



731



»» Features

- 10A general purpose Power Relay.
- Both available 0.25 and 0.187 terminals.
- SPDT, DPDT, TPDT contact configurations.
- AC & DC coils are both available
- Optional for anti-rotation-tab, tapped core, indicator, lamp & push-to-test button, flanged cover.
- Comply with RoHS-Directive 2011/65/EU.

»» Type List

◆ 731

Terminal style	Contact form	Enclosure style				
		Open type	Dust cover	Ears on cover	Antirotation -tab	Ears on top
Quick terminal	1A(SPNO)	731-SPNO	731-SPNO-C	731-SPNO-C1	731-SPNO-C2	731-SPNO-C3
	1C (SPDT)	731-SPDT	731-SPDT-C	731-SPDT-C1	731-SPDT-C2	731-SPDT-C3
	2A (DPNO)	731-DPNO	731-DPNO-C	731-DPNO-C1	731-DPNO-C2	731-DPNO-C3
	2C (DPDT)	731-DPDT	731-DPDT-C	731-DPDT-C1	731-DPDT-C2	731-DPDT-C3
	3A (TPNO)	731-TPNO	731-TPNO-C	731-TPNO-C1	731-TPNO-C2	731-TPNO-C3
	3C (TPDT)	731-TPDT	731-TPDT-C	731-TPDT-C1	731-TPDT-C2	731-TPDT-C3

◆ 731H

Terminal style	Contact form	Enclosure style		
		Dust cover	Ears on cover	Ears on top
Quick terminal	1A (SPNO)	731H-SPNO-C	731H-SPNO-C1	731H-SPNO-C3
	1C (SPDT)	731H-SPDT-C	731H-SPDT-C1	731H-SPDT-C3
	2A (DPNO)	731H-DPNO-C	731H-DPNO-C1	731H-DPNO-C3
	2C (DPDT)	731H-DPDT-C	731H-DPDT-C1	731H-DPDT-C3
	3A (TPNO)	731H-TPNO-C	731H-TPNO-C1	731H-TPNO-C3
	3C (TPDT)	731H-TPDT-C	731H-TPDT-C1	731H-TPDT-C3

»» Ordering Information

$\frac{731}{1} \frac{H}{2} - \frac{TPDT}{3} - \frac{C}{4} \frac{M}{5} - \frac{F}{6} \frac{XXVXC}{7}$

1. 731 -- Basic series designation
2. Blank -- Standard type
H -- High power type
3. SPDT -- Single pole double throw
SPNO -- Single pole normally open
SPNC -- Single pole normally closed

- DPDT -- Double pole double throw
- DPNO -- Double pole normally open
- DPNC -- Double pole normally closed
- TPDT -- Three pole double throw
- TPNO -- Three pole normally open
- TPNC -- Three pole normally closed

- 4. Blank -- Open type without frame tab
- 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
- X -- Open type with frame tab
- 5. M -- With manual operator
- T -- Printed circuit board terminals
- L -- Pilot lamp
- 6. Blank -- Standard type
- F -- Class F
- 7. XXVXC -- Coil voltage (please refer to the coil rating data for the availability)

»» Contact Rating

	731	731H 1P-2P	731H 3P
Resistive load	10A 28VDC 10A 240VAC	20A 300VAC 25A 277VAC	16A 300VAC 20A 277VAC

»» Coil Rating (DC)

Rated voltage (V)	Rated current ±10 % at 23°C (mA)	Coil resistance ±10 % at 23°C (Ω)	Max. continuous voltage at 70°C	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
6	188	32	140 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 1.2W
12	100	120				
24	51	472				
48	27	1800				
110	11	10000				
120	12	10000				

»» Coil Rating (AC)

Rated voltage (V)	Coil resistance ±10 % at 23°C (Ω)	Max. continuous voltage at 70°C	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage	
SP DP	12	21	110 % of rated voltage	85 % of rated voltage	30 % of rated voltage	approx. 2.0VA
	24	85				
	110	1700				
	115	1700				
	120	2250				
	220	7200				
	230	7200				
	240	9110				



731

»» Coil Rating (AC)

Rated voltage (V)	Coil resistance $\pm 10\%$ at 23°C (Ω)	Max. continuous voltage at 70°C	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage	
TP	12 24 110 115 120 220 230 240	18 72 1300 1300 1700 5600 5600 7200	110 % of rated voltage	85 % of rated voltage	30 % of rated voltage	approx. 2.7VA

»» Specification

Contact material	AgSnO alloy	
Contact resistance ⁽¹⁾	50 m Ω Max. (for 731)	100 m Ω Max. (for 731H)
Operate time ⁽¹⁾	20 ms Max.	
Release time ⁽¹⁾	20 ms Max.	
Insulation resistance ⁽¹⁾	1000 M Ω Min. (DC 500V)	
Dielectric strength ⁽¹⁾	Between open contact	: AC 500V, 50/60Hz 1 min. (for 731) : AC 1000V, 50/60Hz 1 min. (for 731H)
	Between contact and coil	: AC 1500V, 50/60Hz 1 min. (for 731) : AC 2500V, 50/60Hz 1 min. (for 731H)
	Between contact circuits	: AC 1500V, 50/60Hz 1 min. (for 731) : AC 2500V, 50/60Hz 1 min. (for 731H)
Vibration resistance	Operating extremes	10~55Hz, amplitude 1.0 mm
	Damage limits	10~55Hz, amplitude 1.5 mm
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) (for 731) 50,000 operations (frequency 360 ops./hr) (for 731H)
Operating ambient temperature	-45~+70°C (no freezing) (for 731)	
	AC coil : -45~+55°C (no freezing) (for 731H) DC coil : -45~+65°C (no freezing)	
Weight	Approx. 79.2 g	

Note: (1) initial value.

»» Safety Approva

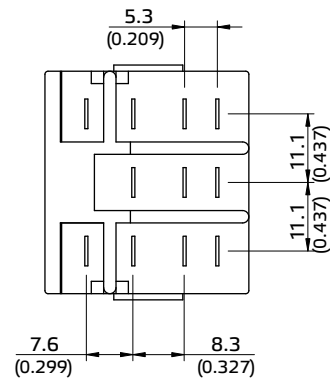
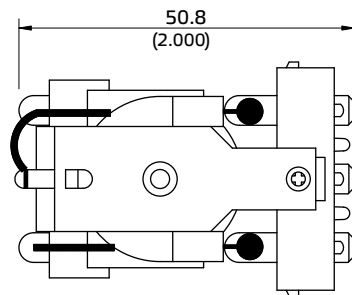
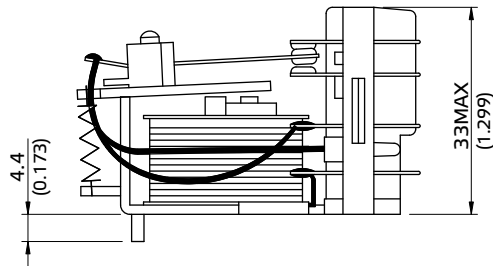
Certified	731			731H
	UL	CSA	FIMKO	UL / CUL
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»» SafetyApproval Rating

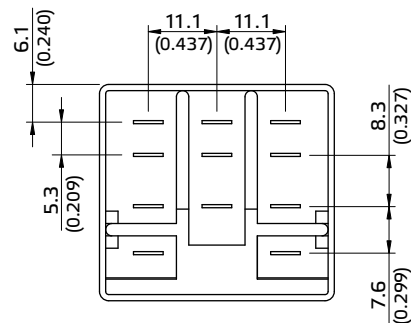
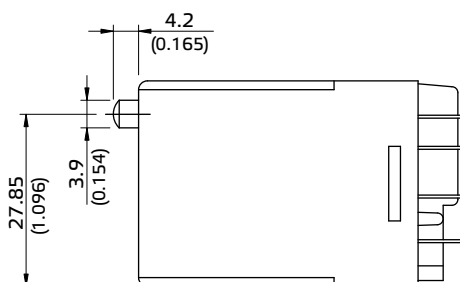
731		731H 1P- 2P	731H 3P
UL - CSA	FIMKO	UL / CUL	
10A 240VAC	10A 250VAC	20A 300VAC	16A 300VAC
10A 28VDC		25A 277VAC	20A 277VAC
1/3HP 120VAC		1.5HP 240VAC	1.5HP 240VAC
1/2HP 240VAC		1HP 120VAC	1HP 120VAC

»» Outline Dimensions

◆ 731 OPEN



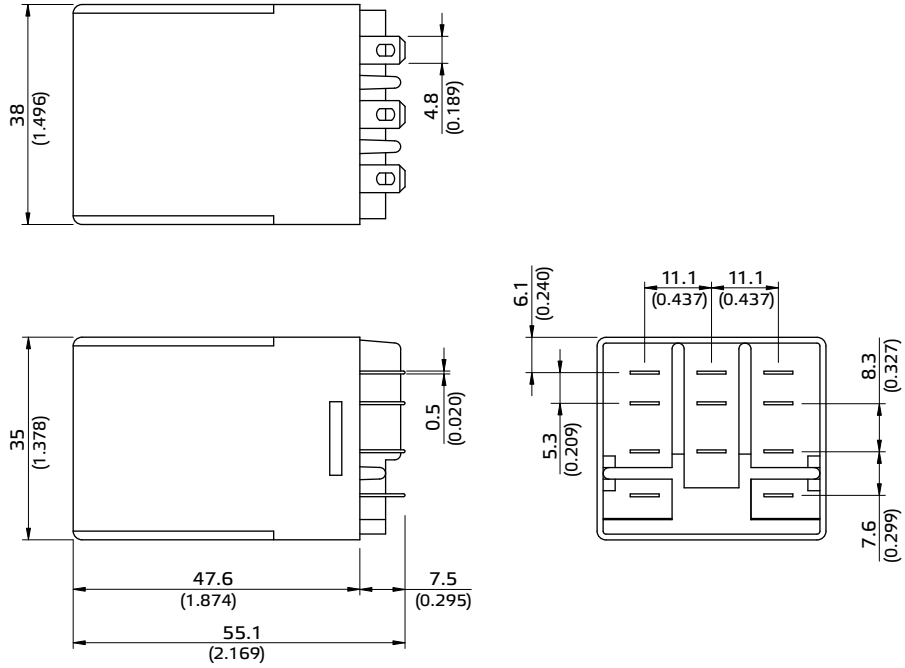
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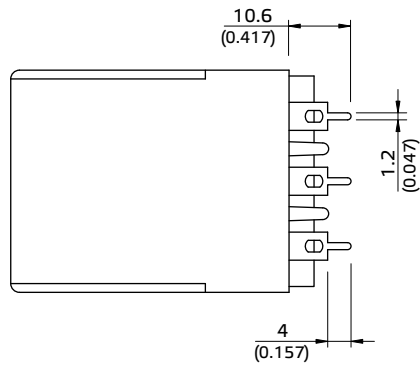


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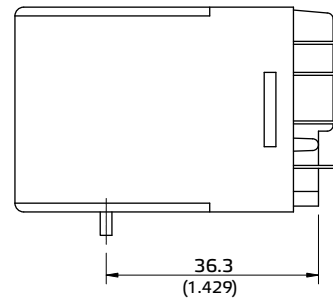
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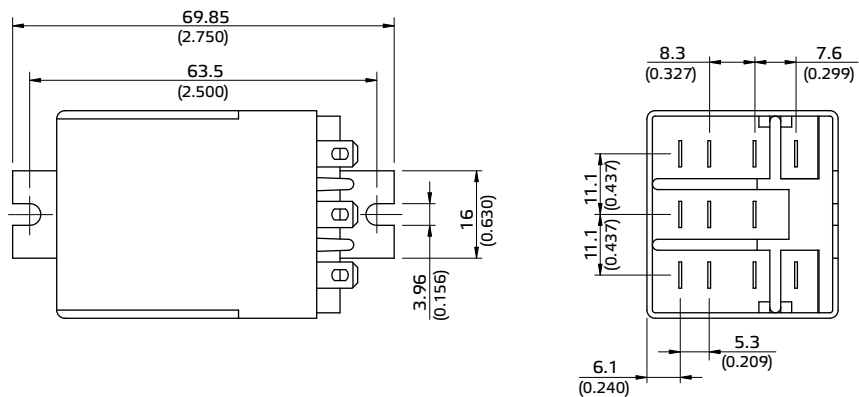
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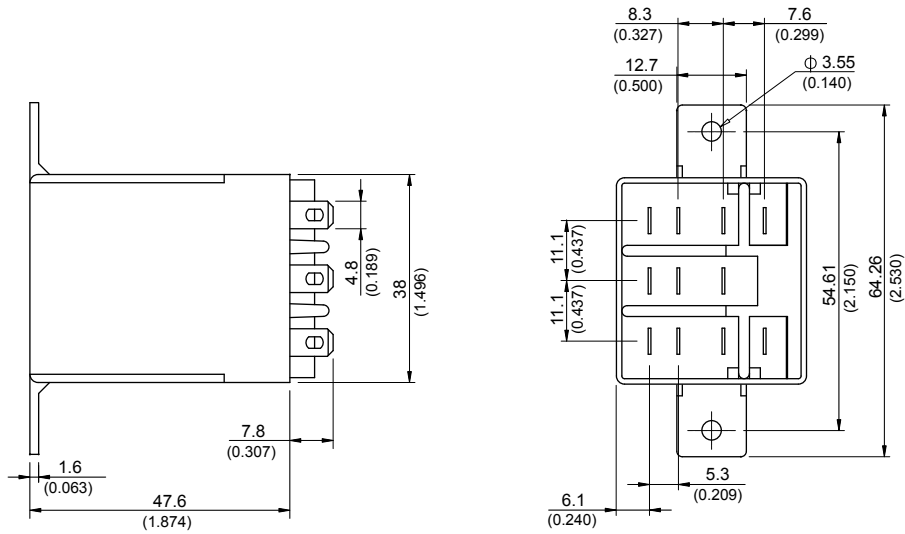
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◆ 731 C1

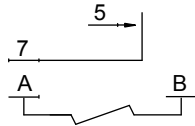


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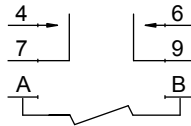


»» Wiring Diagram
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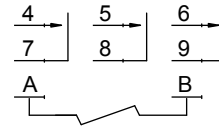
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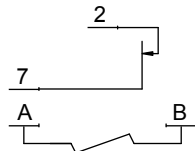
DPNO



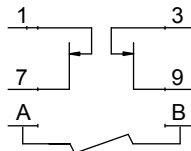
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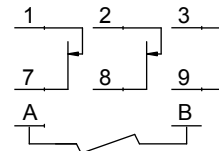
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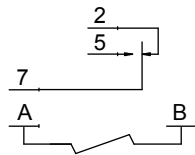
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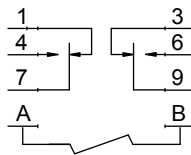
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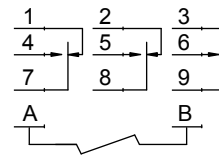
SPDT



DPDT

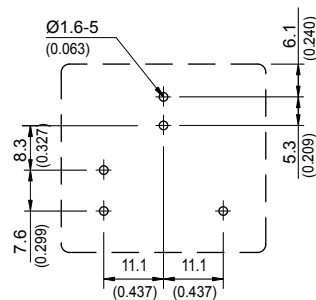


TPDT

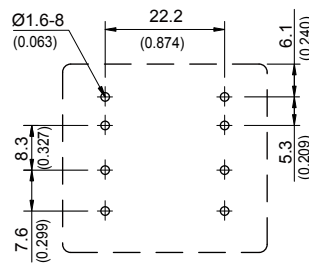


»» PC Board Layout
Bottom New

1P



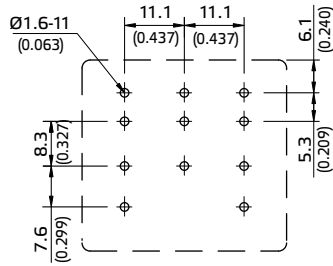
2P





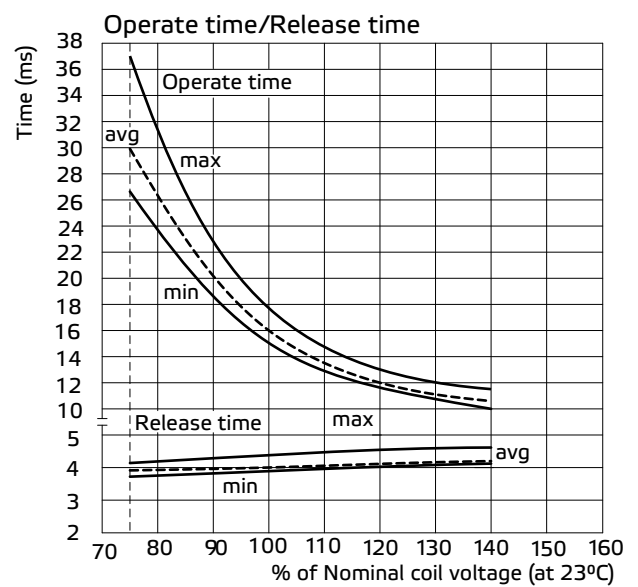
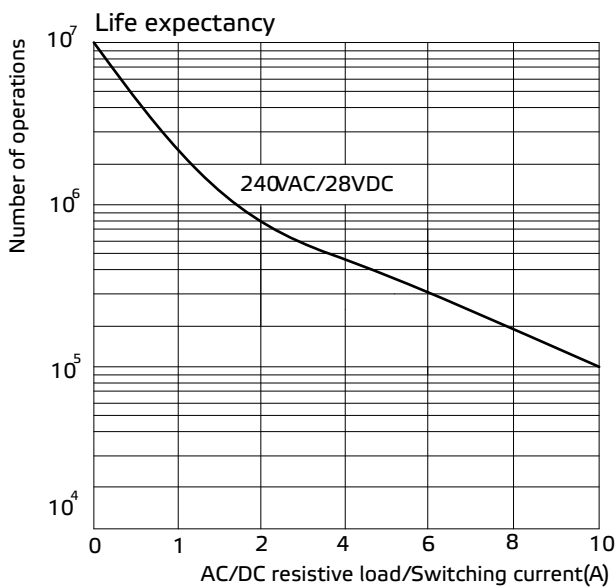
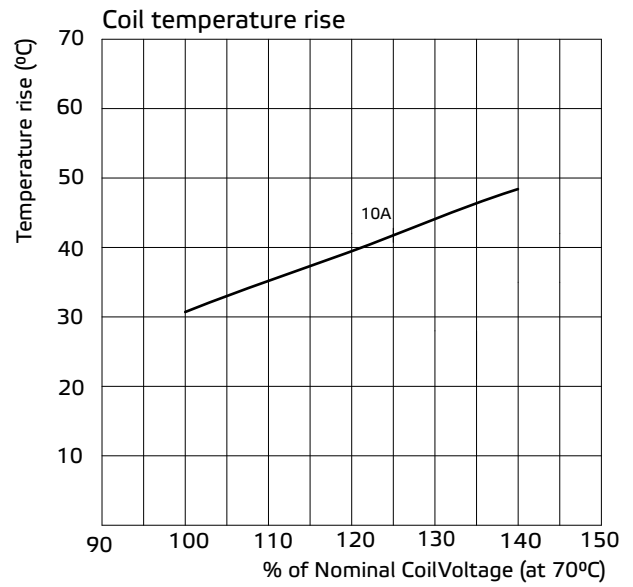
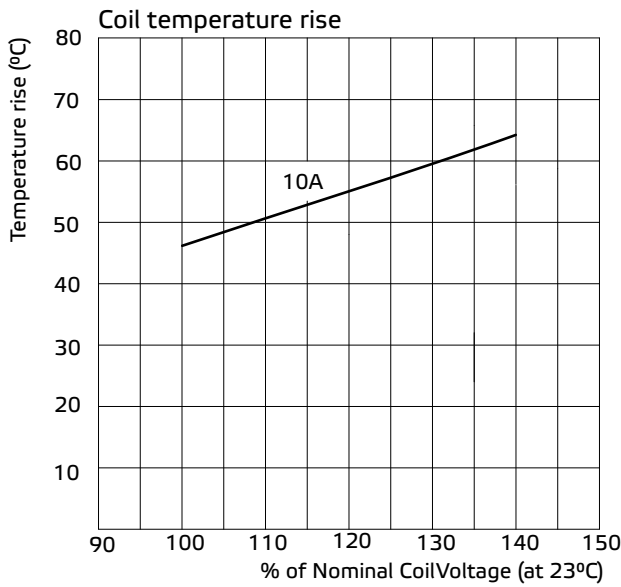
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3P

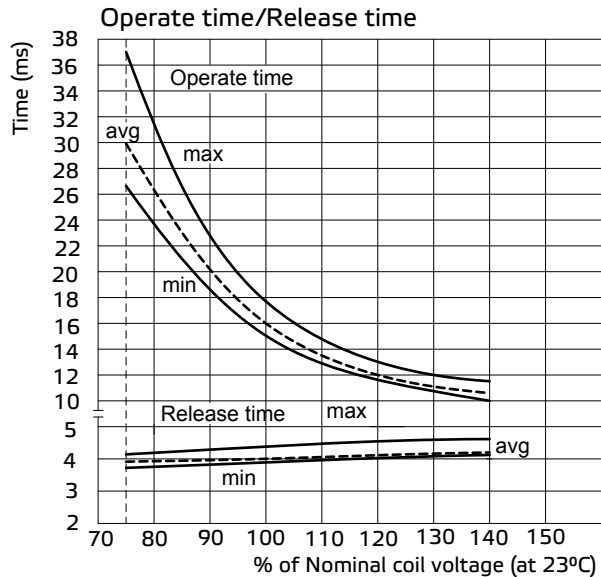
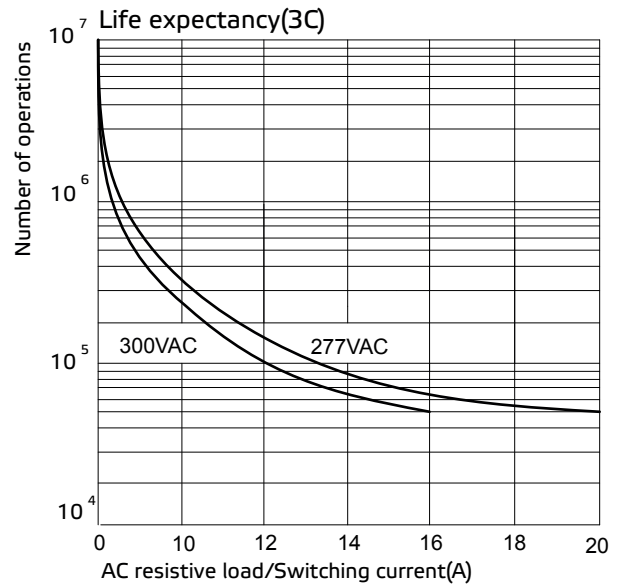
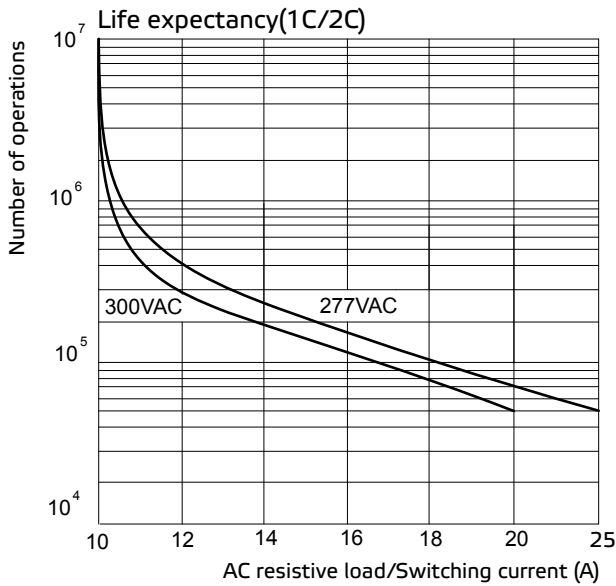
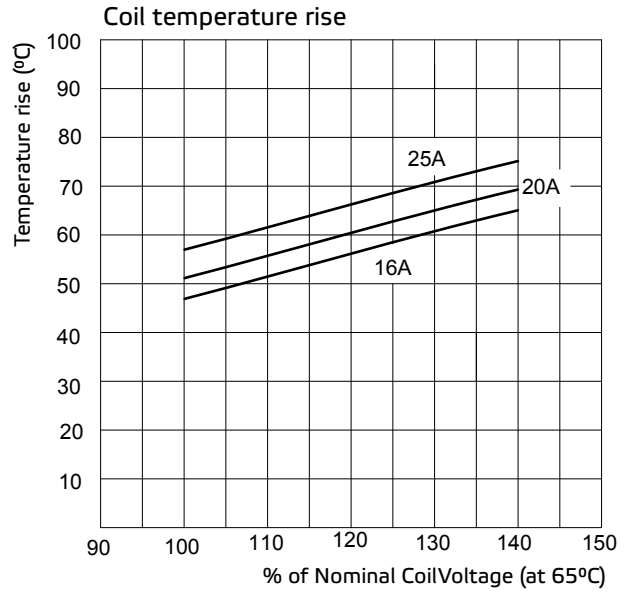
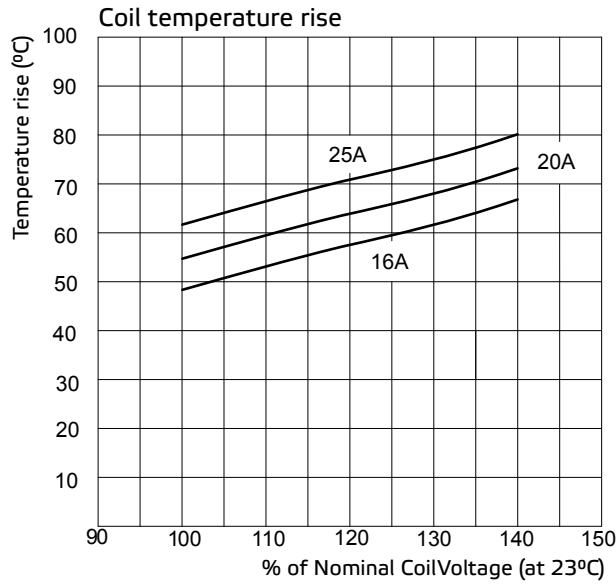


»» Engineering Data

◆ 731



◆ 731 H



Disclaimer

All technical performance data apply to the relay as such, specific conditions of the individual application are not considered. Please always check the suitability of the relay for your intended purpose. We do not assume any responsibility or liability for not complying herewith. We recommend to complete our questionnaire and to request our technical service. Any responsibility for the application of the product remains with the customer only. All specifications are subject to change without notification. All rights of Song Chuan are reserved.