

## EVR-PD Digital 3 Phase Voltage Relay



- MCU&ASIC Based Compact Design
- Multiple Protection Functions
- Wide Voltage Adjustment Range
- Digital Volt Meter and Digital Setting
- Trip Cause Display & Easy Troubleshooting
- Manual/Electrical/Automatic Reset
- Adjustable Reset Timer
- Ambient Insensitive
- Panel Mounting type






### ⇒ Protection

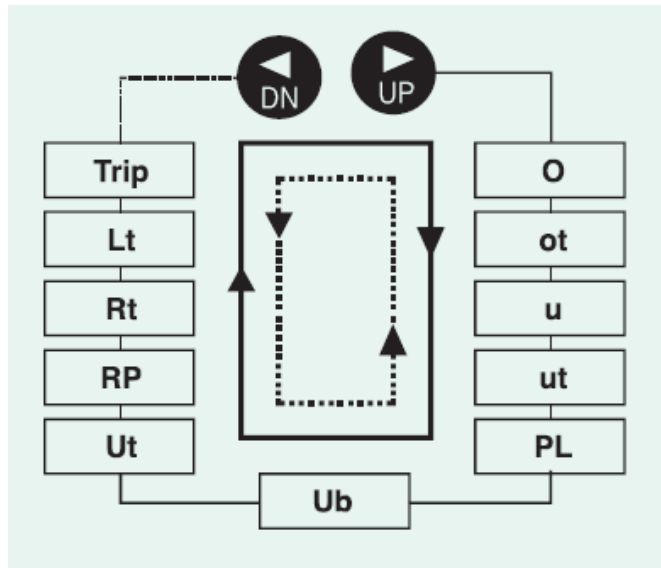
Protective Item	Trip Time
Over-voltage	0.5~10 sec
Under-voltage	0.5~10 sec
Phase Loss	45 %
Phase Reversal	0.1 sec
Phase Unbalance	5 ~ 30 % (0.5 ~ 10 sec)

### ⇒ Specification

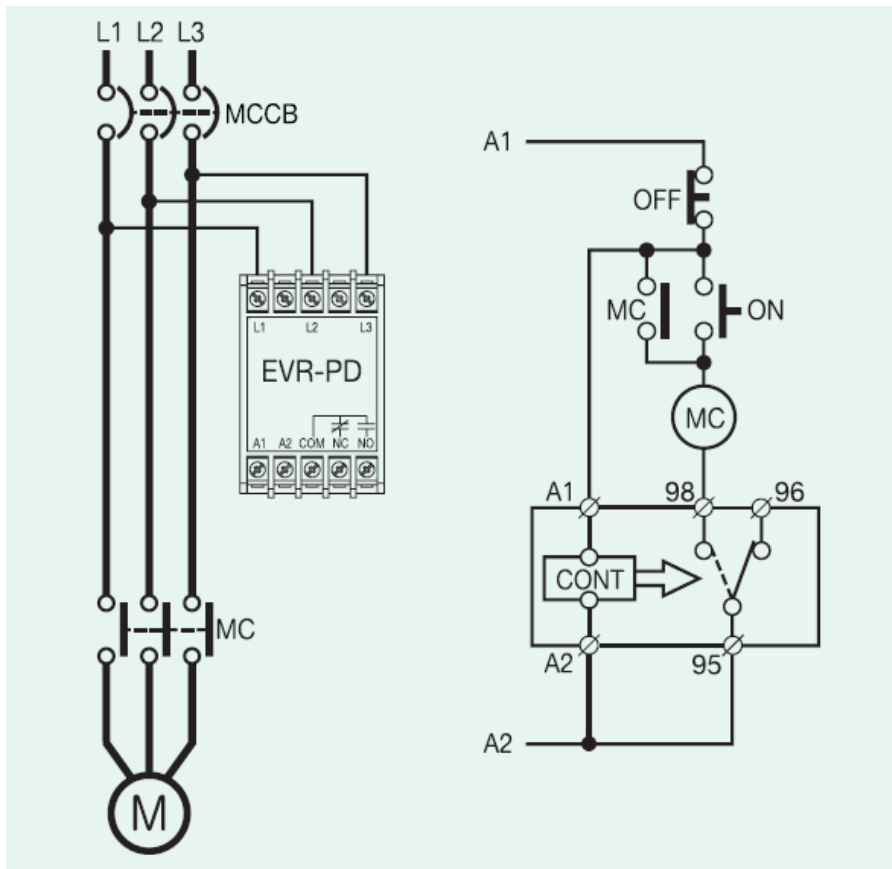
	Type	Over-voltage(O-VOLT)	Under-voltage(U-VOLT)
		Voltage Setting Range	110
	220	220-300V	160-240V
	440	380-500V	300-440V
Trip Time Setting	O-TIME	0.2 ~ 10 sec	
	U-TIME	0.2 ~ 10 sec	
Control Voltage	220	85~250VAC/DC	
	Others	24,48VAC/DC(Optional Order)	
Output Relay	Mode	1-SPDT(1C)	
	Rating	3A/250VAC Resistive	
Reset	Status	Normally Energized	
	AUTO	Reset Time: 1 ~ 10 sec	
Mounting	MAN	RESET Button	
	PD	35mm DIN-Rail / Panel	

## Howtaset

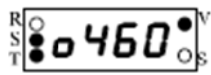
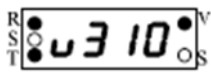
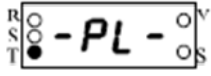

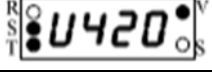
<b>Mode</b>		Search a mode to be adjusted by depressing UP/DN mode switch.
<b>Set</b>		Selected mode and setting value start flickering which means to be ready to accept setting as depressing once a set/store button
<b>Adjust</b>		Select a required setting value and/or characters by depressing continuously UP/DN mode switch until reaching what want to do.
<b>Store</b>		Store a selected value and/or characters by depressing once Set/store button. Instantaneously the flickering is stopped.
<b>Reset</b>		After completing above procedure, make a reset to be ready to operate. If not made reset, it will be reset automatically after an elapse of 30 sec.



## Typical Wiring



## Protection and Indication

Function	Display	Cause of Trip	Description	Operation Delay
Over Voltage		Operated by max. voltage 460 V on S-T phase	Input voltage exceeds preset O-Volt	Preset O-TIME
Under Voltage		Operated by min. voltage 310 V on S-T phase	Input voltage drops in preset U-Volt	Preset U-TIME
Phase Loss		Operated by phase loss on T phase		2 sec.
Reverse Phase		Operated by phase reversal		0.5 sec.
Voltage Unbalance		Operated by voltage Unbalance	Voltage deviation is over than 5%	3 sec.

## Display Setting

	Function	Setting Range	Display	Description
1	Over Voltage	110 : 110.v SOV,OFF 220 : 220.v300V,OFF 440 : 380.vSOOV,OFF 480 : 480.v550V,OFF	ot.tss.1	Input Voltage exceeds preset O-Vote
2	over Voltage Delay Time	0.2~10sec.	al: S.1	over Voltage Delay Time
3	Under Voltage	110 : 80 ~ 120 v 220 : 160 ~ 240 v 440 : 300 ~ 440 v 480 : 380 ~ 480 v	u3Lla.1	Input Voltage exceeds preset u-vote
4	UnderVoltage Delay Time	0.2~10sec.	ul: S.1	UnderVoltage Delay Time
5	Phase Loss	ON(PLon),OFF(PL-)	Plan	Tripped Voltage 45%
6	Voltage Unbalance	5 ~ 30 %,OFF(Ub-)	Ub 5	$[(\text{Max Voltage} - \text{Min Voltage})/\text{Max}] \times 100\% > \text{Ub setting } \%$
7	Voltage Unbalance Delay time	0.5~10 sec.	Ul:: L.	Voltage Unbalance Delay time
8	Phase Reverse	ON(Rpon),OFF(RP-)	RPon	Tripped
9	Reset Time	Reset Time : 1~10 sec.,OFF(--)	rl:: :a.	Reset Time (Auto)
10	3 Phase Loss Delay Time	0.5~10 sec.	Ll:: 3.	3Phase Loss Delay Time
11	Trip Memory	Memorized the last 3 trip causes	l::r IP	Stored the trip causes, regardless power is off  The stored information is displayed from last trip causes and able to check each phase voltage when tripped