
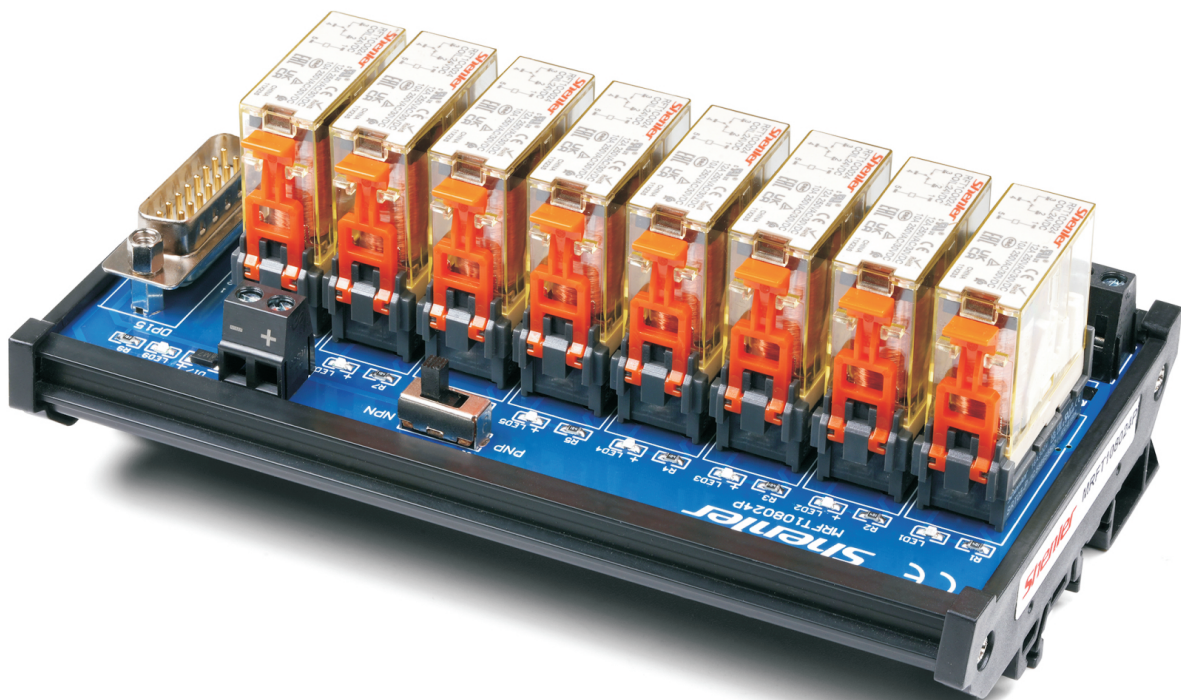


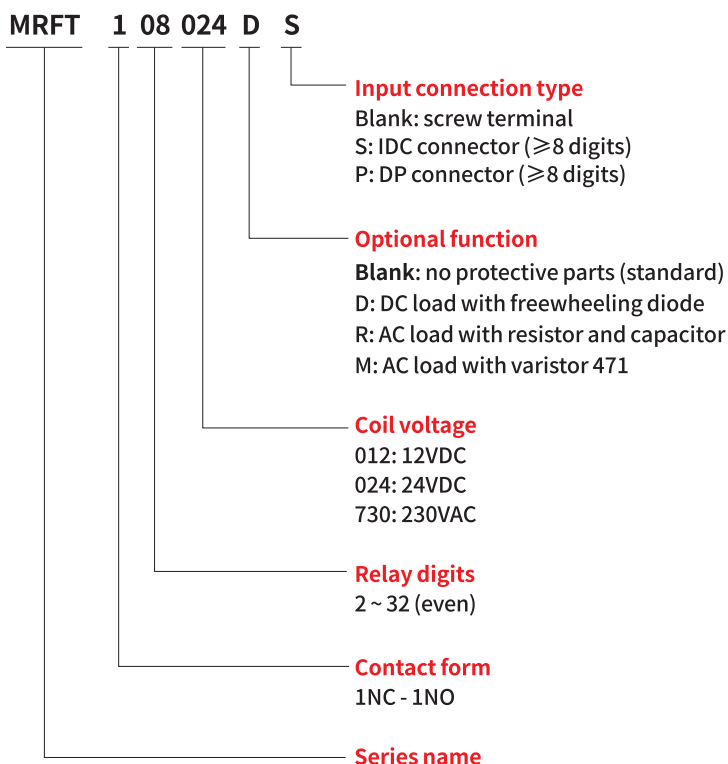
◆ **Application**

It is used for PLC output load current amplification and isolation protection. It is installed in the digital output terminal of PLC,MCU industrial control board,time relay, button and other controllers. It amplifies the output current of the output terminal for high-power equipment and weak current control. In such occasions, to protect the control system core is not destroyed.

◆ **Characteristics**

- ◆ Built-in RFT1CO series relay. It conforms to 
- ◆ The output end can optionally be equipped with additional protection absorbing devices such as resistors and capacitors, freewheeling diodes, and overvoltage protection absorbing devices.
- ◆ Quick installation of 35mm U-type and E-type industrial DIN rail
- ◆ DC input with diode freewheeling protection, input with LED display
- ◆ Input NPN and PNP compatible
- ◆ Supports customization, please consult our staff for more module models

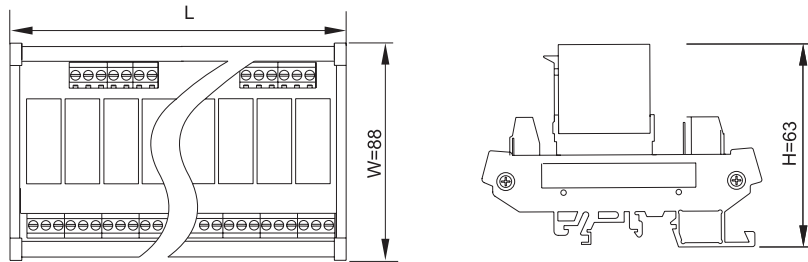




Note: When DC load with freewheeling diode, the contact is 1 NO (normally open)

| Technical Parameters | |
|-------------------------------|--|
| Input (Coil) | |
| Normal Input Voltage | DC 12V/ DC 24V/ AC 230V |
| Normal Current | 48mA / 26mA / 4.8mA |
| Minimum Starting Voltage | DC12V: $\leq 90\%U_e$; DC24V: $\leq 85\%U_e$; AC: $\leq 80\%U_e$ |
| Drop-out Voltage | DC: $\geq 10\%U_e$; AC: $\geq 30\%U_e$ |
| Start Time | $\leq 20\text{ms}$ |
| Drop-out Time | $\leq 10\text{ms}$ |
| Output (Contact) | |
| Contact structure | 1NC - 1NO / SPDT (Single pole double throw) |
| Resistive load | 12A / 250VAC, 30VDC |
| Motor load | 1 / 3HP, 240VAC |
| Minimum applicable load | 5VDC / 100mA |
| Electrical durability | $\geq 20 \times 10^4$ Cycles (1800 Ops/h) |
| Mechanical durability | $\geq 2000 \times 10^4$ Cycles (1800 Ops/h) |
| Material | Ag alloy |
| General Data | |
| Power per group | DC about 0.6W; AC about 1W |
| Action display | LED display |
| Ambient temperature | -40 ~ + 55°C (No icing) |
| Environment humidity | 5 ~ 85% RH (No condensation) |
| Terminal wiring specification | 0.2 ~ 2.5mm ² (26 ~ 12WG) |
| Torque | 0.4Nm |
| Stripping length | 6 ~ 8mm |

Dimensions (mm)



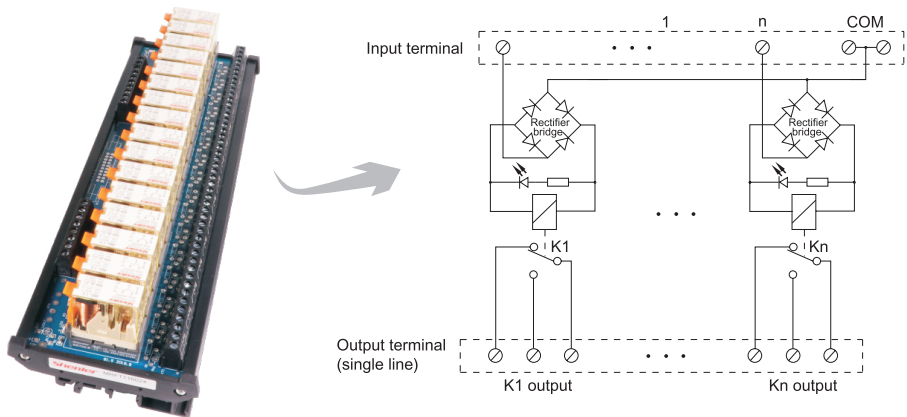
Length see the table below (mm)

| | | | | | | | | | | | | | |
|------------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Digit | 02 | 04 | 06 | 08 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 32 |
| L(MRFT) | 41 | 71 | 101 | 131 | 162 | 199 | 229 | 252 | 290 | 320 | 350 | 380 | 501 |
| Digit | | | | | 08 | 16 | | | | | | | |
| L(MRFTP, DP connector input) | | | | | 149 | 274 | | | | | | | |

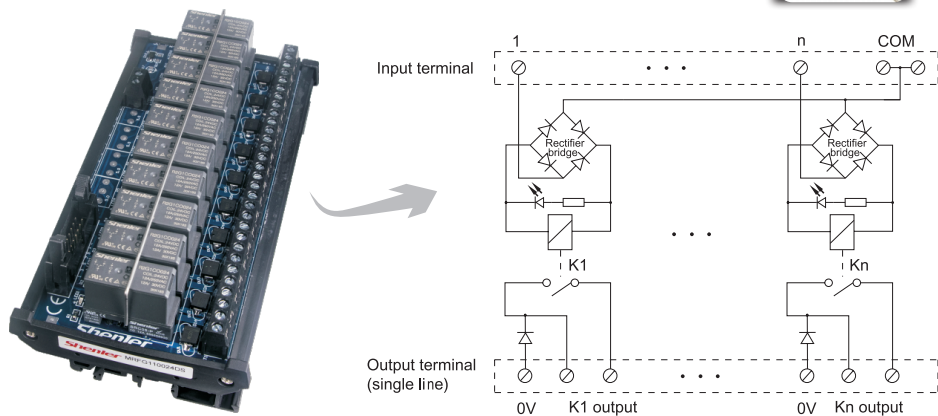
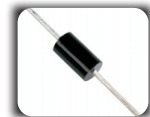
Note: Any other digits can be customized

Wiring Diagrams

MRFT1/ MRFG1 (output without protection parts, suitable for AC/DC loads)



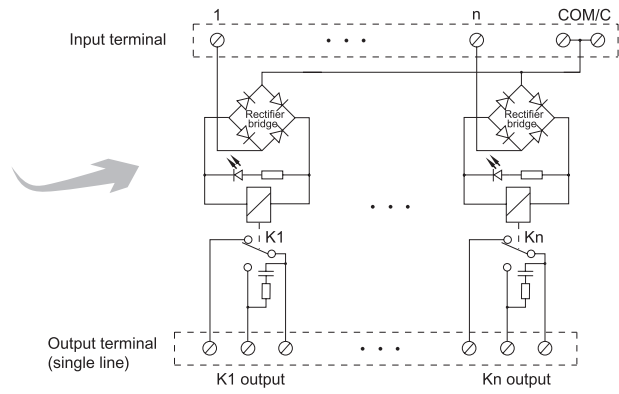
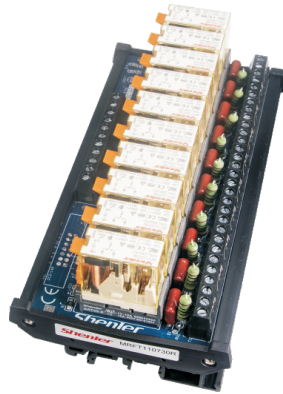
MRFT1D/ MRFG1D (output with freewheeling diode, suitable for DC load)



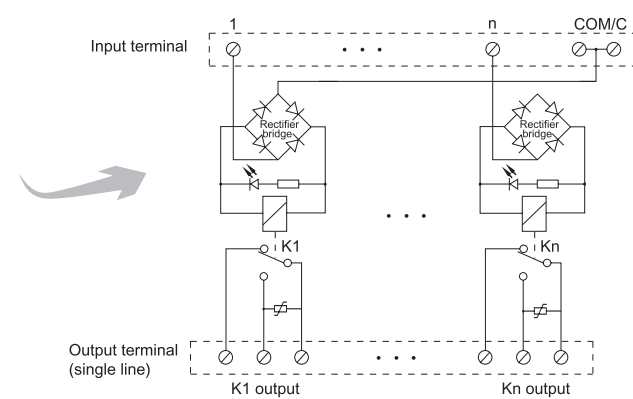
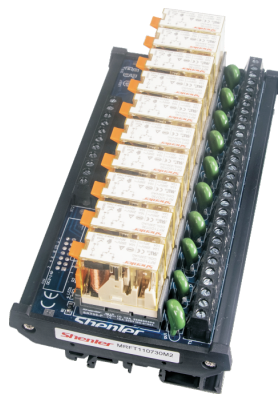
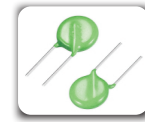
MRFT1

Relay Module

MRFT1R/ MRFG1R (output with resistor and capacitor absorption, suitable for AC load)

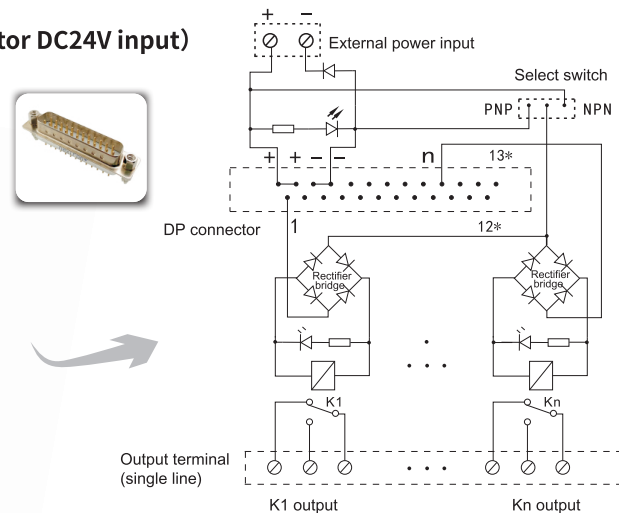


MRFT1M/ MRFG1M (output with varistor 471, suitable for AC load)



Note: The above schematic diagram is a circuit diagram for control voltage of DC 24V and below. For control voltage AC 230V, there is no rectifier bridge inside. 1, 2...n is the input control terminal for each bit, and COM/C is the common terminal.

MRFT1P series (DP connector DC24V input)



Note: The numbers marked in the location * are subject to the silk screen markings on the circuit board.