

## 1 PHASE OVER/UNDER CURRENT RELAY HIL, HIH

84871130

Current Monitor Relay HIH 24-240V ac/dc

- Two models: HIL 2 mA-500 mA, HIH 0.1 A-10 A
- Galvanic isolation control/measurement
- Automatic detection of ac or dc
- 35 mm cabinet with DIN rail



### PRODUCT DESCRIPTION

HIL and HIH control relays are used for monitoring 1-phase AC/DC currents. The relay automatically detects the form of current that is to be measured. The relay requires a supply voltage. Using a rotary switch, selection can be made between over- or under-current, with or without memory. If "with memory" is selected, the supply voltage to the relay must be switched off to restart. The switch position and consequently the control relay's function mode is detected when the operating voltage is switched on. If the switch is in the wrong position, the relay will remain deactivated and the LEDs will flash to indicate incorrect setting. If the switch position is changed during operation, all LEDs begin to flash but the unit will continue to function normally with the function that was set at the most recent power connection. The LEDs return to normal function when the switch has been returned to its original position, which was set before the first power connection. The limit value for over- and under-current is set with a potentiometer that is scaled in the percentage of the current range that is to be monitored. The hysteresis value is similarly set with a scale from 5-50 % of the set limit value. The hysteresis value cannot exceed the measurement range's limit value. Both relays are equipped with a time delay (Tt) to ignore temporary current deviations. HIL and HIH also have a time delay upon start-up (Tt), adjustable between 1-20 s to avoid current peaks or current dips upon start-up. If the current should exceed 10 A, a current transformer can be used. Green LED (Un) indicates supply voltage OK. Yellow LED (R) indicates active relay output.

### TECHNICAL DATA

Adjustable limit value from	10 %
Adjustable limit value to	100 %
Approvals	CE, CSA, RoHS, UL
Breaking capacity	5A, 250V AC/DC
E1-M max. continuous current in 25°C	2 A
E1-M max. current <1s at 25°C	17 A
E2-M max. continuous current in 25°C	11 A
E2-M max. current <1s at 25°C	20 A
E3-M max. continuous current in 25°C	11 A

E3-M max. current <1s at 25°C	50 A
Function	Over/Undercurrent
IP class connection	IP20
IP class housing	IP30
Measurement range E1-M	0,1-1A
Measurement range E2-M	0,5-5A
Measurement range E3-M	1-10A
Mounting	DIN rail
Output	Relay 2 pole C/O
Storage temperature max	70 °C
Storage temperature min	-30 °C
Supply voltage	24-240V ac/dc
Temperature operational max	50 °C
Temperature operational min	-20 °C
Time delay startup	1-20s
Time delay when exceeding the limit value	0,1-3s
Weight	130 g



