

735



### »» Features

- 20A/25A general purpose Power Relays.
- SPDT, DPDT, TPDT contact configurations.
- DC & AC coils are both available.
- Optional for flange covers, tapped core w/anti-rotation tab, indicator lamp, push-to-test button, PCB terminals
- Comply with RoHS-Directive 2002/95/EC, and ELV-Directive 2000/53/EC.

### »» Type List

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	-----	-----	-----

### »» Ordering Information

735 - 2C - F - C1 - M  
 1            2            3            4            5

- |                                    |                                  |
|------------------------------------|----------------------------------|
| 1. 735 -- Basic series designation | 2C -- Double pole double throw   |
| 2. 1A -- Single pole normally open | 3A -- Three pole normally open   |
| 1B -- Single pole normally closed  | 3B -- Three pole normally closed |
| 1C -- Single pole double throw     | 3C -- Three pole double throw    |
| 2A -- Double pole normally open    | 3. Blank -- Standard type        |
| 2B -- Double pole normally closed  | F -- Class F                     |

- |  |  |
|--|--|
| 4. Blank -- Open type<br>C -- With cover<br>C1 -- With mounting ears on cover<br>C2 -- With accessible mounting hole with anti-rotation tab<br>C3 -- Mounting ears on top of cover | 5. Blank -- No special feature<br>M -- With manual operator<br>T -- Printed circuit board terminals<br>L -- Pilot lamp |
|--|--|

### »» Contact Rating

Resistive load	1A, 1B, 1C, 2A, 2B, 2C	3A, 3B, 3C
		20A 240VAC, 15A 28VDC

### »» Coil Rating (DC)

Rated voltage (V)	Rated current $\pm 10\%$ at 23 °C (mA)	Coil resistance $\pm 10\%$ at 23 °C ( $\Omega$ )	Max. continuous voltage at 50 °C	Pick up voltage(Max) at 23 °C	Drop out voltage(Min) at 23 °C	Power consumption at rated voltage
SP DP	6	188	160 % of rated voltage	80 % of rated voltage	10 % of rated voltage	approx. 1.2W
	12	100				
	24	51				
	48	27				
	110	11				
	125	12.5				
TP	6	24				approx. 1.5W
	12	96				
	24	384				
	48	1536				
	110	9600				
	125	9600				

### »» Coil Rating (AC)

Rated voltage (V)	Coil resistance $\pm 10\%$ at 23 °C ( $\Omega$ )	Max. continuous voltage at 50 °C	Pick up voltage(Max) at 23 °C	Drop out voltage(Min) at 23 °C	Power consumption at rated voltage	
SP DP	6	4.2	130 % of rated voltage	85 % of rated voltage	30 % of rated voltage	approx. 3.0VA
	12	18				
	24	72				
	110	1580				
	120	1700				
	220	5850				
	240	7200				

Rated voltage (V)	Coil resistance $\pm 10\%$ at 23 °C ( $\Omega$ )	Max. continuous voltage at 50 °C	Pick up voltage(Max) at 23 °C	Drop out voltage(Min) at 23 °C	Power consumption at rated voltage	
TP	6	3.9	130 % of rated voltage	85 % of rated voltage	30 % of rated voltage	approx. 3.4VA
	12	14.5				
	24	64				
	110	1450				
	120	1540				
	220	5850				
	240	6750				

### »» Specification

Contact material	AgSnO alloy	
Contact resistance <sup>(1)</sup>	50 m $\Omega$ Max.	
Operate time <sup>(1)</sup>	25 ms Max.	
Release time <sup>(1)</sup>	20 ms Max.	
Insulation resistance <sup>(1)</sup>	1000 M $\Omega$ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between open contact	: AC 1000V , 50/60Hz 1 min.
	Between contact and coil	: AC 1600V , 50/60Hz 1 min.
	Between contact circuits	: AC 1600V , 50/60Hz 1 min.
Vibration resistance	Operating extremes	10~55Hz , amplitude 2.0 mm
	Damage limits	10~55Hz , amplitude 2.0 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 1,200 operations/hr)
Operating ambient temperature	-30~+50 °C (no freezing)	
Weight	Approx. 80 g	

Note : (1) initial value

### »» Safety Approval

Certified	UL	CSA	FIMKO
File No.	E88991	LR90143	14426

### »» Safety Approval Rating (FIMKO)

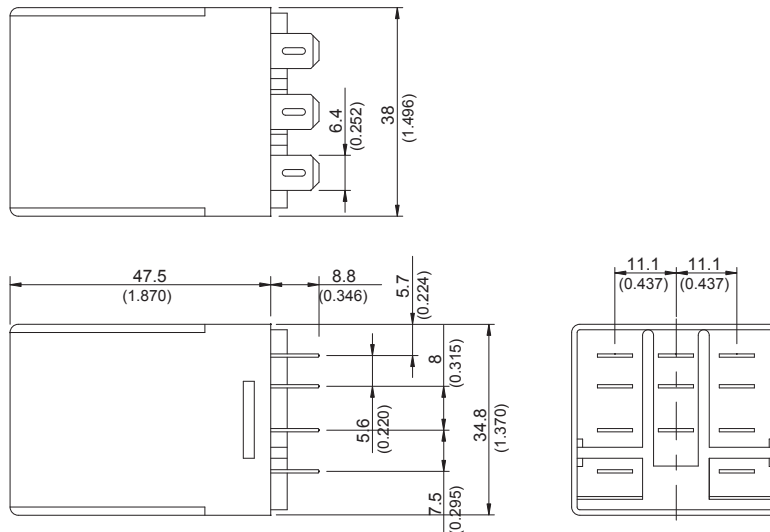
1A, 1B, 1C	2A, 2B, 2C	3A, 3B, 3C
25A 250VAC	25A 250VAC	20A 250VAC

### »» Safety Approval Rating(UL、CSA)

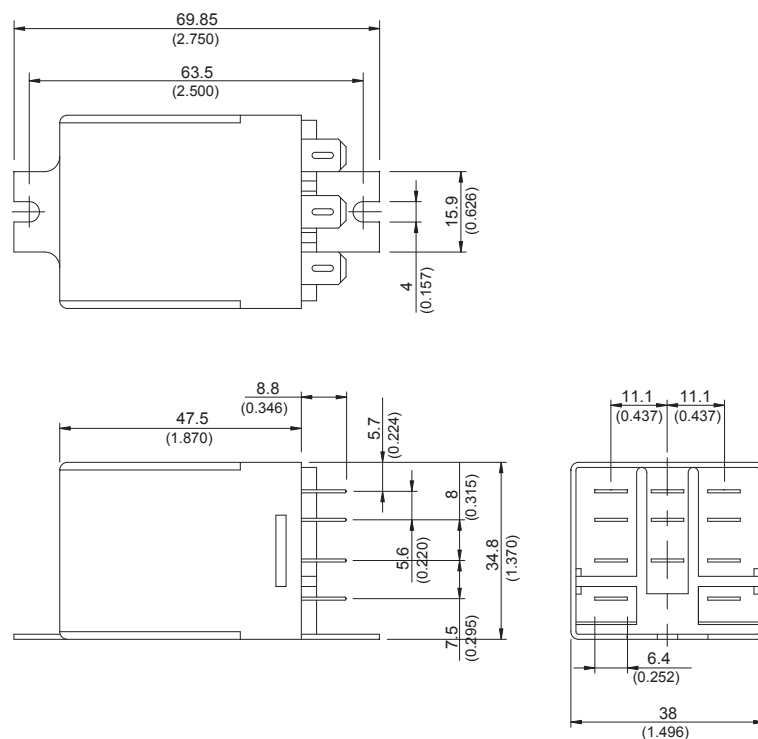
UL			CSA		
1A, 1B, 1C	2A, 2B, 2C	3A, 3B, 3C	1A, 1B, 1C	2A, 2B, 2C	3A, 3B, 3C
25A 28VDC	20A 28VDC	15A 28VDC	30A 277VAC	25A 277VAC	20A 277VAC
25A 277VAC	25A 277VAC	20A 277VAC	10A 600VAC	10A 600VAC	15A 28VDC
10A 600VAC	10A 600VAC	3/4HP 120VAC	25A 28VDC	20A 28VDC	3/4HP 120VAC
1.5HP 240VAC	1.5HP 240VAC	1HP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

### »» Outline Dimensions

#### ◆ 735 C

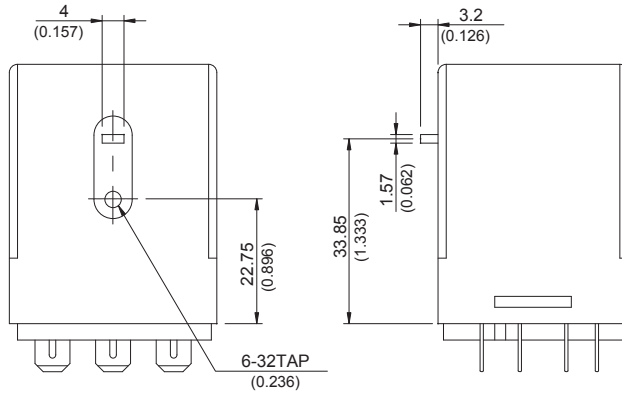


#### ◆ 735 C1

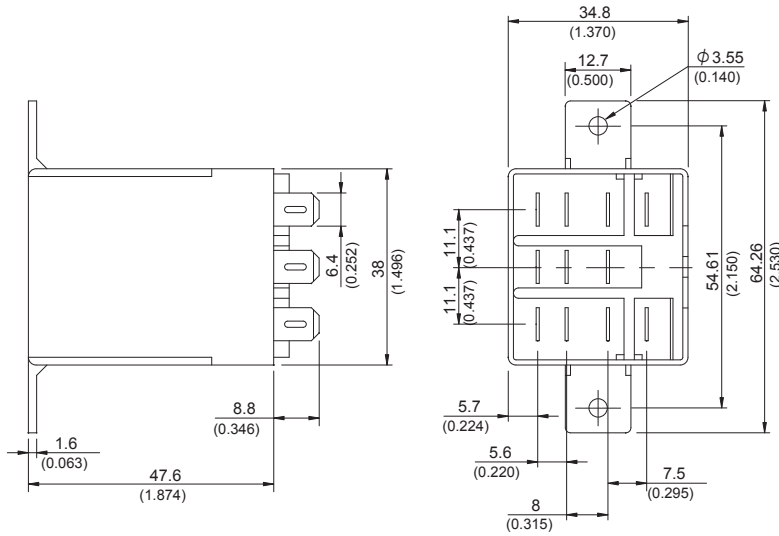


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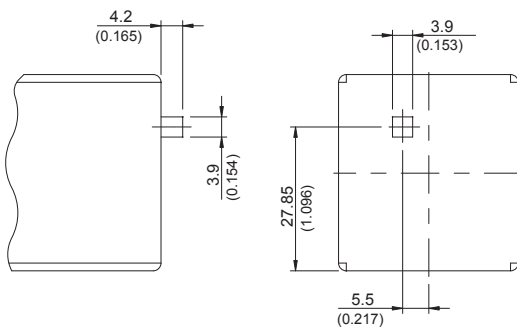
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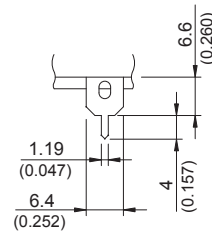
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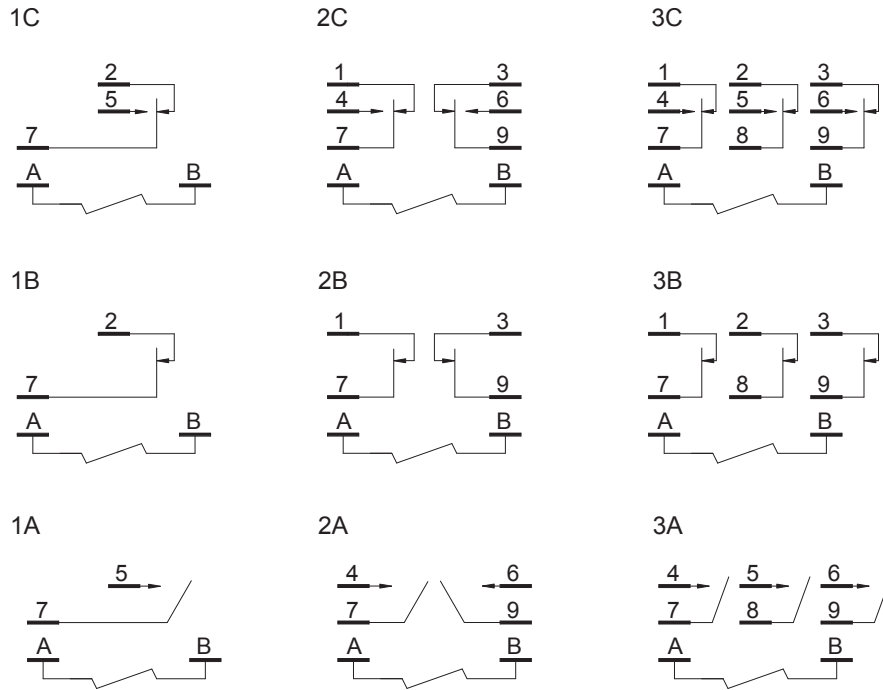
## ◆ 735 M



## ◆ 735 T



## Wiring Diagram BOTTOM VIEW



## Engineering Data

