







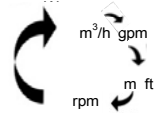


## QUICK STARTUP GUIDE



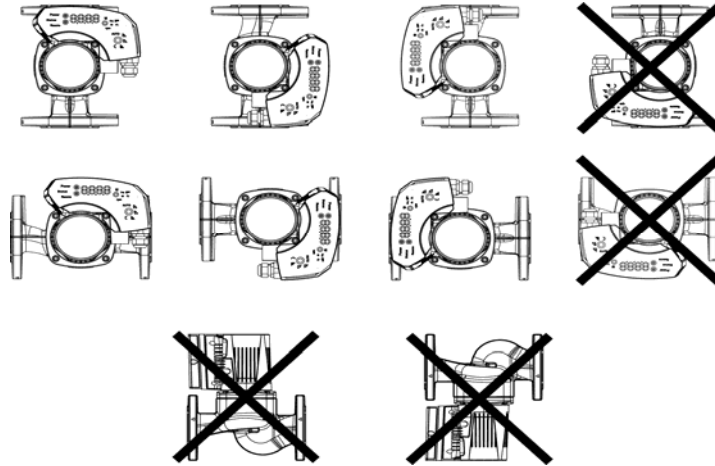
### WARNING

This guide does not replace the instruction and operating manual (IOM). Read the manual carefully before installing and using the product. Improper use of the product can cause personal injury and damage to property and may void the warranty.

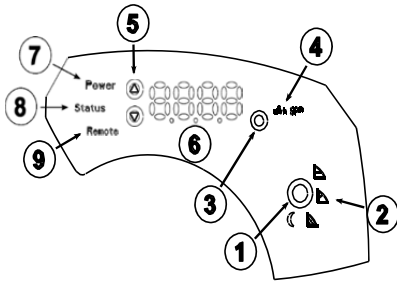
### Startup checklist

	Operation	Pump Display
1	<ul style="list-style-type: none"> <li>Mount pump in the system according to flow direction indicated on the pump housing and with motor housing in one of the allowed orientations shown in figure 1.</li> <li>Make sure the pump is properly aligned with the system piping. Do not attempt to spring the suction or discharge line in position.</li> <li>On 3-phase pumps, install two (2) Absolute Pressure Sensors provided with the pump.</li> </ul>	-
2	<ul style="list-style-type: none"> <li>Make sure that power supply matches nameplate electrical ratings of the pump.</li> <li>Figure 3 shows wiring terminals for single phase and figure 3a shows for 3-phase pumps.</li> <li>Please note that 3-phase pumps will rotate only in one direction set at the factory. Wire swapping is not an option with these units.</li> </ul>	-
3	<ul style="list-style-type: none"> <li>Connect auxiliary input/output signal wires to the pump as indicated.</li> <li>Power and control wiring must be run in separate channels.</li> </ul>	-
4	<ul style="list-style-type: none"> <li>Fill the system with water.</li> <li>Open all valves in the system to facilitate proper air venting of system piping.</li> </ul>	
5	<ul style="list-style-type: none"> <li>Power the pump ON and see that all LEDs are lit and successive submenus start rolling. (refer to the "Electronic Drive Manual" in case of errors or alarm codes on display)</li> </ul>	The display and the LEDs switch-on for 1 second and then a sequence of submenus for advanced functions begin to appear.
6	<ul style="list-style-type: none"> <li>At each power-on, the automatic air venting procedure is executed.</li> <li>In case of residual air inside the system creating noise or excessive vibration:               <ul style="list-style-type: none"> <li>Vent the system again.</li> <li>Recall the automatic air venting procedure by pressing the up and down arrows <b>5</b> simultaneously.</li> <li>If problem is not resolved, refer to instruction manual and/or the electronic drive manual.</li> </ul> </li> </ul>	<p>The user interface displays "deg" (degassing) and a count-down begins until completion of the procedure: 4DEG - 3DEG - 2DEG - 1DEG</p> <p>At the end of the air venting procedure, the pump starts to run with default settings.</p>
7	<ul style="list-style-type: none"> <li>Set control mode of the pump, by short pressing button <b>1</b> (see figure 2 or 2a).</li> </ul>	<p>At the user interface, the chosen mode LED will light up.</p> <p> <b>Constant pressure mode</b></p> <p> <b>Proportional pressure mode</b></p> <p> <b>Fixed speed mode</b></p> <p> <b>Night mode</b></p>
8	<ul style="list-style-type: none"> <li>Short press button <b>5</b> to display the actual set points (see figure 2 or 2a).</li> </ul>	On display the actual setpoint starts blinking
9	<ul style="list-style-type: none"> <li>Change values as desired with arrow buttons <b>5</b> (see fig. 2 or 2a)</li> </ul>	The setpoint stops blinking on display and the new parameters will be displayed
10	<ul style="list-style-type: none"> <li>To change the displayed units of measurement, press the button <b>3</b> (see fig.2 or 2a)</li> </ul>	
11	<ul style="list-style-type: none"> <li>To change the unit of measurement of head or flow, press the button <b>3</b> for more than 1sec. (see fig. 2)</li> </ul>	<ul style="list-style-type: none"> <li>Flow: m<sup>3</sup>/h ↔ gpm (US)</li> <li>Head: m ↔ ft</li> </ul>
12	<ul style="list-style-type: none"> <li>The user interface can be locked/ unlocked by pressing and holding down the two arrow setting buttons <b>5</b> and the parameter button <b>3</b> simultaneously for two seconds. The user interface will be automatically locked after ten minutes of pressing the last button.</li> </ul>	<p>By pressing any button when the user interface is locked, the display shows </p> <p>Unlocked user interface displays: </p>

**Fig. 1 – Allowed pump installation positions**



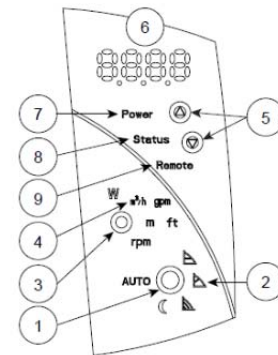
**Fig. 2 – 1-Phase User Interface**



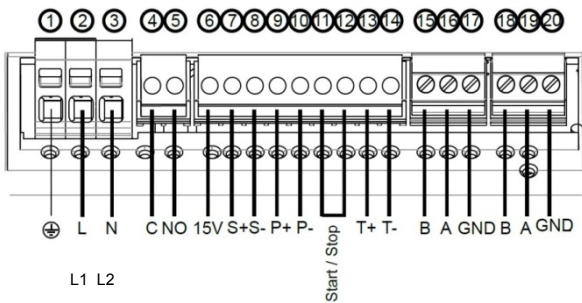
**Interface Buttons Identification**

1. Control mode button
2. Control mode indicators
3. Parameter button
4. Parameter indicators
5. Setting buttons
6. Numeric Display
7. Power indicator
8. Status / Fault indicator
9. Remote control indicator

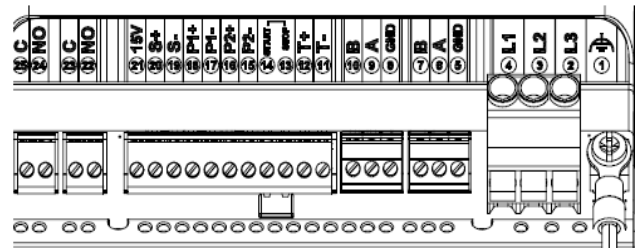
**Fig. 2a – 3-Phase User Interface**



**Fig. 3 – 1-phase pump terminal block**



**Fig. 3a – 3-phase pump terminal block**



Terminal No.	Description
1-2-3	Power Supply
4-5	Fault Signal dry contact (max 250VAC – 2A)
6	Auxiliary DC supply +15V (max 40 mA)
7-8	Analog input 0-10V DC
9-10	External pressure sensor input 4-20mA
11-12	Start/Stop input
13-14	External temperature probe input
15-16-17	Primary RS-485 channel
18-19-20	Secondary RS-485 channel

Terminal No.	Description
1-2-3-4	Power Supply
5-6-7	Communication bus RS-485 (standard)
8-9-10	Communication bus RS-485 (optional)
11-12	External temperature sensor input
13-14	External start/stop
15-16	Sensor 2
17-18	Sensor 1
19-20	External analog input 0-10V DC
21	Auxiliary DC supply +15V (max 40 mA)
22-23	Fault signal
24-25	