# MUR-0x/MUR-0xF Series electric voltage monitors

#### General

MUR-0x/MUR-0xF series electric voltage monitors monitor the system voltage over or low in real time .Designed for phase protection (MUR-OXF with phase sequence protection). monitors designed base on a microprocessor and measuring system RMS voltage.

## Operation principle

MUR-0x/MUR-0xF series protection relays are mainly used for three-phase / 2 phase / single-phase system voltage protection (MUR-0xF provide phase sequence protection), such as electronic systems, control systems and motors. Voltage protection relay test system directly connected to the network and through the front panel knob for adjusting voltage is too high, too low range. Series of protective relays for the MUR-0x/MUR-0xF provide the corresponding working power, the panel "ON" indicator light. When the detected three-phase voltage set value range, the output relay to switch to "ON" state, and the panel's "OUT" indicator lights. MUR-0xF voltage monitor relay with phase sequence protection, when the three-phase system, phase sequence error, the output relay state without delay to switch to the OFF state, the panel's "U <", and "U > "light is also bright and" OUT "indicator turn off. When the detected three-phase voltage set value is not within the panel voltage is too high / low indicator light, when the delay to set the time  $(0.1 \sim 10 \text{ seconds})$ , the output relay to switch to "OFF"state, while the panel's "OUT" indicator turn off. In order to avoid voltage recovered malfunction, a 5V voltage to restore the value of return difference. When the voltage is restored to the set value range and keep to the set delay time  $(0.1 \sim 10 \text{ seconds})$ , the output relay to automatically switch to "ON" state.

MUR-0x/MUR-0xF series protection relay include instantaneous protection function, when the Phase-Neutral voltage >300V(Phase-Phase voltage >520V) or Phase-Neutral voltage <150 (Phase-Phase <300V), the panel's "U <", and "U > "light is also bright and" OUT "indicator turn off within <500ms



#### **Technical Data**

Voltage parameters : Note in the packing Link : 2P2W,3P3W,3P4W;

Rated Frequency : 50/60HZ

Scope of work :  $(0.6-1.35) \times Un$ 

Adjustment range : Umax (1.05-1.30 ) ×Un

Umin  $(0.70-0.95) \times Un$ 

Delay Time : 0.1s to 10s

Transient fault : LN <150V, >300V

Failure time instant : <500ms

Output Contact : 1 8A, 1700VA Interface

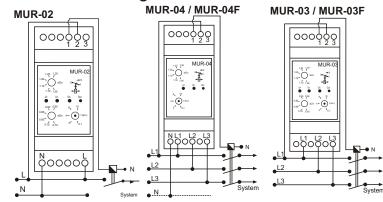
Set Point Hysteresis: 3%

Ambient Temperature: -5 °C to+50 °C

Installation : Equipment or equipment rail surface

Protection Class : IP20 Weight : 0.1 kg

## **Connection Diagram**



Model	Description	Detection and control parameters	Auxiliary power
MUR-03F	Phase and phase sequence protection	L-L: 265-480VAC 50/60Hz	Self-powered
	High voltage + low voltage protection	Low: 75% - 95% High: 105% -130%	
	Voltage unbalance protection	20% or 40%	
MUR-04F	Phase and phase sequence protection	L-N: 160-285VAC 50/60Hz	Self-powered
	High voltage + low voltage protection	Low: 75% - 95% High: 105% -130%	
	Voltage unbalance protection	20% or 40%	
MUR-03FA	Phase and phase sequence protection	L-L: 265-480VAC 50/60Hz	12/24/48/110/220VDC (Manufactured by order)
	High voltage + low voltage protection	Low: 75% - 95% High: 105% - 130%	
	Voltage unbalance protection	20% or 40%	
MUR-04FA	Phase and phase sequence protection	L-N: 160-285VAC 50/60Hz	12/24/48/110/220VDC (Manufactured by order)
	High voltage + low voltage protection	Low: 75% - 95% High: 105% - 130%	
	Voltage unbalance protection	20% or 40%	
MUR-02	High voltage + low voltage protection	L-N: 160-285VAC 50/60Hz	Self-powered
		Low: 75% - 95% High: 105% - 130%	
MUR-03	High voltage + low voltage protection	L-L: 265-480VAC 50/60Hz	Self-powered
		Low: 75% - 95% High: 105% - 130%	
MUR-04	High voltage + low voltage protection	L-N: 160-285VAC 50/60Hz	Self-powered
		Low: 75% - 95% High: 105% - 130%	
MUR-02A	High voltage + low voltage protection	L-L: 265-480VAC 50/60Hz	12/24/48/110/220VDC (Manufactured by order)
		Low: 75% - 95%High: 105% - 130%	
MUR-03A	High voltage + low voltage protection	L-L: 265-480VAC 50/60Hz	12/24/48/110/220VDC (Manufactured by order)
		Low: 75% - 95% High: 105% -130%	
MUR-04A	High voltage + low voltage protection	L-N: 160-285VAC 50/60Hz	12/24/48/110/220VDC (Manufactured by order)
		Low: 75% -95% High: 105% -130%	

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