AMR Series

FEATURES

- Current Monitoring
- Voltage Monitoring
- Under/ Over Monitoring
- Wide range of Measuring Voltage/ Current
- Alsense Energy Monitor

COMPETITORS

Carlo Gavazzi	IDEC
Crompton TE	Phoenix Contact
Crouzet	Omron
Finder	Macromatic

APPLICATIONS

- Ventialtion Monitoring
- Pump Monitoring
- Motor Monitoring
- Smart Energy
- Conveyor Monitoring

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LISTED
E233019



Monitoring Part Number	Phases	Supply Voltage	Voltage Measurement AC	Voltage Measurement DC	Current Measurement	Monitor Function Over	Under	Window	Phase Loss	Sequence	Trip Delay	Latch	Relay Output SPDT	DPDT
CURRENT														
AMR-AI1M5A2D	1	Monitor	-	-	20mA, 1A, 5A	x	x	x	-	-	x	x	-	x
AMR-AI3M5A2D	3	Monitor	-	20mA,	20mA, 1A, 5A	x	x	x	-	-	x	x	-	x
VOLTAGE														
AMR-AP1M300V2D	1	External	30V, 60V,	30V, 60V, 300V	- 300V	x	x	x	-	-	-	x	-	x
AMR-AP3U690V2D	3	Monitor	180-690V	-	-	-	x	-	x	x	x	-	-	x
AMR-EP1F480Y277V1D	3	Monitor	480/277V	-	-	-	-	-	x	x	x	-	x	
AMR-EP1M230V1	1	Monitor	24V, 300V	24V	-	-	x	x	-	-	-	-	x	-
ALSENSE ENERGY MONITOR														
AMR-ES3M480V5A2M	3													

Monitor Functions

OVER
If the measured value exceeds the adjusted MAX threshold, the output relay switches into off-position. The output relay switches into on-position again, as soon as the measured value falls below the adjusted MIN threshold.

UNDER
If the measured value falls below the min value, the output relay drops out. The output relay picks up again as soon as the value exceeds the max value.

WINDOW
If the measured value falls below the adjusted MIN threshold, the output relay switches into off-position. The output relay switches into on-position again, as soon as the measured value exceeds the adjusted MIN threshold. If the measured value exceeds the adjusted MAX threshold, the output relay switches into off position. The output relay switches into on-position again, as soon as the measured value falls below the adjusted MAX threshold.

PHASE LOSS
As soon as one of the three phases fails, the output relay R pulls in and drops out. For safe detection of phase failures, the asymmetry function should be activated. It is recommended to connect the neutral conductor of the monitoring relay as soon as loads in the system use the neutral conductor connection.

PHASE SEQUENCE
If all phases are connected in the correct sequence and the measured asymmetry is smaller than the set value, the output relay pulls in. If the phase sequence changes, the output relay drops out (yellow LED does not light up). It is recommended to connect the neutral conductor of the monitoring relay as soon as loads in the system use the neutral conductor connection.

PHASE ASSYMETRY
If the asymmetry of the daisy-chained voltages exceeds the set ASYM value, the output relay drops out. If the neutral conductor is connected, the phase voltages (star voltage) are additionally monitored for asymmetry with respect to the neutral conductor. In this application, both values for the asymmetry are used for the evaluation. As soon as one of the two values exceeds the set value, the output relay drops out.

TRIP DELAY
If the monitored value leaves the selected range, the output relay only switches into off-position following expiration of the trip delay.

LATCH FUNCTION
If the device detects a fault, the output relay only switches on again when the fault latch has been reset. The fault latch can be reset by means of an internal or external reset button or by interrupting the supply voltage.