SONG CHUAN

Industrial relay catalog

Song Chuan is one of the world's leading manufacturers of electro-mechanical components. For over 30 years, we have been developing, making and marketing product solutions for renowned companies all over the world. Quickly, individually and reliably. Our European sales headquarters is located right in the heart of Germany.

The factory in Xiamen, China, is certified in accordance with ISO 14001, ISO 9001, ISO/TS 16949

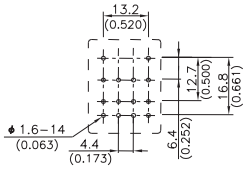
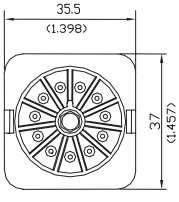
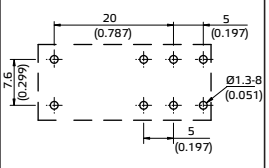
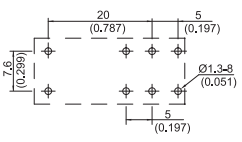
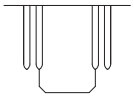
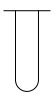
Index

Industrial Catalog

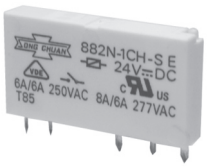
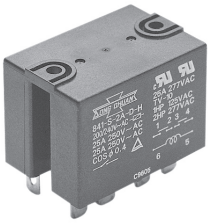
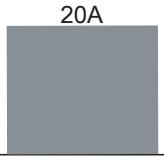
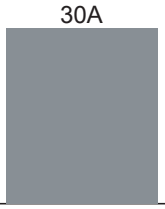
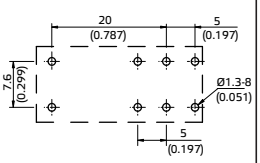
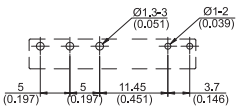
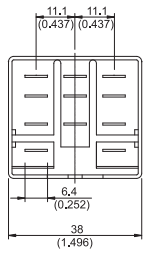
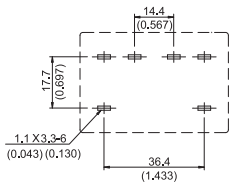
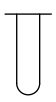
SONG CHUAN

Industrial Relays

Relays Selection Chart

Type		305	205	507	507 - 2 pole
Photo / Description					
Outline (L×W×H) mm No including terminals		27.5x21x37.4	37x35.5x59	29x12.5x15.7	29x12.5x15.7
Contact configuration		4C	2C · 3C · 2T · 3T	1A、1C	2A、2C
Max. Allowable Contact current (A)	45 40 35 30 25 20 15 10 5 3	10A	10A	16A	12A
Contact rating Resistive load		10A 250VAC	2C/3C : 10A 250VAC 2T/3T : 4A 250VAC	12A 240VAC (507/N) 10A 240VAC (N1) 16A 240VAC(H/HN)	8A 240VAC
Coil voltage	DC	12-220V	12-220V	3～110V	3-48V
	AC	12-240V	24-230V	6～240V	6-240V
Power consumption	DC	1.0W	1.2W	0.53W、0.40W、0.25W	0.53W
	AC	0.98VA	2.0VA	0.75VA	0.75VA
Life expectancy Mechanical (Min.)		$2x10^7$	$2x10^7$	$3x10^7$	$3x10^7$
Electrical (Min.)		------	------	$1x10^5$	$1x10^5$
Dielectric strength Open contact		1000VAC	1500VAC	1000VAC	1000VAC
Contact and coil		2500VAC	2500VAC	5000VAC	5000VAC
Contact circuits		2000VAC	2500VAC	------	2500VAC
Terminal layout mm (inch) Bottom view (PCB layout)					
Terminal type					
Safety approval		UL CSA	UL CSA	UL VDE	UL VDE
Page no.		6-11	12-19	20-30	20-30

Relays Selection Chart

507(inrush)	882	735	841
			
29x12.5x15.7	28x5x15	38x34.8x47.5	51.5x34.9x36.8
1A · 1C	1A · 1C	1 form C to 3 form C	1A - 2A
			
1500W 240VAC	NC: 6A 240VAC NO: 8A 240VAC NC/NO: 6A/6A 240VAC	1,2 form C: 20A 240VAC 3 form C: 20A 120VAC	1A: 30A 220VAC 2A: 25A 220VAC
3-48V	3-60V	6-125V	3-200V
------	——	6-240V	6-240V
0.53W	0.21W · 0.17W	1.2W · 1.5W	1.92W
------	-——	3.0VA · 3.4VA	1.7VA · 2.7VA
3×10^7	$1x10^7$	$1x10^7$	$5x10^6$
3×10^4	$1x10^4$	$1x10^5$	$1x10^5$
1000VAC	1000VAC	1000VAC	2000VAC
5000VAC	4000VAC	1600VAC	4000VAC
------	------	1600VAC	2000VAC
			
			
UL | VDE	UL | VDE	UL | CSA | FI/CE	UL | TUV
20-30	31-37	38-45	46-54

Standard Packaging

Relay series	Dimensions[(LxWxH) cm]	PCS / Tube, Tray	PCS / Box	G.W. kg / Box
882	57.5×13.8×9.7	18 / Tube	900	6.4
5007	65.4×19.4×18.3	20 / Tube	1000	15.6
841	53.5×36.5×21.8	20 / Tray	200	20
841 (C1)	70.7×35.8×23.8	20 / Tray	200	20
205	39.1×16.2×20.4	10 / Tray	100	9
735	53.5×35.8×24.0	20 / Tray	200	20
305	32.4×24.3×11.2	10 / Tray	200	6.6

For any details regarding the accessories please check under the relay inside the catalogue.

Cross Reference Sheet

Song Chuan	Finder	Fujitsu	Hongfa	OMRON	Panasonic	Relpol	TYCO
305	55.34	-----	HF18FF (JZX-18FF)	MY4	HC4	R4	PT5
205	60.12/60.13	-----	HF1OFF/ HF1OFH	MK2/MK3	-----	R15	MT2/MT3
882	34.51	FTR-LY	HF41F	-----	APE	RM699V	SNR/ V23092
507-1pole	40.31/41.31	VS/FTR-H1	JQX-14FF/ HF115F-A	G2R-1/ G2RL-1	JW1	RM92/ RM87	RP41/RP81 RT1/RTB/ RX114
507H-1pole	40.61/41.61	VSB/FTR-K1	JQX-14FW/ HF115F-A	G2R-1-E/ G2RL-1-E/ G5RL	ALZ	RM83/ RM85	RP3/RP7/ RT3/RTD/ RX314
507-2 pole	40.52/44.52/ 44.62/41.52	VB/FTR-F1	JZX-14OFF/ HF115F-A	G2R2/ G2RL-2	JW2	RM94/ RM84	RP42/RP82/ RT42/RTE/ RX424
735	62.82/62.83	-----	-----	-----	-----	RUC	RM
841	-----	-----	HF116F	G7L	HE	-----	-----

Contact Material & Applications

Contact Material	Attached by		Typical Properties	Typical Applications	Range of Application
	Sulfur	Oxidation			
Fine Gold Au	No	No	Best corrosion resistance, too soft as pure metal. Cold welding danger	Gold plating > 3 μm Gold flashing > 0.2 μm for contact protection	N/A
Hard Gold AuNi 1	No	No	Excellent corrosion resistance, stable contact resistance for low loads	Dry circuits used in sulphuric atmosphere	μV~60V μA~0.2A
Silver-Fine Grain AgNi. 15	Yes	No	Mechanical stability, low tendency for welding, harder than pure Ag, but slightly higher contact resistance	Universal applications for medium size loads higher loads than pure Ag	> 12V 10mA~10A
Silver-Nickel AgNi 10	Yes	No	Resists wear, slightly susceptible to welding. High contact resistance	Loads in the medium range power applications, DC loads	> 12V > 100 mA
Silver Cad Oxide AgCdO	Yes	No	Less susceptible to welding than AgNi, high wear resistivity. Minor environmental concerns recently	Particularly suited for inductive loads	> 12V > 100 mA
Silver Tin Oxide AgSnO	Yes	No	Lowest welding tendency Very high wear resistance Little material transfer	Circuits with medium to heavy loads, DC switching	> 12V > 100 mA
Silver Tin Indium AgSnOInO	Yes	No	Same as above but more resistance to in-rush, less welding, stable material	Same as above plus higher in-rush applications	> 12V > 100 mA

While there are several other possible contact materials, these are the most commonly used in electromechanical relays. These materials represent the range from 200 mAmps to 50 Amps, 100 mV to 600V applications. For specific applications, contact Song Chuan Europe for assistance in choosing a relay or contact material.

German Technology

Features

- 4PDT General Purpose Power Relay
- DC/AC coil.
- 10A 24VDC/250VAC; UL, CSA/CUS Approvals.
- With position indicator and manual override.
- Optional LED and protection diode.
- Comply with RoHS Directive 2011/65/EU.

Type List

Terminal style	Contact form	Designation (provid with)	Enclosure style	
			Dust cover with manual	Dustcover with lockable manual
Quickterminal	4C (4PDT)	LED	305-4CC-D-1	305-4CC-DM-1
			305-4CC-D-4	305-4CC-DM-4

Ordering Information

305	-	4C	CA	-	DM	-	1	XXVXC
1		2	3		4		5	6

1. 305 -- Basic series designation

2. 4C -- Four pole double throw

3. C -- Contac material AgNi
   CA -- Contact material AgNi + Au plating

4. D -- Dust coer with manual
   DM -- Dust cover with lockable manual

5. Blank -- Without special features
   1 -- Coil parallel with LED
   2 -- Coil parallel with diode, the positive pole „+“ on the #14 terminal
   3 -- Coil parallel with diode, the negative pole „-“ on the #14 terminal
   4 -- Coil parallel with diode & LED, the positive pole „+“ on the #14 terminal
   5 -- Coil parallel with diode & LED, the negative pole „-“ on the #14 terminal

6. XXVXC -- Coil voltage (please refer to the coil rating data for the availability)”

Contact Rating

Rated load (resistive)	10A / 250VAC
Max. switching current	20A
Max. switching capacity	2500VA

SONG CHUAN 305

Coil Rating (DC)

Rated voltage (V)	Rated current ±10% at 23ºC (mA)	Coil resistance 10% at 23ºC (Ω)	Max. continuous voltage at 60ºC	Pick up voltage (Max) at 23ºC	Drop out voltage (Min) at 23ºC	Power consumption at rated voltage
12	83.9	143	110% of rated voltage	80% of rated voltage	5% of rated voltage	approx. 1.0W
24	41.7	576				
48	21.3	2,250				
60	18.6	3,225				
110	9.1	12,100				
125	8.8	14,200				
220	5.0	44,230				

Coil Rating (AC)

Rated voltage (V)	Coil resistance ±10% at 23ºC (Ω)	Max. continuous voltage at 60ºC	Pick up voltage (Max) at 23ºC	Drop out voltage (Min) at 23ºC	Power consumption at rated voltage
12	46.5	110% of rated voltage	85% of rated voltage	15% of rated voltage	approx. 0.98VA
24	177				
48	762				
60	1,200				
115	4,570				
120	4,570				
220/230/240	19,040				

Specification

Contact material	AgNi alloy	
Contact resistance (1)	100mΩ Max.	
Operate time (1)	10ms Max.	
Release time (1)	10ms Max.	
Insulation resistance (1)	1,000 MΩ Min. (DC 500V)	
Dielectric strength (1)	Between open contact	: AC 1000V, 50/60Hz 1min.
	Between contact and coil	: AC 2500V, 50/60Hz 1min.
	Between contact circuits	: AC 2000V, 50/60Hz 1min
Vibration resistance	Operating extremes	30 ~ 100Hz, NC>2G, NO>10G
Life expectancy	Mechanical	20,000,000 operations (frequency 18,000 operations/hr)
Operating ambient temperature	-40 ~ +60ºC (no freezing)	
Weight	Approx. 33g	

Note : (1) initial value

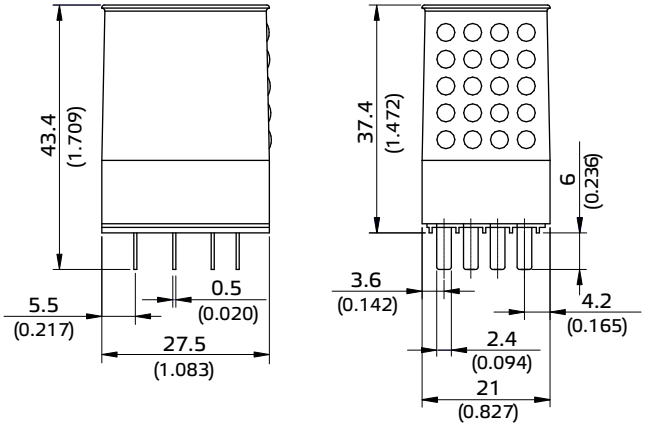
Safety Approval

Certified	UL	CSA / CUS
File No.	E 74321	171397

Safety Approval Rating

UL	CSA / CUS
10A 24VDC /250VAC 1/6HP 120VAC / 240VAC	10A 24VDC /250VAC

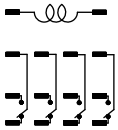
Outline Dimensions



Wiring Diagram

BOTTOM VIEW

4C



Engineering Data

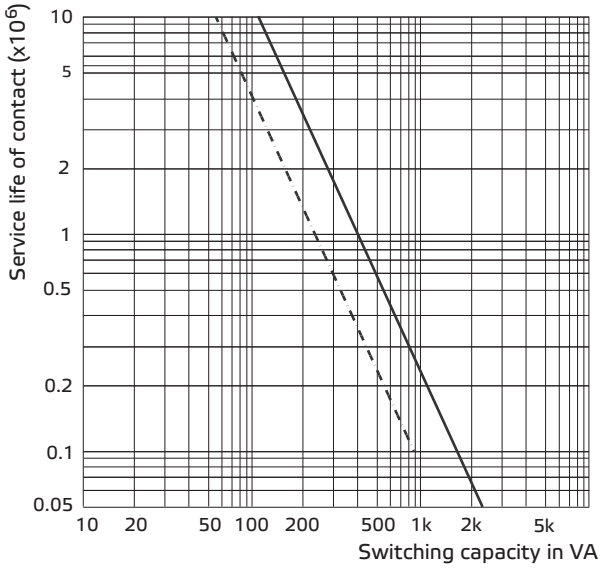
Electrical Service Life AC

90 % operating

—— resistive load

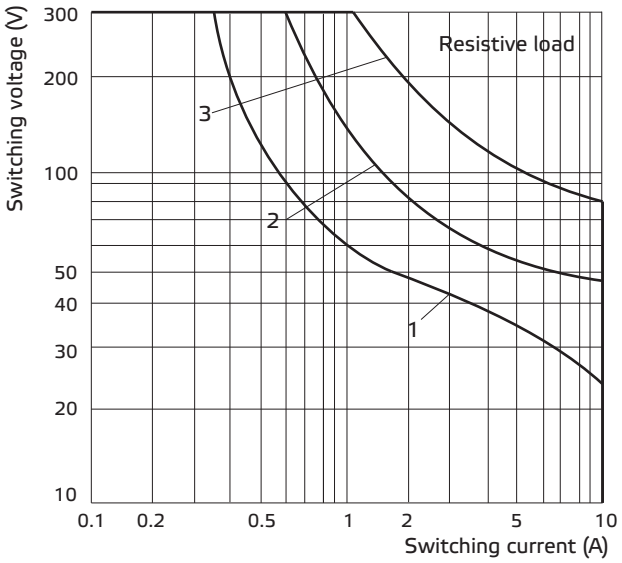
- - - - inductive load

cos ϕ = 0.4...0.7

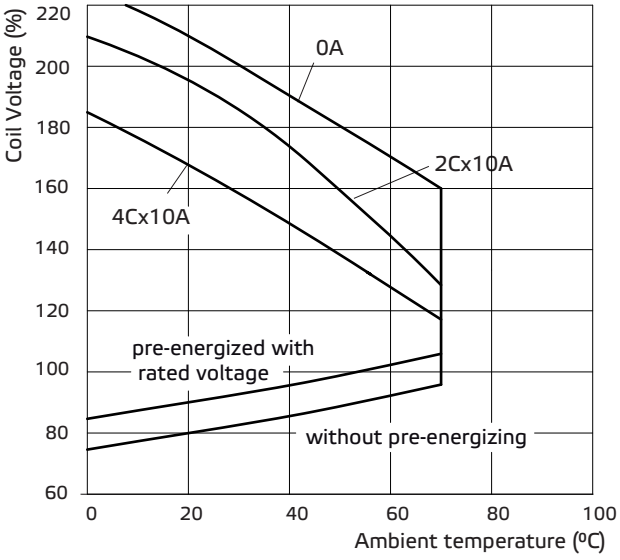


Max DC load breaking capacity

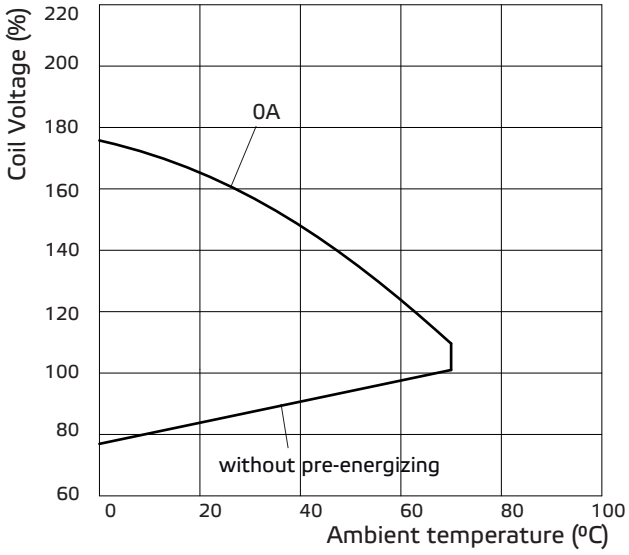
1 one contact
2 two contacts in series
3 four contacts in series



Coil operating range DC



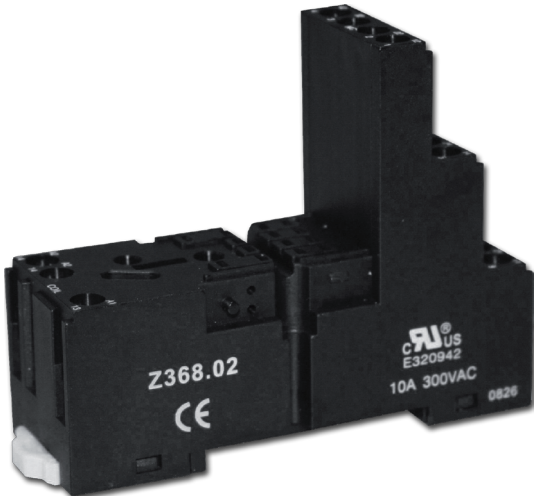
Coil operating range AC

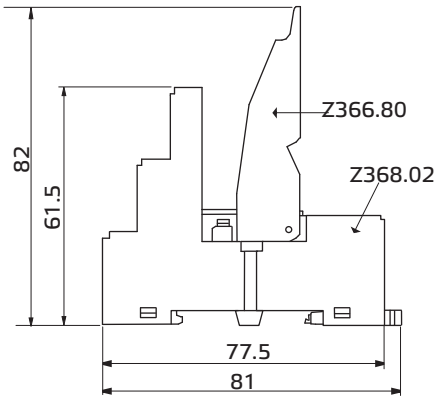


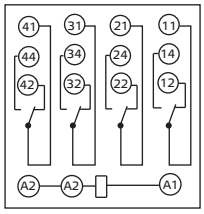
DIN-rail socket and accessories
For miniature 4 pole relay

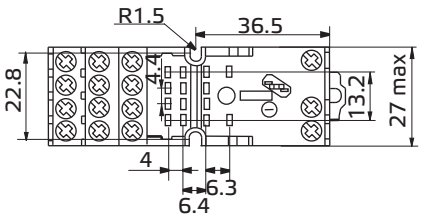
Features
- Protection group C250 (VDE 0110b/2)
- Sockets for 35mm DIN rail mount or screw mounting
- Rising clamp terminals
- Accessories: retaining clip, writing plates, modules
- Sockets and accessories comply with RoHS-Directive 2002/95/EC

Z368.02 socket for 4pole 305 with screw connection, logical

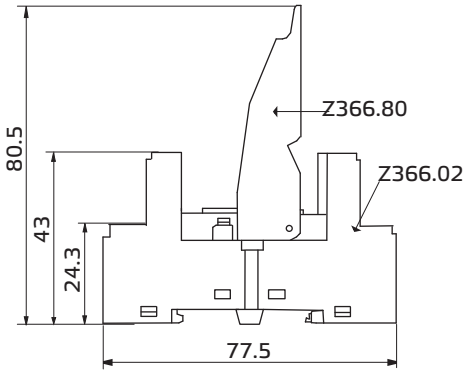


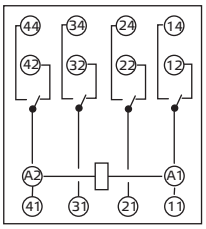


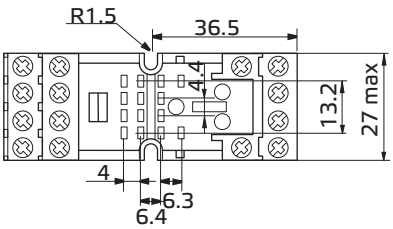




Z366.02 socket for 4pole 305 with screw connection



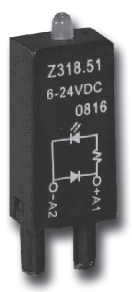


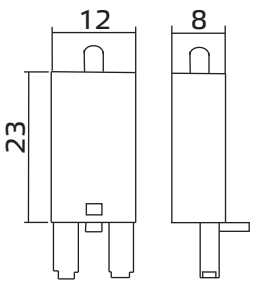


Technical data

Sockets with screw terminals for DIN-rail mounting	
Rated current	10A
Rated voltage	300VAC
Dielectric strength coil / contact	2500VAC
Dielectric strength open contact circuit	1200VAC
Dielectric strength adjacent contact circuits	2500VAC
Insulation category acc. VDE0110b/2.79	C250
Ambient temperature	-40 ..+70ºC
Terminal protection degree according to EN60529	IP20
Terminal capacity	2 x 2.5 mm²
Terminal capacity with cable end	2 x 1.5 mm²
Maximum torque	0.7Nm
Screw type	Combination of slotted and Phillips head screw M3
Packaging unit sockets	10 pcs
Packaging unit retaining clips	10 pcs
Packaging unit modules	20 pcs
Approvals	CUL

Standard part numbers	
DIN rail socket - logical	Z368.02
DIN rail socket	Z366.02
Plastic retaining clip	Z366.80
Writing plate - supplied with socket	SK4P
Protection diode (+ A1)	Z318.53
Protection diode (+ A2)	Z318.50
Green LED + protection diode 6/24VDC (+ A1)	Z318.51
Red LED + protection diode 6/24VDC (+ A1)	Z318.51R
Green LED 6..24V AC/DC (+ A1)	Z318.52
Red LED 6..24V AC/DC (+ A1)	Z318.52R
Green LED + protection diode 6/24VDC (+ A2)	Z318.57
Red LED + protection diode 6/24VDC (+ A2)	Z318.57R
Green LED 110..230V AC/DC (+ A1)	Z318.58
Red LED 110..230V AC/DC (+ A1)	Z318.58R
Varistor 24VAC	Z318.54
Varistor 230VAC	Z318.55





Module Z318.5x

Clip Z366.80

German Technology

Features

- DPDT ; TPDT General Purpose Power Relay.
- DC / AC Coil.
- Single or Twin contacts with / without gold plated.
- With position indicator, manual override and override level.
- Optional LED and protection diode.
- Comply with RoHS-Directive 2011/65/EU.

Type List

Terminal style	Contact form	Designation (provided with)	Enclosure style	
			Dust cover with manual	Dust cover with lockable manual
8PIN or 11PIN quick terminal	2C (DPDT)	LED	205-2CC-D-1	205-2CC-DM-1
		Diode & LED	205-2CC-D-3	205-2CC-DM-3
	3C (TPDT)	LED	205-3CC-D-1	205-3CC-DM-1
		Diode & LED	205-3CC-D-3	205-3CC-DM-3
	2T (DPDT)	LED	205-2TC-D-1	205-2TC-DM-1
		Diode & LED	205-2TC-D-3	205-2TC-DM-3
	3T (TPDT)	LED	205-3TC-D-1	205-3TC-DM-1
		Diode & LED	205-3TC-D-3	205-3TC-DM-3

Ordering Information

205		-	3C	CA	-	DM	-	1	XXVXC
1	2		3	4		5		6	7

1. 205 -- Basic series designation

2. Blank -- 8PIN or 11PIN quick terminal

3. 2C -- Double pole double throw
   3 C -- Three pole double throw
   2T -- Twin contact, double pole double throw
   3T -- Twin contact, three pole double throw

4. C -- Contant material AgNi
   CA -- Contant material AgNi + Au plating

5. D -- Dust cover with manual
   DM -- Dust cover with lockable manual

6. Blank -- Without special features
   1 -- Coil parallel with LED
   2 -- Coil parallel with diode
   3 -- Coil parallel with diode & LED

7. XXVXC -- Coil voltage (please refer to the coil rating data for the availability).

Contact Rating

Type	Single contact	Twin contact
Rated load (resistive)	10A 250VAC	4A 250VAC
Inrush current	20A	10A
Max. switching capacity	4000VA	1000VA

Coil Rating (DC)

Rated voltage (V)	Rated current ±10 % at 23ºC (mA)	Coil resistance ±10 % at 23ºC (Ω)	Max. continuous voltage at 60ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
12	125	96	120 % of rated voltage	80% of rated voltage	5% of rated voltage	approx. 1.2W
24	63	384				
48	31	1,536				
60	25	2,400				
110	14	7,660				
125	12	10,360				
220	7.2	30,630				

Coil Rating (AC)

Rated voltage (V)	Coil resistance ±10 % at 23ºC (Ω)	Max. continuous voltage at 40ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
24	74	110% of rated voltage	85% of rated voltage	15% of rated voltage	approx. 2.0VA
48	303				
60	474				
110	1,710				
115	1,710				
230	7,500				

Specification

Contact material	AgNi alloy
Contact resistance (1)	100 mΩ Max.
Operate time (1)	12 ms Max.
Release time (1)	10 ms Max.
Insulation resistance (1)	1,000 MΩ Min. (DC 500V)
Dielectric strength (1)	Between open contact : AC 1500V , 50/60Hz 1 min.
	Between contact and coil : AC 2500V , 50/60Hz 1 min.
	Between contact circuits : AC 2500V , 50/60Hz 1 min.

Vibration resistance	Operating extremes	30 ~ 100Hz , >4G
Life expectancy	Mechanical	20,000,000 operations (frequency 18,000 operations/hr)
Operating ambient temperature	DC	-25 ~ +60ºC (no freezing)
	AC	-25 ~ +40ºC (no freezing)
Weight	Approx.90g	

Note : (1) initial value

Safety Approval

Certified	UL	CSA / CUS
File No.	E41922	171397

Safety Approval Rating

◆ UL

2C	3C	2T / 3T
10A 240VAC 6A 24VDC 0.3A 240VDC 0.6A 120VDC	6.6A 240VAC 10A 120VAC 6A 24VDC 0.3A 240VDC 0.6A 120VDC	4A 240VAC 6A 24VDC 0.3A 240VDC 0.6A 120VDC

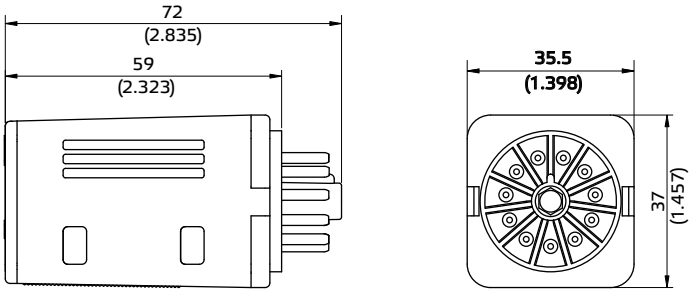
◆ CSA / CUS

2C	3C	2T / 3T
10A 240VAC 6A 24VDC 0.3A 240VDC 0.6A 120VDC 1/2HP 120VAC / 240VAC	6.6A 240VAC 10A 120VAC 6A 24VDC 0.3A 240VDC 0.6A 120VDC 1/2HP 120VAC / 240VAC	4A 240VAC 6A 24VDC 0.3A 240VDC 0.6A 120VDC 1/2HP 120VAC / 240VAC

205

Outline Dimensions

◆205

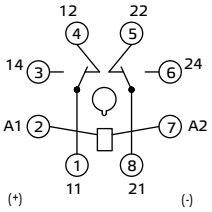


Wiring Diagram

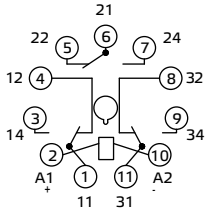
BOTTOM VIEW

◆205

DPDT

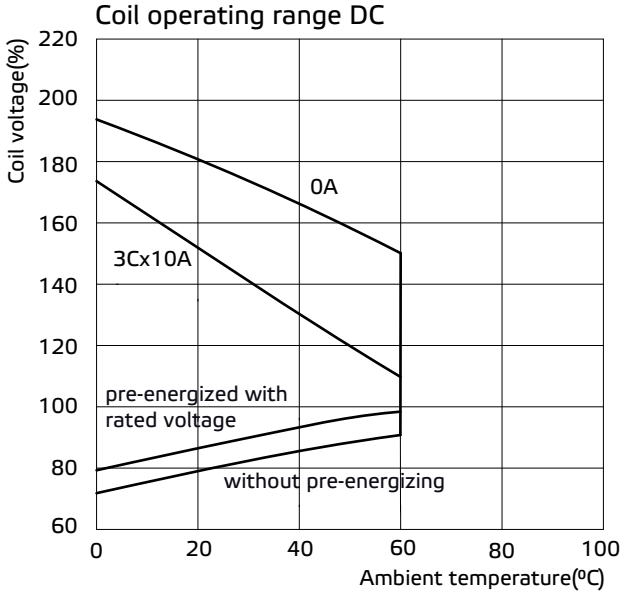


TPDT

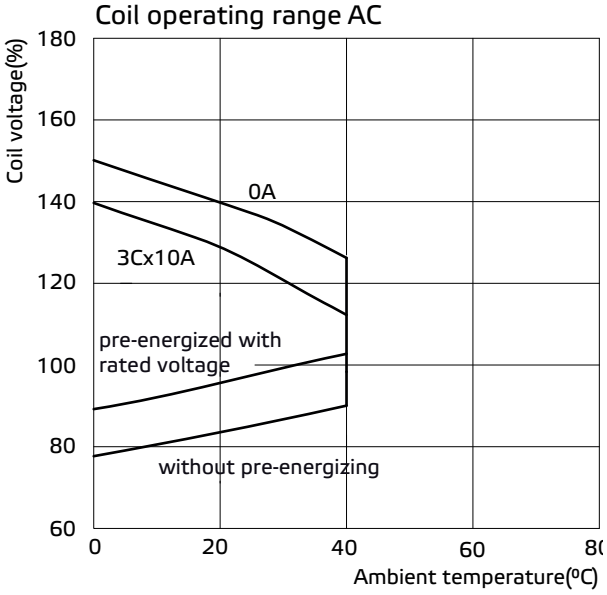


Engineering Data

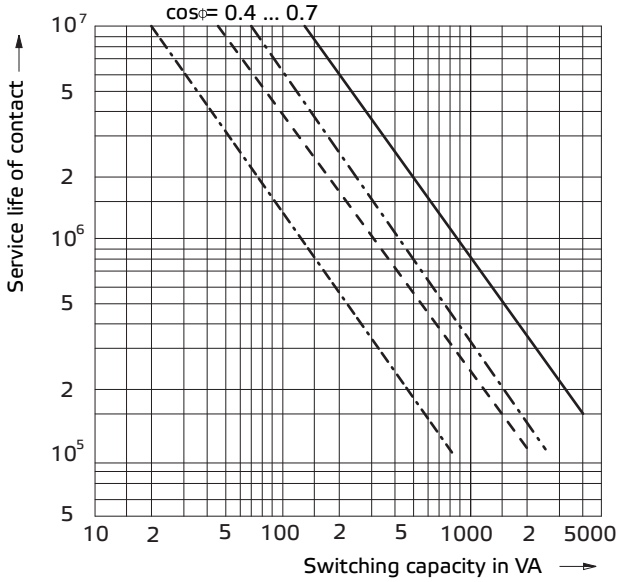
Coil operating range DC



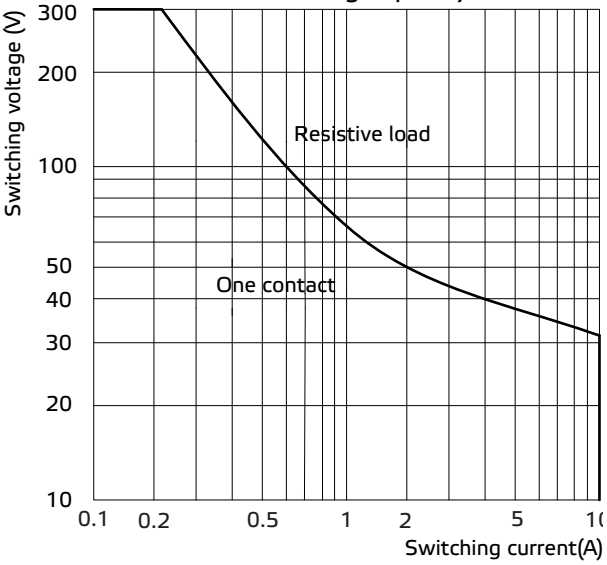
Coil operating range AC



Electrical Service Life AC
90 % operating
resistive load Single contacts
inductive load Single contacts
resistive load Twin contacts
inductive load Twin contacts
cosφ= 0.4 ... 0.7



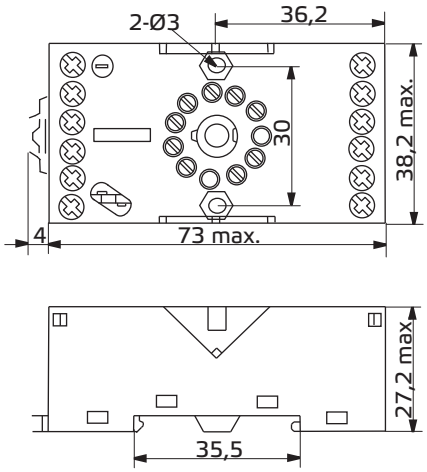
Max.DC load breaking capacity

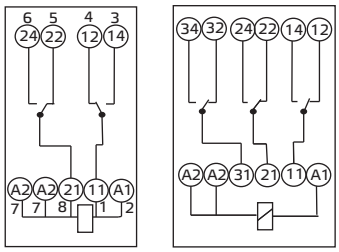


DIN-rail socket and accessories
For miniature 205 relay

Features
- Protection group C250 (VDE 0110b/2)
- Sockets for 35mm DIN rail mount or screw mounting
- Rising clamp terminals
- Accessories: Z395 & Z396 : timer, modules, retaining spring
  Z392.01 & Z393.01 : retaining spring
- Sockets and accessories comply with RoHS-Directive 2002/95/EC

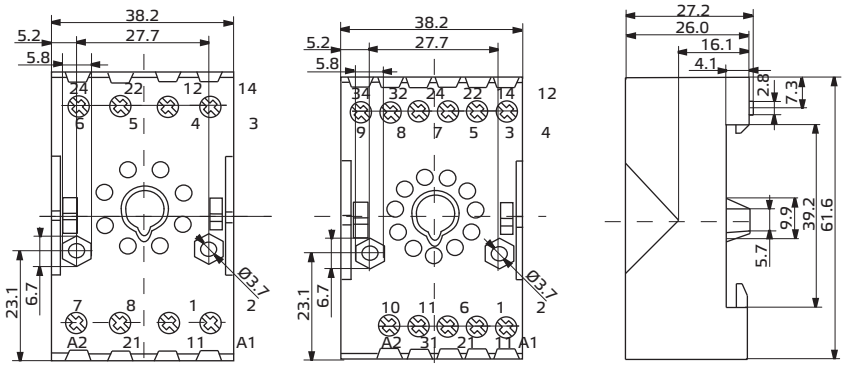
Z395 & Z396 sockets for 2&3 pole 205 with screw connection, with module-slot





Z395 Z396

Z392.01 & Z393.01 sockets for 2 & 3 pole 205 with screw connection, without module-slot



Z392.01 Z393.01

Technical data

Electrical / mechanical Data	Z395 & Z396	Z392.01 & Z393.01
Rated current	12A	12A
Rated voltage	300VAC	300VAC
Dielectric strength coil to contact circuits	2500VAC	2500VAC
Dielectric strength open contact circuits	1500VAC	1500VAC
Dielectric strength adjacent contact circuits	2500VAC	2500VAC
Insulation category acc. VDE0110b/2.79	C250/B380	C250
Ambient temperature	-40 ... +80ºC	-25 ... +70ºC
Protection category acc. EN60529	IP20	IP20
Terminal capacity	2 x 2.5 mm²	2 x 2.5 mm²
Terminal capacity with cable end	2 x 1.5 mm²	2 x 1.5 mm²
Maximum torque	0.8Nm	0.7Nm
Screw type	Combi screw M3*	Pozidrive screw M3
Packaging unit sockets	10 pcs.	10 pcs.
Packaging unit modules	20 pcs.	-
Packaging unit retaining clips	10 pcs.	10 pcs.
Approvals	CUL (pending)	CUL

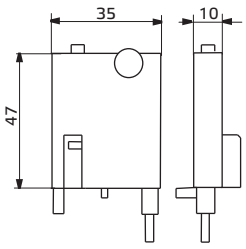
(*) Combination of slotted and Phillips head screw M3

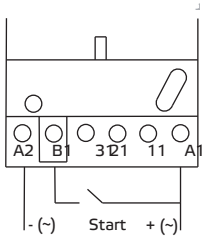
Standard part numbers	
DIN rail socket for 2 pole without module-slot	Z392.01
DIN rail socket for 3 pole without module-slot	Z393.01
DIN rail socket for 2 pole relay with module-slot	Z395
DIN rail socket for 3 pole relay with module-slot	Z396
Metallic retaining clip	Z434
Protection diode (+ A1)	Z396.50
Red LED + protection diode 6/24VDC (+ A1)	Z396.52
RC protection 110..240VAC	Z396.53
Varistor protection 24VAC	Z396.54
Varistor protection 230VAC	Z396.55
Red LED 230VAC	Z396.58
Timer Module with 8 functions Time from 50ms to 240h voltage from 24 to 240V AC/DC	Z396.64

Universal Timer Module Z396.64 for socket Z395 + Z396

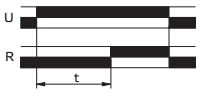
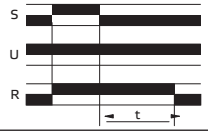
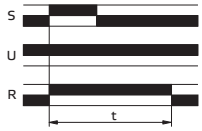
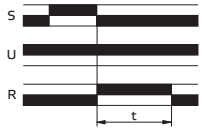
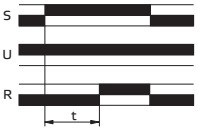
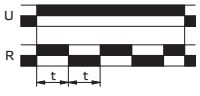
- Multi voltage of 24 - 240VDC/AC
- Multi-functional with 8 functions
- Multi range from 50ms - 240h

Time ranges, time range limit	Adjustment range
1 s	0.05s - 1s
10 s	0.5s - 10s
1 min	3s - 60s
10 min	30s - 600s
1 h	3min - 60min
10 h	30min - 600min
1 day / 24 h	1,2h - 24h
10 days / 240 h	12h - 240h





General data	
Voltage range supply	24V to 240VAC, 24 to 250VDC -15% to +10% in relation to rated voltage
Voltage range control contact	at 24V min. 80% of supply voltage at 230V min. 95% of supply voltage
Duty cycle	100%
Frequency	48Hz to 63Hz
Power failure bridging time	max. 10ms
Recovery time	Max. 100ms at 25ºC, max. 150ms at 55ºC
Adjustments	Time ranges and functions selectable via DIP switch Time setting via potentiometer
Temperature range	-25ºC to +55ºC
Indicators	Green “Power on” LED Green LED flashes during delay time
Supply voltage terminal	Plug-in to socket Z396

Functions	Description of Functions	Function diagram
E	Switch-on delay Start by switching the supply voltage	
R	Switch-off delay Start with control contact	
Ws	Switch-on wiper Start with control contact	
Wa	Switch-off wiper Start with control contact	
Wu	Switch-on wiper Start by switching the supply voltage	
Es	Switch-on delay Start with control contact	
Bp	Blinker 0 – starting Start by switching the supply-voltage	
Bi	Blinker 1 – starting Start by switching the supply voltage	

Features

- High rating miniature PCB Relay.
- AC & DC coil are both available.
- UL/CUL and VDE approved.
- 17A 277VAC SPDT.
- 12A 277VAC DPDT.
- Low profile 15.7 and high insulation system class F
- High CTI 250 material & New Glow Wire Approved (E Version)
- Special version for inrush rating application is available. (507 IR type)
- Comply with RoHS-Directive 2011/65/EU

Type List

◆ Standard type

Terminal style	Contact form	Insulation system	Designation (provided with)	
			Flux tight	Sealed type washable
PCB terminal	1A (SPNO)	F	507-1AC-F-C	507-1AC-F-S
			507-1AH-F-C	507-1AH-F-S
	1C (SPDT)	F	507-1CC-F-C	507-1CC-F-S
			507-1CH-F-C	507-1CH-F-S
	2A (DPNO)	F	507-2AC-F-C	507-2AC-F-S
			507-2AH-F-C	507-2AH-F-S
	2C (DPDT)	F	507-2CC-F-C	507-2CC-F-S
			507-2CH-F-C	507-2CH-F-S

◆ High sensitive type (N) / Ultra-sensitive type (N1)

PCB terminal	1A (SPNO)	F	507N-1AC-F-C	507N-1AC-F-S
			507N1-1AC-F-C	507N1-1AC-F-S
			507N-1AH-F-C	507N-1AH-F-S
			507N1-1AH-F-C	507N1-1AH-F-S
	1C (SPDT)	F	507N-1CC-F-C	507N-1CC-F-S
			507N1-1CC-F-C	507N1-1CC-F-S
			507N-1CH-F-C	507N-1CH-F-S
			507N1-1CH-F-C	507N1-1CH-F-S
	2A (DPNO)	F	507N-2AC-F-C	507N-2AC-F-S
			507N-2AH-F-C	507N-2AH-F-S
	2C (DPDT)	F	507N-2CC-F-C	507N-2CC-F-S
			507N-2CH-F-C	507N-2CH-F-S

◆ High power type

PCB terminal	1A (SPNO)	F	507H-1AC-F-C	507H-1AC-F-S
			507H-1AH-F-C	507H-1AH-F-S
	1C (SPDT)	F	507H-1CC-F-C	507H-1CC-F-S
			507H-1CH-F-C	507H-1CH-F-S

507

◆ High power type、High sensitive type (N)

PCB terminal	1A (SPNO)	F	507HN-1AC-F-C	507HN-1AC-F-S
			507HN-1AH-F-C	507HN-1AH-F-S
	1C (SPDT)	F	507HN-1CC-F-C	507HN-1CC-F-S
			507HN-1CH-F-C	507HN-1CH-F-S

Note：507A: Special footprint 5.0mm pinning version can be selected.

Ordering Information

507	H	N	-	1C	C	-	F	-	C	IR	XXVXC
1	2	3		4	5		6		7	8	9

1. 507 -- Basic series designation

2. Blank -- Standard type (1P - Terminal pitch 3.5mm)
   A -- Standard type and special terminal pitch (1P - Terminal pitch 5.0mm)
   H -- High power type (only for 1P type)

3. Blank -- Standard type (DC: 0.53 W) (AC: 0.75 VA)
   N -- High sensitive type (0.40 W)
   N1 -- Ultra-sensitive type (0.25 W)

4. 1A -- Single pole normally open
   1B -- Single pole normally closed
   1C -- Single pole double throw
   2A -- Double pole normally open
   2B -- Double pole normally closed
   2C -- Double pole double throw

5. C -- Contact material AgNi
   CA -- Contact material AgNi + Au
   H -- Contact material AgSnO
   HA -- Contact material AgSnO + Au

6. Blank -- Standard type
   F -- Class F

7. C -- Flux tight
   S -- Sealed type washable

8. Blank -- Standard type
   E -- CTI 250 V
   IR -- 507 Inrush type (only for H, 1A/1C type)

8. XXVXC -- Coil voltage (please refer to the coil rating data for the availability)

Contact Rating

Type	1P			2P
	507 - 507N	507N1	507H - 507HN	507 - 507N
Rated load (resistive)	12A 240VAC	10A 240VAC	16A 240VAC	8A 240VAC
Max. switching current	12A	10A	17A	8A
Max. switching voltage	277VAC	277VAC	277VAC	277VAC
Max. switching capacity	2880VA	2400VA	4080VA	1920VA

◆ Inrush type

Tungsten Lamp	NO:1500W 240VAC 30,000 ops (Inrush 110A)
Halogen Lamp	NO:1500W 240VAC 30,000 ops (Inrush 110A)

Coil Rating (DC)

◆ Standard Type

Rated voltage (V)	Rated current ±10% at 23ºC (mA)	Coil resistance ±10% at 23ºC (Ω)	Max. continuous voltage at 85ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
3	176	17	150 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.53W
5	106	47				
6	88	68				
9	59	153				
12	44	272				
15	35	425				
18	29	611				
24	22	1,087				
36	15	2,445				
48	11	4,347				

◆ High sensitive type (N)

Rated voltage (V)	Rated current ±10% at 23ºC (mA)	Coil resistance ±10% at 23ºC (Ω)	Max. continuous voltage at 85ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
3	133	22.5	150 % of rated voltage	70 % of rated voltage	10 % of rated voltage	approx. 0.40W
5	80	62				
6	67	90				
9	44	203				
12	33	360				
18	23	771				
24	17	1,440				
36	11	3,240				
48	9	5,520				

◆ Ultra-sensitive type (N1)

Rated voltage (V)	Rated current ±10% at 23ºC (mA)	Coil resistance ±10% at 23ºC (Ω)	Max. continuous voltage at 85ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
3	83	36	150 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.25W
5	50	100				
6	42	144				
9	28	324				
12	21	576				
18	14	1,296				
24	10	2,304				
36	7	5,184				

SONG CHUAN

507

Coil Rating (AC) [only for 507、507H]

Rated voltage (V)	Rated current ±10% at 23ºC (mA)	Coil resistance ±10% at 23ºC (Ω)	Max. continuous voltage at 70ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
6	125	23.4	150 % of rated voltage	80 % of rated voltage	15 % of rated voltage	approx. 0.75VA
12	62.5	100				
24	31.2	368				
42	17.8	1,188				
48	15.6	1,540				
100/110	7.45	6,880				
110/120	6.8	8,360				
200/220	3.75	26,700				
220/240	3.4	33,000				

Specification

Contact material	AgNi / AgSnO alloy	
Contact resistance (1)	100mΩ Max.	
Operate time (1)	20ms Max.	
Release time (1)	10ms Max.	
Insulation resistance (1)	1000MΩ Min. (DC 500V)	
Dielectric strength (1)	Between open contact : AC 1000V, 50/60Hz 1 min.	
	Between contact and coil : AC 5000V, 50/60Hz 1 min.	
	Between contact circuits : AC 3000V, 50/60Hz 1 min. (for 2P DC type) : AC 2500V, 50/60Hz 1 min. (for 2P AC type)	
Surge voltage withstand (1)	Between contact and coil : 10KV (1.2X50)μS	
Vibration resistance	Operating extremes	10~55Hz , amplitude 1.5 mm
	Damage limits	10~55Hz , amplitude 1.5 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	30,000,000 operations (frequency 36,000 operations /hr)
		5,000,000 operations (for 2P AC type - frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 360 operations /hr)
Operating ambient temperature	DC coil	-40~+85ºC (no freezing) (2)
	AC coil	-40~+70ºC (no freezing)
Weight	Approx. 10 g	

Note : (1) initial value
(2) special version of high temperature 105ºC can be selected

Safety Approval

Certified	UL / CUL	VDE
File No.	E88991	40006746

Safety Approval Rating (VDE)

◆ DC coil

◆ AC coil

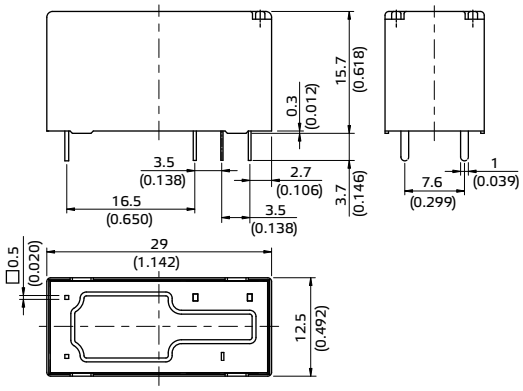
507H · 507HN	507 · 507N · 507N1	507 · 507N	507H	507
	1P	2P		
17A 250VAC T105	12A 250VAC T105	12A 250VAC T85 10A 250VAC T105	17A 250VAC T85	1P:12A 250VAC T85 2P.10A 250VAC T85

Safety Approval Rating (UL/CUL)

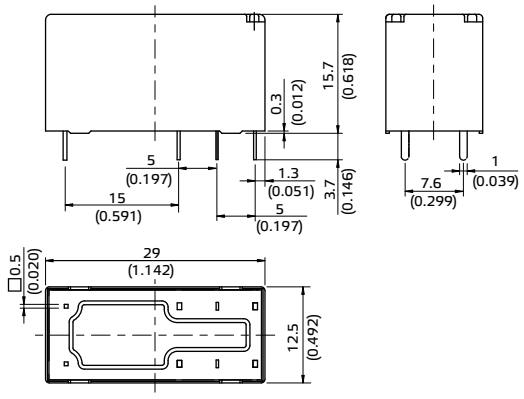
507		507 (2P)	507N1
C · CA	H · HA		
NO/NC: 17A 277VAC NO: 10FLA 250VAC 12A 30VDC 1HP 480VAC NC: 1/2HP 120/240/480VAC	NO/NC: 17A 277VAC 10FLA 250VAC NO: 1HP 120/240/480VAC TV-8 NC: 12A 30VDC 1/2HP 120/240/480VAC	NO/NC: 12A 277VAC NO:1/2HP 120/240VAC TV-5(H·HA type only) NC: 1/3HP 120/240VAC	17A 277VAC 12A 30VDC

Outline Dimensions

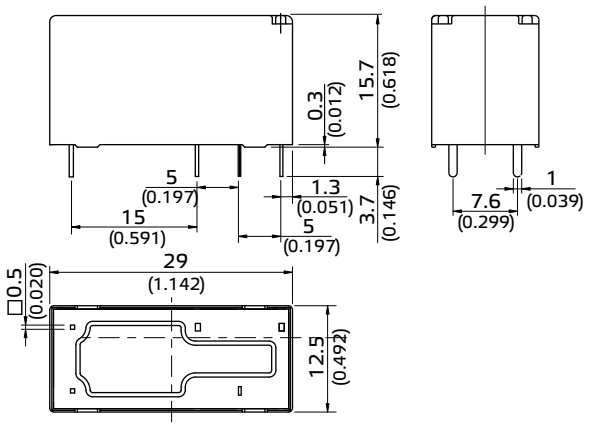
◆ 507 1P



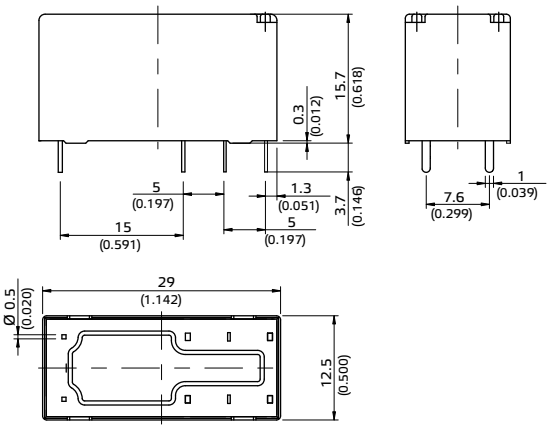
◆ 507H 1P



◆ 507A 1P



◆ 507 2P

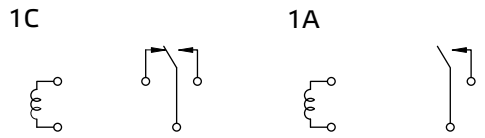


507

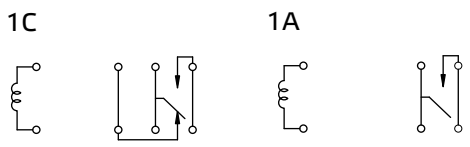
Wiring Diagram

BOTTOM VIEW

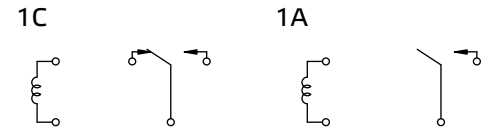
◆ 507 1P



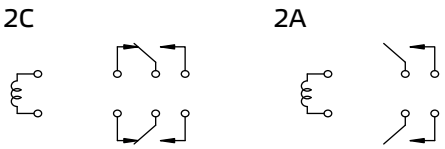
◆ 507H 1P



◆ 507A 1P



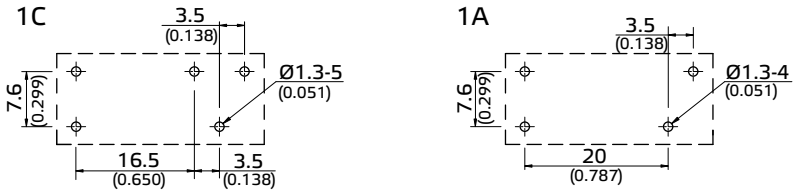
◆ 507 2P



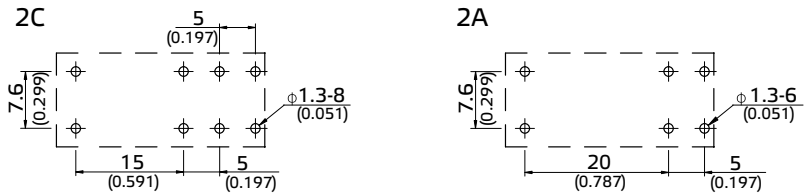
PC Board Layout

BOTTOM VIEW

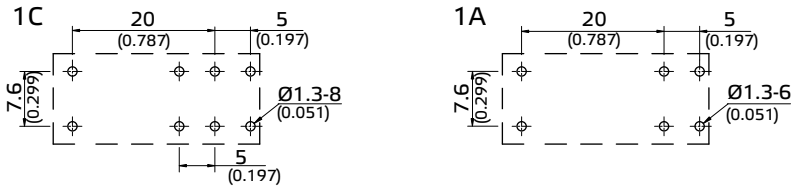
◆ 507 1P



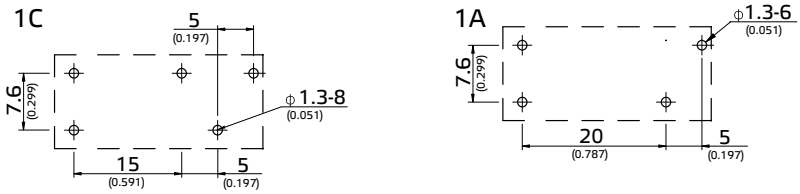
◆ 507 2P



◆ 507H 1P

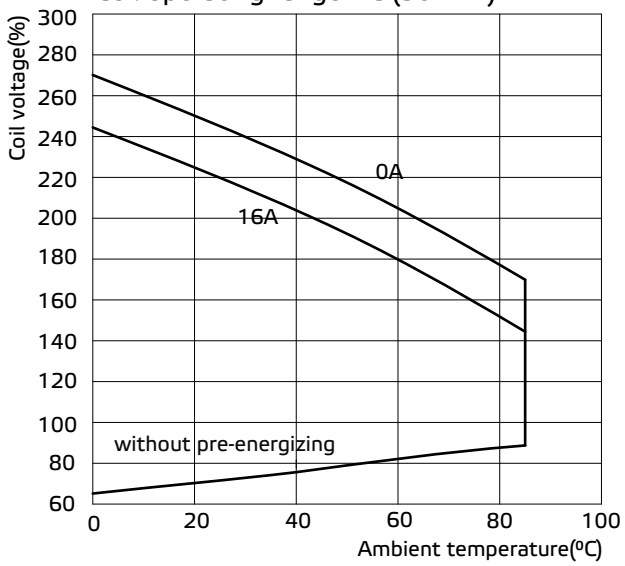


◆ 507A 1P

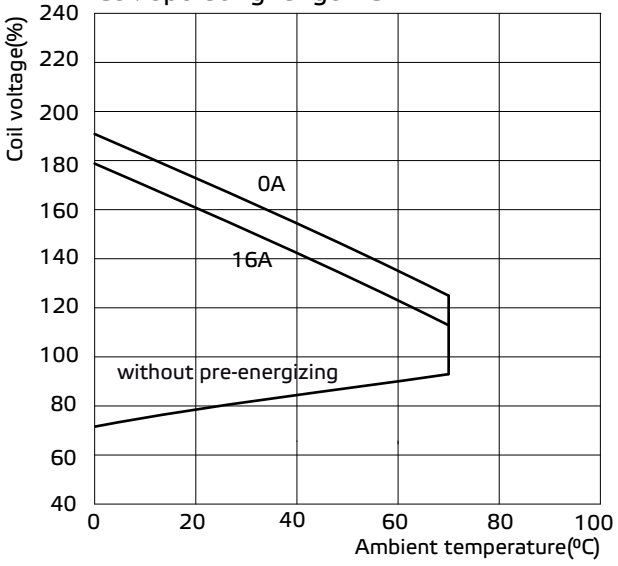


Engineering Data

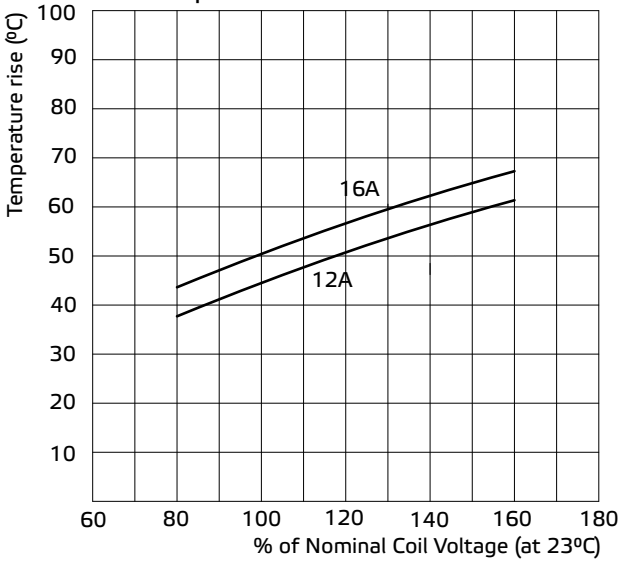
Coil operating range DC (507HN)



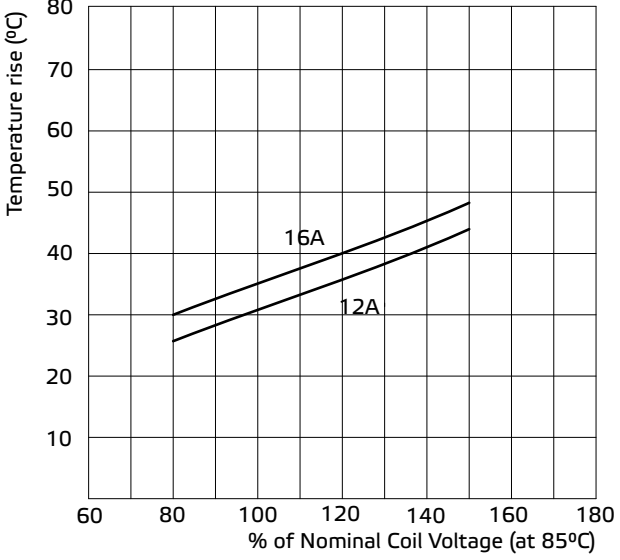
Coil operating range AC



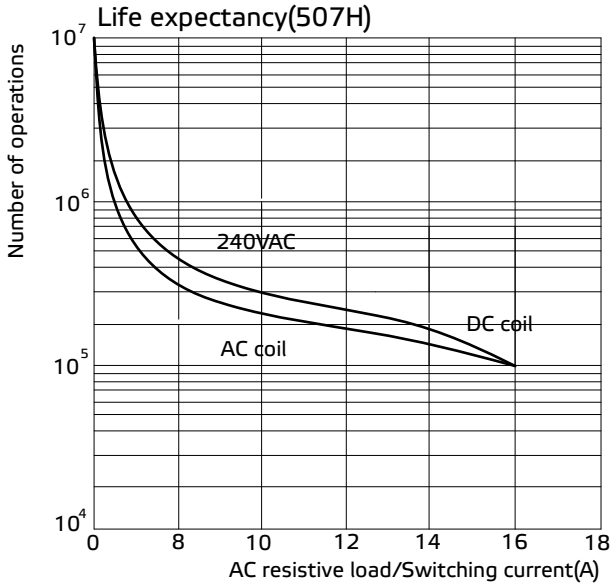
Coil temperature rise



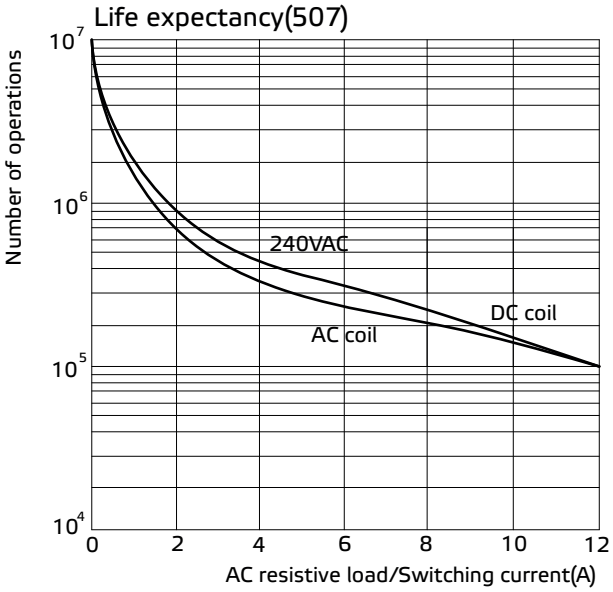
Coil temperature rise



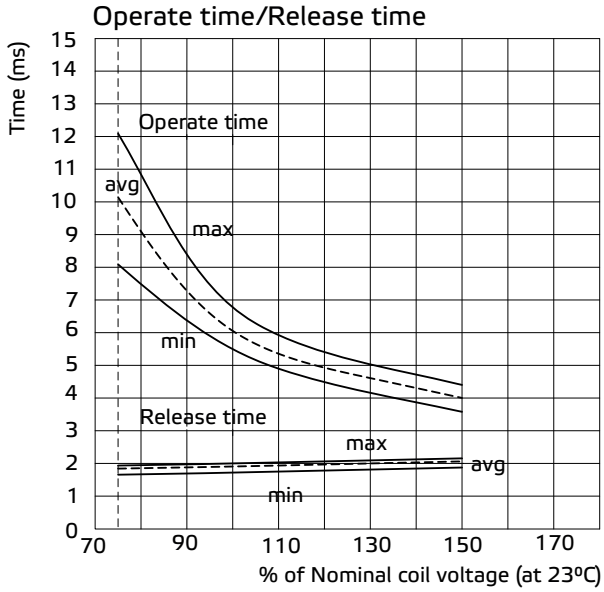
Life expectancy(507H)



Life expectancy(507)

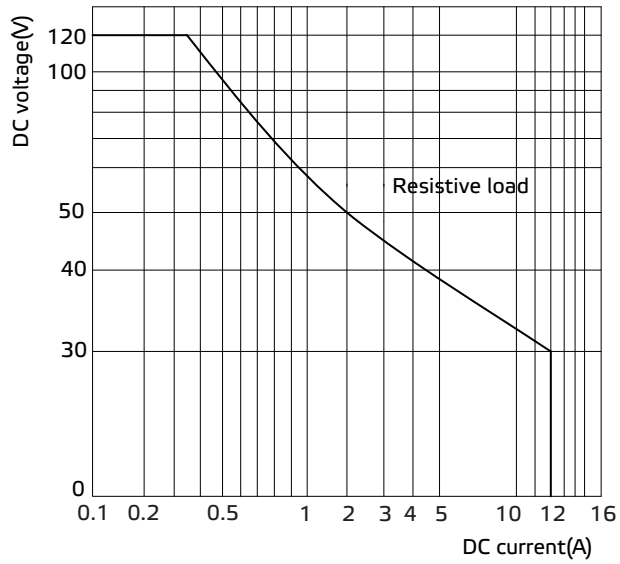


Operate time/Release time



◆ 507/ 507H

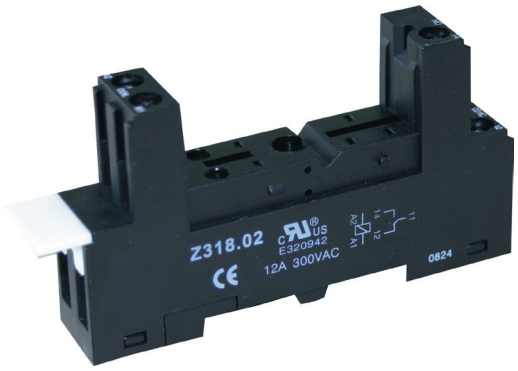
Max. DC load breaking capacity

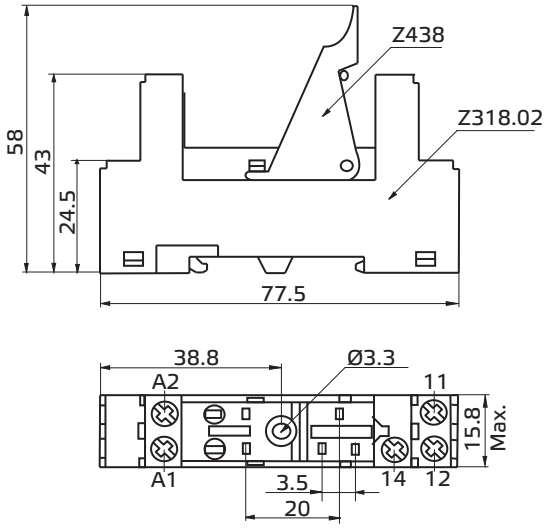


DIN-rail socket and accessories
For PCB relay - 1 and 2 poles, 3.5 and 5.0 mm

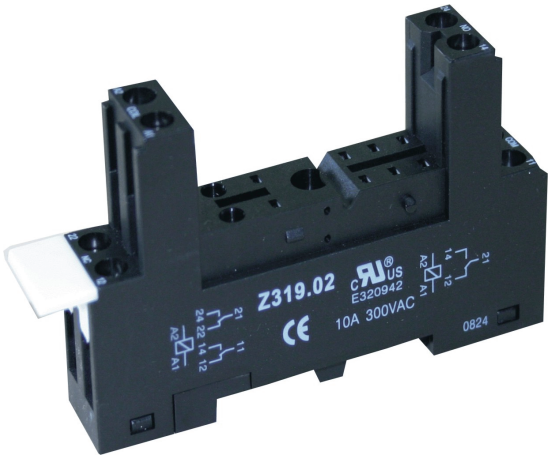
Features
- Protection group C250 (VDE 0110b/2)
- Sockets for 35mm DIN rail mount or screw mounting
- Rising clamp terminals with screws
- Accessories: modules, retaining clip, writing plates
- Sockets and accessories comply with RoHS-Directive 2002/95/EC

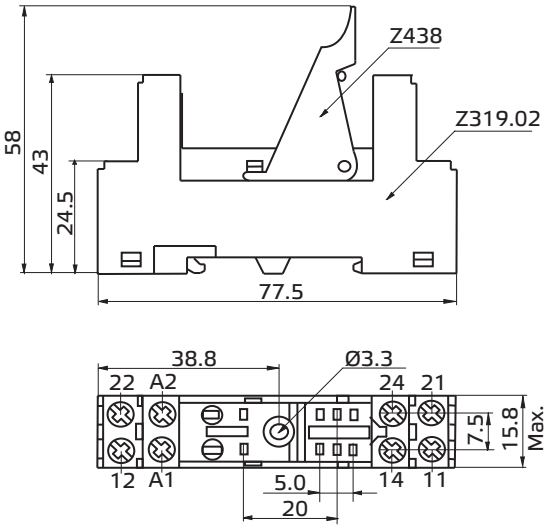
Z318.02 socket for 1pole 507, 3.5mm with screw connection, logical, C250



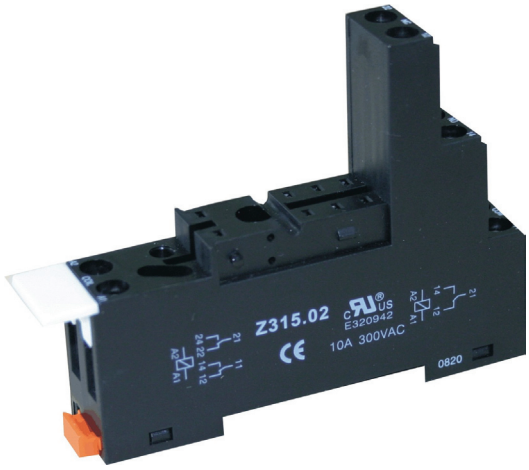


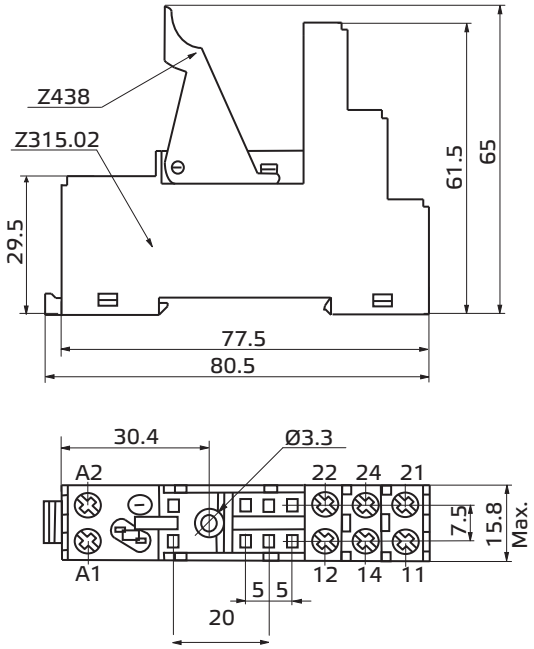
Z319.02 socket for 1 & 2 pole 507, 5mm with screw connection, C250



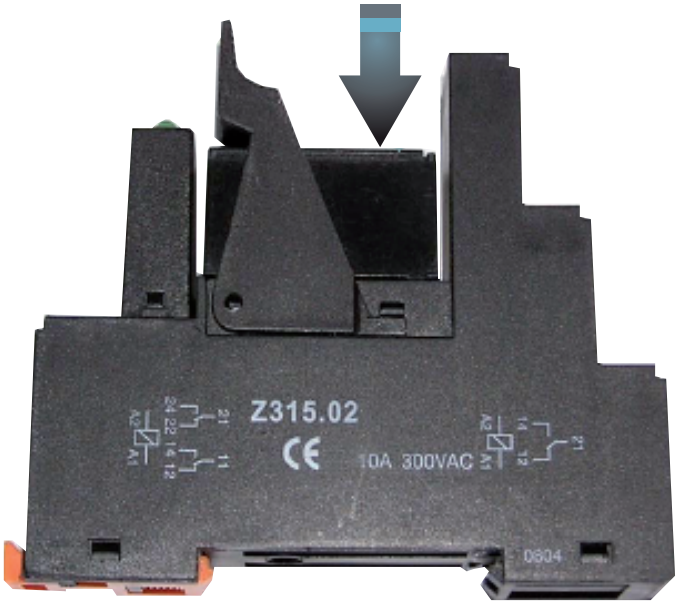


Z315.02 socket for 1pole 507, 5mm with screw connection, logical, C250





To remove easily the relay, please press here while you push back the retaining clip

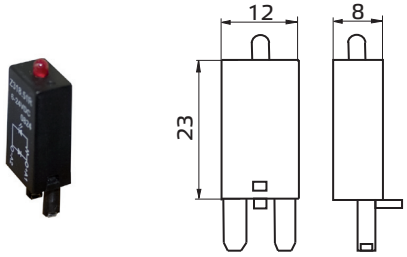


Technical data

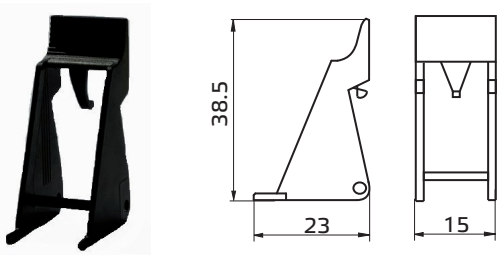
Electrical / mechanical Data	Z318.02	Z319.02	Z315.02
Rated current	12A	10A*	10A*
Rated voltage	300VAC	300VAC	300VAC
Dielectric strength coil to contact circuits	4000VAC	4000VAC	4000VAC
Dielectric strength open contact circuit	1000VAC	1000VAC	1000VAC
Dielectric strength adjacent contact ciruits	-	2500VAC	2500VAC
Ambient temperature	-40 .. +70 ºC		
Terminal protection degree acc. EN60529	IP20		
Terminal capacity	2 x 2.5 mm²		
Terminal capacity with cable end	2 x 1.5 mm²		
Maximum torque	0.7Nm		
Screw type	Combination of slotted and Phillips head screw - M3		
Packaging unit sockets	20 pcs.		
Packaging unit modules	20 pcs.		
Packaging unit retaining clips	20 pcs.		
Approvals	*CUL*		

(*) for 1 pole relay 17A, the relay terminals 11-21, 12-22 and 14-24 have to be bridged.

Standard part numbers	
DIN rail socket 3.5 mm logical	Z318.02
DIN rail socket 5.0 mm	Z319.02
DIN rail socket 5.0 mm logical	Z315.02
Platic retaining clip	Z438
Writing plate - supplied with socket	SR2P
Protection diode (+ A1)	Z318.53
Protection diode (+ A2)	Z318.50
Green LED + protection diode 6/24VDC (+A1)	Z318.51
Red LED + protection diode 6/24VDC (+A1)	Z318.51R
Green LED 6..24V AC/DC (+ A1)	Z318.52
Red LED 6..24V AC/DC (+A1)	Z318.52R
Green LED + protection diode 6/24VDC (+A2)	Z318.57
Red LED + protection diode 6/24VDC (+A2)	Z318.57R
Green LED 110..230V AC/DC (+ A1)	Z318.58
Red LED 110..230V AC/DC (+ A1)	Z318.58R
Varistor 24VAC	Z318.54
Varistor 230VAC	Z318.55



Module Z318.5x



Clip Z438

882

Features

- 5mm slim type miniature PCB Power Relay.
- High rating 8A 277VAC.
- UL/CUL, VDE approved.
- High dielectric strength up to 4000VAC.
- Special design for interface application and Home Appliances.
- Comply with RoHS-Directive 2011/65/EU.

Type List

◆ Standard Type

Terminal style	Contact form	Designation (provided with)	
		Flux tight	Sealed type washable
PCB terminal	1A (SPNO)	882-1AH-C	882-1AH-S
		882-1AHA-C	882-1AHA-S
	1C (SPDT)	882-1CH-C	882-1CH-S
		882-1CHA-C	882-1CHA-S

◆ High Sensitive Type

PCB terminal	1A (SPNO)	882N-1AH-C	882N-1AH-S
		882N-1AHA-C	882N-1AHA-S
	1C (SPDT)	882N-1CH-C	882N-1CH-S
		882N-1CHA-C	882N-1CHA-S

Ordering Information

882	N	-	1C	H	-	F	-	C	XXVDC
1	2		3	4		5		6	7

1. 882 -- Basic series designation

2. Blank -- Standard type
   N -- High sensitive type

3. 1A -- Single pole normally open
   1C -- Single pole double throw

4. H -- Contact material AgSnO
   HA -- Contact material AgSnO+ Au

5. Blank -- Standard type
   F -- Class F

6. C -- Flux tight
   S -- Sealed type washable

7. XXVDC -- Coil voltage (please refer to the coil rating data for the availability).

Contact Rating

Resistive load	NC 6A 240VAC NO: 8A 240VAC NC / NO : 6A/6A 240VAC

Coil Rating (DC)

◆ Standard Type

Rated voltage (V)	Rated current ±10 % at 23ºC (mA)	Coil resistance ±10 % at 23ºC (Ω)	Max.continuous voltage at 85ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
3	69.8	43	160 % of rated voltage	75 % of rated voltage	5 % of rated voltage	approx. 0.21W
4.5	46.6	96				
5	42	119				
9	23.3	386				
12	17.5	686				
18	11.7	1,543				
24	8.7	2,743				
48	4.4	10,971				
60	3.5	17,143				

◆ High Sensitive Type

Rated voltage (V)	Rated current ±10 % at 23ºC (mA)	Coil resistance ±10 % at 23ºC (Ω)	Max.continuous voltage at 85ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
3	56.6	53	160 % of rated voltage	75 % of rated voltage	5 % of rated voltage	approx. 0.17W
4.5	37.7	119				
5	34	147				
9	18.8	480				
12	14.2	847				
18	9.5	1,906				
24	7.1	3,388				

Specification

Contact material	AgSnO alloy	
Contact resistance (1)	100mΩ Max.	
Operate time (1)	10ms Max.	
Release time (1)	5ms Max.	
Insulation resistance (1)	100MΩ Min. (DC 500V)	
Dielectric strength (1)	Between open contact : AC 1000V , 50/60Hz 1 min. (typ.)	
	Between contact and coil : AC 4000V , 50/60Hz 1 min.	
Vibration resistance	Operating extremes	10~50Hz , amplitude 1.0 mm
	Damage limits	10~50Hz , amplitude 1.0 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 operations/hr)
	Electrical	10,000 operations (frequency 360 operations/hr)
Operating ambient temperature	-40~+85ºC (no freezing)	
Weight	Approx. 6 g	

Note: (1) initial value

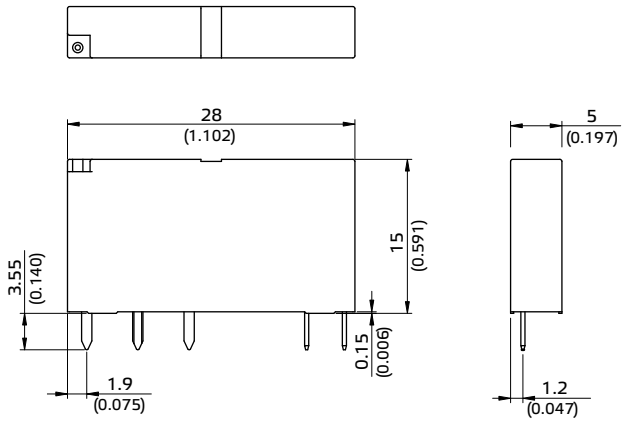
Safety Approval

Certified	UL / CUL	VDE
File No.	E225821	40000971

Safety Approval Rating

UL / CUL		VDE	
NO	NC	NO	NC
8A 277VAC / 6A 24VDC R300 / B300	6A 277VAC / 24VDC R300 / B300	8A 250VAC T85	6A 250VAC T85

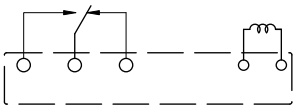
Outline Dimensions



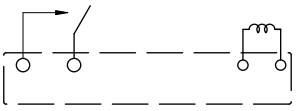
Wiring Diagram

BOTTOM VIEW

1C

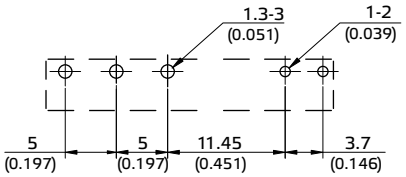


1A



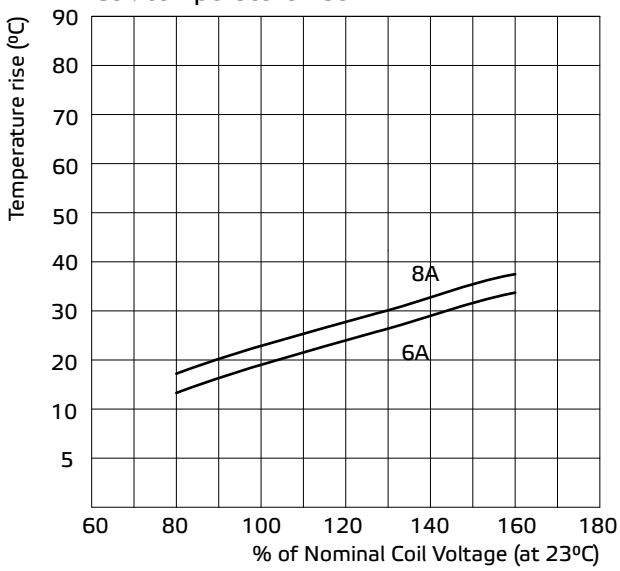
PC Board Layout

BOTTOM VIEW

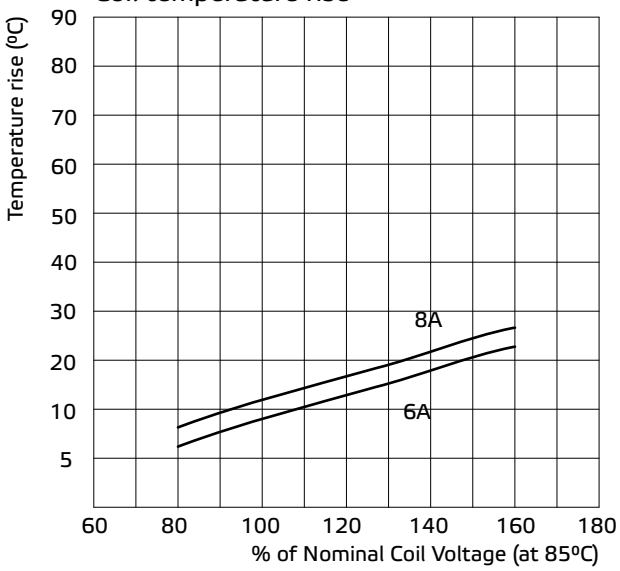


Engineering Data

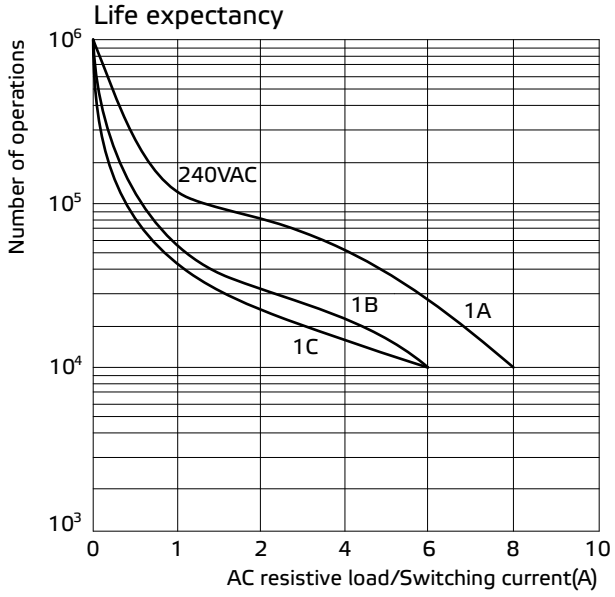
Coil temperature rise



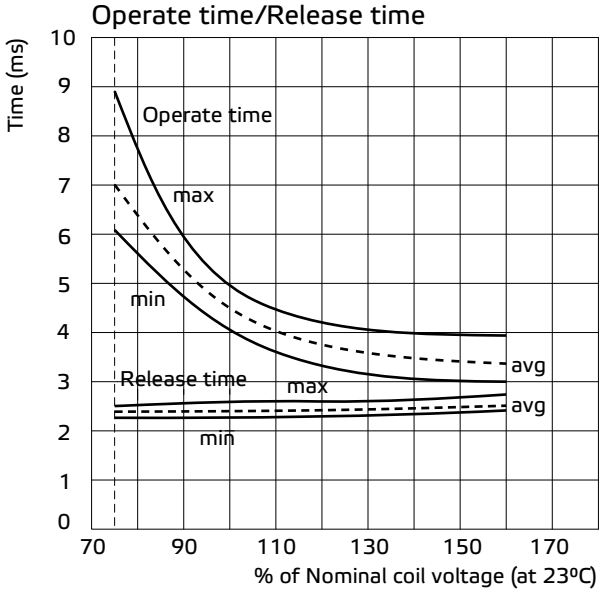
Coil temperature rise



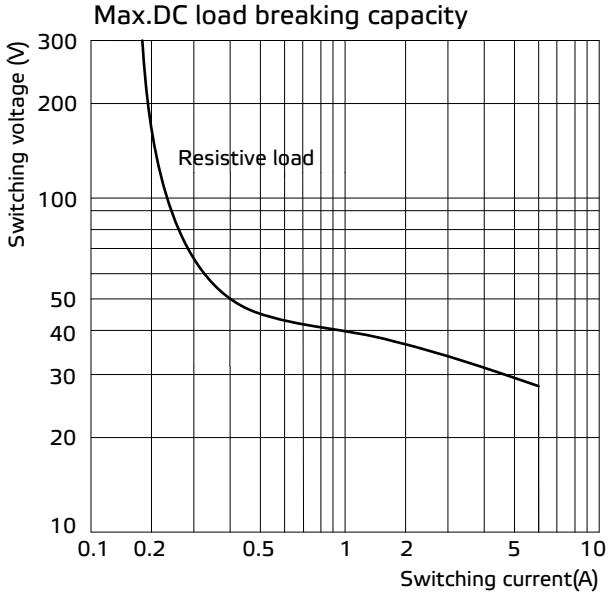
Life expectancy



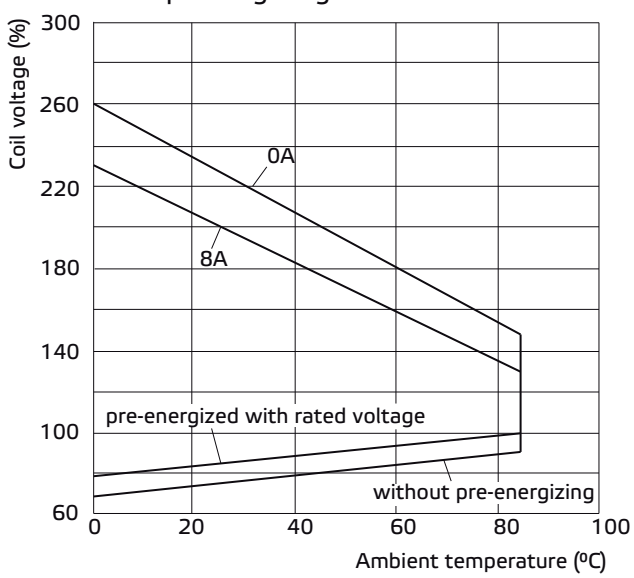
Operate time/Release time



Max.DC load breaking capacity



Coil operating range DC

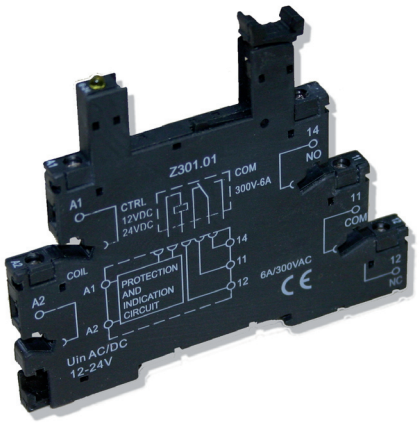


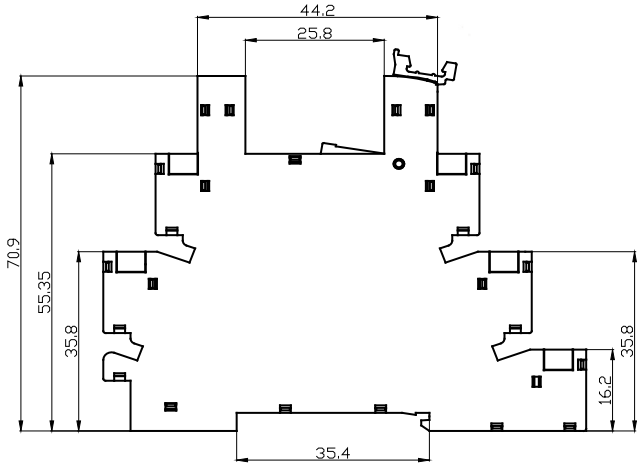
SLIM-DIN-rail socket for 882 relay
1 pole 6A

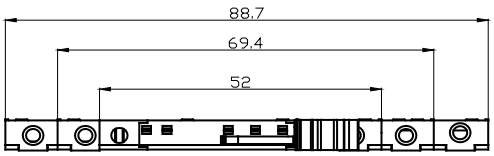
Features

- Protection group C250 (VDE 0110b/2)
- 6mm width sockets for 35mm DIN rail mount
- DC and AC sockets available
- Screw cage terminals available
- LED indication
- Protection circuit
- Sockets are RoHS compliant according 2002/95/EC

Z301 socket for relay 882 with screw connection, 6mm width







SONG CHUAN 882

Technical data

Electrical / mechanical Data		
Rated current		6A
Rated voltage		300VAC
Dielectric strength coil/contact		4000VAC
Ambient operating temperature range	Z301.01	-40..+70ºC
	Z301.02	-40..+55ºC
Terminal protection degree acc. EN60529		IP20
Terminal capacity with or without cable end		0.22..2.5 mm²
Maximum torque		0.5 Nm
Screw type		Slot flat head M2.5
Approvals		CE mark
Packaging unit		10 pcs.

Standard part numbers	
DIN rail socket for input 12 & 24 VAC/DC coil voltage 12 & 24VDC	Z301.01
DIN rail socket for input 230 VAC/DC coil voltage 60VDC	Z301.02

735

Features

- 20A/25A general purpose Relays.
- SPDT, DPDT, TPDT contact configurations
- DC & AC coils available.
- Optional for flange covers, tapped core w/ antirotation tab, indicator lamp, push-to-test button, PCB terminals
- Comply ewith RoHS Directive 2011/65/EU.

Type List

◆ Standard Type

Terminal style	Contact form	Enclosure style				
		Open type	Dust cover	Ears on cover	Antirotation-tab	Ears on top
Quick terminal	1A (SPNO)	735-1A	735-1A-C	735-1A-C1	735-1A-C2	735-1A-C3
	1B (SPNC)	735-1B	735-1B-C	735-1B-C1	735-1B-C2	735-1B-C3
	1C (SPDT)	735-1C	735-1C-C	735-1C-C1	735-1C-C2	735-1C-C3
	2A (DPNO)	735-2A	735-2A-C	735-2A-C1	735-2A-C2	735-2A-C3
	2B (DPNC)	735-2B	735-2B-C	735-2B-C1	735-2B-C2	735-2B-C3
	2C (DPDT)	735-2C	735-2C-C	735-2C-C1	735-2C-C2	735-2C-C3
	3A (TPNO)	735-3A	735-3A-C	735-3A-C1	735-3A-C2	735-3A-C3
	3B (TPNC)	735-3B	735-3B-C	735-3B-C1	735-3B-C2	735-3B-C3
	3C (TPDT)	735-3C	735-3C-C	735-3C-C1	735-3C-C2	735-3C-C3
PCB terminal	1A (SPNO)	-------	735-1A-C-T	-------	-------	-------
	1B (SPNC)	-------	735-1B-C-T	-------	-------	-------
	1C (SPDT)	-------	735-1C-C-T	-------	-------	-------
	2A (DPNO)	-------	735-2A-C-T	-------	-------	-------
	2B (DPNC)	-------	735-2B-C-T	-------	-------	-------
	2C (DPDT)	-------	735-2C-C-T	-------	-------	-------
	3A (TPNO)	-------	735-3A-C-T	-------	-------	-------
	3B (TPNC)	-------	735-3B-C-T	-------	-------	-------
	3C (TPDT)	-------	735-3C-C-T	-------	-------	-------

◆ High Power Type

Terminal style	Contact form	Insulation system	Enclosure style	
			Dust cover	Ears on cover
Quick terminal	1A (SPNO)	F	735H-1A-F-C	735H-1A-F-C1
	1B (SPNC)		735H-1B-F-C	735H-1B-F-C1
	1C (SPDT)		735H-1C-F-C	735H-1C-F-C1
	2A (DPNO)		735H-2A-F-C	735H-2A-F-C1
	2B (DPNC)		735H-2B-F-C	735H-2B-F-C1
	2C (DPDT)		735H-2C-F-C	735H-2C-F-C1

SONG CHUAN

735

Ordering Information

735	H	-	2C	-	F	-	C1	-	M	XXVXC
1	2		3		4		5		6	7

1. 735 -- Basic series designation

2. Blank -- Standard type
   H -- High power type

3. 1A -- Single pole normally open
   1B -- Single pole normally closed
   1C -- Single pole double throw
   2A -- Double pole normally open
   2B -- Double pole normally closed
   2C -- Double pole double throw
   3A -- Three pole normally open
   3B -- Three pole normally closed
   3C -- Three pole double throw

4. Blank -- Standard type
   F -- Class F

5. Blank -- Open type
   C -- With cover
   C1 -- With mounting ears on cover
   C2 -- With accessible mounting hole, with anti-rotation tab
   C3 -- Mounting ears on top of cover

6. Blank -- No special feature
   M -- With manual operator
   T -- Printed circuit board terminals
   L -- Pilot lamp

7. XXVXC -- Coil voltage (please refer to the coil rating data for the availability)"

Contact Rating

Type	735		735H
	1A, 1B, 1C, 2A, 2B, 2C	3A, 3B, 3C	
Resistive load	20A 240VAC 15A 28VDC	20A 120VAC 15A 240VAC/28VDC	30A 240VAC 15A 28VDC

Coil Rating (DC)

◆Standard type

Rated voltage (V)		Rated current 10% at 23ºC (mA)	Coil resistance 10% at 23ºC (Ω)	Max. continuous voltage at 50ºC	Pick up voltage (Max) at 23ºC	Drop out voltage (Min) at 23ºC	Power consumption at rated voltage
SP DP	6	188	32	130% of rated voltage	80 % of rated voltage	10 % of rated voltage	approx. 1.2W
	12	100	120				
	24	51	472				
	48	27	1800				
	110	11	10000				
	125	12.5	10000				
TP	6	250	24				approx. 1.5W
	12	125	96				
	24	63	384				
	48	31	1536				
	110	11.5	9600				
	125	13	9600				

◆High Power Type

Rated voltage (V)	Rated current ±10% at 23ºC (mA)	Coil resistance ±10% at 23ºC (Ω)	Max continuous voltage at 55ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
6	188	32	100% of rated voltage	80% of rated voltage	10% of rated voltage	approx. 1.2W
12	100	120				
24	51	472				
48	27	1800				
110	11	10000				
125	12.5	10000				

Coil Rating (AC)

◆Standard Type

Rated voltage (V)		Coil resistance ±10% at 23ºC (Ω)	Max.continuous voltage at 50ºC	Pick up voltage (Max) at 23ºC	Drop out voltage (Min) at 23ºC	Power consumption at rated voltage
SP DP	6	4.2	110% of rated voltage	85 % of rated voltage	30 % of rated voltage	approx.3.0 VA
	12	18				
	24	72				
	110	1580				
	120	1700				
	220	5850				
	240	7200				
TP	6	3.9				approx.3.4VA
	12	14.5				
	24	64				
	110	1450				
	120	1540				
	220	5850				
	240	6750				

◆High Power Type

Rated voltage (V)	Coil resistance ±10% at 23ºC (Ω)	Max continuous voltage at 55ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
6	4.2	100 %of rated voltage	85 %of rated voltage	30 %of rated voltage	approx. 3.4VA
12	18				
24	72				
110	1580				
120	1700				
220	5850				
240	7200				

SONG CHUAN

735

Specification

Contact material	AgSnO alloy	
Contact resistance(1)	50mΩ Max. (for 735), 100mΩ Max. (for 735H)	
Operate time(1)	25ms Max.	
Release time(1)	20ms Max.	
Insulation resistance(1)	1000MΩ Min. (DC 500V)	
Dielectric strength(1)	Between open contact	: AC 1000V, 50/60Hz 1min (for 735) : AC 1500V, 50/60Hz 1min (for 735H)
	Between contact and coil	: AC 1600V, 50/60Hz 1min (for 735) : AC 3000V, 50/60Hz 1min (for 735H)
	Between contact circuits	: AC 1600V, 50/60Hz 1min (for 735) : AC 3000V, 50/60Hz 1min (for 735)
Vibration resistance	Operating extremes	10 ~ 55Hz, amplitude 2.0mm
	Damage limits	10 ~ 55Hz, amplitude 2.0mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 ops./hr)
	Electrical	100,000 operations (frequency 1,200 ops./hr) (for735)
		NO: 30,000 operations NC:10,000 operations (frequency 360 ops./hr) (for 735H)
Operating ambient temperature	-30~+50ºC (no freezing) (for 735) -30~+55ºC (no freezing) (for 735H)	
Weight	Approx. 80g	

Note : (1) intial value

Safety Approval

Certified	735			735H
	UL	CSA	FIMKO	UL / CUL
File No.	E88991	1664125	24560	E88991

Safety Approval Rating (FIMKO)

735 1A, 1B, 1C	735 2A, 2B, 2C	735 3A, 3B, 3C
25A 250VAC	25A 250VAC	20A 250VAC

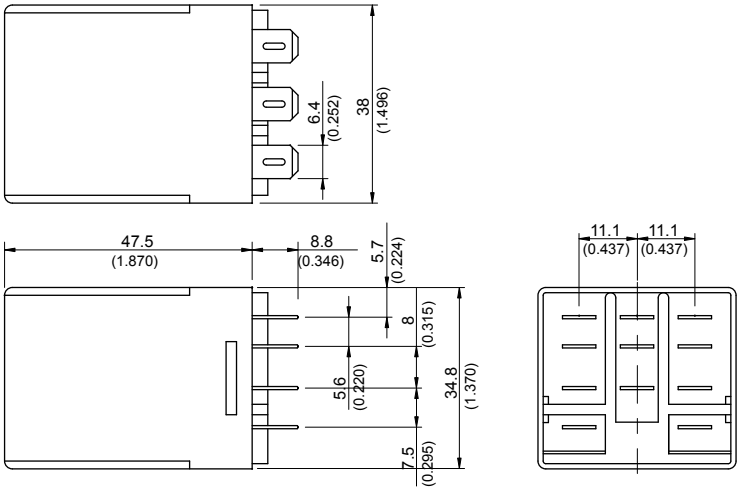
Safety Approval Rating (UL - CSA)

UL			CSA		
735 1A, 1B, 1C	735 2A, 2B, 2C	735 3A, 3B, 3C	735 1A, 1B, 1C	735 2A, 2B, 2C	735 3A, 3B, 3C
25A 28VDC 25A 277VAC 10A 600VAC 1.5HP 240VAC 1HP 120VAC	20A 28VDC 25A 277VAC 10A 600VAC 1.5HP 240VAC 1HP 120VAC	15A 28VDC 20A 277VAC 3/4HP 120VAC 1HP 240VAC	30A 277VAC 10A 600VAC 25A 28VDC 1.5HP 240VAC 1HP 120VAC	25A 277VAC 10A 600VAC 20A 28VDC 1.5HP 240VAC 1HP 120VAC	20A 277VAC 15A 28VDC 3/4HP 120VAC 1HP 240VAC

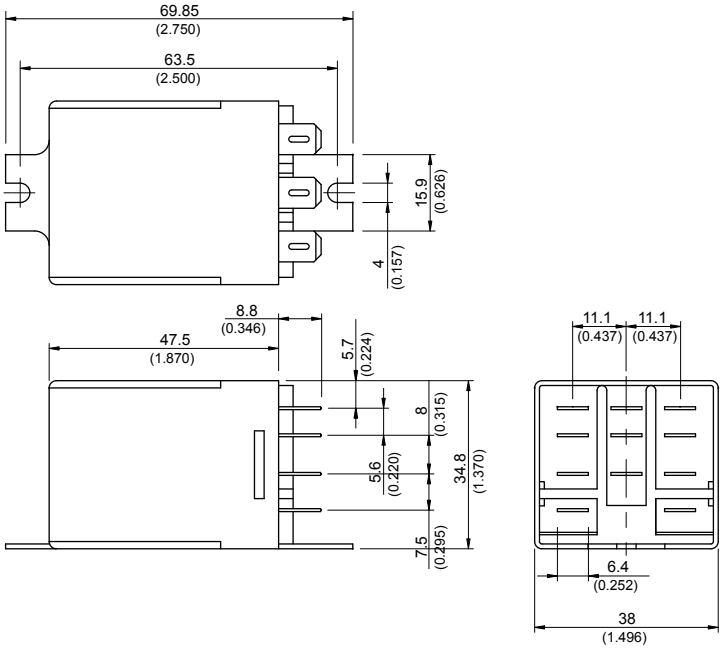
UL / CUL	
735H 1A, 1B, 1C	735H 2A, 2B, 2C
30A 277VAC	30A 277VAC
25A 28VDC	20A 28VDC
10A 600VAC	10A 600VAC
1.5HP 240VAC	1.5HP 240VAC
1HP 120VAC	1HP 120VAC

Outline Dimensions

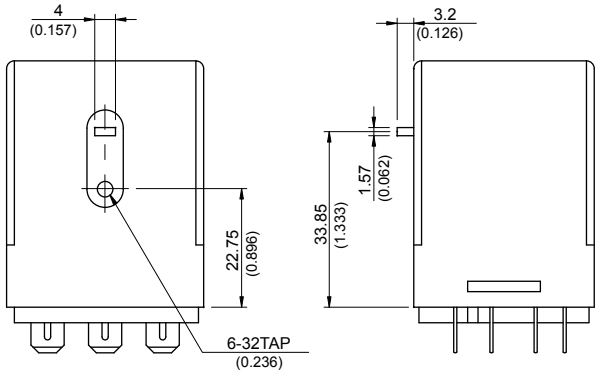
◆735 C



◆735 C1

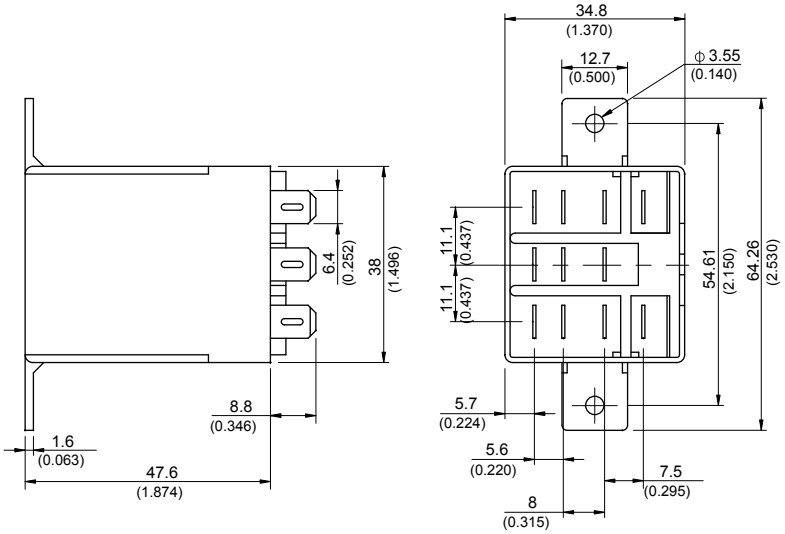


◆735 C2

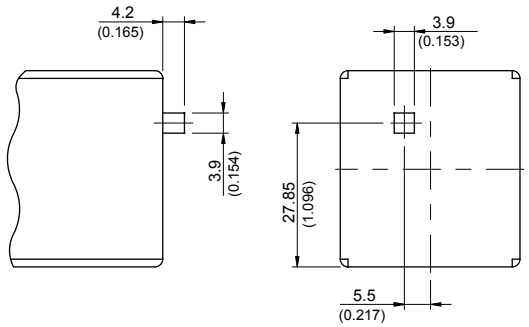


735

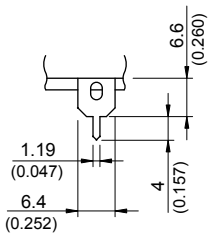
◆735 C3



◆735 M



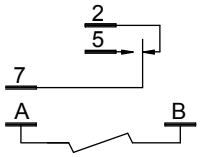
◆735 T



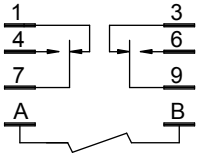
Wiring Diagram

BOTTOM VIEW

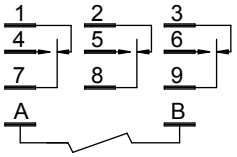
1C



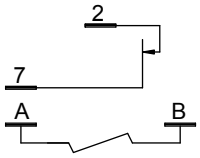
2C



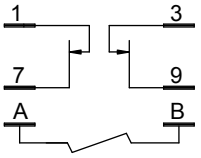
3C



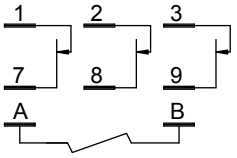
1B



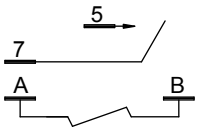
2B



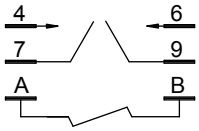
3B



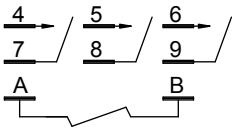
1A



2A



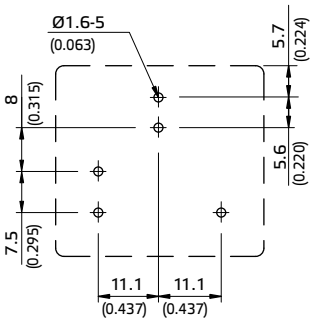
3A



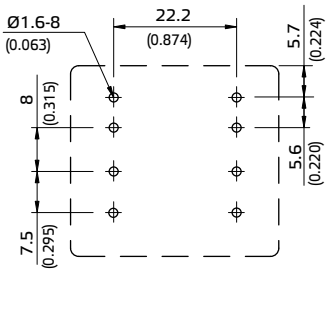
PC Board Layout

BOTTOM VIEW

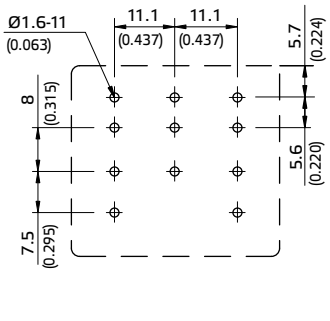
1P



2P

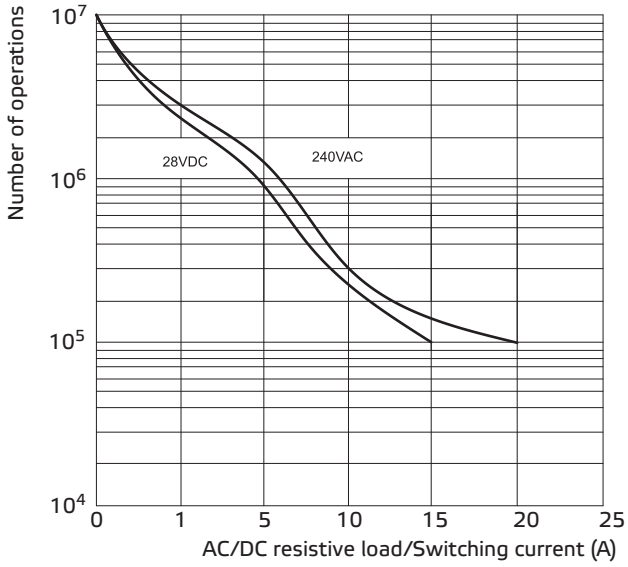


3P

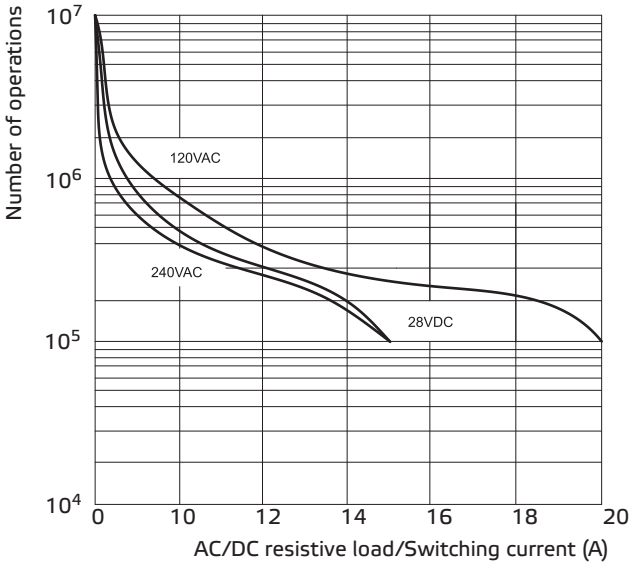


Engineering Data

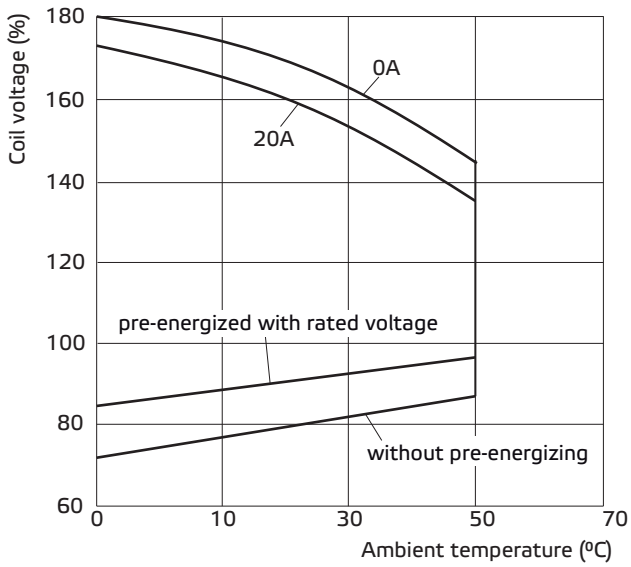
Life expectancy (1C/2C)



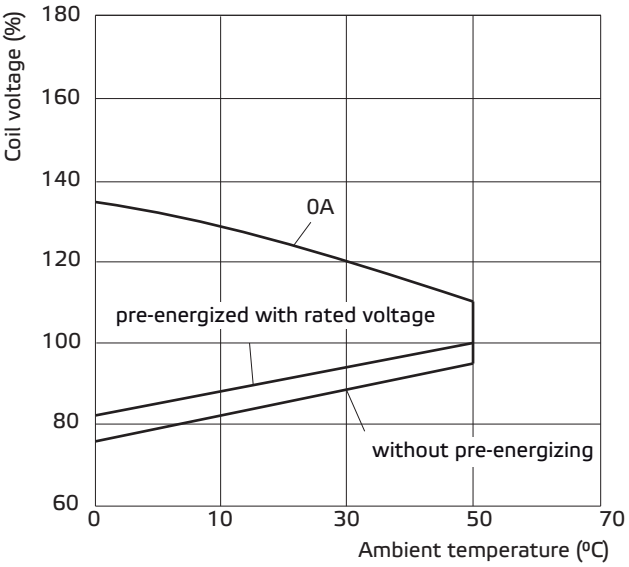
Life expectancy (3C)



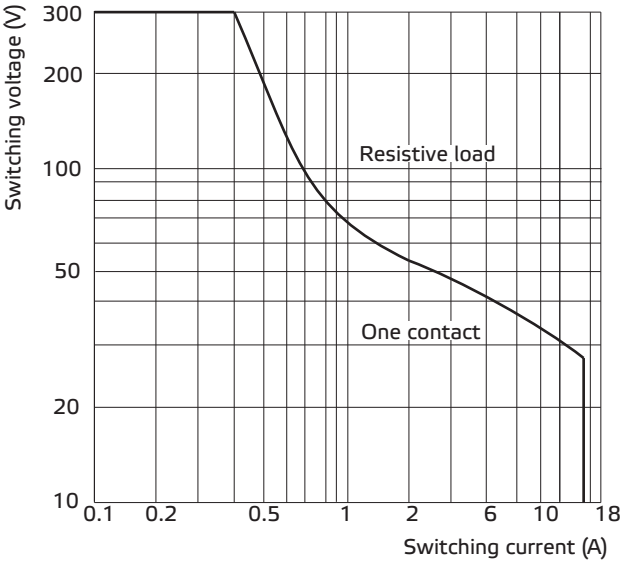
Coil operating range DC



Coil operating range AC



Max.DC load breaking capacity



Features

- Heavy duty 30A 240VAC, 25A 240VAC power type.
- AC & DC coils are both available.
- PCB terminals and quick terminal types.
- Optional for special large contact gap 3.0mm version.
- SPNO-ST & DPNO-ST contact configuration.
- Comply with RoHS-Directive 2011/65/EU.

Type List

Terminal style	Contact form	Enlarge spacing type	Designation			
			Dust cover	Flux tight	Flanged cover	Sealed type washable
S (Quick terminal)	1A (SPDM)	-------	841-S-1A-D	841-S-1A-C	841-S-1A-C1	841-S-1A-S
		H	841-S-1A-D-H	841-S-1A-C-H	841-S-1A-C1-H	841-S-1A-S-H
	2A (DPDM)	-------	841-S-2A-D	841-S-2A-C	841-S-2A-C1	841-S-2A-S
		H	841-S-2A-D-H	841-S-2A-C-H	841-S-2A-C1-H	841-S-2A-S-H
P (PCB terminal)	1A (SPDM)	-------	841-P-1A-D	841-P-1A-C	-------	841-P-1A-S
		H	841-P-1A-D-H	841-P-1A-C-H	-------	841-P-1A-S-H
	2A (DPDM)	-------	841-P-2A-D	841-P-2A-C	-------	841-P-2A-S
		H	841-P-2A-D-H	841-P-2A-C-H	-------	841-P-2A-S-H

Ordering Information

841	-	S	-	1A	-	F	-	C	-	H	XXVXC
1		2		3		4		5		6	7

1. 841 -- Basic series designation

2. S -- Quick terminal
   P -- PCB terminals

3. 1A -- Form A, single-pole, double-make (SPDM)
   2A -- Form A, double-pole, double-make (DPDM)

4. Blank -- Standard type
   F -- Class F

5. C -- Flux tight
   D -- Dust cover
   S -- Sealed type washable
   C1 -- Flanged cover
   D1 -- Dust cover with flange
   S1 -- Plastic sealed washable with flange

6. Blank -- Standard type
   H -- Enlarged insulation spacing type

7. XXVXC -- Coil voltage (please refer to the coil rating data for the availability).

Contact Rating

Load type	1A (SPDM)	2A (DPDM)
Rated load (Resistive)	30A 220VAC	25A 220VAC
Max. Switching Current	30A	25A
Max. Switching Voltage	277VAC	277VAC
Max. Switching Capacity	6600VA	5500VA

SONG CHUAN

841

Coil Rating (DC)

Rated voltage (V)	Rated current ±10 % at 23ºC (mA)	Coil resistance ±10 % at 23ºC (Ω)	Max. continuous voltage at 70ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
3	638	4.7	110 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 1.92W
6	319	18.8				
12	160	75				
24	80	300				
48/50	40/41.6	1200				
100	19.2	5200				
110	17.4	6300				
200	9.5	21000				

Coil Rating (AC)

Rated voltage (V)	Rated current +15/-20% at 23ºC (mA)	Coil resistance +15/-20% at 23ºC (Ω)	Max. continuous voltage at 70ºC	Pick up voltage(Max) at 23ºC	Drop out voltage(Min) at 23ºC	Power consumption at rated voltage
6	275	15	110 % of rated voltage	80 % of rated voltage	10 % of rated voltage	approx. 1.7VA ~ 2.7VA
12	138	75				
24	74	300				
48/50	39/40	1,200				
100/120	18.7/22.1	5,200				
200/240	9.1/10.8	21,000				

Specification

Contact material	AgSnO alloy	
Contact resistance (1)	100 mΩ Max.	
Operate time (1)	30 ms Max.	
Release time (1)	30 ms Max.	
Insulation resistance (1)	1000 MΩ Min. (DC 500V)	
Dielectric strength (1)	Between open contact : AC 2000V , 50/60Hz 1 min.	
	Between contact and coil : AC 4000V , 50/60Hz 1 min.	
	Between contact circuits : AC 2000V , 50/60Hz 1 min.	
Vibration resistance	Operating extremes	10~55Hz , amplitude 1.5 mm
	Damage limits	10~55Hz , amplitude 1.5 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G

Life expectancy	Mechanical	5,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 900 operations/hr)
Operating ambient temperature	-55~+70ºC (no freezing)	
Weight	Approx. 90 g	

Note： (1) initial value.

Safety Approval

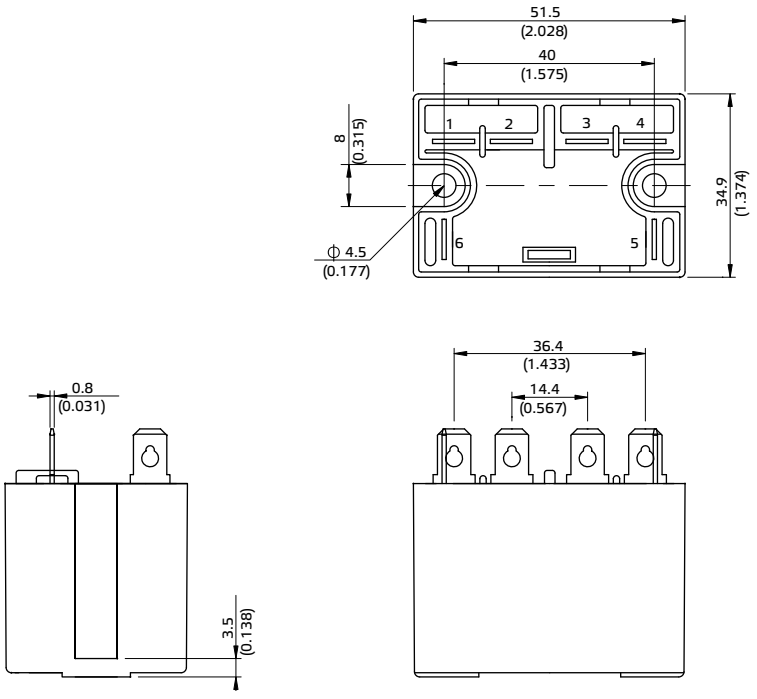
Certified	UL / CUL	TUV
File No.	E88991	R9653713

Safety Approval Rating

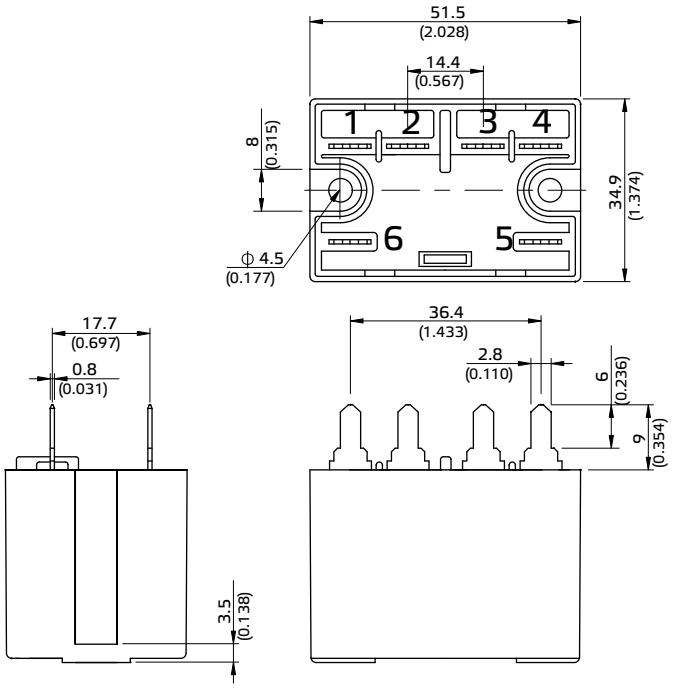
UL / CUL		TUV	
1A	2A	1A	2A
30A 277VAC TV-10 10A 277VAC 1.5HP 20FLA, 125VAC 3HP 14.1FLA, 277VAC	25A 277VAC TV-10 10A 277VAC 1HP 16FLA, 125VAC 2HP 9.96FLA, 277VAC	30A 250VAC 25A 250VAC cos ϕ 0.4 30A 125VAC cos ϕ 0.4	25A 250VAC 25A 250VAC cos ϕ 0.4

Outline Dimensions

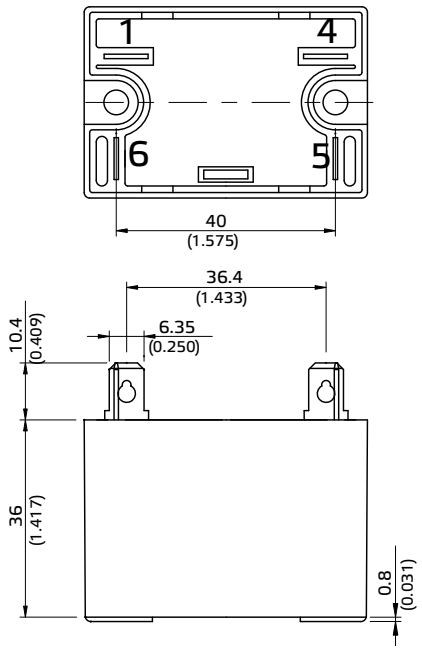
◆841-S-2A (C,D,V,S)



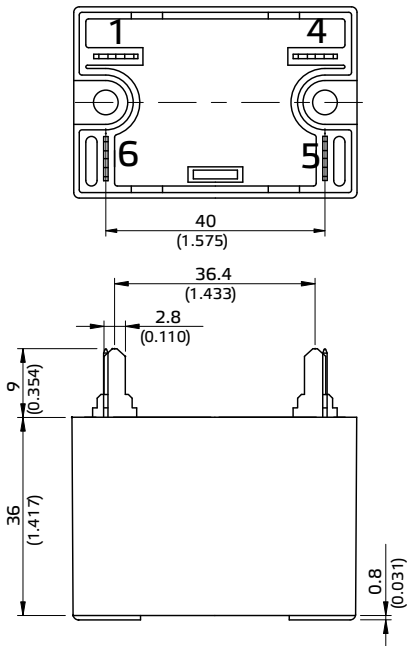
◆841-P-2A (C,D,V,S)



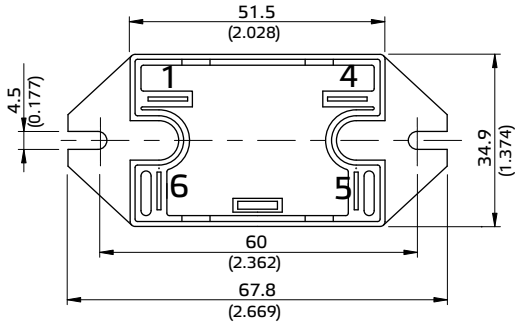
◆841-S-1A (C,D,V,S)

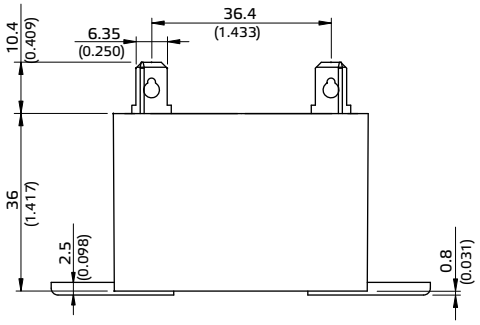


◆841-P-1A (C,D,V,S)

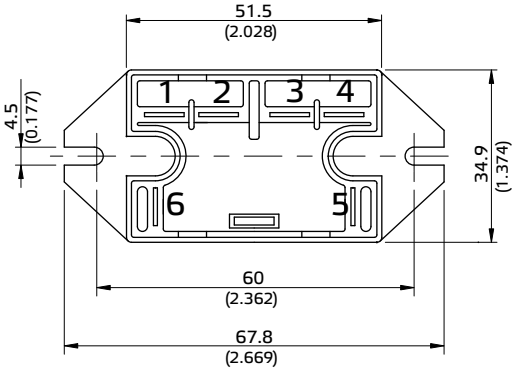


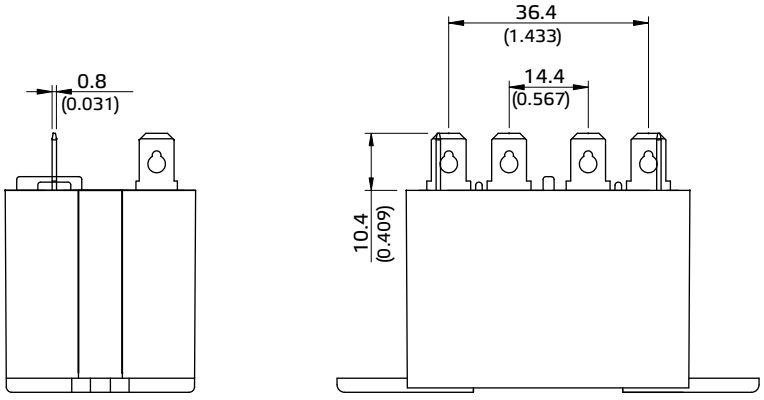
◆841-S-1A (C1,D1,S1)





◆841-S-2A (C1,D1,S1)

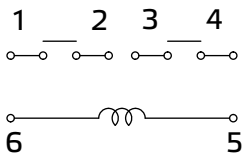




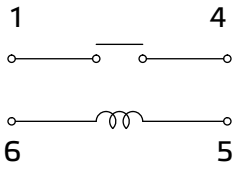
841

Wiring Diagram
BOTTOM VIEW

2A

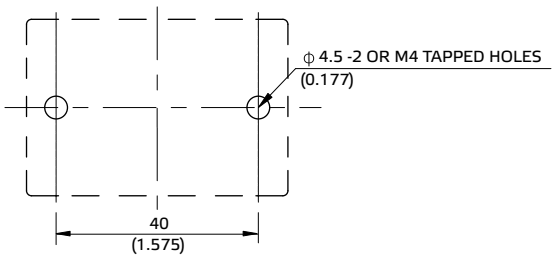


1A

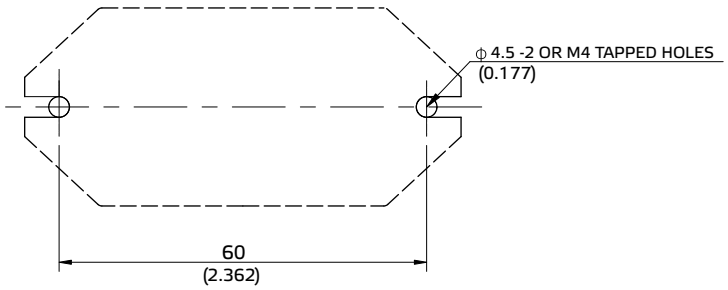


Mounting Holes
BOTTOM VIEW

◆841-S



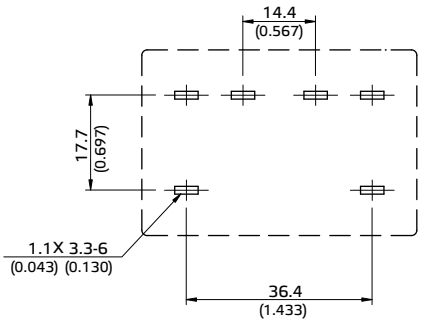
◆841-S (C1,D1,S1)



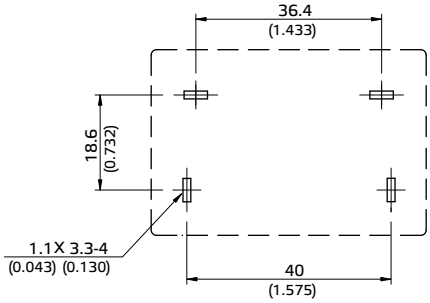
PC Board Layout
BOTTOM VIEW

◆841-P

2A

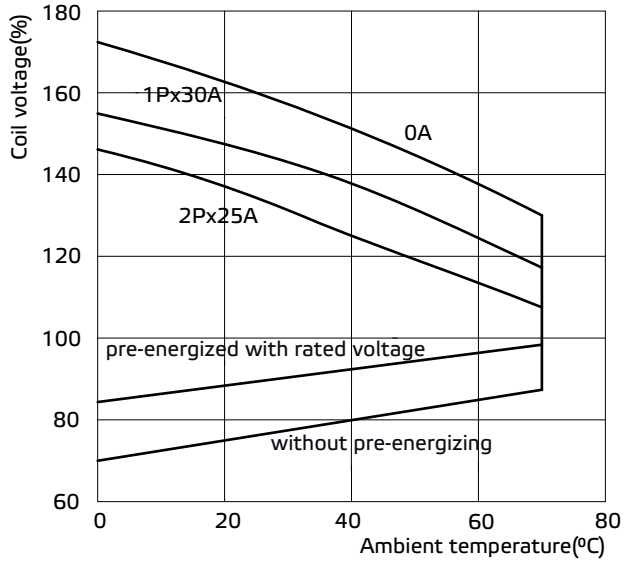


1A

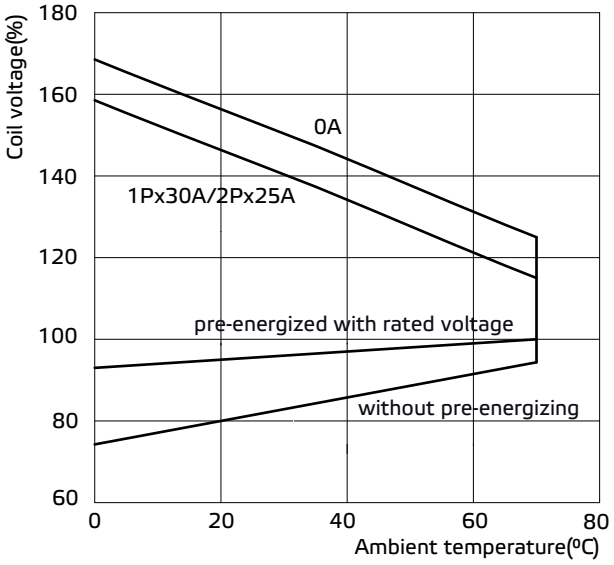


Engineering Data

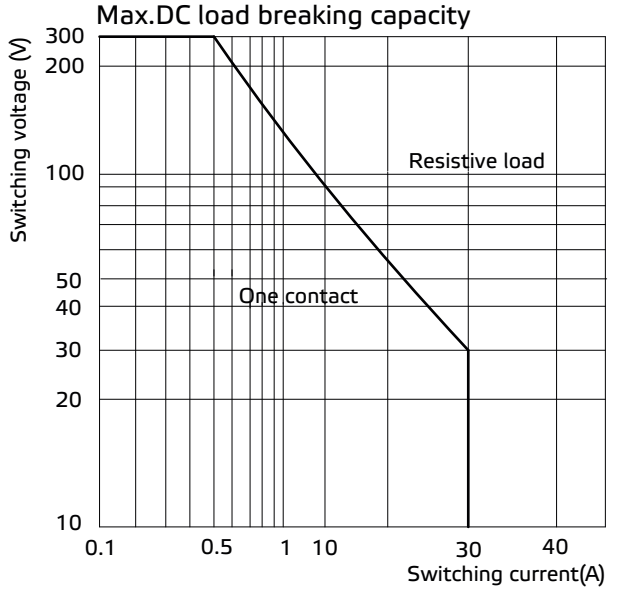
Coil operating range DC



Coil operating range AC

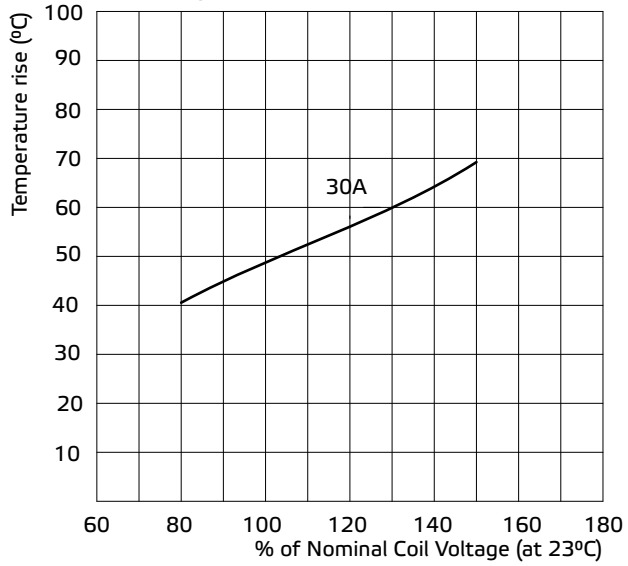


Max.DC load breaking capacity

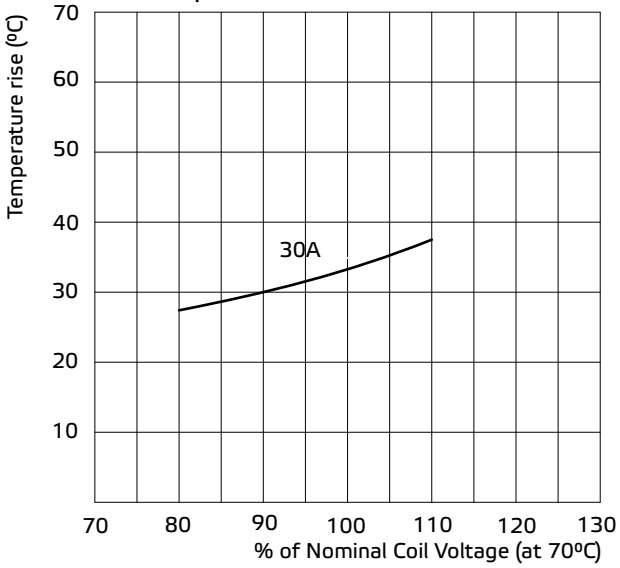


◆ 841(1P)

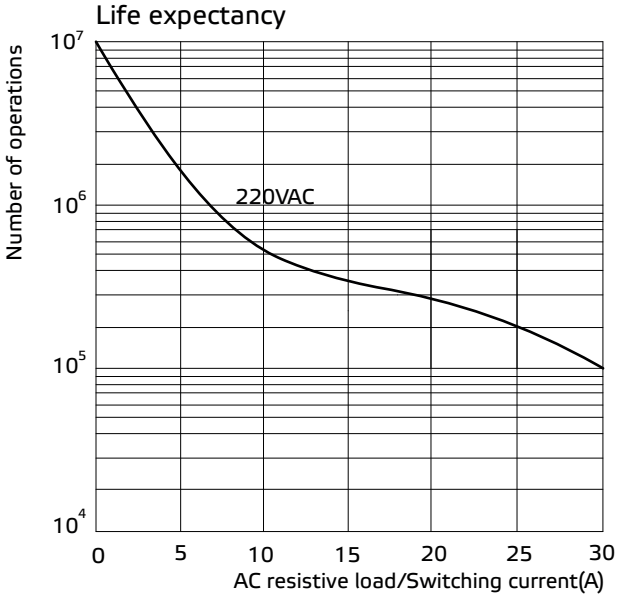
Coil temperature rise



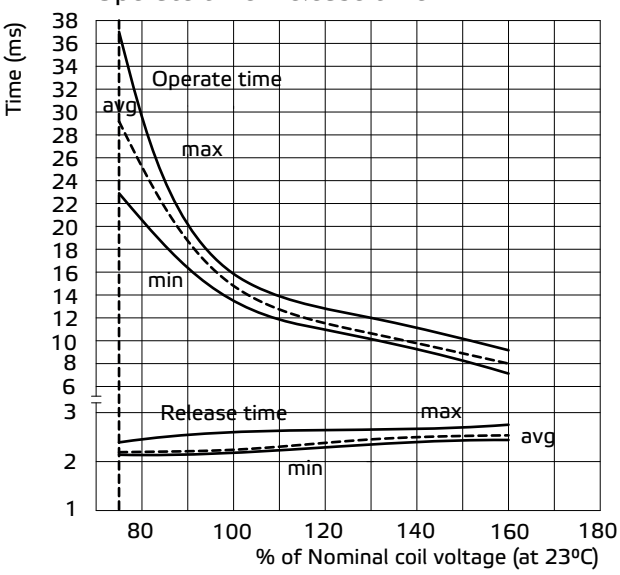
Coil temperature rise



Life expectancy

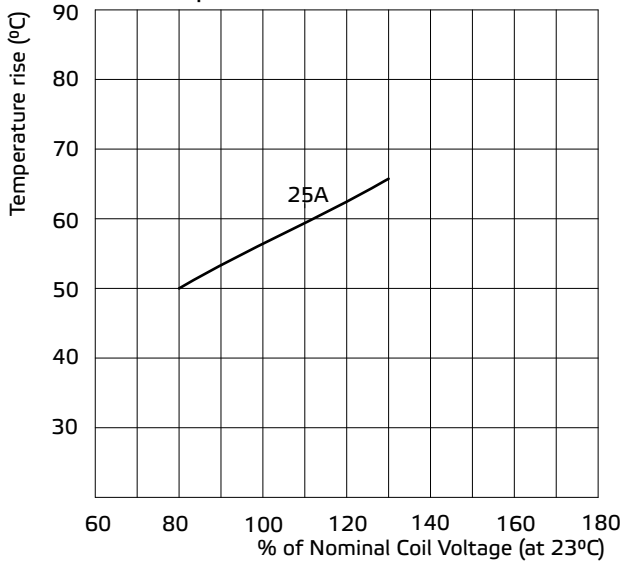


Operate time/Release time

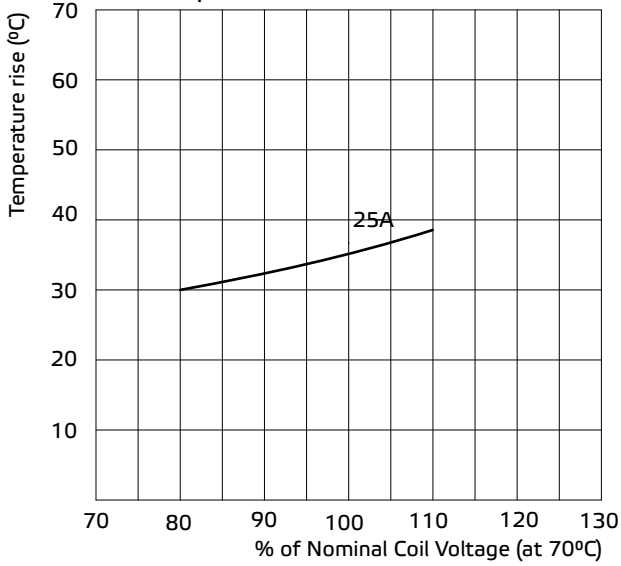


◆841(2P)

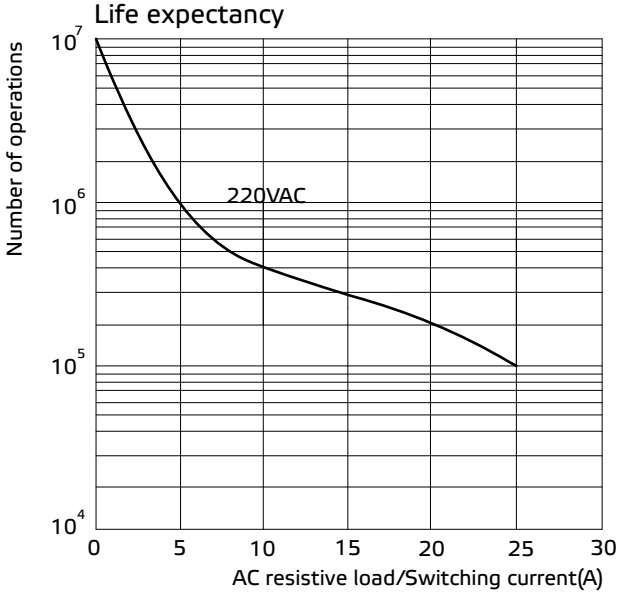
Coil temperature rise



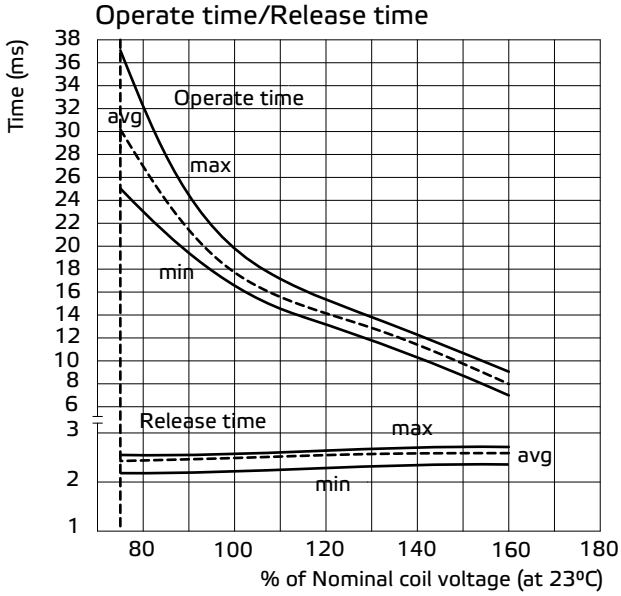
Coil temperature rise



Life expectancy



Operate time/Release time



Note

Notes

SONG CHUAN

Note

Notes

SONG CHUAN

Note

Notes

SONG CHUAN

Song Chuan Group Company Headquarter

SONG CHUAN PRECISION Co. Ltd.
No. 377, Jhonghua Road, Shulin City, Taipei County 238, Taiwan
Tel.: 886-2-86845332, -86845432, Fax: 886-2-86843097, -86843896
E-Mail: info@songchuan.com.tw, info1@songchuan.com.tw
www.songchuan.com

Factories

XIAMEN SONG CHUAN PRECISION Co., Ltd. (Electron)
Zonic Science Building, Xing Long Road, Huli Industrial District,
Xiamen Fujian, China 361006
Tel.: 86-592-6025539-43, Fax: 86-592-6025546
E-Mail: info@songchuan.com.tw, info1@songchuan.com.tw
www.songchuan.com.cn

SHANGHAI SONG CHUAN PRECISION ELECTRON Co., Ltd.
No. 1059, Xiao Yun Road, Baoshang Industrial District, Shanghai, China 200949
Tel.: 86-21-51651666, Fax: 86-21-51651611
www.songchuan.com.cn

Sales Office Europe

SONG CHUAN EUROPE GmbH
Im Petersfeld 5, 65624 Altendiez, Germany
Tel.: 49-6432-8006-0, Fax: 49-6432-8006-50
E-Mail: info@songchuan.eu
www.songchuan.eu

Sales Office USA

SONG CHUAN USA, Inc.
2841 Center Port Circle, Pompano Beach, FL33064
Tel.: 1-954-788-5889, Fax: 1-954-788-8717
E-Mail: scu@songchuan.com
www.songchuan.com

Sales Office Asia

SONG CHUAN PRECISION Co. Ltd.
No. 377, Jhonghua Road, Shulin City, Taipei County 238, Taiwan
Tel.: 886-2-86845332, -86845432, Fax: 886-2-86843097, -86843896
E-Mail: info@songchuan.com.tw, info1@songchuan.com.tw
www.songchuan.com

SONG CHUAN EUROPE GmbH
Im Petersfeld 5
65624 Altendiez
Germany

Tel.: +49 6432-8006-0
Fax: +49 6432-8006-50
info@songchuan.eu
www.songchuan.eu