Current and Voltage Controls
Self-powered 3-Phase Sequence Control
Type EUH

- **3-phase monitoring relay for phase-sequence/total phase loss (closed circuit)**
- **Measures when all 3 phases have the correct phase sequence**
- **Measures on own power supply**
- **Power supply range: 230-440 VAC (±10%)**
- **Output: 5 A SPDT relay**
- **For mounting on DIN-rail in accordance with DIN/EN 50 022**
- **22.5 mm Euronorm housing**
- **LED-indication for relay and power supply ON**

Product Description

3-phase control relay for detection of incorrect phase sequence or total phase loss. Supply range from 230-440 VAC covered by one multi-voltage relay. 22.5 mm Euronorm housing for mounting on DIN-rail. Frequently used to secure the right phase sequence when applying a load to a 3-phase electrical network.

Ordering Key

EUH C M44

Housing
Function
Type
Output
Power supply

Type Selection

Mounting	Output	Supply: 230-440 VAC
For DIN-rail	SPDT	**EUH C M44**

Input Specifications

Input U, V, W	L1 - L2 - L3 measures on own supply

Supply Specifications

Power supply	Overvoltage cat. III (IEC 60664)
Rated operational voltage	(IEC 60038)
Through term. U, V, W	230-440 VAC ±10% @ 50 ± 5 Hz 220-440 VAC ±10-15% @ 60 ± 5 Hz
Voltage interruption	≤ 40 ms
Dielectric voltage	none
Rated operational power	15 VA @, 440V/50 Hz
Supplied from	L1 & L3

Output Specifications

Output		SPDT relay
Rated insulation voltage		250 VAC (contact/elect.)
Contact ratings (AgCdO)		µ (micro gap)
Resistive loads	AC 1	5 A, 250 VAC
	DC 1	5 A, 24 VDC
Small inductive loads	AC 15	2 A, 250 VAC
	DC 13	3 A, 24 VDC
Mechanical life		≥ 40 x 10^6 operations
Electrical life		≥ 10^5 operations (at max. load)
Operating frequency		≤ 7200 operations/h
Dielectric strength		
Dielectric voltage		2 kVAC (rms)
Rated impulse withstand volt.		4 kV (1.2/50 µs)

General Specifications

Reaction time	
OFF-delay	< 190 ms
ON-delay	< 375 ms
Indication for	
Power supply ON	LED, green
Output ON	LED, yellow
Environment	
Degree of protection	IP 20
Pollution degree	3
Operating temperature	-20° to +50°C (-4° to +122°F)
Storage temperature	-50° to +85°C (-58° to +185°F)
Weight	140 g
Screw terminals	
Tightening torque	Max. 0.5 Nm acc. to IEC 60947

Mode of Operation

EUH measures on its own 3-phased power supply. The relay operates when the phase sequence is correct.

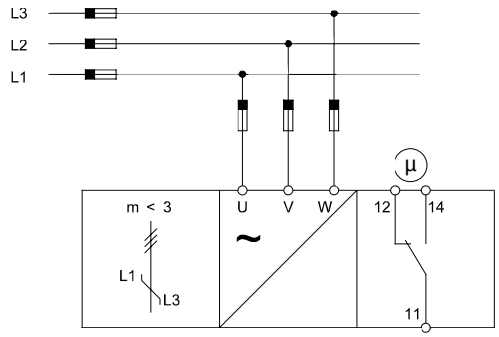
The relay releases when the phase sequence is incorrect or one or more of the phases are disconnected.

Example 1
The relay releases in case of incorrect phase sequence or interruption of one of the phases caused by a blown fuse.

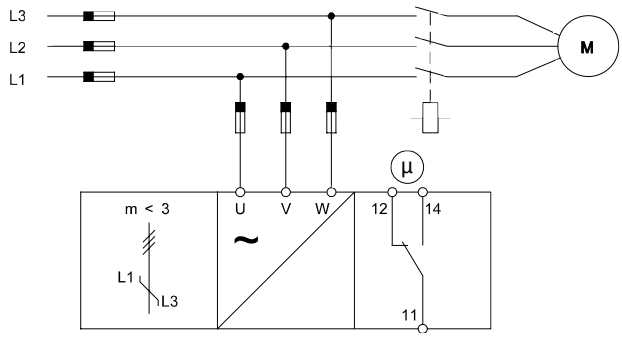
Example 2
The relay is for monitoring that the power supply has the correct phase sequence. A blown fuse will not be detected as the motor will partly regenerate the lost phase.

Wiring Diagrams

Example1



Example 2



Operation Diagram