

## 3 PHASE, PHASE CONTROL HWUA

84873026

Phase Monitor Relay HWUA 3 x 220-480V ac

- Triggers alarm upon incorrect phase sequence, phase interruption, asymmetry and over-/under-voltage
- Adjustable line voltage
- Measures returned voltage to 70 %
- 35 mm cabinet with DIN rail



### PRODUCT DESCRIPTION

Control relay for phase monitoring with regeneration of voltage and asymmetry. Adjustable switch at the front for adjustment of correct voltage in 3-phase networks. Voltage switch's position is not registered until the operating voltage is switched on. If the switch position is changed during operation, all LEDs (LED indications) begin to flash but the unit will continue to function normally with the voltage that was set at the most recent power connection. The LEDs return to normal function when the correct voltage is restored. The relay monitors the correct phase sequence between the three phases or if any phase is lacking (measured  $U < 0.7 \times U_n$ ), 70 % of the returned voltage. The asymmetry setting is made at the front between 5 and 15 % (the rated voltage between the phases  $U_n \times$  degree of asymmetry, %). Deviations in over-/under-voltage are adjustable between -2 and -20 % of the line voltage (window relay function). In the event of incorrect phase sequence or phase interruption, the relay immediately produces an alarm (drops out), and in the event of an asymmetry or voltage fault, the relay drops out after the set time  $T_t$ . If the power is switched on with a measured fault, the relay remains deactivated. Fault indication is accomplished with LEDs, which also differentiates between the various fault causes. If a fault remains after the time delay, a non-flashing LED indicates an asymmetry fault and a flashing LED indicates over-/under-voltage. The LED indication that shows this is labelled with Def. on the front of the relay. Green LED (Un) indicates supply voltage OK. Yellow LED (R) indicates active relay output.

### TECHNICAL DATA

Approvals	CSA, GL, RoHS, UL
Breaking capacity	5A, 250V AC/DC
Function	Phase Sequence, Phase Failure, Asymmetry, Under/Overvoltage
IP class connection	IP20
IP class housing	IP30
Mounting	35 mm DIN-Rail
Output	Relay
Selection of rated voltage	220, 380, 400, 415, 440, 480 V
Storage temperature max	70 °C

Storage temperature min	-40 °C
Supply voltage	3 x 220-480V AC
Temperature operational max	50 °C
Temperature operational min	-20 °C
Time delay alarm	0.2 s
Time delay startup	0.5 s
Time delay when exceeding the limit value	0,1-10s
Weight	130 g

