

Installation- and Operating Instructions

PN-400/230-N

Item no. 3020100200

Function:

By pressing a compressional wave transmitter (pneumatic feeler) the pressure on the membrane of a compressional wave switch is increased via a special pneumatic hose. In this way the connected 400V three-phase current pump or the 230V alternating current pump is switched on or off on pressing the transmitter again. Due to the internal running time limit the pump is switched off again at the latest after the internally set maximum running time (0 up to approx. 25 minutes) . The motor is protected against overload by a motor protection (0 to 8A) that is realized by a micro-processor. This control unit is especially designed to switch upstream facilities, splash showers, floor whirl facilities, massage jets and similar attractive facilities.

Technical specifications:

Dimension:	175mm x 125mm x 76mm
Operating voltage:	400V/50Hz
or	230V/50Hz
Power consumption of the control:	ca.1.5VA
Breaking capacity:	max. 8A (AC3)
System of protection:	IP 40
Maximum length of pneumatic hose:	30m (if an osf-PN-hose and an osf-PN-key is used)

Installation:

The control unit is to be installed humidity protected according to its system of protection.

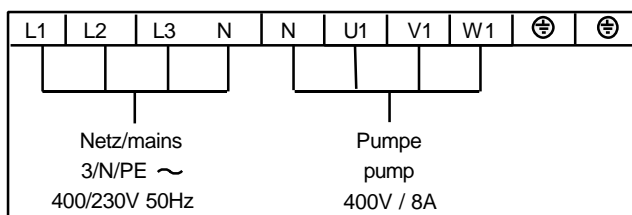
Safety instruction:

Any service- and maintenance work may only be carried out with a dead circuit control by an authorized electrical specialist. Before opening the control it must be switched to zero potential!

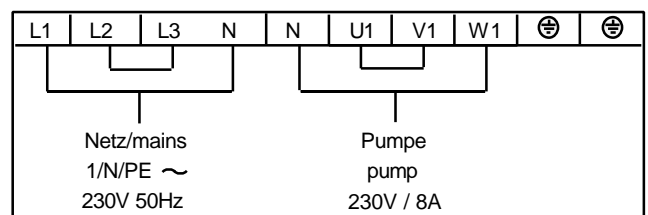
Electrical connection:

The electrical connection may only be carried out by an accredited electrical specialist! The following connecting diagram and the prevailing safety regulations are must be observed. Any conductive components must be included in the equipotential bonding.

Connection of a 400V three-phase current pump



Connection of a 230V alternating current pump

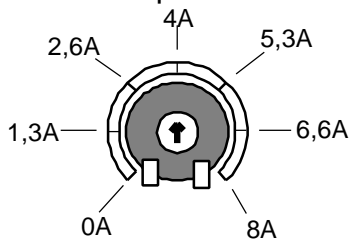


So that the electronic motor protection works properly if connected to a 230V mains, the motor current must be led via all three switch contacts of the filter control (clamps L2 and L3 as well as U1 and V1 are bridged). **The connection to the pump is carried out at clamp W1.**

Please note reverse side!

Electronic motor protection:

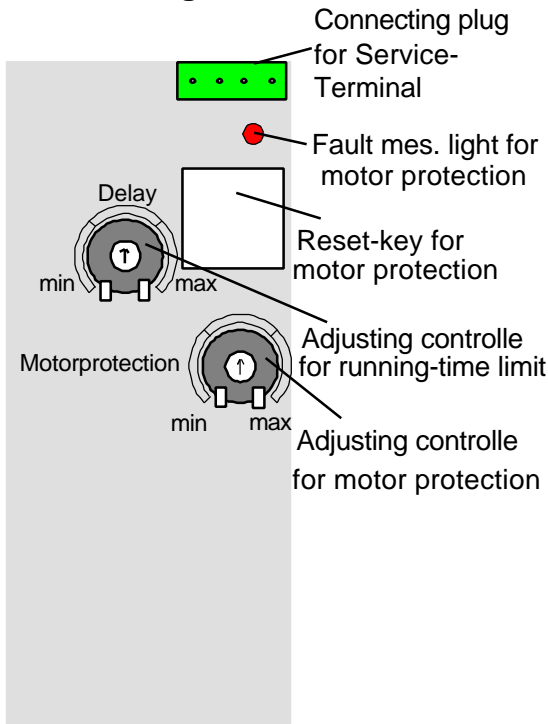
Adjusting controller for motor protection



The pump is protected against damage caused by overload by a continuously adjustable motor protection. For this the motor protection must be adjusted to the nominal current of the pump (see type plate of the pump). The adjusting controller for the motor protection is located right down on the board. If the nominal current of the pump is unknown, the motor protection can be set according to the following process:

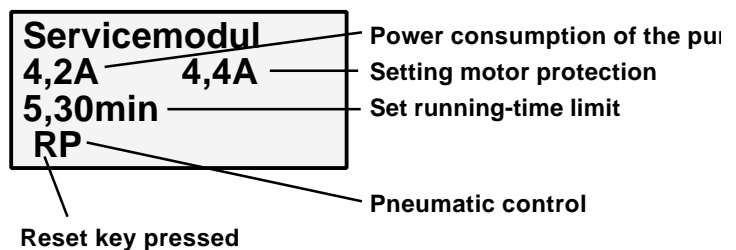
1. Turn adjusting screw of the motor protection to the right stop .
 2. Switch pump on.
 3. Slowly turn adjusting screw anti-clockwise until the motor protection triggers and the red error message light flashes.
 4. Turn adjusting screw clockwise by some angular degrees (approx. 10%).
- Acknowledge error message with the key "Reset". This key is located between the adjusting screw and the error message light.

Drawing



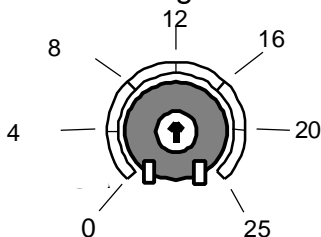
Service terminal

To check the control as well as to facilitate an initial operation and error diagnosis, an **osi** service terminal (item no. 3010000900) can be connected to this control. The connector plug is located on the circuit board (top right) inside the device. **Before opening the housing and plugging the service terminal, it is absolutely necessary to switch the control to zero potential!** After switching on the control unit, the display of the service terminal indicates the following diagnostic text:



Setting the maximum running time

Adjusting controller for the running time limit



The maximum running time of the pump can be set with a potentiometer on the circuit board between 0 and approx. 25 minutes. After this time the pump is automatically switched off. If the adjusting screw is turned to the left stop, no running time limit is activated. In this case the pump is not automatically switched off.

We wish you a lot of fun and relaxation in your swimming pool.