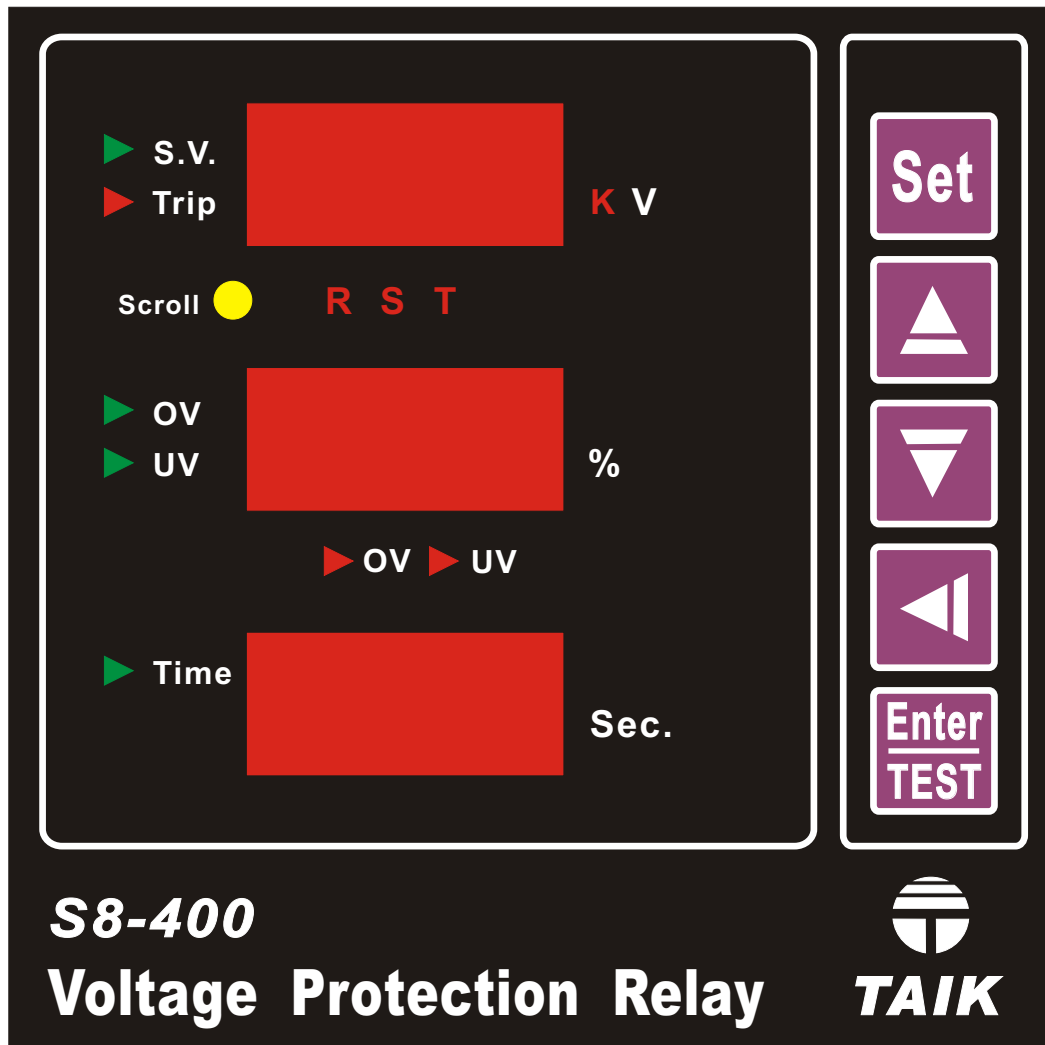


# Voltage Protection Relay

## S8-400



**TAIK ELECTRIC**

The voltage monition relay S8-400 is used for avoiding system failure. This relay utilizes its performances for use on three-phase system (Line-Volt). This information is internally by the microprocessor, to take the voltage protection action defined under IEC standard.

AC voltage protection relay provides voltage monitoring and protection in both single and 3 phase systems. This unit can be used in applications such as mains failure, regulation of power supplies and to protect voltage sensitive equipment. The main features include the programmable adjustment in setting the desired tripping points available for under, over and combined over/under voltage.

The relay can indicate the cause on the front plate as each possible fault occurs, besides it is equipped with RS 485 Modbus for the related information received.

## FEATURES

- Programmable adjustment for voltage transformer ratio.
- Line RMS voltage measurement.
- Auto scrolling of three phase voltage value.
- Setting value protected by password.
- Local display of data recorded at the moment of a fault.
- With RS485 output.
- Immunity test according to IEC 255 standards.
- Outside dimension compatible for DIN standards (144x144mm)
- Internal fault detection.

## FUNCTIONS

- 27-Line under voltage relay with definite time delay.
- 59-Line over voltage with definite time.

## SPECIFICATION

<b>Overvoltage and Undervoltage</b> (27, 59)	
Maximum Delay Time	60.0 Sec. (0.01 step < 9.99 sec.) (0.1 step > 10.0 sec.)
Digital Measurement	True RMS at 32 samples per cycle
System Voltage Setting	110V.220V.380V(Line Voltage)
Pick-up Voltage Level	
Overvoltage	100~150% (1 % step)
Undervoltage	50~100% (1% step)
Time & Relay Reset Voltage Level	
Overvoltage	100~150% (1% step)
Undervoltage	50~100% (1% step)

<b>Accuracy</b>	
Pickup accuracy	± 0.5% of full scale
Reset accuracy	± 0.5% of full scale
Time accuracy	± 3% of trip time or ± 20ms (whichever is greater)
at 0ms time delay (no intentional delay) 50ms max	

<b>Display</b>	
Type	0.56"H, red LED
Digital format	3 row of 3 digits

<b>Trip</b>	
Relay	(Failsafe) Contact: SPST 250V AC 5A (overvoltage) Contact: SPST 250VAC, 5A (undervoltage) Contact: SPST 250VAC, 5A
Indication	RED LED for individual phase and Trip

<b>Power Supply</b>	
Nominal voltage	AC 110/220 ± 20%, 50/60HZ DC 110V or DC 220V ±15% or option
Burden	≤ 5VA

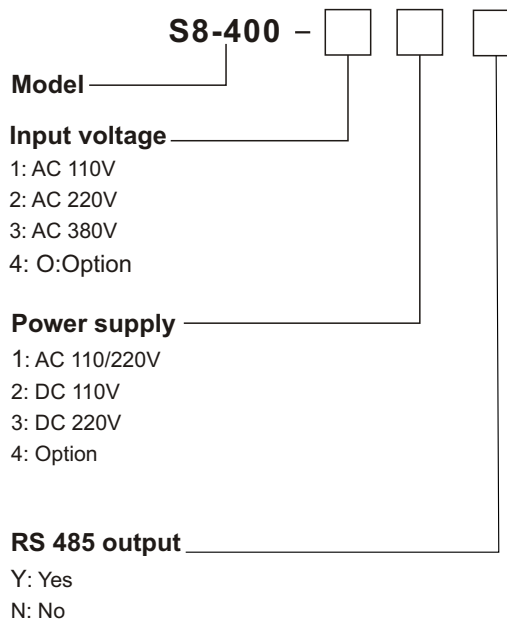
<b>Communication</b>	
Interface	RS 485
Protocol	MODBUS, RTU framing
Baud rate	1200 ~ 38400 programmable
Address range	1 ~ 255 programmable
Data format	N.8.1/ N.8.2/ O.8.1/ E.8.1
Number of meter	up to 32 256 (option)

<b>Frame</b>	
Degree	IP50

<b>General</b>	
Trip record	4 records
Setup memory	EEPROM
Dielectric strength	IEC 688, AC 2.3KV between terminals AC 3KV between terminal/case
Operating temperature	0~60 °C
Storage temperature	-10~70 °C
Max.humidity	95%

<b>Immunity Test</b>	
Withstanding impulse voltage	IEC 61000-4-5 (IEC 255-5)
Electrical transient in burst	IEC 61000-4-4 (IEC 255-22-4)
Electrostatic discharge	IEC 61000-4-2
Voltage disps and short interference	IEC 61000-4-11
1MHz interference	IEC 255-22-1, class III
Radio interference	IEC 255-22-3, class III
Shock test	IEC 255-21-2, class I
Insulation test	IEC 255-5

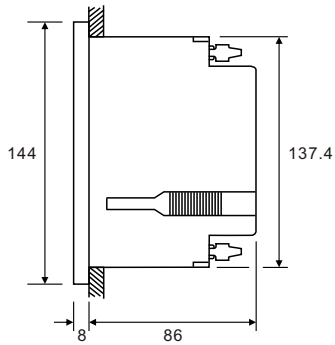
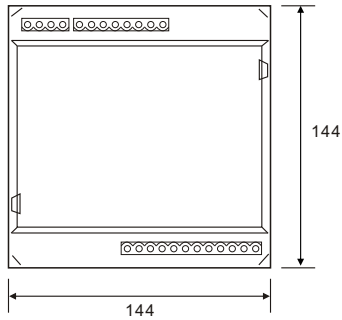
## ORDERING INFORMATION



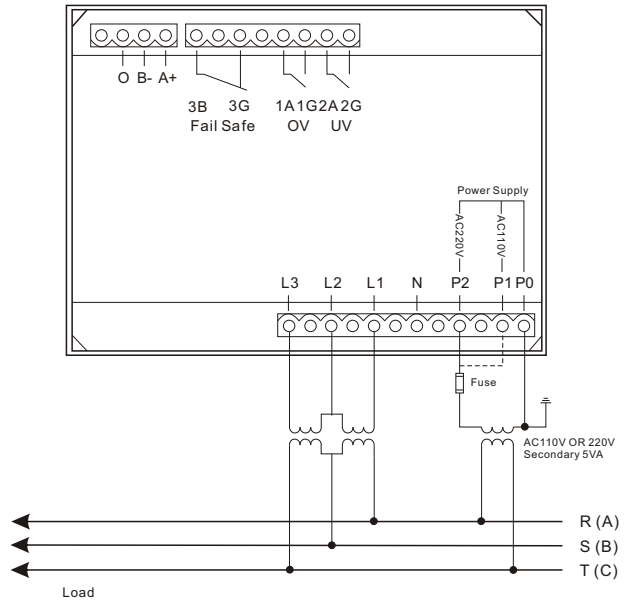
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# S8-400

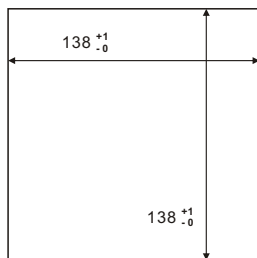
## OUTSIDE DIMENSION(Unit:mm)



## CONNECTION DIAGRAM



## PANEL CUTOUT(Unit:mm)



**TAIK ELECTRIC CO., LTD.**