


# HOME APPLICATION RELAY
## ETR RET SERIES

## ■FEATURES

- 1 Pole to 2-Poles versions available with switching current at 15A (1 Pole) and 10A (2 Poles).
- Printed Circuit Board Terminal, Plug-in Terminal and Flanged Case are designed for easy mounting.
- Both AC and DC coil available.
- Low coil power consumption with high response time.
- High reliability and long life with better vibration and shock resistance.
- 1/3 HP on RET 2 Poles series is certified by UL.
- Touch Button and LED version available.
- Comply with RoHS and REACH regulations.

## ■SPECIFICATIONS

| | |
|---|---|
| Contact Resistance | Max. 100mΩ at initial value. @1A,6VDC |
| Contact Capacity | RET-1P: 15 Amps at 250VAC Cosφ=1<br>15 Amps at 30VDC L/R=0<br>RET-2P: 10 Amps at 250VAC Cosφ=1<br>10 Amps at 30VDC L/R=0 |
| Operate Time | 25m Sec. Max. |
| Release Time | 25m Sec. Max. |
| Dielectric Strength | Between coil & Contact: 1500VAC at 50/60Hz for one minute<br>Between Contacts: 1000VAC at 50/60Hz for one minute |
| Insulation Resistance | 100MΩ Min. at 500VDC |

## ■COIL SPECIFICATION AT 20℃

| Coil Sensitivity | Coil Voltage Code | Nominal Voltage (VAC/ VDC) | Nominal Current (mA) | | Coil Resistance (Ω±10%) | Power Consumption | | Pull-In Voltage (VDC) | Drop-Out Voltage (VDC) | Max. Allowable Voltage (VDC) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 50Hz | 60Hz | | 50Hz | 60Hz | | | |
| RET 1P, 2P AC Coil | 01 | 6 | 282.7 | 214.3 | 10 | 1.70VA | 1.29VA | 80% Max. | 15% Min. | 110% |
| | 02 | 12 | 106.2 | 94.9 | 40 | 1.27VA | 1.14VA | | | |
| | 03 | 24 | 52.8 | 45.5 | 160 | 1.27VA | 1.09VA | | | |
| | 04 | 48 | 23.7 | 20.0 | 600 | 1.10VA | 0.96VA | | | |
| | 05 | 110 | 12.5 | 10.3 | 3,400 | 1.37VA | 1.13VA | | | |
| | 06 | 120 | 16.8 | 14.3 | 3,400 | 2.01VA | 1.72VA | | | |
| | 07 | 220 | 6.2 | 5.1 | 13,600 | 1.36VA | 1.12VA | | | |
| | 08 | 240 | 7.2 | 5.9 | 13,600 | 1.74VA | 1.41VA | | | |
| | 09 | 230 | 7.0 | 5.7 | 13,600 | 1.61VA | 1.31VA | | | |
| RET 1P, 2P DC Coil | 01 | 6 | 150 | | 40 | Abt. 0.9W | | 80% Max. | 10% Max. | 110% |
| | 02 | 12 | 75 | | 160 | | | | | |
| | 03 | 24 | 36.9 | | 650 | | | | | |
| | 04 | 48 | 18.5 | | 2,600 | | | | | |
| | 05 | 110 | 10 | | 11,000 | | | | | |
| | 06 | 120 | 10 | | 11,000 | | | | | |
| | 10 | 60 | 15 | | 4,000 | | | | | |

## ■PART NUMBER SYSTEM

ETR RET - 1 - 01 D M P F L T - Z

- Z: RoHS Compliant
- Touch Button:
  Nil: Without Touch Button
  T: With Touch Button Selection
- LED:
  Nil: Without LED
  L: With LED Selection
- Case Type:
  Nil: Standard Case
  F: Flanged Case
- Terminal Type:
  Nil: Solder Lug Terminal
  P: PC Board Terminal
- Contact Form:
  Nil: One Form C
  M: One Form A
  B: One Form B
- Coil Type:
  D: DC Coil
  A: AC Coil
- Coil Voltage:
  01:6V, 02:12V, 03:24V, 04:48V, 05:110V
  06:120V, 07:220V, 08:240V, 09:230V, 10:60V
- Number of Pole:
  1: One Pole
  2: Two Poles
- Model Name: RET
- Series Name: ETR

***Marking without: "ETR" & "Z".**

**ETR RET-106D**

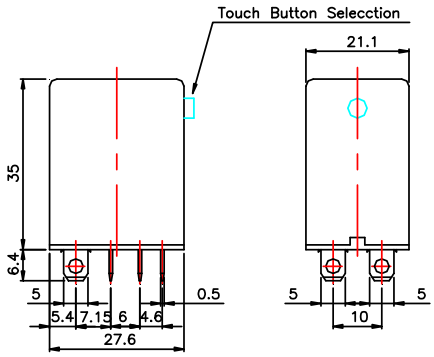


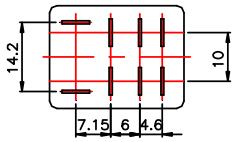
**ETR RET-206D**



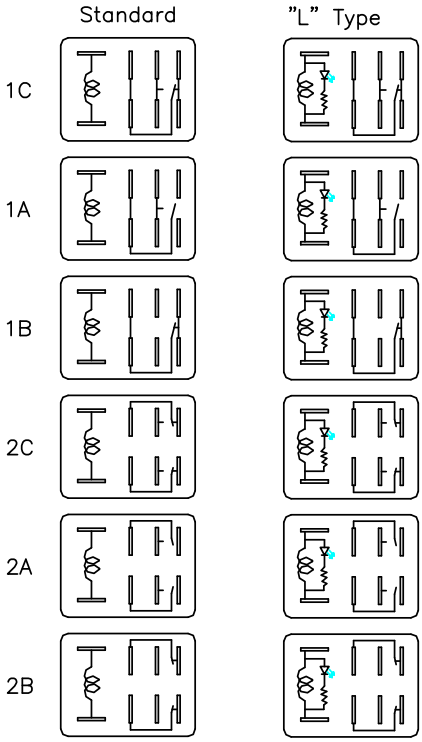
## ■DIMENSIONS (≦5mm±0.2mm, ＞5mm±0.3mm, the tolerance of PCB thru hole: +0.1mm)

ETR RET
(Solder Lug Terminal)



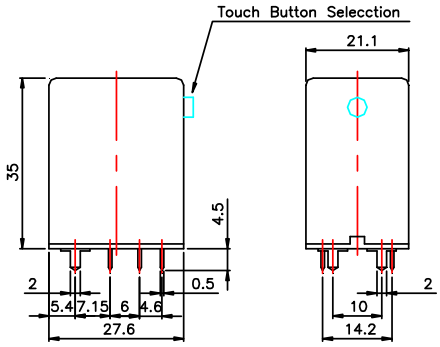



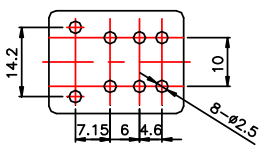

P.C.B LAYOUT



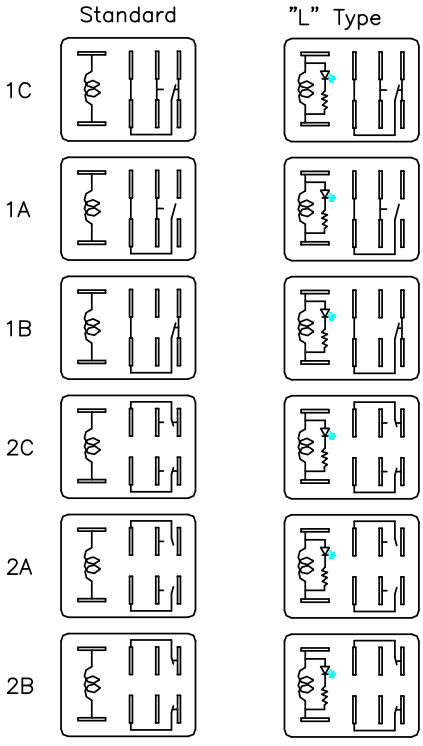

BOTTOM VIEW

ETR RET–P
(PC Board Terminal)



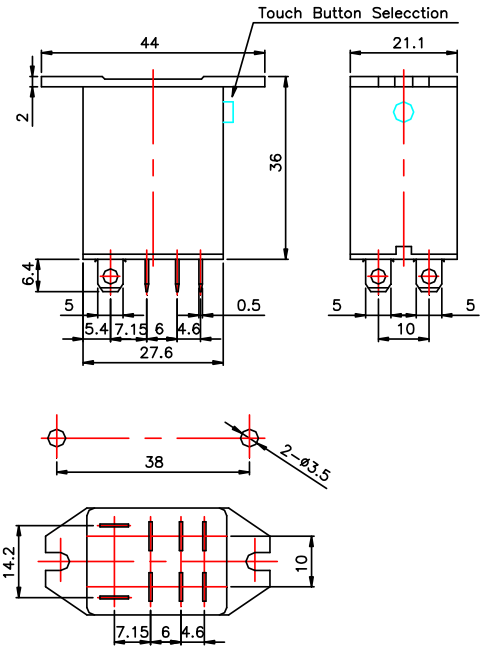




P.C.B LAYOUT

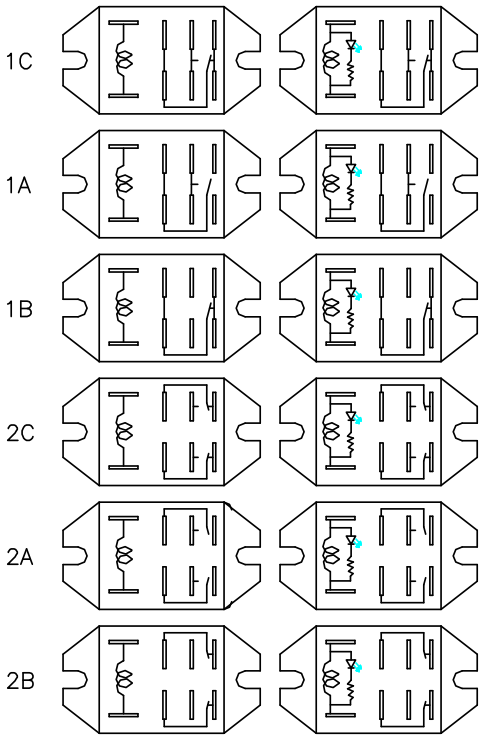



BOTTOM VIEW

ETR RET–F
(Solder Lug Terminal & With Flanged Case)

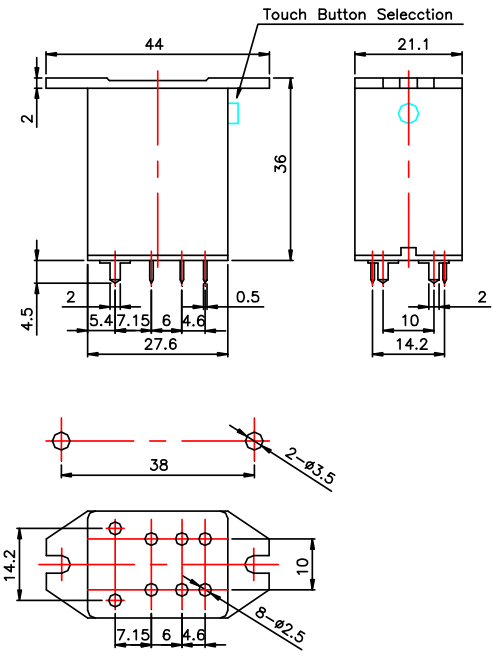



P.C.B LAYOUT

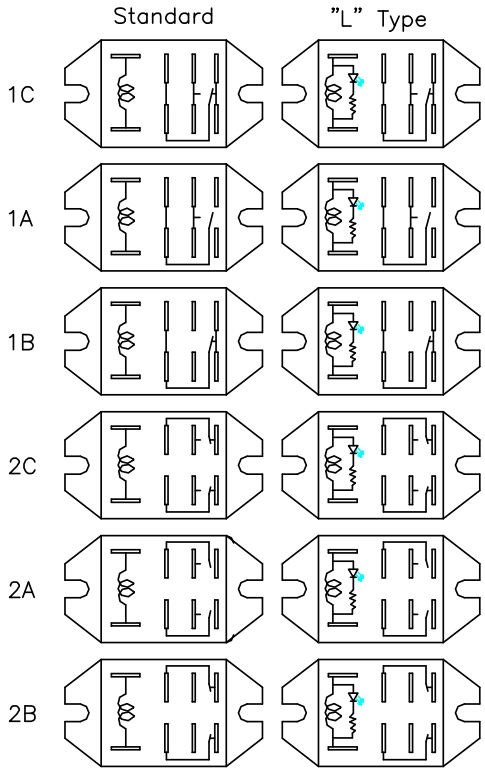



BOTTOM VIEW

ETR RET–PF
(PC Board Terminal & With Flanged Case)




P.C.B LAYOUT




BOTTOM VIEW