



AEFR

DIGITAL FREQUENCY 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.

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.
- Make sure the product is firmly connected to the socket. Failure to do so might cause electric shock or fire.

SPECIFICATIONS		NAMES AND FUNCTIONS OF FACEPLATE	
Operating voltage	AC : 100 ~ 240V	Display	Frequency indicator
Allowable operating voltage range	85 ~ 110% of rated operating voltage	Relay output indicator	Time indicator in second
Rated frequency	50 / 60 Hz	Under frequency setting	Reset delay time
Contact rating	250VAC 5A (Resistive load)	Over frequency setting	Error delay time
Display	Display resolution ± 0.1 Hz	Setting values display	Manual reset
Power consumption	Approx. 3VA		Function settings
Life	Mechanical : 5,000,000 times / Electrical : 100,000 times		
Ambient temperature	-10 ~ +50 °C		
Ambient humidity	MAX 85% RH		
Weight	Approx. 130g		

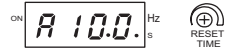
SETTING PROCEDURE

1. Over frequency setting



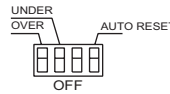
Set the desired value for over frequency. The display will show existing frequency after 3 seconds.

3. Auto reset time setting



Set the delay time for auto reset. The display will show existing frequency after 3 seconds.

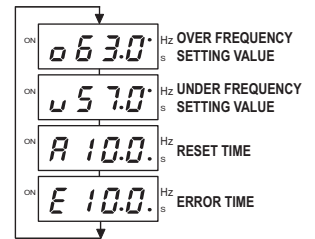
5. The function of DIP switches



OVER	ON	Over frequency enable
	OFF	Over frequency disable
UNDER	ON	Under frequency enable
	OFF	Under frequency disable
AUTO	ON	Auto reset
RESET	OFF	Manual reset

6. Setting values display

By pressing "TEST" button, all setting value will be shown ordinarily as follows. The display will show existing frequency after 3 seconds.

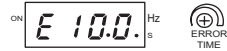


2. Under frequency setting



Set the desired value for under frequency. The display will show existing frequency after 3 seconds.

4. Error delay time setting

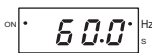


Set the delay time for error. The display will show existing frequency after 3 seconds.

DISPLAY

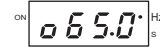
1. Frequency display

The existing frequency will be shown as follow.

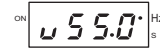


2. The fault indications

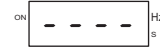
OVER FREQUENCY



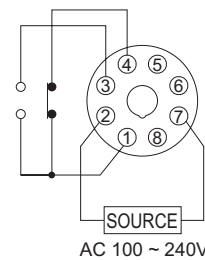
UNDER FREQUENCY



NO INPUT



CONNECTION



TIMING CHART

