

MUJIE-INT[®]

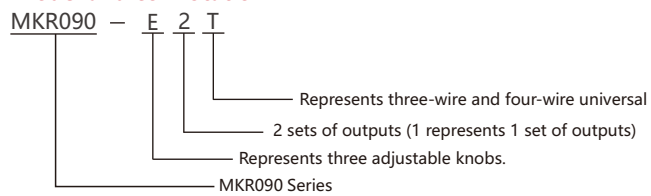
3-Phase voltage relay MKR090-E2T series



General

- Voltage protection relay uses a high-speed and low-power processor as its core. When the power supply line has over-voltage, under-voltage, or phase failure, phase reverse, the relay will cut off the circuit quickly and safely to avoid accidents caused by abnormal voltage being sent to the terminal appliance. When the voltage returns to the normal value, the relay will turn on the circuit automatically to ensure the normal operation of the terminal electrical appliances under unattended conditions.
- Cut off the line when Over & Under Voltage occurs and automatically reset and connect the line after returning to normal without manual operation
- When the line appears transient or transient Over & Under Voltage, the protector does not malfunction

Model and connotation



Panel Diagram

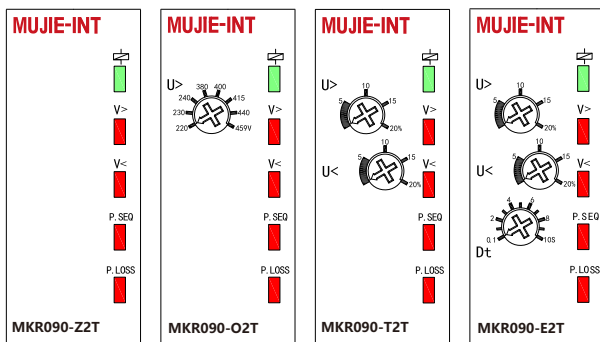
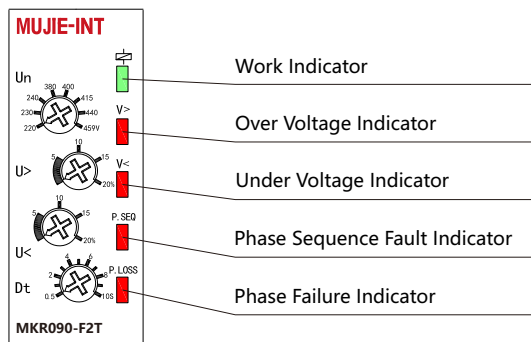
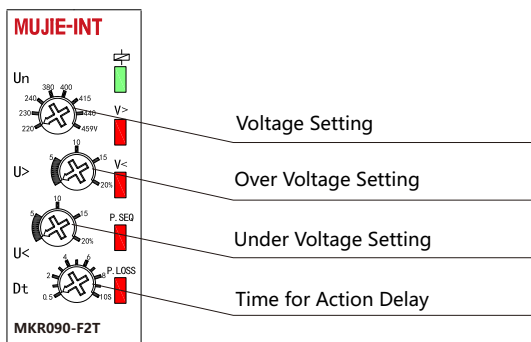


Table 1

Function code	Over-voltage	Under-voltage	Delay time	Phase sequence	Phase failure	Asy
Z2T	15%	15%	3s	●	●	●
O2T	15%	15%	3s	●	●	●
T2T	0%...20%	0%...20%	3s	●	●	●
E2T	0%...20%	0%...20%	0.1s...10s	●	●	●
F2T	0%...20%	0%...20%	0.1s...10s	●	●	●
-	-	-	-	-	-	-

Note: ● the function is available

Technical parameters

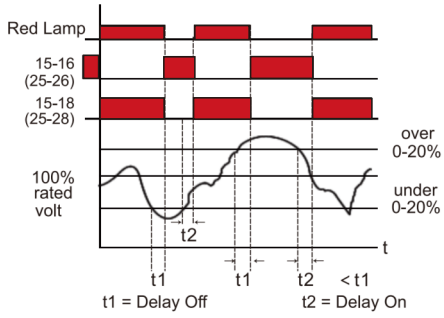
ITEM NO.	SINGLE PHASE	3P3W
Rated voltage	AC 110V, 220V, 230V, 240V	AC 220V, 240V, 380V, 400V, 415V, 440V
Frequency	50 or 60HZ	
Response time of relay	Delay on : 0,5s or 0,1-10s	Delay off : 3s or 0,1-10s
Contact rating	3A/250VAC	
Reset time	0.2 Sec Max	
Ambient temp	-10°C-55°C	
Setting error	±10% MAX	
Repeat error	±2% MAX	

ITEM NO.	3P4W	3P3W&3P4W
Rated voltage	AC 127-254V(L/N)	
Frequency	50 or 60HZ	
Response time of relay	Delay on : 0,5s or 0,1-10s	Delay off : 3s or 0,1-10s
Contact rating	3A/250VAC	8A/250VAC
Reset time	0.2 Sec Max	
Ambient temp	-10°C-55°C	
Setting error	±10% MAX	
Repeat error	±2% MAX	

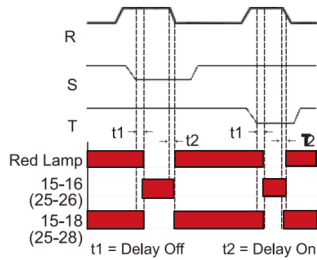
OPERATION CHART (3P4W 3P3W&3P4W)

Functions Diagram

• Over & Under Voltage



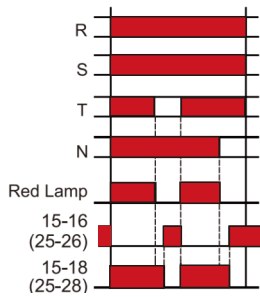
• Asymmetric Voltage



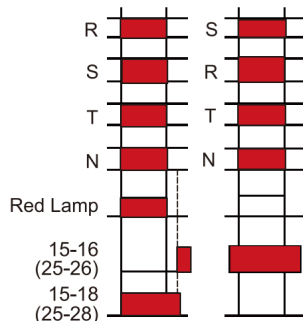
Asymmetric Voltage Function:

$$\frac{(\text{The highest voltage of phase R,S,T}) - (\text{The lowest voltage of phase R,S,T})}{(\text{The highest voltage of phase R,S,T})} \times 100\% \geq \text{Asymmetric voltage limit } 5\% - 15\%$$
 Relay 15-18 Off Red Lamp Off

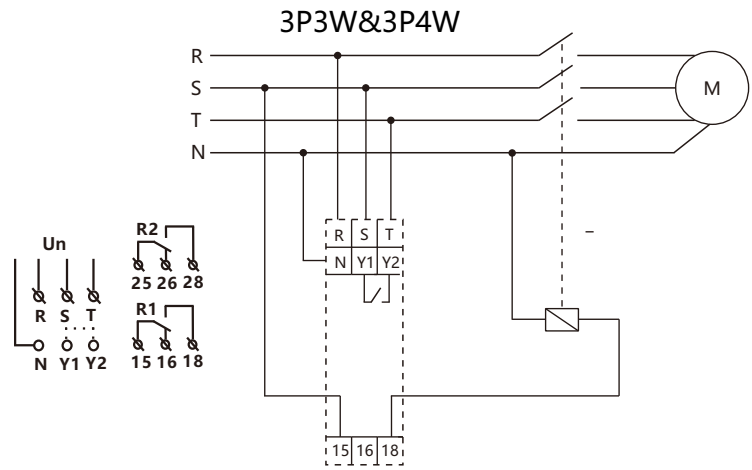
• Phase Failure



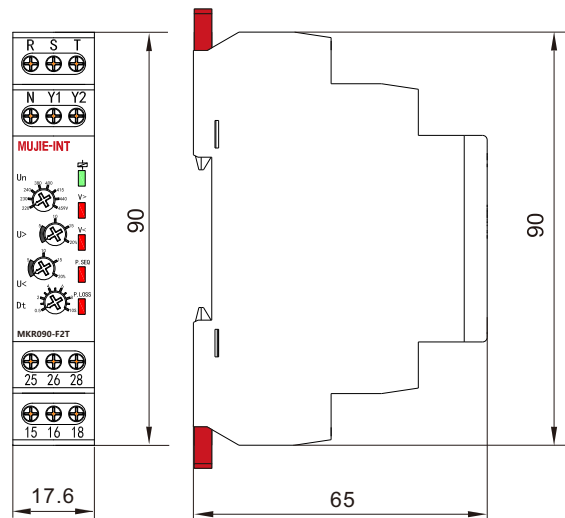
• Phase Sequence



Wiring Diagram



Dimensions (mm)



MUJIE-INT®



Disposal of Electrical Waste
 All electrical waste should be disposed of in compliance with current WEEE regulations.



Caution
 The products must be installed by qualified electricians. All and any electrical connections of the product shall comply with the appropriate safety standards.