



Main Feature

1. 2-pole and 4-pole version are available with switching current at 5 Amps (2 Poles & 4 Poles).
2. Printed Circuit Board Terminal, Solder Lug Terminal and Flanged Case are designed for direct panel mounting use.
3. Low coil power consumption with high response time.
4. High reliability and long life with better vibration and shock resistance.
5. Touch Button and LED version are available for customer's selection.

Contact Rating

| Load Type | RE-2P (DM/DB) | RE-2P (D) | RE-4P (DM/DB) | RE-4P (D) |
|----------------------------|---------------|-----------|---------------|-----------|
| Rated Load (Resistive) | 5A 250VAC | 5A 250VAC | 5A 250VAC | 5A 250VAC |
| | 5A 30VDC | 5A 30VDC | 5A 30VDC | 5A 30VDC |
| Rated Carrying Current | 5A | 5A | 5A | 5A |
| Max. Allowable Voltage | AC 250V | AC 250V | AC 250V | AC 250V |
| | DC 110V | DC 110V | DC 110V | DC 110V |
| Max. Allowable Current | 5A | 5A | 5A | 5A |
| Max. Allowable Power Force | 1,250VA | 1,250VA | 1,250VA | 1,250VA |
| | 150W | 150W | 150W | 150W |
| Contact Material | Ag Alloy | Ag Alloy | Ag Alloy | Ag Alloy |
| Contact Form | DPST | DPDT | 4PST | 4PDT |

Application

Vending Machine, Cooking Appliances, Office Machine, Domestic Appliances, Control Equipment... etc.

Performance (at Initial Value)

- Contact Resistance 100 mΩ Max@1A,6VDC
- Operate Time..... 25 mSec. Max.
- Release Time 25 mSec. Max.
- Dielectric Strength :
Between Coil & Contact 1,500VAC at 50/60 Hz for one minute.
Between Contacts 1,000VAC at 50/60 Hz for one minute.
- Surge Strength 3,000V (between Coil & Contact 1.2x50μSec.)
- Insulation Resistance 100 MegaΩ Min. at 500VDC.
- Max. On/Off Switching :
Electrical..... 6 Cycles per Minute.
Mechanical 300 Cycles per Minute.
- Temperature Range..... -25 ~ 55°C
- Humidity Range 45 ~ 85% RH.
- Coil Temperature Rise..... 60°C Max.
- Vibration :
Endurance 10 to 55 Hz dual amplitude width 1.5mm.
Error Operation..... 10 to 55 Hz dual amplitude width 1.5mm.

- Shock :
Endurance 1,000 m/S² Min.
Error Operation..... 100 m/S² Min.
- Life Expectancy :
Mechanical 10⁷ Operations at No Load condition.
Electrical 10⁵ Operations at Rated Resistive Load.
- Weight About 2 P : 32 g.
4 P : 35 g.

Accessories & Sockets

RE-2P

- PYF-08A/AE See Page 170
- PY-08/-0..... See Page 176
- PYF-08BE & BE/3 See Page 170

RE-4P

- PYF-14A/AE See Page 171
- PY-14/-0..... See Page 176
- PYF-14BE & BE/3 See Page 171

Safety Standard & Its File Number

- UL & C-UL E141060
- VDE 40012699
- CQC.....07001018730

Coil Specification (at 20°C)

| Coil Sensitivity | Coil Voltage Code | Nominal Voltage (VAC/VDC) | Nominal Current (mA) | | Coil Resistance ($\Omega \pm 10\%$) | Power Consumption | | Pull-In Voltage | Drop-Out Voltage | Max. Allowable Voltage |
|--------------------------|-------------------|---------------------------|----------------------|--------|---------------------------------------|-------------------|--------|-----------------|------------------|------------------------|
| | | | 50 Hz | 60 Hz | | 50HZ | 60HZ | | | |
| RE 2P & 4P AC Coil | 01 | 6 | 282.67 | 214.33 | 10 | 1.7VA | 1.29VA | 80% Maximum | 30% Minimum | 110% |
| | 02 | 12 | 106.2 | 94.85 | 40 | 1.27VA | 1.14VA | | | |
| | 03 | 24 | 52.8 | 45.45 | 160 | 1.27VA | 1.09VA | | | |
| | 04 | 48 | 23.65 | 19.95 | 600 | 1.1VA | 0.96VA | | | |
| | 05 | 110 | 12.45 | 10.25 | 3,400 | 1.37VA | 1.13VA | | | |
| | 06 | 120 | 16.75 | 14.33 | 3,400 | 2.01VA | 1.72VA | | | |
| | 07 | 220 | 6.18 | 5.08 | 13,600 | 1.36VA | 1.12VA | | | |
| | 08 | 240 | 7.24 | 5.85 | 13,600 | 1.74VA | 1.41VA | | | |
| | 09 | 230 | 7.0 | 5.7 | 13,600 | 1.61VA | 1.31VA | | | |
| RE 2P & 4P DC Coil | 01 | 6 | 150 | | 40 | Abt. 0.9 W | | 80% Maximum | 10% Minimum | 110% |
| | 02 | 12 | 75.0 | | 160 | | | | | |
| | 03 | 24 | 36.9 | | 650 | | | | | |
| | 04 | 48 | 18.5 | | 2,600 | | | | | |
| | 05 | 110 | 10.0 | | 11,000 | | | | | |
| | 06 | 120 | 10.9 | | 11,000 | | | | | |
| | 07 | 220 | 5.0 | | 44,000 | Abt. 1.1 W | | | | |

Classification

| Model | RE | |
|-----------------|--|--|
| Coil Type | AC Coil | |
| Number Of Poles | 2 Poles | 4 Poles |
| Contact Form | RE-2□□A/AM/AB | RE-4□□A/AM/AB |
| Terminal Type | RE-2□□A/AM/AB RE-2□□AP/AMP/ABP | RE-4□□A/AM/AB RE-4□□AP/AMP/ABP |
| Case Type | RE-2□□A/AM/AB RE-2□□AF/AMF/ABF | RE-4□□A/AM/AB RE-4□□AF/AMF/ABF |
| LED | RE-2□□AL/AML/ABL RE-2□□APL/AMPL/ABPL RE-2□□AFL/AMFL/ABFL | RE-4□□AL/AML/ABL RE-4□□APL/AMPL/ABPL RE-4□□AFL/AMFL/ABFL |
| Touch Button | RE-2□□AT/AMT/ABT RE-2□□APLT/AMPLT/ABPLT RE-2□□AFLT/AMFLT/ABFLT | RE-4□□AT/AMT/ABT RE-4□□APLT/AMPLT/ABPLT RE-4□□AFLT/AMFLT/ABFLT |
| Europe Type | RE-2□□ALTU/AMLTU/ABLTU RE-2□□APLTU/AMPLTU/ABPLTU | RE-4□□ALTU/AMLTU/ABLTU RE-4□□APLTU/AMPLTU/ABPLTU |
| Remark | "LTU" were restricted to be together within European Type ordering | |

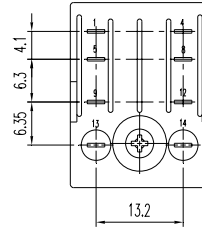
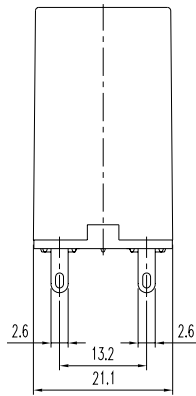
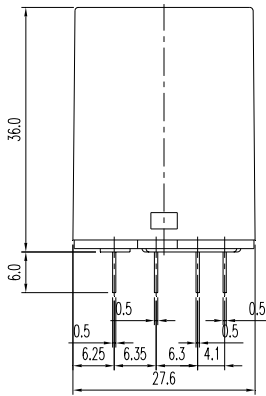
| Model | RE | |
|-----------------|--|---|
| Coil Type | DC Coil | |
| Number Of Poles | 2 Poles | 4 Poles |
| Contact Form | RE-2□□D/DM/DB | RE-4□□D/DM/DB |
| Terminal Type | RE-2□□D/DM/DB RE-2□□DP/DMP/DBP | RE-4□□D/DM/DB RE-4□□DP/DMP/DBP |
| Case Type | RE-2□□D/DM/DB RE-2□□DF/DMF/DBF | RE-4□□D/DM/DB RE-4□□DF/DMF/DBF |
| LED | RE-2□□DL(Z/Y/X/V)/DML(Z/Y/X/V)/DBL(Z/Y/X/V) RE-2□□DPL(Z/Y/X/V)/(DMPL(Z/Y/X/V)/DBPL(Z/Y/X/V) RE-2□□DFL(Z/Y/X/V)/DMFL(Z/Y/X/V)/DBFL(Z/Y/X/V) | RE-4□□DL(Z/Y/X/V)/DML(Z/Y/X/V)/DBL(Z/Y/X/V) RE-4□□DPL(Z/Y/X/V)/DMPL(Z/Y/X/V)/DBPL(Z/Y/X/V) RE-4□□DFL(Z/Y/X/V)/DMFL(Z/Y/X/V)/DBFL(Z/Y/X/V) |
| Touch Button | RE-2□□DT/DMT/DBT RE-2□□DPL(Z/Y/X/V)T/DMPL(Z/Y/X/V)T/DBPL(Z/Y/X/V)T RE-2□□DFL(Z/Y/X/V)T/DMFL(Z/Y/X/V)T/DBFL(Z/Y/X/V)T | RE-4□□DT/DMT/DBT RE-4□□DPL(Z/Y/X/V)T/DMPL(Z/Y/X/V)T/DBPL(Z/Y/X/V)T RE-4□□DFL(Z/Y/X/V)T/DMFL(Z/Y/X/V)T/DBFL(Z/Y/X/V)T |
| Europe Type | RE-2□□DL(Z/Y/X/V)TU/DML(Z/Y/X/V)TU/DBL(Z/Y/X/V)TU RE-2□□DPL(Z/Y/X/V)TU/DMPL(Z/Y/X/V)TU/DBPL(Z/Y/X/V)TU | RE-4□□DL(Z/Y/X/V)TU/DML(Z/Y/X/V)TU/DBL(Z/Y/X/V)TU RE-4□□DPL(Z/Y/X/V)TU/DMPL(Z/Y/X/V)TU/DBPL(Z/Y/X/V)TU |
| Remark | "LTU" were restricted to be together within European Type ordering | |

Ordering Information

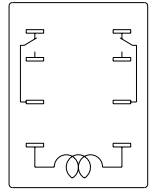
| RE | - | 2 | 01 | D | M | P | F | L | T | U | - | N |
|-------------------------------|---|---|----|---|---|---|---|---|---|---|---|---|
| Contact Material code: | | | | | | | | | | | | Nil: AgSnO ₂ S: AgSnO ₂ gilded K: AgSnO ₂ Au+Plated I: AgNi G: AgNi gilded O: AgNi Au+Plated C: AgCdO W: AgCdO gilded |
| European Type: | | | | | | | | | | | | Nil: Standard RE Relay U: European Type (Indicator, Topside Lockable Test Button, Smoked Transparent Case) |
| Touch Button: | | | | | | | | | | | | Nil: Standard Relay T: With Touch Button Selection |
| Internal Connections: | | | | | | | | | | | | Nil: Standard Relay L: With LED Selection (Use No Polarity LED) Z: Coil Parallel with Diode & the Positive Pole " +" On #14 Terminal Y: Coil Parallel with Diode & the Negative Pole " -" On #14 Terminal X: Coil Parallel with Diode + LED & the Positive Pole " +" On #14 Terminal V: Coil Parallel with Diode + LED & the Negative Pole " -" On #14 Terminal (Z, Y, X, V, Only VDC Coil) |
| Case Type: | | | | | | | | | | | | Nil: Standard Square Shape F: Flanged Case (RE Relay Only) |
| Terminal Type: | | | | | | | | | | | | Nil: Solder Lug Terminal P: PC Board Terminal |
| Contact Form: | | | | | | | | | | | | Nil: Form C M: Form A B: Form B |
| Coil Type: | | | | | | | | | | | | D: DC Coil A: AC Coil |
| Coil Code: | | | | | | | | | | | | 01: 6V, 02: 12V, 03: 24V, 04: 48V, 05: 110V, 06: 120V, 07: 220V, 08: 240V, 09: 230V, 10: 60V |
| Number of Pole: | | | | | | | | | | | | 2: 2 Poles 4: 4 Poles |
| Type: | | | | | | | | | | | | RE |

Dimension ($\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, the tolerance of PCB thru hole: $+0.1\text{mm}$)

RE-2

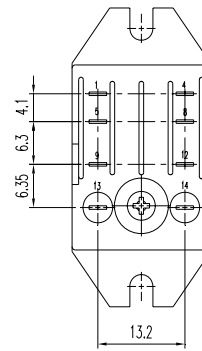
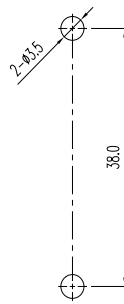
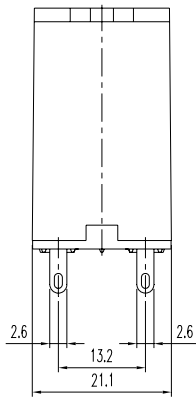
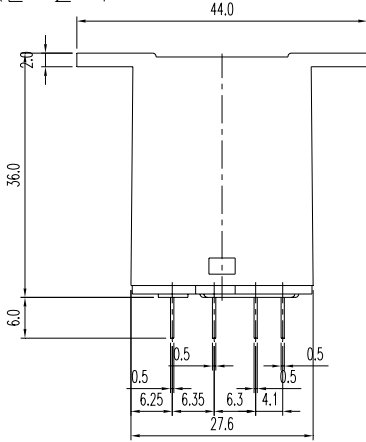


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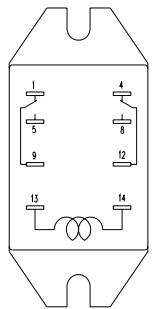


BOTTOM VIEW

RE-2-F

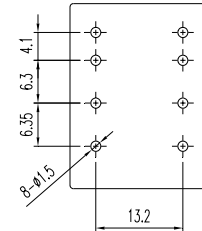
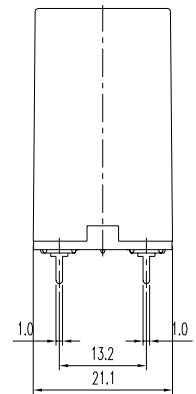
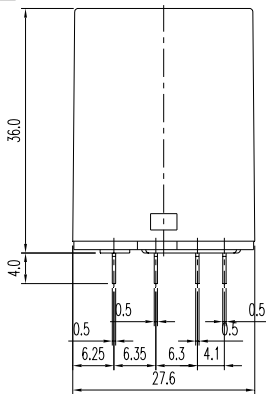


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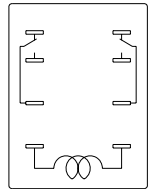


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RE-2-P

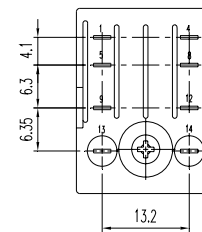
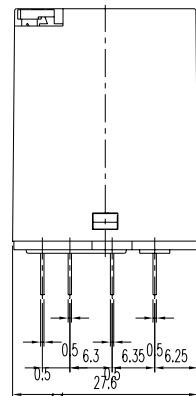
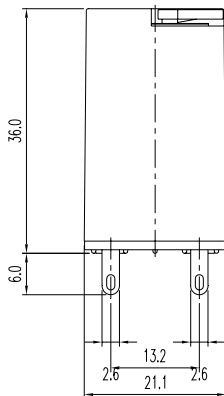


P.C.B. Layout

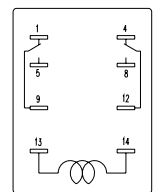


BOTTOM VIEW

RE-2xxU



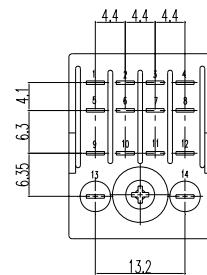
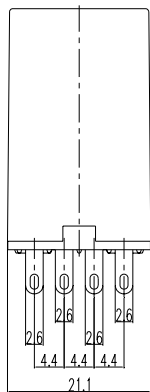
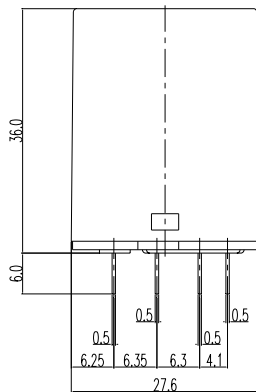
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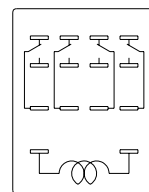
BOTTOM VIEW

RE

RE-4

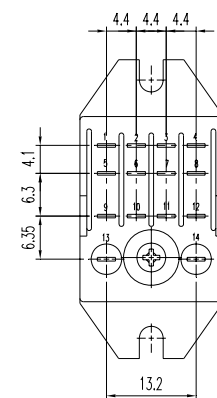
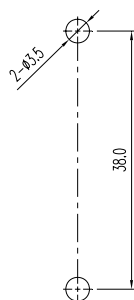
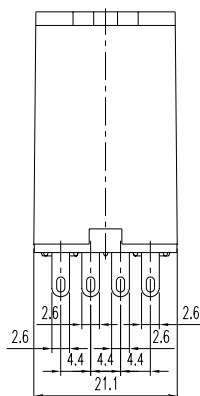
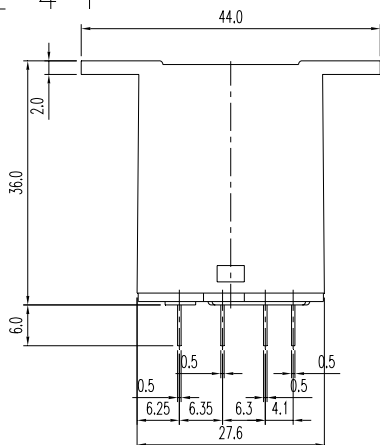


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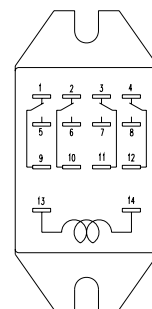


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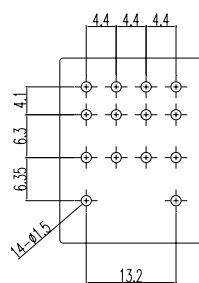
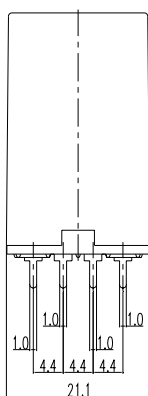
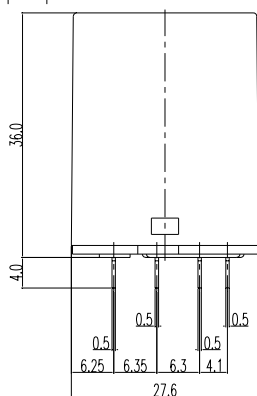


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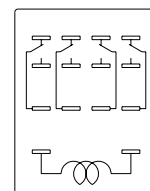


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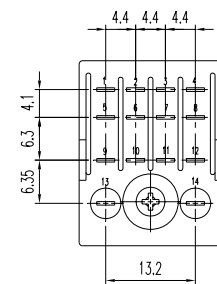
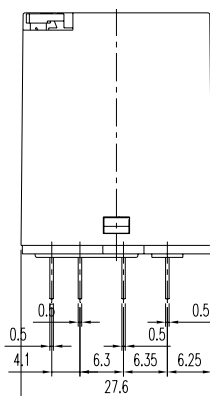
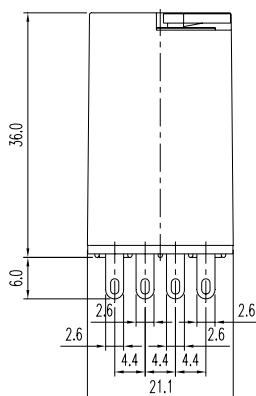


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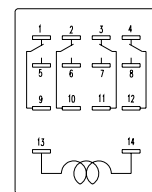


BOTTOM VIEW

RE-4xxU



BOTTOM VIEW



BOTTOM VIEW

Wiring diagrams (Bottom view)

| RE-2P | | |
|---------------|---------------|------------------------|
| RE-2□D□□□L□□□ | RE-2□D□□□X□□□ | RE-2□D□□□V□□□ |
| | | |
| RE-2□D□□□Z□□□ | RE-2□D□□□Y□□□ | AC Coil Model With LED |
| | | |
| RE-4P | | |
| RE-4□D□□□L□□□ | RE-4□D□□□X□□□ | RE-4□D□□□V□□□ |
| | | |
| RE-4□D□□□Z□□□ | RE-4□D□□□Y□□□ | AC Coil Model With LED |
| | | |