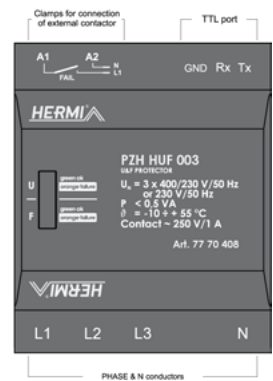
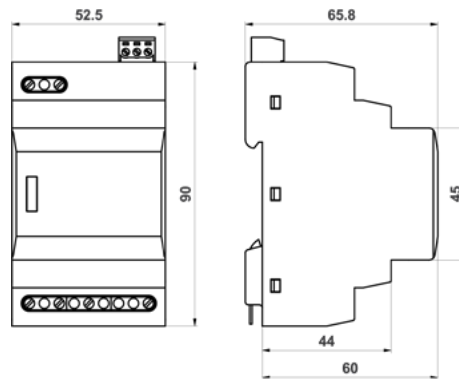


Voltage and Frequency Protector

AC / IP20 / CE



PZH HUF 003

This voltage & frequency protector is recommended for use in AC parts of photovoltaic systems or other types of AC electrical installations. After connecting the PZH HUF to the monitored system and after the initialization of its internal electronics, the in-built switching contact for external contactor control closes. Subsequently, there is a continuous monitoring of two basic variables connected to the AC power supply system (specifically, voltage and frequency) and in case of deviation from the preset values, this contact opens and consequently the external contactor is dropped. In this way, it is possible to immediately disconnect all protected devices from the monitored AC network.

PZH HUF 003 is suitable for use in three-phase or in one-phase applications since reconfiguration of measuring mode is made automatically by in-built microprocessor. The basic working limits of overvoltage / undervoltage / frequency and basic response time are set by producer. Alternative changes to these limits at the customer may only be performed by an authorized person (service technician) after connecting to the PC.

TYPE		PZH HUF 003
Supply voltage	U_N	3x400/230 V/50 Hz (three-phase mode) or 230 V/50 Hz (single-phase mode)
Supply voltage fluctuation range		$\pm 20 \%$
Power consumption	P	< 0.5 VA
Basic setting of working parameters by manufacturer*		Voltage ~ 230 V $\pm 10 \%$ Frequency 50 Hz $\pm 1 \%$ Response time 0.1 s Time of re-attaching 20 min.
Possible range of working parameters adjustment		Voltage ~ 184 ÷ 275 V Frequency 45 ÷ 55 Hz Response time 0.1 ÷ 2 s Time of re-attaching 10 s ÷ 20 min.
Output		Switching contact ~ 250V/1A for control of external contactor
Measuring accuracy		< 1 %
Possibility changes of working parameters		By delivered software PZH HUF MONITOR and TTL port
Operating temperature range	J	- 10 ... + 55 °C
Mounting on		DIN rail 35 mm
Housing		IP20
Weight	m	145 g
Article number		77 70 408

* Note: further settings are possible on the basis of specification, according to the connection conditions of the electricity distributor

Communication HUF → PC

PZH HUF 003 is equipped with series interface TxD and RxD. Therefore it is necessary for communication with PC to use a USB → TTL convertor, with galvanic isolation. The supplied PZH HUF MONITOR software application (operating under Windows) will find the correct serial port when it is started and gives the user the following options:

- to observe actual voltage values at all line wires of connected phases
- to observe actual frequency of connected AC network

The necessary communication converter to the PC can also be the subject of delivery based on a special order if the customer specifies the hardware of his PC.