



# EP4-2

## MULTI FUNCTION VOLTAGE RELAY

### User's Manual

#### RESTRICTIONS ON USE

When using this product in applications that require particular safety or when using this product in important facilities, please pay attention to the safety of the overall system and equipment. Install fail-safe mechanisms, perform redundancy checks and periodic inspections and adopt other appropriate safety measures when it is necessary. This product is rated at Class II .

#### SAFETY PRECAUTION

- This manual uses the following symbols to ensure safe operation of this product.
- WARNING** Warnings are indicated when mishandling this product might result in death or serious injury to user.
  - CAUTION** Cautions are indicated when mishandling this product might result in minor injury to the user, or only physical damage to the timer.

#### WARNING

- Note this incorrect wiring of this product can damage it and lead to other hazards. Make sure the product has been correctly wired before turning the power ON.
- Before wiring, or removing / mounting the product, be sure to turn the power OFF. Failure to do so might cause electric shock.
- Do not touch electrically charged parts such as the power terminals. Doing so might cause electric shock.
- Do not disassemble the product. Doing so might cause electric shock or faulty operation.

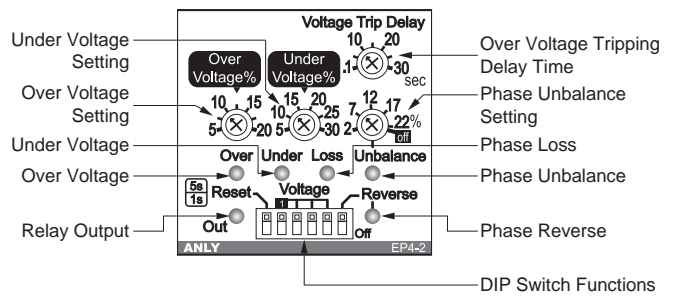
#### CAUTION

- Use the product within the operating ranges recommended in the specification (temperature, humidity, voltage, shock, mounting direction, atmosphere and etc.). Failure to do so might cause fire or faulty operation.
- Firmly tighten the wires to the terminal. Insufficient tightening of the wires to the terminal might cause fire.

#### SPECIFICATIONS

Operating voltage	EP4-2A: L-N: AC 115 - 277V, L-L: AC 200 - 480V
	EP4-2B: L-N: AC 110 - 277V, L-L: AC 190 - 480V
Allowable operating voltage range	70 ~ 120% of rated operating voltage
Rated frequency	50 / 60 Hz
Contact rating	250VAC 5A (Resistive load)
Power consumption	Approx. 2.8VA(220VAC), Approx. 3.6VA(380VAC)
Life	Mechanical : 5,000,000 times / Electrical : 100,000 times
Ambient temperature	-10 ~ +50 °C (without condensation & freezing)
Ambient humidity	MAX 85% RH (without condensation)
Altitude	MAX 2000m
Weight	Approx. 136g

#### NAMES AND FUNCTIONS OF FACEPLATE



#### SETTING PROCEDURE

##### 1. Voltage Trip Delay Time



Set the desired trip delay time from 0.1 sec to 30 sec.

##### 3. Under Voltage Setting



Set the desired Under Voltage trip point, from 5% to 30% of the rated voltage

##### 2. Over Voltage Setting



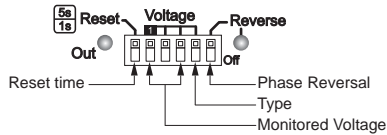
Set the desired Over Voltage trip point, from 5% to 20% of the rated voltage

##### 4. Phase Unbalance Setting



Set the desired Phase Unbalance trip point, from 2% to 22% or turned off

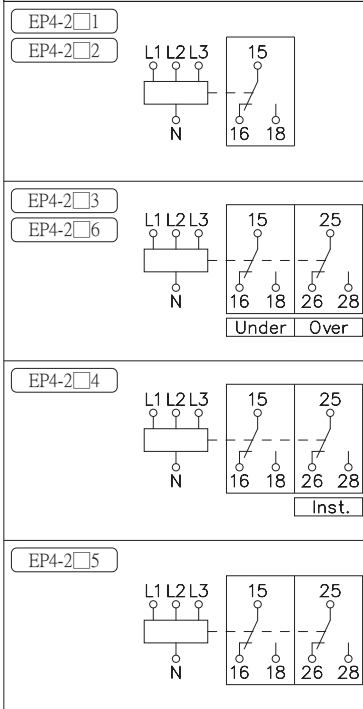
##### 5. DIP Switch Functions



5S/1S	ON		Auto reset with 5 sec delay
	OFF		Auto reset with 1 sec delay
Type	ON		L-N (L1-L2-L3-N)
	OFF		L-L (L1-L2-L3)
REV.	ON		Phase reversal protection On
	OFF		Phase reversal protection Off

Monitored Voltage	EP4-2A		EP4-2B	
	L - N	L - L	L - N	L - L
	115	200	110	190
	127	220	127	220
	133	230	133	230
	138	240	138	240
	220	380	220	380
	230	400	240	415
	240	415	254	440
	277	480	277	480

#### CONNECTION



#### TIMING CHART

