VOLTAGE MONITORING RELAYS
RMW17

They are electronic devices designed to supervise and monitor three-phase and single-phase power supplies, interrupting the process operation whenever an anomaly occurs. They can switch off circuits and activate safety devices and alarms in order to protect machines and equipment against faults on the power supply according to the settings.

Voltage Monitoring Functions

- RMW17-FF - Phase loss
- RMW17-FFN - Phase loss with neutral detection
- RMW17-SF - Phase sequence
- RMW17-FSF - Phase loss and sequence
- RMW17-FSN - Phase loss and sequence with neutral detection
- RWM17-SS - Three-phase undervoltage and overvoltage
- RMW17-SSM - Single-phase undervoltage and overvoltage

Configuration

RMW17 - FF 01 D23

RMW17 - Voltage monitoring relay

Function
FF - Phase loss
FFN - Phase loss with neutral detection[1)]
SF - Phase sequence
FSF - Phase loss and sequence
FSN - Phase loss and sequence with neutral detection[1)]
SS - Three-phase undervoltage and overvoltage
SSM - Single-phase undervoltage and overvoltage

Number of contacts: 01 - 1 Contact

Power supply
D23 - 220 V ac
D24 - 230 V ac
D25 - 240 V ac
D33 - 380 V ac
D34 - 400 V ac
D35 - 415 V ac
D36 - 440 V ac
D38 - 460 V ac
D39 - 480 V ac
D65 - 200-240 V ac
D77 - 208 V ac
D90 - 208-480 V ac
D97 - 380-480 V ac

Selection

Reference	Power supply (L1-L2-L3)
RMW17-FF01D65	200-240 V ac
RMW17-FFN01D65	200-240 V ac
RMW17-FF01D97	380-480 V ac
RMW17-FFN01D97	380-480 V ac
RMW17-FSF01D65	200-240 V ac
RMW17-FSN01D65	200-240 V ac
RMW17-FSF01D97	380-480 V ac
RMW17-FSN01D97	380-480 V ac
RMW17-SF01D65	200-240 V ac
RMW17-SF01D90	208-480 V ac
RMW17-SS01D77	208 V ac
RMW17-SS01D23	220 V ac
RMW17-SS01D24	230 V ac
RMW17-SS01D25	240 V ac
RMW17-SS01D33	380 V ac
RMW17-SS01D34	400 V ac
RMW17-SS01D35	415 V ac
RMW17-SS01D36	440 V ac
RMW17-SS01D38	460 V ac
RMW17-SS01D39	480 V ac
RMW17-SSM01D23	220 V ac

Note: 1) For FFN and FSN models it is mandatory to connect the three phases and neutral, otherwise the equipment will not function properly.

Selection

RMW17-FF/FFN - Phase Loss/Phase Loss with Neutral Function

RMW17-FF - This is for monitoring three-phase systems against is the phase drop (without neutral).
RMW17-FFN - Will monitor the phase failure and also the voltage at neutral (terminal N) which must be ever connected.

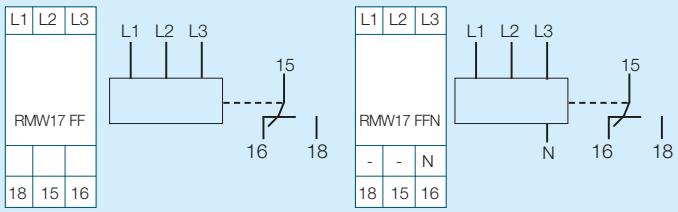
Installation

It is directly connected to the three phases, terminals L1, L2 and L3, on the power line to be monitored (connect the neutral to the FFN model if applicable).

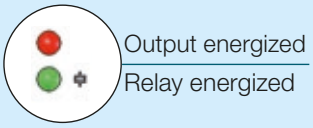
Operation

The output relay switches the contacts to the operation position (closing terminals 15-18), and the red LED (relay) and green LED (power supply) will turn on. Adjust the sensitivity of the line voltage If one of the phases drops down below the percentage limit set on the selector switches, the coil output contacts will be powered down, opening contacts 15-18, and the red LED will turn OFF.

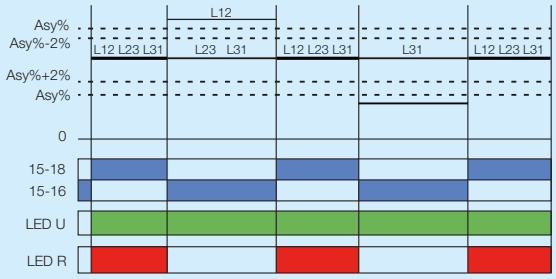
Wiring Diagram



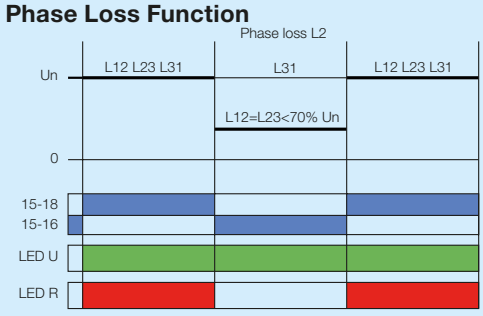
The RMW17 protector relay has state indication LEDs, as shown below:



Asymmetry Function



Phase Loss Function



RWM17-SF - Phase Sequence Function

It is designed to monitor three-phase systems against the inversion of phase sequence (L1-L2-L3).

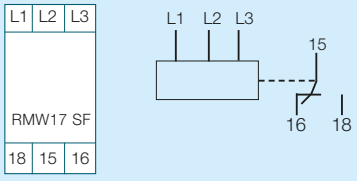
Installation

It is directly connected to the three phases, on terminals L1, L2 and L3, on the power line to be monitored.

Operation

If the phase sequence is correct, the output relay switches the contacts to the operation position (closing terminals 15-18), and the red LED (relay) and green LED (power supply) will turn on.

Wiring Diagram



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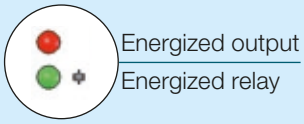
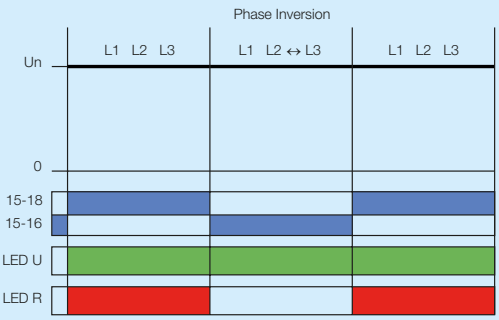


Phase Sequence Function



Selection

RWM17-FSF/FSN - Phase Loss and Sequence/Phase Loss and Sequence with Neutral

RMW17-FSF - It is designed to monitor three-phase systems against phase loss and inversion.
RMW17FSN - It will perform the monitoring for phase failure, phase inversion and also the neutral voltage, which must be ever connected.

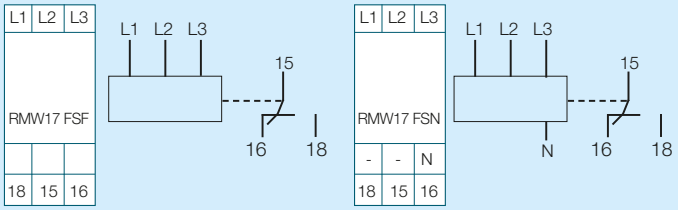
Installation

It is directly connected to the three phases, on terminals L1, L2 and L3, on the power line to be monitored (connect the neutral to the FSN model if applicable).

Operation

Energize the relay and observe if the green LED (power supply) and the red LED (relay) turn on. If they do not turn on, check for voltage between phases L1, L2 and L3 (including in relation to the neutral to be used).

Wiring Diagram



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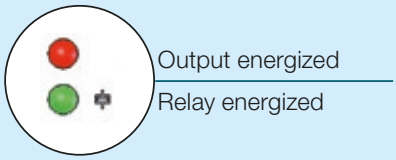
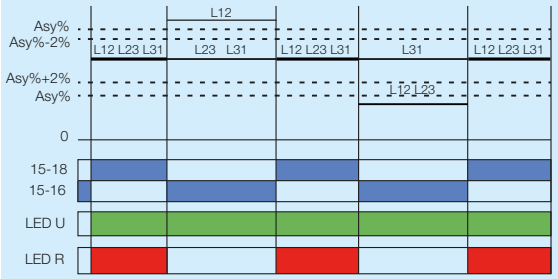
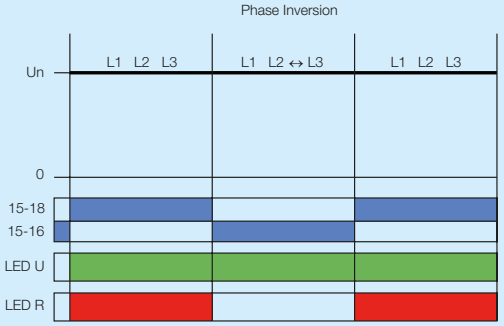


Asymmetry Function



Phase Sequence Function



Phase Loss Function