with LED indicator device
- Plug-in installation

Model Number Structure



Contact form(Riveted contact) —————

3: 3PDT

4: 4PDT

C : Product type —————

Type —————

L: LED

Coll voltage —————

DC 6~220V

AC 6~380V

Specifications

	Contact form	3PDT	4PDT
Contact Ratings	Rated load(Resistive load)	10A/250VAC,30VDC	10A/250VAC,30VDC
	Load motor	1/6HP 240VAC	1/6HP 240VAC
	Switching power(Resistive load)	2500VA 300W	2500VA 300W
	Contact resistance(initial)	$\leq 50\text{m}\Omega$	
	Contact materials	Ag alloy	
	Electrical life(Frequency 1s on, 1s off)	1×10^5 times	
	Mechanical life	AC: 2×10^7 times DC: 5×10^7 times	
	Must-operate voltage(23°C)	DC: $\leq 75\%$ (rated voltage), AC: $\leq 80\%$ (rated voltage) 50/60Hz(rated voltage)	
	Must-release voltage (23)	DC: $\geq 10\%$ (rated voltage), AC: $\geq 30\%$ (rated voltage) 50/60Hz(rated voltage)	
	Maximum voltage(23)	110% (rated voltage)	
	Coil power consumption	DC (W) AC (VA)	4C-Approx. 1.5 4C-Approx. 2.5
	Operate time (rated voltage)	$\leq 20\text{ms}$	
	Release time (rated voltage)	AC DC	$\leq 25\text{ms}$ $\leq 15\text{ms}$, Built in freewheeling diode type: $\leq 25\text{ms}$
	Insulation resistance		1000M Ω (500VDC)
Dielectric Strength	Between contacts of same polarity	1000VAC/1min (Leakage current 1mA)	
	Between contacts of different polarity	2000VAC/1min (Leakage current 1mA)	
	Between contact and coil	2000VAC/1min (Leakage current 1mA)	
Ambient temperature		$-25 \sim +55^\circ\text{C}$	
Ambient humidity		35% ~ 85%RH	
Atmospheric pressure		86 ~ 106KPa	
Shock resistance		10G (Sine half wave pulse: 11ms)	
Vibration resistance		10~55Hz double amplitude: 1mm	
Installation mode		Plug-In type	
Packaging form		Dust cover type	
Weight		3C-Approx. 50g	4C-Approx. 65g

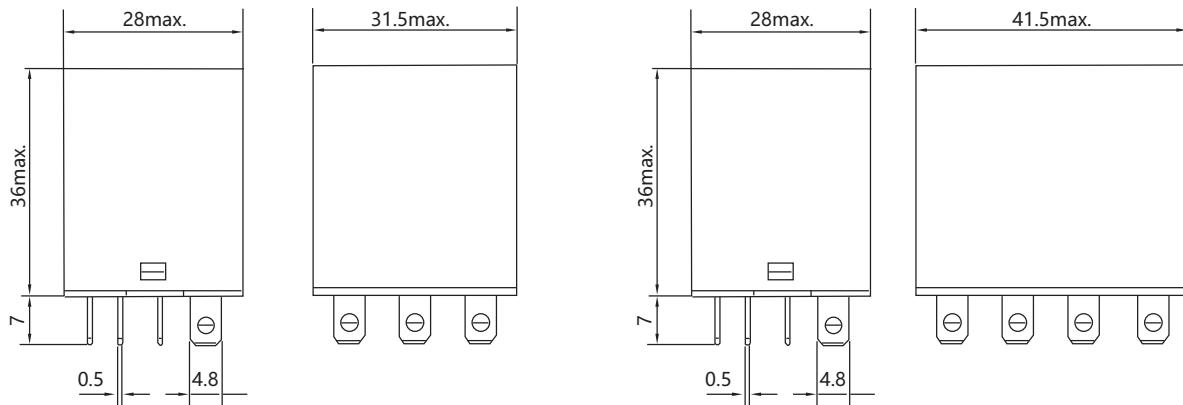
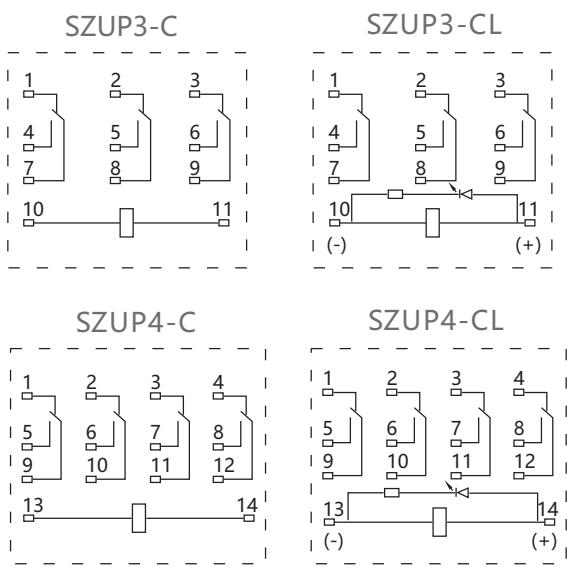
Coil Ratings (23°C)
SZUP3-C

Rated Voltage V.DC	6	12	24	48	100~110	220
Coil resistance Ω	25	100	400	1600	8400	33000
Rated Voltage V.AC	6	24	48	110~120	220~240	380
Coil resistance Ω	6.5	102	410	2500	10000	26000

SZUP4-C

Rated Voltage V.DC	6	12	24	48	100~110	220
Coil resistance Ω	24	96	360	1500	6800	29000
Rated Voltage V.AC	6	24	48	110~120	220~240	380
Coil resistance Ω	5	80	320	1680	8000	20000

Note: Coil resistance tolerance: Nominal value of coil rated voltage < 110V±10%Ω, ≥110V 1±15%Ω.

Dimensions (mm)

Connecting diagram


SH1M-05T (Guide rail installation)

Applicable relay

SZM1-SL


Specifications

Model	Current	A	12
Nominal Load	Voltage	V	250VAC/DC
Dielectric Strength	Between Coil and Contact	V/S	4000
	Between contacts of the same polarity	V/S	1000
	Between contacts of the different polarity	V/S	3000
Torque	N.m	1.0	
Wire Size	AWG/mm ²	20-14/0.5-2.5	
Ambient temperature	°C	-40-70	
Unit Weight	g	24	

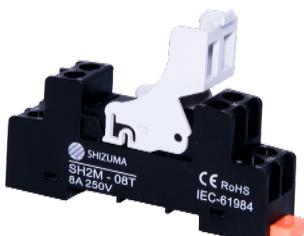
Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH1M-05T	Assembled	-

SH2M-08T (Guide rail installation)

Applicable relay

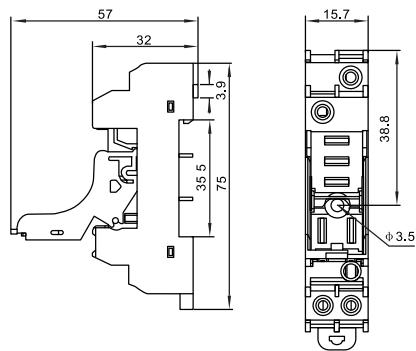
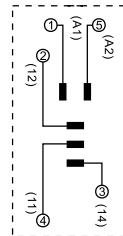
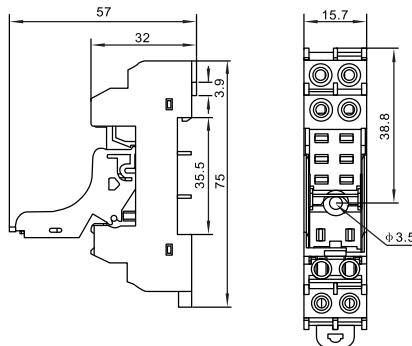
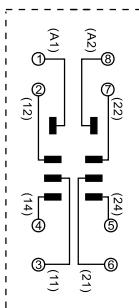
SZM2-SL


Specifications

Model	Current	A	8/10
Nominal Load	Voltage	V	250VAC/DC
Dielectric Strength	Between Coil and Contact	V/S	4000
	Between contacts of the same polarity	V/S	1000
	Between contacts of the different polarity	V/S	3000
Torque	N.m	1.0	
Wire Size	AWG/mm ²	20-14/0.5-2.5	
Ambient temperature	°C	-40-70	
Unit Weight	g	29	

Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH2M-08T	Assembled	-

Dimensions (mm)

Internal connections

Dimensions (mm)

Internal connections


RELAY SOCKET

SH2U-08T (Guide rail installation)

Applicable relay
SZU2-ZL



Specifications

Model	Current	A	8
Nominal Load	Voltage	V	250VAC/DC
	Between Coil and Contact	V/S	4000
Dielectric Strength	Between contacts of the same polarity	V/S	1000
	Between contacts of the different polarity	V/S	3000
Torque	N.m	1.0	
Wire Size	AWG/mm ²	20-14/0.5-2.5	
Ambient temperature	°C	-40-70	
Unit Weight	g	30	

Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH2U-08T	Assembled	-

SH4U-14T (Guide rail installation)

Applicable relay
SZU4-ZL



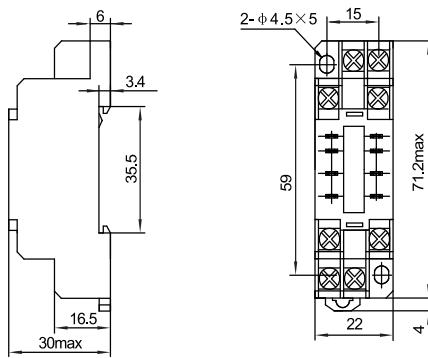
Specifications

Model	Current	A	5
Nominal Load	Voltage	V	250VAC/DC
	Between Coil and Contact	V/S	4000
Dielectric Strength	Between contacts of the same polarity	V/S	1000
	Between contacts of the different polarity	V/S	3000
Torque	N.m	1.0	
Wire Size	AWG/mm ²	20-14/0.5-2.5	
Ambient temperature	°C	-40-70	
Unit Weight	g	44	

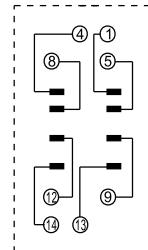
Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH4U-14T	Assembled	-

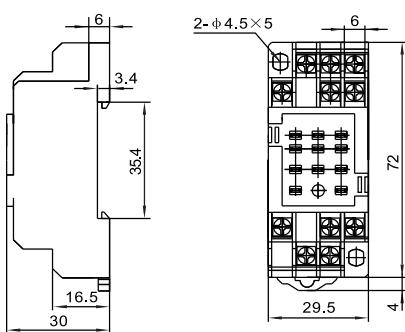
Dimensions (mm)



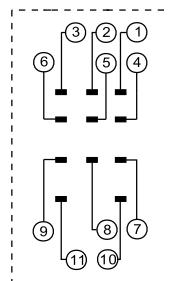
Internal connections



Dimensions (mm)



Internal connections



RELAY SOCKET

SH2UP-08T (Guide rail installation)

Applicable relay

SZUP2-CL



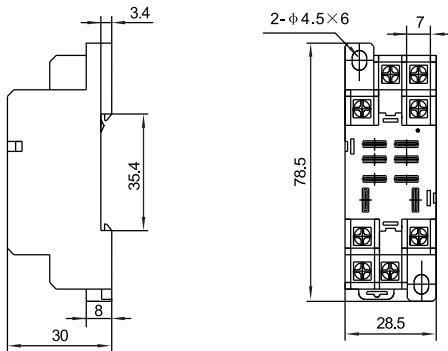
Specifications

Model		
Nominal Load	Current	A 10
	Voltage	V 250VAC/DC
Dielectric Strength	Between Coil and Contact	V/S 4000
	Between contacts of the same polarity	V/S 1000
	Between contacts of the different polarity	V/S 3000
Torque	N.m	1.0
Wire Size	AWG/mm ²	20-14/0.5-2.5
Ambient temperature	°C	-40-70
Unit Weight	g	31

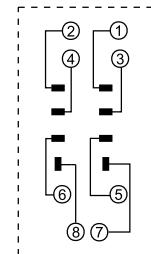
Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH2UP-08T	Assembled	-

Dimensions (mm)



Internal connections



SH4UP-14T (Guide rail installation)

Applicable relay

SZUP4-CL



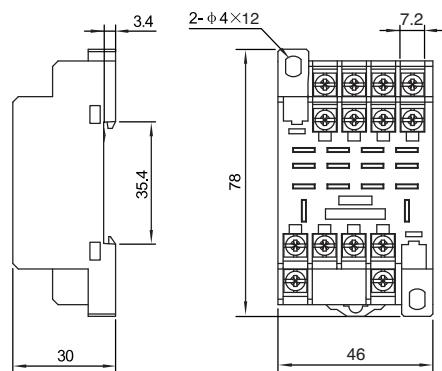
Specifications

Model		
Nominal Load	Current	A 10
	Voltage	V 250VAC/DC
Dielectric Strength	Between Coil and Contact	V/S 4000
	Between contacts of the same polarity	V/S 1000
	Between contacts of the different polarity	V/S 3000
Torque	N.m	1.0
Wire Size	AWG/mm ²	20-14/0.5-2.5
Ambient temperature	°C	-40-70
Unit Weight	g	67.3

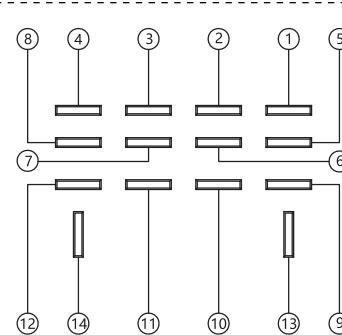
Accessories

Model	Plastic retaining and release clip	Metal retaining clip
SH4UP-14T	Assembled	-

Dimensions (mm)



Internal connections





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