

737



### »» Features

- 30A general purpose Power Relay.
- SPDM, SPDB, SPDM+DB contact configurations.
- AC & DC coils are both available.
- Optional for anti-rotation tab, tapped core indicator lamp & push-to-test button, flanged covers. (side flange & top flange)
- Comply with RoHS-Directive 2002/95/EC.

### »» Type List

Terminal style	Contact form	Designation	Enclosure style				
			Open type	Dust cover	Ears on cover	Antirotation-tab	Ears on top
Quick terminal	1X(SPDM)	-----	737-1X	737-1X-C	737-1X-C1	737-1X-C2	737-1X-C3
	1Y(SPDB)		737-1Y	737-1Y-C	737-1Y-C1	737-1Y-C2	737-1Y-C3
	1Z (SPDM/B)		737-1Z	737-1Z-C	737-1Z-C1	737-1Z-C2	737-1Z-C3
	1X(SPDM)	Lamp	-----	737-1X-C-L	737-1X-C1-L	737-1X-C2-L	737-1X-C3-L
	1Y(SPDB)		-----	737-1Y-C-L	737-1Y-C1-L	737-1Y-C2-L	737-1Y-C3-L
	1Z (SPDM/B)		-----	737-1Z-C-L	737-1Z-C1-L	737-1Z-C2-L	737-1Z-C3-L
	1X(SPDM)	Manual	-----	737-1X-C-M	737-1X-C1-M	737-1X-C2-M	737-1X-C3-M
	1Y(SPDB)		-----	737-1Y-C-M	737-1Y-C1-M	737-1Y-C2-M	737-1Y-C3-M
	1Z (SPDM/B)		-----	737-1Z-C-M	737-1Z-C1-M	737-1Z-C2-M	737-1Z-C3-M
PCB terminal	1X(SPDM)	-----	-----	737-1X-C-T	-----	737-1X-C2-T	737-1X-C3-T
	1Y(SPDB)		-----	737-1Y-C-T	-----	737-1Y-C2-T	737-1Y-C3-T
	1Z (SPDM/B)		-----	737-1Z-C-T	-----	737-1Z-C2-T	737-1Z-C3-T
	1X(SPDM)	Lamp	-----	737-1X-C-LT	-----	737-1X-C2-LT	737-1X-C3-LT
	1Y(SPDB)		-----	737-1Y-C-LT	-----	737-1Y-C2-LT	737-1Y-C3-LT
	1Z (SPDM/B)		-----	737-1Z-C-LT	-----	737-1Z-C2-LT	737-1Z-C3-LT
	1X(SPDM)	Manual	-----	737-1X-C-MT	-----	737-1X-C2-MT	737-1X-C3-MT
	1Y(SPDB)		-----	737-1Y-C-MT	-----	737-1Y-C2-MT	737-1Y-C3-MT
	1Z (SPDM/B)		-----	737-1Z-C-MT	-----	737-1Z-C2-MT	737-1Z-C3-MT

### »» Ordering Information

737 - 1X - F - C1 - M  
 1      2      3      4      5

- |                                      |                           |
|--------------------------------------|---------------------------|
| 1. 737 -- Basic series designation   | 3. Blank -- Standard type |
|                                      | F -- Class F              |
| 2. 1X -- Single pole double make     |                           |
| 1Y -- Single pole double break       | 4. Blank -- Open type     |
| 1Z -- Single pole double make/ break | C -- With cover           |



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

### »» Contact Rating

Resistive load	30A 28VDC, 15A 600VAC, 30A 300VAC
Motor	1HP 120VAC, 1.5HP 200~600VAC

### »» 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 75°C	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
1X 1Y	6	188	110 % 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				
1Z	6	250	110 % of rated voltage	80 % of rated voltage	10 % of rated voltage	approx. 1.5W
	12	125				
	24	63				
	48	31				
	110	11.5				
	125	13				

### »» Coil Rating (AC)

Rated voltage (V)	Coil resistance $\pm 10\%$ at 23°C ( $\Omega$ )	Max. continuous voltage at 75°C	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
6	4.2	110 % of rated voltage	85 % of rated voltage	30 % of rated voltage	approx. 3.0VA
12	18				
24	72				
110	1580				
120	1700				
220	5500				
240	7200				

## »» Specification

Contact material	AgSnO alloy	
Contact resistance <sup>(1)</sup>	50 mΩ Max.	
Operate time <sup>(1)</sup>	25 ms Max.	
Release time <sup>(1)</sup>	20 ms Max.	
Insulation resistance <sup>(1)</sup>	1000 MΩ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between live parts & ground	: AC 1600V , 50/60Hz 1 min.
	Between contact and coil	: AC 2200V , 50/60Hz 1 min.
	Between open contact	: AC 1000V , 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 360 operations/hr)
Operating ambient temperature	-40~+75°C (no freezing)	
Weight	Approx. 83 g	

Note : (1) initial value

## »» Safety Approval

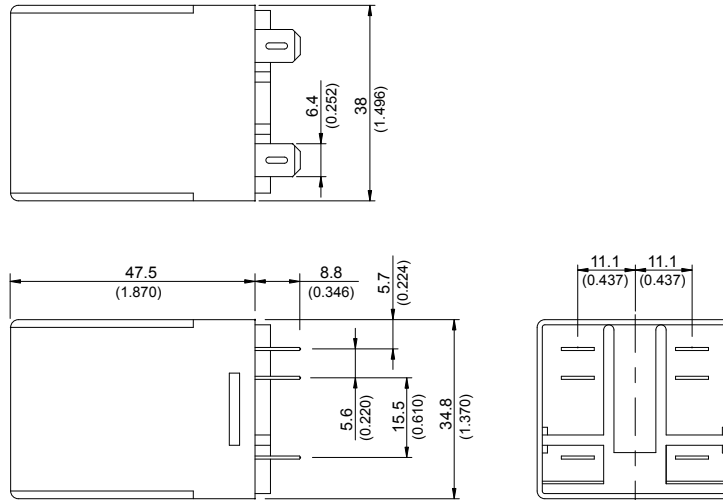
Certified	UL	CSA	TUV
File No.	E88991	1664125	R50044822

## »» Safety Approval Rating

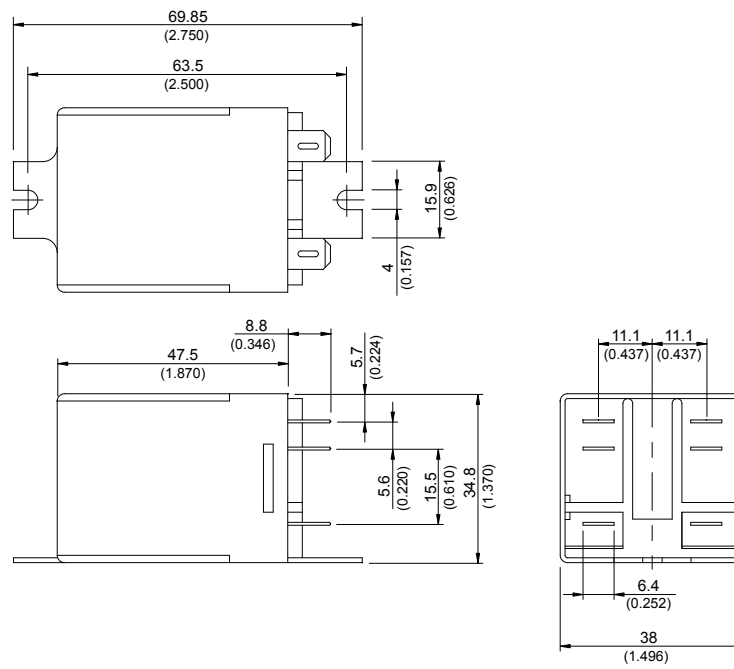
UL	CSA	TUV
30A 28VDC	30A 28VDC	30A 250VAC (for 1X,1Z)
30A 300VAC	30A 300VAC	
15A 600VAC	15A 600VAC	
1HP 120VAC	1HP 120VAC	
1.5HP 200/240/480/600VAC	1.5HP 200~600VAC	

## »» Outline Dimensions

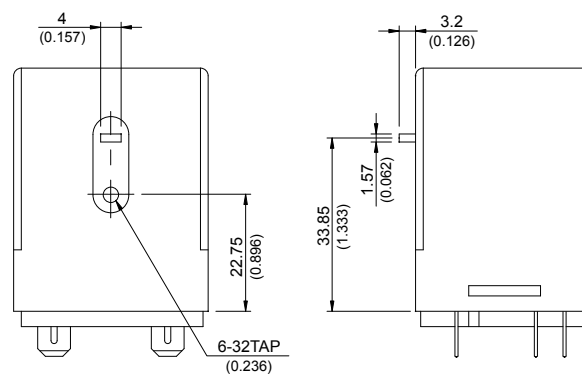
### ◆ 737 C



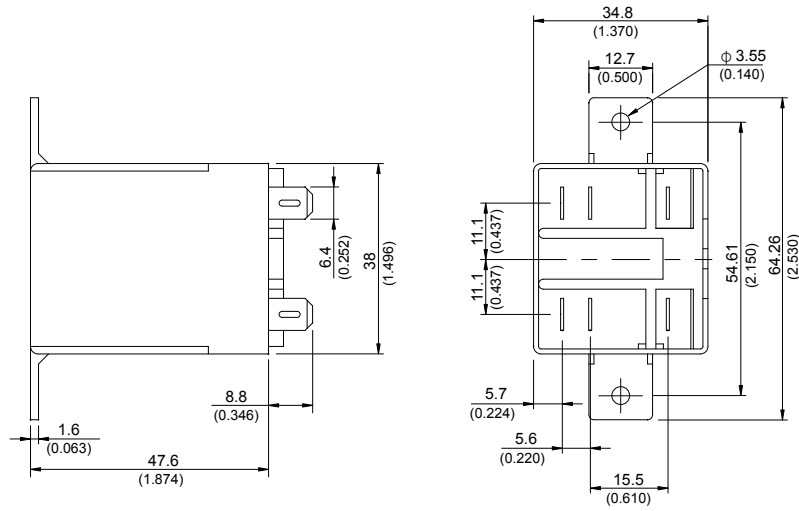
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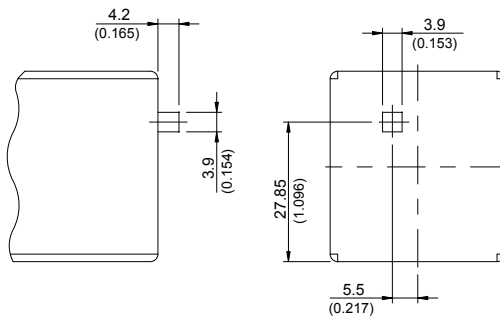
### ◆ 737 C2



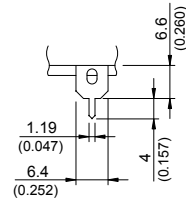
◆ 737 C3



◆ 737 M

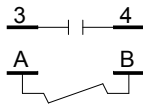


◆ 737 T

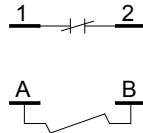


»» Wiring Diagram  
BOTTOM VIEW

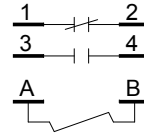
1X



1Y

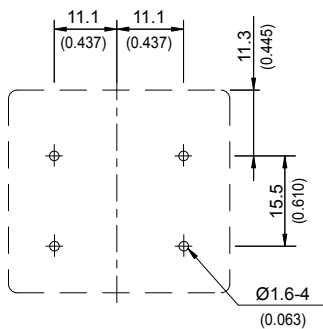


1Z

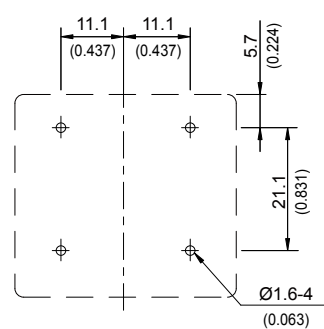


»» PC Board Layout  
BOTTOM VIEW

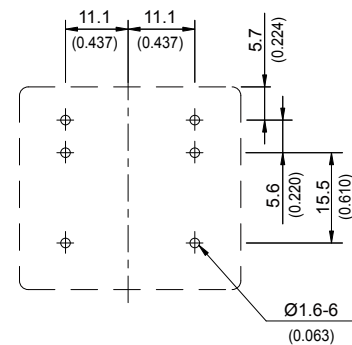
1X



1Y



1Z



## »» Engineering Data

