



Item number	Description
1772-2205000	PUMA pump control without communication interface.
1772-20225042	PUMA pump control with 4G modem.
1772-20225002	PUMA pump control with NB / IoT modem.
1772-20220042	PUMA 4G modem
1717-20220002	PUMA NB/IoT modem



PUMA Quickguide



About the PUMA Controller

PUMA pump control is a universal compact single-pump control with the possibility of communication. PUMA can operate both a 1-phase and 3-phase pump up to 12A (5.5KW).

PUMA has a unique function for current measurement on all 3 phases as well as phase sequence detection. PUMA has 2 digital inputs for high-level switch and the like, as well as 2 digital outputs for general alarm etc.

PUMA can be delivered with a built-in communication interface, as either a 4G or NB-IoT modem. PUMA uses Modbus TCP / IP protocol.

PUMA is constructed in a two-part impact-resistant IP65 encapsulated housing. The PUMA cabinet can easily be mounted on a wall, in street cabinets and other enclosures due to its compact size of only 23cm in width. The PUMA housing is designed for easy connection via bottom-mounted fittings and a combination of screw terminals and spring clamps.

Applications

PUMA is used for single-pump stations, where it via either level switch or standard 4-20mA analog level gauge, measures the level in the well, and starts and stops the pump automatically. PUMA has integrated standard functions for inlet flow calculation, flow and capacity calculation as well as "Blind running" function via the high-level switch.

For daily operation, PUMA has a 2.4 "OLED display in the front and 4 control buttons.

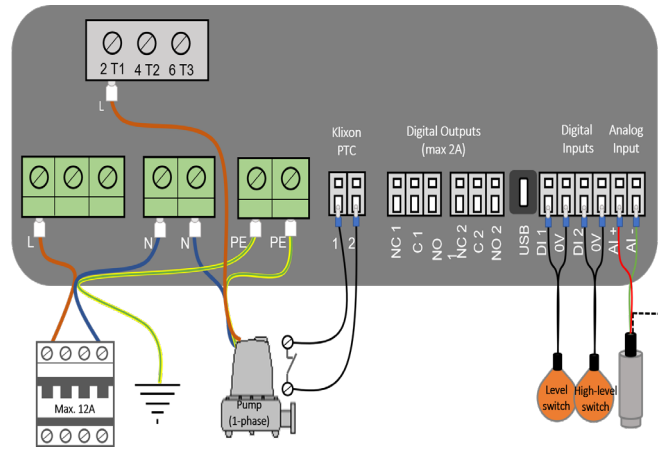
Installation and dimensions

For installation of the PUMA controller, the following dimensions may be required.

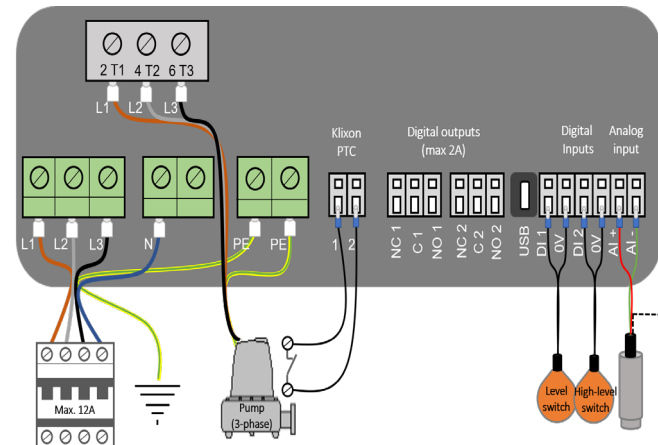
NOTE! PUMA is not ATEX certified and must therefore not be installed in EX areas.

Electrical installation

- 1-phased pump



- 3-phased pump



Specifications

Dimensions	W=237mm x H=248mm x D=98mm
Weight	1350g
Power supply	1-phase 230V AC 50 Hz or 3-phased 400V AC 50Hz
Wire connection	0.5 – 6mm ²
Enclosure class	IP65
Number of analog inputs	1
Number of digital inputs	2
KLIXON/PTC protection	Ja
Digital outputs	2 (Relay outputs max. 2A)
Electrically insulated	Yes
Maximum pump current	5,5kW
Maximum power consumption	12A

Functions

- Built-in GSM / GPRS or NB / IoT modem
- Modbus TCP / IP protocol.
- Built-in graphic 2.4 "OLED display.
- Validated flow calculation, where the "true" capacity of the pump is calculated.
- Inlet flow calculation with load profile at pump station.
- "Blind running" function via level switch in case of faulty pressure transmitter.
- Built-in power bank.
- Option of varied starting level, so that fat build-up is avoided.
- Configuration of PUMA via AcowaZoo software, both locally or via TCP connection.