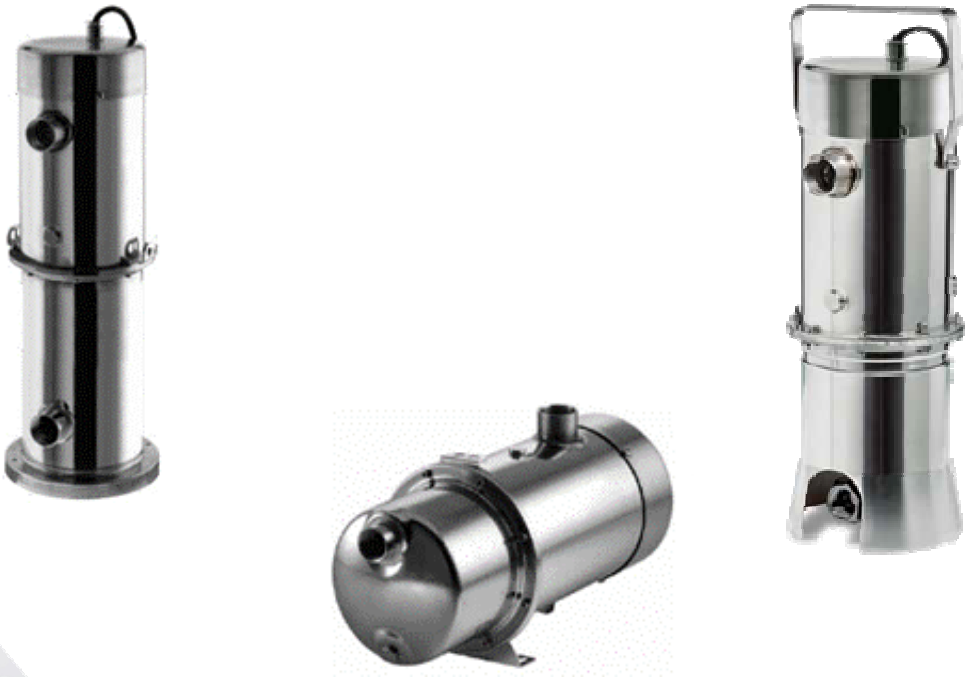
ONTELLY

INVISIBLE INVERTER BY STEELPUMPS



User and maintenance manual

Dichiarazione CE di conformità

Noi STEELPUMPS srl dichiariamo sotto la nostra esclusiva responsabilità che le pompe Intelly tipo e numero di serie riportati in targa, sono conformi alle prescrizioni di sicurezza della Direttiva Macchine 2006/42/CE, della Direttiva Bassa Tensione 2014/35/UE e della Direttiva sulla Compatibilità Elettromagnetica 2014/30/UE.

EC Declaration of Conformity

STEELPUMPS srl declares, under its own responsibility, that the Intelly pumps, with the models and serial numbers specified on the nameplate, are compliant with the safety requirements of the Machine Directive 2006/42/CE, of the Low Voltage Directive 2014/35/UE and in the Electromagnetic Compatibility Directive 2014/30/UE.

Déclaration de conformité CE

STEELPUMPS srl déclare sous son entière responsabilité que les pompes Intelly et numéro de série reportés sur la plaque - sont confonmes aux prescriptions de sécurité imposées par la Directive Machines 2006/42/CE par la Directive Bass~ Tension 2014/35/UE et par la Directive sur la Compatibilité Electromagnétique 2014/30/UE.

EG-Konformitatserklarung

Wir, das STEELPUMPS, erklaren unter unserer ausschlieBlichen Verantwortung, dass die Pumpen Intelly mit dem am Typenschild angegebenen Modelltyp und Seriennummer den Schutzanforderungen der EG~ aschinenrichtlinie 2006/42/CE sowie
der Niederspannungsrichtlinie 2014/35/UE und der EWGRichtlinie über die elektromagn~!ische Vertraglichkeit 2014/30/UE.

Declaracion de conformidad CE

STEELPUMPS srl. declara bajo su exclusiva responsabilidad, que las bombas Intelly , tipo y numero de serie tal como resultan en la placa de identificacion correspondiente, son confonmes con las prescripciones de seguridad estipuladas por la Directiva de Maquinas 2006/42/CE con la Directiva de Baja Tension 2014/35/UE y con la Directiva sobre Compatibilidad Electromagnética 2014/30/UE.

Declaraçao CE de conformidade

A STEELPUMPS srl declara, baixo a propria e exclusiva responsabilidade, que as bombas Intelly tipo e numero de série anotados na placa, estao conforme às prescriç6es de segurança da Directiva Maquinas 2006/42/CE, da Directiva Baixa Tensao 2014/35/UE e da Directiva sobre a Compatibilidade Electromagnética 2014/30/UE.

STEELPUMPS srl

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GENERAL INFORMATION

With this manual, Steelpumps Srl intends to provide the necessary information for the installation, use and maintenance of the INTELLY inverter exclusively coupled to an electric pump owned by Steel-pumps.
Incorrect use may result in damage to the machine or equipment and the loss of warranty.
Steelpumps should only be used for pumping clean water in its liquid state and without any suspended solids.
The inverter module has a single-phase power supply and manages a three-phase pump by reading the pressure from the electronic pressure transducer and the flow rate. The module allows at the operator to select various functions by using a remote control and LCD display.
Please check the package integrity and verify that the machine received corresponds to the one requested in the order.
It is necessary to check the machine for defects and in case of mismatch or damage, report the problem to Steelpumps Srl or to the dealer, no later than 10 days from the date of purchase.

NOTE: Keep the original packaging to facilitate future transport of the machine.

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TECHNICAL SPECIFICATIONS

NOTE: For the electric pump, refer to the information in the specific manuals.

WARNING: Do not use the pump to transport dangerous liquids and do not use the product in environments with acids, corrosive and/or combustible gases.

CAUTION: If there is a motor generator and/or high-powered machine tools in the electrical system, supply the INTELLY with power through a stabiliser and appropriately sized filters.

Max. ambient temperature: + 45 °C
Temperature of pumped liquid: +2 °C to + 40 °C
INTELLY degree of protection: IP44
Pump degree of protection: IP68
Maximum operating pressure: 7 bar
Inverter power supply voltage: 1x230Vac ± 10%.
Input frequency: 50Hz ± 3%
Input filter: compliant with EMC directive
INTELLY is compliant with EN 55014-1, EN 55014-2+A1+A2 and EN 61000-3-2, 61000-3-3 for electromagnetic compatibility.

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INSTALLATION

CAUTION: Installation operations must be carried out by qualified technicians. Observe the current safety and accident prevention regulations strictly. This equipment is not to be used by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been supervised or instructed in its use by a person responsible for their safety. It is necessary to ensure that children do not play with this device.
The system can be used with direct connection to the public water network or by sucking from a primary collection tank.
ATTENTION: For connection to the public water supply system, strictly observe the local regulations in force. Check that the sum of the suction pressure and the maximum pressure of the electric pump does not exceed the maximum values allowed by the system.
It is necessary to install an expansion tank, on the delivery side, with a capacity of at least 8 litres to avoid continuous operation of the electric pump. Check the pre-charge pressure of the tank before the connection to the system; this value must be 0.5/0.8 Bar lower than the set working pressure (SET-POINT).
DANGER: Make sure that all connections are voltage-free. Disconnect the power supply cable before working on electrical or mechanical parts of the pump. Wait until the display is off before moving the pump (2 minutes). Make electrical connections in accordance with current local regulations.
ATTENTION: It is the responsibility of the technician to ensure that the electrical power supply system is equipped with an efficient earthing system in accordance with the regulations in force.

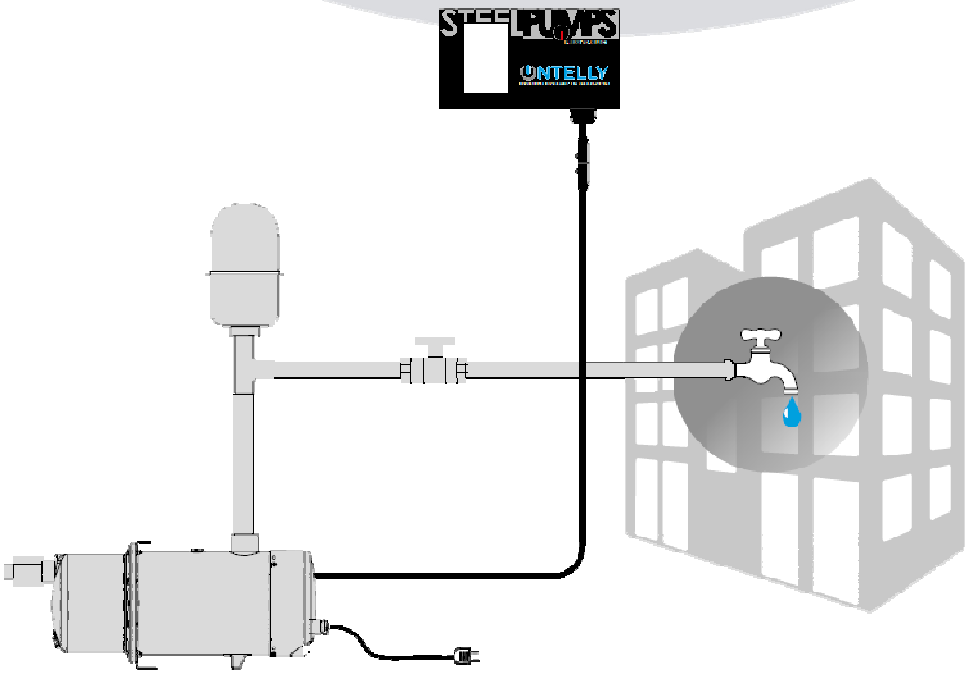
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INSTALLATION

To connect the machine to the power supply, follow these steps:

- The pump must be earth-grounded and protected against indirect contact in accordance with local regulations.
- If a residual current circuit breaker is installed on the power supply of the pump as additional protection, this circuit breaker must switch when the presence of leakage currents to earth is detected.
- Check that the mains voltage is 1~230 Vac, 50 Hz.
- The INTELLY device is supplied with a power cable, so a dedicated power supply panel must be provided.
- If the power cable is damaged, it must be replaced by a service centre or by qualified technicians.

NOTE: In special cases, extra components (e.g. filters, etc.) may be required to limit electromagnetic interference.

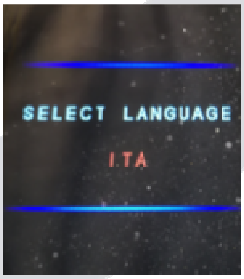


SETTINGS

In order to start the guided setting procedure, without which the machine will not start, it is necessary to operate on the control panel with display.



CHOOSING THE LANGUAGE: Turn the knob to select the language. Press to confirm and move on to the next setting.



SELECT WORKING PRESSURE: Turn the knob clockwise to increase the working pressure and counter-clockwise to decrease it. The range values are fixed in the table on page 13. Press to confirm and move on to the next setting.



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SETTINGS

INSTALLATION TYPE SETTING: Turn the knob to select the installation type. Press to confirm and move on to the next setting.



DATE AND TIME SETTING: Turn the knob clockwise for selection. Press to confirm and move to the next setting. When this setting is complete the pump is ready to start operating mode.



WARNING: In order to make a reset of the setup configuration, it is necessary to perform the following actions:

- Switching off the pump
- Keep the knob pressed down and simultaneously power up the pump
- Release the knob

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SETTINGS

ACTIVATE THE SELECTION OF A FUNCTION:

Press to set and activate the selection cursor (red box around the function).



The functions are:

- Activation (Off-On)
- Working pressure setting
- Language selection (ITA-ENG-DEU)

SELECT THE VALUE OF THE FUNCTION:

Press to set and activate the selection cursor (red box around the function), press 3 seconds to select. Turn to choose the value, press to select the value that becomes operational.

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DISPLAY INFORMATION

FLOW: This indicates the instantaneous flow value expressed in litres/minute, delivered by the pump.



SET PRESSURE: Indicates the set pressure value expressed in bar.



INSTANT PRESSURE: Indicates the instantaneous pressure value at which the pump is working, the value is expressed in bar.



POWER VOLTAGE: Indicates the value of the power supply voltage.



PUMP STATUS: The status can be "Off" indicating that the pump is powered but not running, or "On" indicating that the pump is running and ready to supply water on demand.

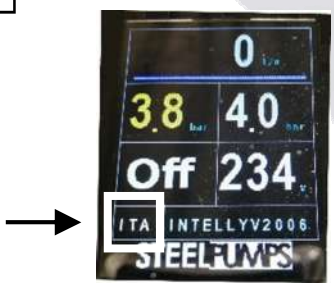


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DISPLAY INFORMATION

LANGUAGE: Indicates the set language



PUMP MODEL: Indicates the pump model.



WORKING OPERATION

The system is composed by an electric pump where an electronic control system (inverter) is installed inside it, allowing to maintain a constant pressure in the system, by reducing or increasing the rotation speed of the electric motor.

When the system pressure drops below the set value, the module starts the pump to restore the set-point pressure; the pump rotation speed varies according to the water demand, a higher demand will result in a higher speed, until the maximum set value will be reached. When the water demand decreases, the pump speed will be reduced until the minimum set speed value has been set, after that, if there is no further pressure decrease, the pump will be stopped (Stand-By) until a new cycle starts.

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RECOMMENDED SETTINGS

Model	Model Description	Working Pressure Range	Recommended Working Pressure	Hysteresis
INTELLYJ120V	JET VERTICAL HP1,2 INVERTER	2,5 ÷ 3,5	2,5 ÷ 3,5	0,5
INTELLYJ120	JET HORIZONTAL HP1,2 INVERTER	2,5 ÷ 3,5	2,5 ÷ 3,5	0,5
INTELLY120	HORIZONTAL MULTISTAGE HP1,2 INVERTER	2,5 ÷ 3,5	2,5 ÷ 3,5	0,6
INTELLY150	HORIZONTAL MULTISTAGE HP1,5 INVERTER	2,5 ÷ 4,5	2,5 ÷ 4,5	0,6
INTELLY1204	HORIZONTAL MULTISTAGE HP1,2 HF INVERTER	2,0 ÷ 3,0	2,0 ÷ 3,0	0,5
INTELLY1505	HORIZONTAL MULTISTAGE HP1,5 HF INVERTER	2,5 ÷ 3,5	2,5 ÷ 3,5	0,6
INTELLY2006	HORIZONTAL MULTISTAGE HP2,0 HF INVERTER	2,5 ÷ 4,5	2,5 ÷ 4,5	0,6
INTELLYV120H	MULTISTAGE MOV HP1,2 INVERTER	2,5 ÷ 3,5	2,5 ÷ 3,5	0,6
INTELLY120V	VERTICAL MULTISTAGE HP1,2 INVERTER	2,5 ÷ 3,5	2,5 ÷ 3,5	0,6
INTELLY150V	VERTICAL MULTISTAGE HP1,5 INVERTER	2,5 ÷ 4,5	2,5 ÷ 4,5	0,6
INTELLY1204V	VERTICAL MULTISTAGE HP1,2 HF INVERTER	2,0 ÷ 3,0	2,0 ÷ 3,0	0,5
INTELLY1505V	VERTICAL MULTISTAGE HP1,5 HF INVERTER	2,5 ÷ 3,5	2,5 ÷ 3,5	0,6
INTELLY2006V	VERTICAL MULTISTAGE HP2,0 HF INVERTER	2,5 ÷ 4,5	2,5 ÷ 4,5	0,6
INTELLY3007V	VERTICAL MULTISTAGE HP3,0 HF INVERTER	2,5 ÷ 5,5	2,5 ÷ 5,5	0,6

TECHNICAL MENU

To display the technical menu, press the knob on the display 5 times, the screen with the following status information will appear:



HYSTERESIS SETTING

In order to set the restart pressure (hysteresis) after stopping, the stop, it is necessary to enter the specific setting menu by pressing the control knob 10 times.

NOTE: Before contacting the service department you must have the correct pump model, date of manufacture and software version (identified by the values in the vicinity of the "Firmware" label).

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SIGNALS AND ALARMS

MESSAGE ERRORS	DESCRIPTION	SOLUTION
INVERTER ERROR	CURRENT OVERLOAD	Error occurring when the current absorbed by the module is higher than the rated current. This condition can be caused by the pump blockage by external objects. Verify the electrical system. Please contact service for clarification.
	CAN COMMUNICATION INTERRUPTED	This error occurs when the control board fails to communicate with the power part. Disconnect power to the system, wait about 1 minute, and power up again. Please contact service for clarification.
DRY RUNNING	DRY RUNNING CONDITIONS	Check the water supply in the suction side. Check if there are gate valves on the suction side, they must be open. Check the efficiency of the suction check valve. Check the functionality of the flow fan on the delivery pipe. Please contact service for further clarification.
VOLTAGE ALARM	ABNORMAL INPUT VOLTAGE	Check the value of the power supply voltage to the unit, take the test, the value must be 230 Vac ±10%. Switch off the power supply to the system, wait about 1 minute and power up again. Please contact service for further clarification.
TEMPERATURE ALARM	ABNORMAL INVERTER BOARD TEMPERATURE	If the temperature on the inverter board is outside the range +2°C ÷ +60°C, the device is stopped. Check the cause of the fault or please contact our service.

STEELPUMPS Evolution
WATER PUMPS DIVISION

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