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.
- Parameters setting by keys.
- Over and under voltage protection
- Rated operation current: 63A
- 3 digit display for operating voltage
- N phase failure protection
- LED indication for control state
- 5 module, Din-rail mounting

APPLICATION

RM-PS63 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-PS63 will automatically select the optimum phase and switch the single phase load supply to this phase.

The output current is 63A and user don't need an external contactor for a heavy load.

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	220-300V
Umin setting range	120-210V
Auto-reclosing delay	Ton:1-600s
Delay to return to priority phase	Tr:5-200s/OFF
Switch delay to reserve phases	<0.2s
Voltage hysteresis	5V
Umax trip delay	0.1s; ≥350V: 0.02s
Umin trip delay	5s
Measurement accuracy	<1%
Rated operation current	63A
Maximum operation current	80A
Rated insulation voltage	400V
Pollution degree	3
Electrical life	10^5
Mechanical life	10^6
Altitude	≤2000m
Ambient temperature	-25°C~+50°C
Permissable relative humidity	≤50% at 40°C(without condensation)
Storage temperature	-25°C~+55°C

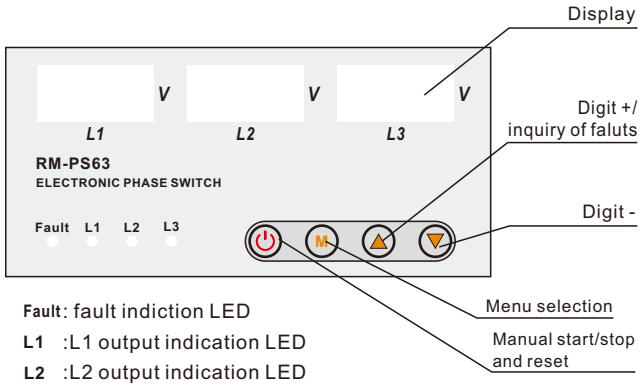
Technical parameter	Setting range	Step	Factory setting
Overvoltage trip value	220V~300V	1V	250V
Undervoltage trip value	120V~210V	1V	170V
Auto-reclosing delay	1s~600s	1s	5s
Delay to return to priority phase	5s~200s/OFF	1s	OFF

RM-PS63

AUTOMATIC PHASE SWITCH

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

FRONT-FACE PANEL

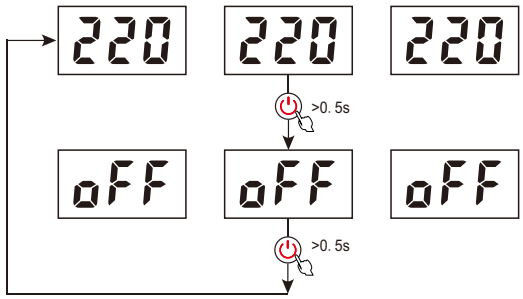


Fault: fault indiction LED
L1 :L1 output indication LED
L2 :L2 output indication LED
L3 :L3 output indication LED

● Auto-reclosing delay display

● Delay time flashes on the L3 display during the counting of auto-reclosing delay; the output relay closes after the delay is over.

● Stop/start manually

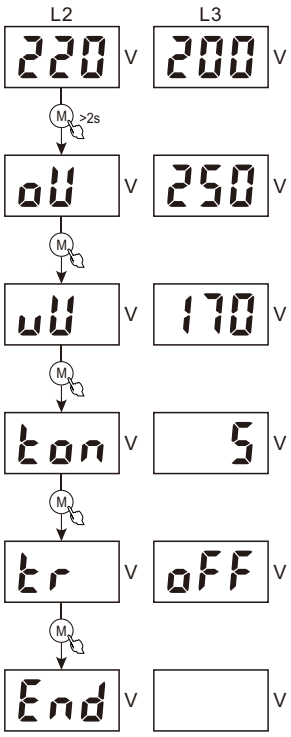


● Press ⏻ for more than 5s.

DESCRIPTION

1. Set Umax value, Umin value, Ton delay time and Tr delay time.
2. Ton delay starts after applying power supply on the device, the delay time displayed. After the counting of delay time is over, the output relay judges the state according to order of L1-L2-L3.
3.**Tr= OFF:**
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 RM-PS63 will switch the load to the phase 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).
Tr=5s~200s:
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 RM-PS63 will switch the load to the phase where voltage value is within trip thresholds. If L1 phase returned to normal state, the device will switch the load to L1 after the preset **Tr** delay is over.
Switching is performed successively from L1 to L2, from L2 to L3 (the corresponding LED indication glows).
4. If there are faults on output relays and can't switch to correct phase, LED Fault glows.
5. Load must not be higher than 63A(AC-1).

● Main menu setting



● Main display

● **Overvoltage trip value setting**

220→300

Change the setting value by pressing ▼▲ keys.

● **Undervoltage trip value setting**

120→210

Change the setting value by pressing ▼▲ keys.

● **Auto-reclosing delay setting**

1→600

Change the setting value by pressing ▼▲ keys.

● **Setting for delay to return to the priority phase**

5→200→oFF

Change the setting value by pressing ▼▲ keys. OFF: turn off the function.

● **End settings.**

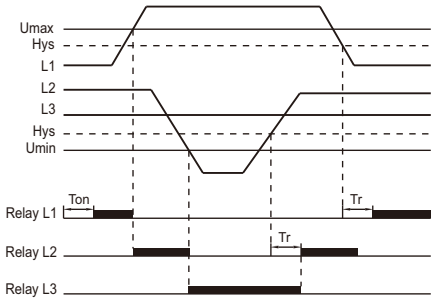
● Long press ▼ ▲ can increase or decrease repidly.

● The relay will automatically exit from the menu and not save the modified value if not pressing the keys for continuous 60s during setting.

● Only L2/L3 display when setting.

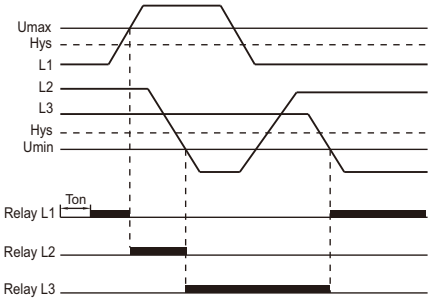
FUNCTION DIAGRAMS

● Tr set at 5-200s



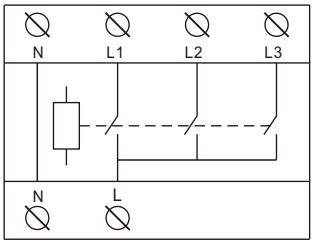
Ton: auto-reclosing time delay
Tr: delay to return to the priority phase

● Tr set at **OFF**

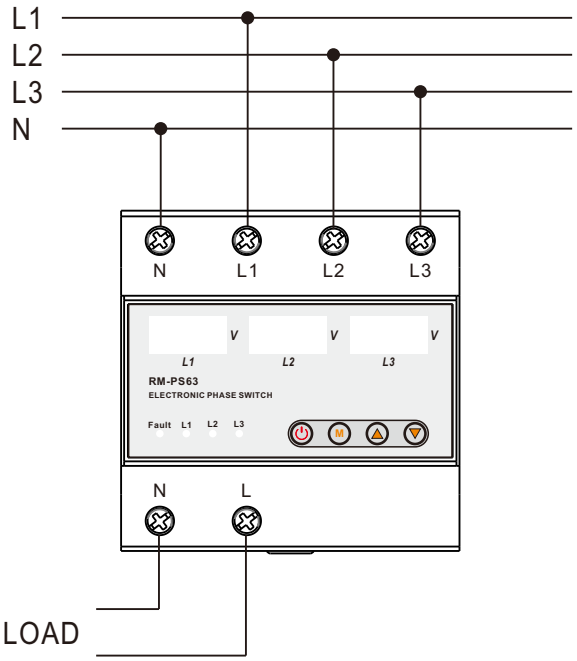


Ton: auto-reclosing time delay

SYMBOL



WIRING DIAGRAM



● Rated operating current of circuit breaker is 75% maximum current of the relay Ie=0.75x Imax

DIMENSIONS