

SAFETY PRECAUTIONS

1. The device must be installed by a qualified person,
2. Disconnect all power before working on the device. Don't touch any terminal when the power is ON.
3. Verify correct terminal connection when wiring.
4. Don't dismantle or repair the device whether it operates normally, otherwise no responsibility is assumed by producer and seller.
5. Never use the device at the site which can be invaded by corrode gas, strong sunshine light and rain.
6. Clean the device with a dry cloth.
7. Fail to follow these instructions will result in serious injury or death.

FEATURES

- Microcontroller based.
- Parameter setting by knobs
- With "Priority" phase
- Overvoltage and undervoltage
- LED indication for control state
- Din-rail mounting

APPLICATION

RM-PS3 automatic electronic phase switch is designed to supply an single phase 220V load from three phase four wire mains 3x220+N in order to maintain uninterrupted power supply of essential single phase load and protect it against unallowable voltage variations in the mains. According to voltage presence and voltage quality on phases RM-PS3 will automatically select the optimum phase and switch the single phase load supply to this phase.

- If load is not more than 16A, the load is energized from RM-PS3 directly
- If load is more than 16A, a configuration is used that consists of a switch and three contactors that have a properly selected current carrying capacity.

TECHNICAL DATA

Supply terminals	N,L1,L2,L3
Rated supply voltage	AC 3*220V(N-L1/L2/L3)
Rated operation voltage range	50-400V
Rated frequency	50/60Hz
Umax setting range	230-280V
Umin setting range	110-210V
Auto-reclosing delay(Ton)	1-600s
Delay to return to priority phase	5-200s: adjustable/200s-OFF:OFF
Switch delay to reserve phases	<0.2s
Voltage hysteresis	6V
Voltage accuracy	<1%
Max operating phase voltage	400V
Transient withstand	450V
Maximum switched current of output contacts	16A(AC1)
Pollution degree	3
Electrical life	10 ⁵
Mechanical life	10 ⁶
Altitude	≤2000m
Ambient temperature	-25°C~+50°C
Permissible relative humidity	≤50% at 40 (without condensation)
Storage temperature	-25°C~+55°C
Conductor size	0.5mm ² ~1mm ²
Torque	0.5Nm

DESCRIPTION

By detecting the values of input voltage RM-PS3 judges the state of three phase L1,L2,L3. The phase L1 is the priority one, the load will always be energized from L1 phase if voltage on this phase is present and within preset thresholds. If the voltage value on L1 goes outside the trip threshold range the RM-PS3 will switch the load to the phase (switch delay is less than 0.2s)where voltage value is within trip thresholds. If the voltage on both reserve phases are outside the preset trip voltage threshold the load will be de-energized.

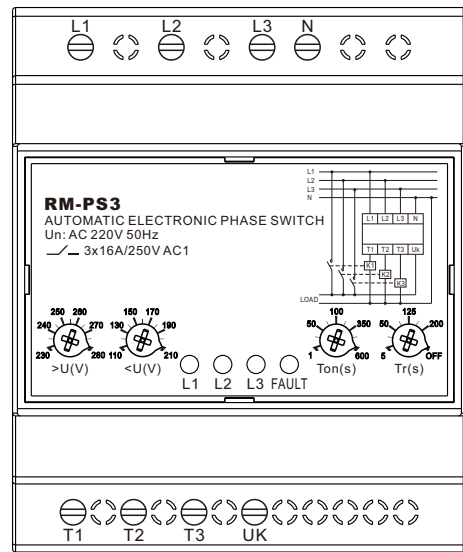
Switching is performed successively from L1 to L2, from L2 to L3 (the corresponding LED indication glows).

RM-PS3

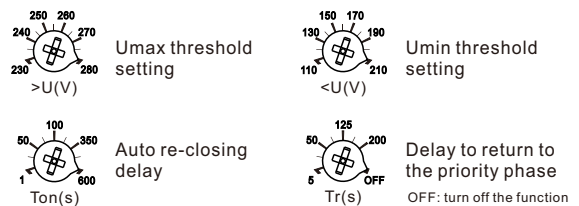
AUTOMATIC PHASE SWITCH

Please read complete instructions prior to installation and operation of the device.

FRONT-FACE PANEL



- N,L1,L2,L3: supply terminals.
- T1,T2,T3: Voltage output terminal
- UK: Voltage measurement terminal



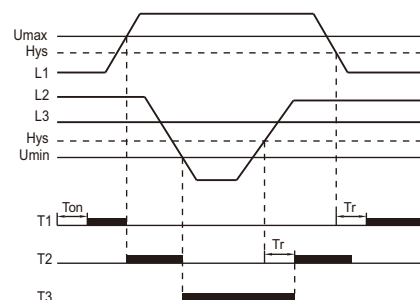
● Indication LEDs

● L1 ○ L2 ○ L3 ○ FAULT	Indicating L1 is the priority phase
○ L1 ● L2 ○ L3 ○ FAULT	Indicating L2 is the priority phase
○ L1 ○ L2 ● L3 ○ FAULT	Indicating L3 is the priority phase
○ L1 ○ L2 ○ L3 ● FAULT	Indicating fault (load is de-energized from all three phases)
○ L1 ○ L2 ○ L3 ○ ● FAULT	Ton delay is timing/UK output fault

● : ON ○ : OFF ☼ : Flashing

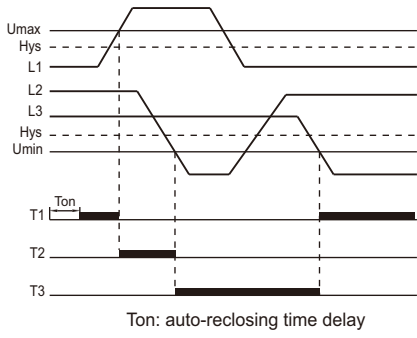
FUNCTION DIAGRAMS

- Tr set at 5-200s



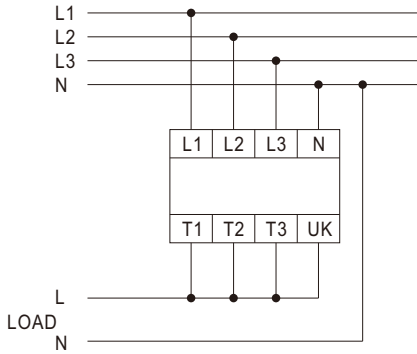
Ton: auto-reclosing time delay
Tr: delay to return to the priority phase

● Tr set at OFF

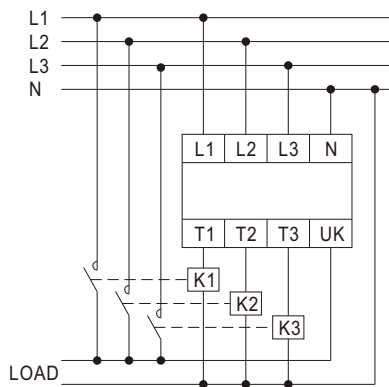


WIRING DIAGRAM

● Load is not more than 16A



● Load is more than 16A



DIMENSIONS

