

elentek[®]
One Step Forward

**INVERTER
AND PRESSFLOW SWITCHES**





elentek[®]

DESIGN AND INNOVATION

In energy production and control

“One step forward” as an inspiration, as a guide. “One step forward” leading to constant innovation, continuous pursuit of the excellence and the most advanced components, into care for details and tailor made solutions and projects

OUR COMPANY

The solution that arises by analyzing the problem, the experience that supports the analysis, the continuous discussion with the users of the products on a daily basis: these are the foundations on which Elentek was born twenty years ago. Pillars that make the company evolve every day, constantly implementing new technologies to be always **one step forward**. With a totally **Made in Italy production** and a highly qualified technical office, Elentek is present in the national and international market with expandable, modular and totally customizable electrical panels. The control, management and protection of pump systems are guaranteed.

The certified value of a company

The enhancement of human resources, the quality of the product, the control of production processes: Elentek is ISO 9001 certified to grow every day in a virtuous way.





HOW WE WORK



RESEARCH



PLANNING



DESIGN



PRODUCTION

01 RESEARCH & DEVELOPMENT

Looking to the future without neglecting the past.

Elentek combines his knowledge with the latest discoveries and designs the **latest generation of control panels** that increasingly improve the performance of systems.

Never before have the control, management and protection of pumps become of the highest quality.

The new Elentek control panels are easy to install, expandable, versatile, equipped with a multifunction display or LED signaling. The result is maximum system reliability.

PLANNING 02

The technicians who design and test Elentek control panels are those who then follow the customer in the after-sales service: an extra safety for each installer who can contact the source, if the instruction manual is not enough.

Day after day, with the continuous comparison, the knowledge expands and **every need is reflected** in a new product.

03 DESIGN

Elentek control panels catch the eye with their **innovative design**, inside and out.

A minimalist box, with simple and elegant lines, welcomes immediately without needing additional manpower with most of the components used.

Elentek researches its suppliers in a painstaking manner to ensure excellence in every component. The thirty-year experience of the company has led to the consolidation of more and more relationships with European business partners of primary importance.

PRODUCTION 04

All the technical information to concretize Elentek control panels goes directly from the technical office to the production department: the continuous comparison between the various sectors and the exchange of information makes each panel an **excellent team result**.

The synergy Made in Italy, between materials, craftsmanship and experience, gives the added value to each product, from beginning to end, even after the sale.

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FREQUENCY INVERTER

	Model	COD.	Power supply	Max.Current	N° pumps
	Tekspeed 1112 MM	99400	~1x230 V	~1x230 V (12 A)	1-2
	Tekspeed 1010 MT	99401		~3x230 V (Δ) (10 A)	
	Tekspeed 1305 TT	99402	~3x400 V	~3x400 V (5 A)	
	Tekspeed 1309 TT	99403		~3x400 V (9 A)	
	Tekspeed 1314 TT	99404		~3x400 V (14 A)	
	Tekspeed DUO	99405	~1x230 V	2 VF 1x230 V (12A) 2 VF 3x230 V (10A)	2
	Tekspeed SET	99406	~3x400 V	2 x ~3x400 V (9A)	2

PRESSOFLOW AND PRESSURE SWITCH

	Model	COD.	Hydraulic Connections	Pump Power	Pressure	
	Tekpress PRO	99420	G1" NPT1" G1-1/4" NPT1-1/4"	3 HP / 2,2 kW ~1x110-230 V (16 A)	Start: 0,5 - 5,5 bar Work: 2 - 6 bar	
	Tekpress EVO	99421	G1" NPT1" G1-1/4" NPT1-1/4"	3 HP / 2,2 kW ~1x110-230 V (16 A)	Start: 1 - 5 bar Work: 2 - 6 bar	
	Tekpress	99422	G11/4" M	3 HP / 2,2 kW	1,5-3 bar	
	Model	COD.	Hydraulic Connections	Power supply	Pumps connection	
	Tekswitch	99423	G 1/4" F NPT 1/4" F	~1x110-230 V	~1x110-230 V (16 A)	
	Model	COD.	Hydraulic Connections	Power supply	Pressure	Output
	TPO10B	98044	G 1/4" A	8-28 V	0-10 bar	4-20 mA
	TPO16B	98045	G 1/4" A	8-28 V	0-16 bar	4-20 mA

tekspeed

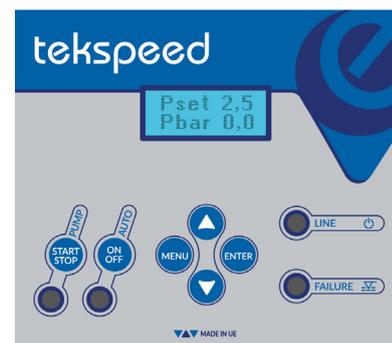
Frequency inverter for controlling a single-phase or three-phase pump, with wall mounting

Tekspeed is an electrical control and protection panel for a single-phase or three-phase pump with frequency inverter.

Available in versions with power supply:

- 230vac single-phase input and 230vac single-phase output;
- Single-phase 230vac input and 230vac three-phase output;
- 400vac three-phase input and 400vac three-phase output;

Tekspeed inverters can be mounted individually for the control of a pump, or in multipump systems up to 2 MASTER-SLAVE devices with alternating logic and contemporaneity.



Multifunctional LCD control panel

- Indication LEDs, START-STOP, AUTOMATIC buttons
- Configuration system

Versions:

1112 MM | 1010 MT | 1305 TT | 1309 TT | 1314 TT

TECHNICAL FEATURES

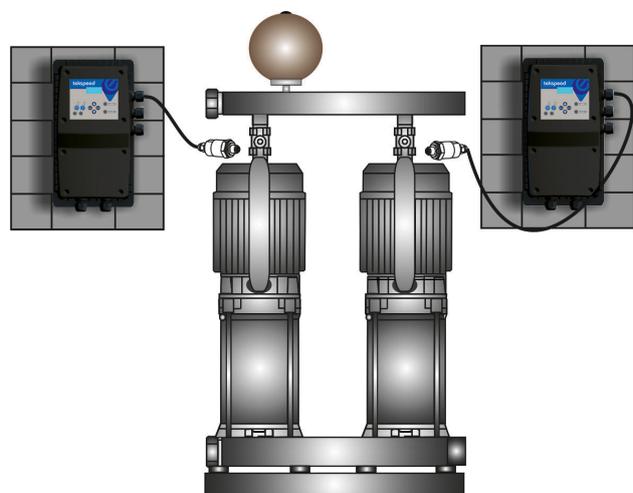
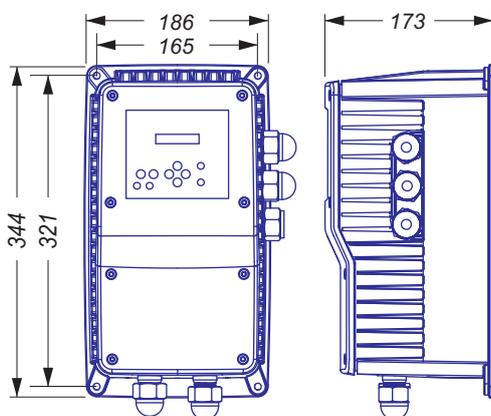
	1112 MM	1010 MT	1305 TT - 1309TT - 1314TT
Input voltage	~1 x 230 Vac	~1 x 230 Vac	~3 x 400 Vac
Output voltage	~1 x 230 Vac	~3 x 230 Vac	~3 x 400 Vac
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Max.current	12 A	10 A	5 A - 9 A - 14A
Overcurrent	20% 10"	20% 10"	20% 10"
Pressure range	0,5 ÷ 25 bar	0,5 ÷ 25 bar	0,5 ÷ 25 bar
Protection degree	IP65	IP65	IP65
Analog input	4-20 mA	4-20 mA	4-20 mA
Ambient temperature Max.	50 °C	50 °C	50 °C
Weight	3,5 kg	4,5 Kg	4,5 kg
Cooling system	Forced ventilation	Forced ventilation	Forced ventilation

MAIN FEATURES

- Frequency inverter with PID logic
- Multifunction LCD display for visualization: nominal pressure, voltage, current, frequency, working hours, number of starts and alarm history log
- Buttons for custom function selection and parameterization
- ART function (Automatic Reset Test). When the control panel is in dry run protection, ART tries, with a programmed periodicity, to restart the pump until the water flow is re-established
- STC function (Smart Temperature Control): when the temperature of the electronic board exceeds 85° C automatically decreases the frequency of revolution of the pump, decreasing the heat generation, while maintaining the flow of water
- Automatic system recovery after power failure. The system restarts maintaining the configuration parameters
- MASTER-SLAVE operation mode where up to 2 devices can be connected in cascade and start-up sequence alternating
- Configurable electronic input for: external level control, assigning a second pressure setpoint, remote control start-stop
- Input for external pressure transducer with 4-20 mA signal
- Aluminium heat sink with forced ventilation

PROTECTION

- Electric pump control and protection system against overcurrent.
- Dry running protection system of the electric pump.
- Abnormal supply voltage.
- Short circuit between system output phases.
- Pressure transducer error alarm.



tekspeed DUO

Double frequency inverter for the control of two single-phase or three-phase pumps, with wall mounting

Tekspeed DUO is an electric control and protection panel for two single-phase or three-phase pumps, each with inverter.

The device's power supply input is single-phase at 230V while the load supply output can be single-phase 230vac or three-phase 230vac. In complete modulation TEKSPEED DUO makes work in cascade and alternating both pumps.



Multifunctional LCD control panel

- Indication LEDs, START-STOP, AUTOMATIC buttons
- Configuration system

TECHNICAL FEATURES

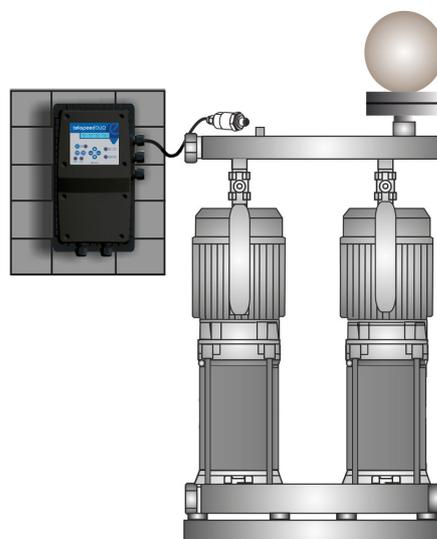
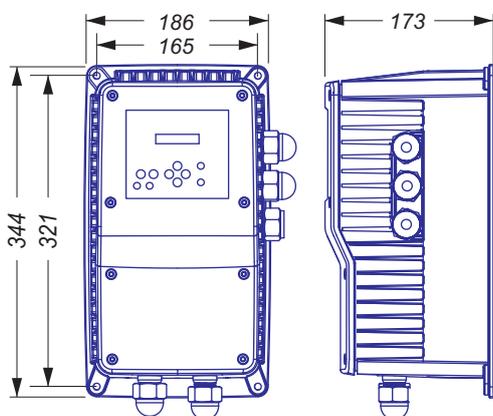
	TEKSPEED DUO
Input voltage	~1 x 230 Vac
Frequency	50/60 Hz
Max. current pump 1	10 A (~3 x 230 Vac) ou 12A (~1 x 230 Vac)
Max. current pump 2	10 A (~3 x 230 Vac) ou 12A (~1 x 230 Vac)
Overcurrent	20% 10"
Pressure range	0,5 ÷ 25 bar
Protection degree	IP65
Analog input	4-20 mA
Ambient temperature Max	50 °C
Weight	4,8 Kg
Cooling system	Forced ventilation

MAIN FEATURES

- Two frequency inverters for the management of two electric pumps with PID logic
- Multifunction LCD display for visualization: nominal pressure, voltage, current, frequency, working hours, number of starts and alarm history log
- Buttons for custom function selection and parameterization
- 2 operating modes: duty-assist and duty-standby
- ART function (Automatic Reset Test). When the control panel is in dry run protection, ART tries, with a programmed periodicity, to restart the pump until the water flow is re-established
- STC function (Smart Temperature Control): when the temperature of the electronic board exceeds 85° C automatically decreases the frequency of revolution of the pump, decreasing the heat generation, while maintaining the flow of water
- Automatic system recovery after power failure. The system restarts maintaining the configuration parameters
- Configurable electronic input for: external level control, assigning a second pressure setpoint, control remote start-stop
- Input for external pressure transducer with 4-20 mA signal
- Aluminium heat sink with forced ventilation

PROTECTION

- Control system and protection of electric pumps against overcurrent.
- Dry running protection system for electric pumps.
- Abnormal supply voltage.
- Short circuit between system output phases.
- Pressure transducer error alarm.

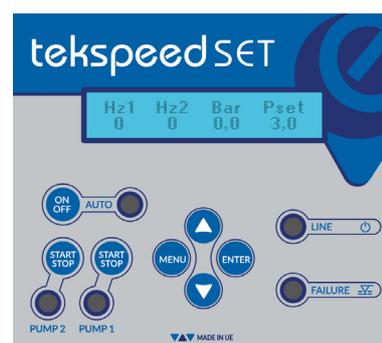


tekspeed SET

Frequency inverter and direct start with fixed speed, for the control of two three-phase pumps, with wall mounting

Tekspeed SET is an electrical control and protection panel for two pumps. It includes an inverter (frequency variator) for the control of the main pump and a direct start at fixed speed for the secondary pump. This system is designed to maintain the optimal pressure in the system.

The two pumps work in alternation and contemporaneity and the pump managed by the inverter changes with each start, or timed.



Multifunctional LCD control panel

- Indication LEDs, START-STOP, AUTOMATIC buttons
- Configuration system

TECHNICAL FEATURES

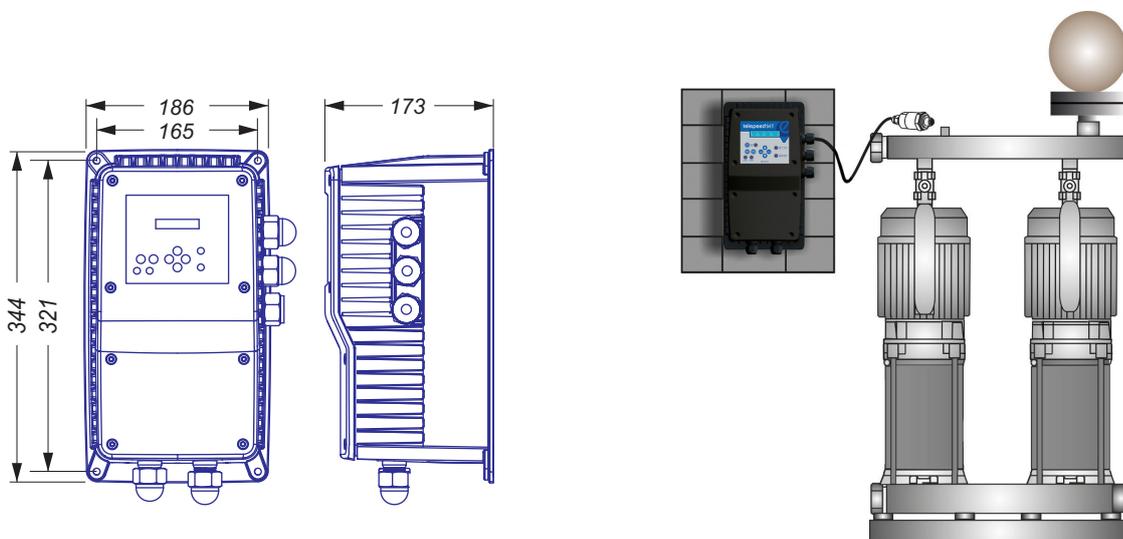
	TEKSPEED SET
Input voltage	~3 x 400 Vac
Frequency	50/60 Hz
Max. current pump 1	9A (~3 x 400 Vac)
Max. current pump 2	9A (~3 x 400 Vac)
Overcurrent	20% 10"
Pressure range	0,5 ÷ 25 bar
Protection degree	IP65
Analog input	4-20 mA
Ambient temperature Max.	50 °C
Weight	4,8 Kg
Cooling system	Forced ventilation

MAIN FEATURES

- Frequency inverter with PID logic for the management of the main pump
- Power relay for the management of the auxiliary electric pump
- Multifunction LCD display for visualization: nominal pressure, voltage, current, frequency, working hours, number of starts and alarm history log
- Buttons for custom function selection and parameterization
- Alternating sequence of operation: for cycles or for maximum time
- ART function (Automatic Reset Test). When the control panel is in dry run protection, ART tries, with a programmed periodicity, to restart the pump until the water flow is re-established
- STC function (Smart Temperature Control): when the temperature of the electronic board exceeds 85° C automatically decreases the frequency of revolution of the pump, decreasing the heat generation, while maintaining the flow of water
- Automatic system recovery after power failure. The system restarts maintaining the configuration parameters
- Configurable electronic input for: external level control, assigning a second pressure setpoint, control remote start-stop
- Input for external pressure transducer with 4-20 mA signal
- Aluminium heat sink with forced ventilation

PROTECTION

- Control and protection system of electric pumps against overcurrent.
- Dry running protection system of the electric pump.
- Abnormal supply voltage.
- Short circuit between system output phases
- Pressure transducer error alarm.



tekpress PRO

Pressflow switch with regulation and reduction of starting and output pressures, with electronic over-current control, to ensure the best constant pressure

Tekpress PRO is an electronic regulator and pressure reducer for single phase pumps with power up to 2.2kw (1~115 - 230V) complete with overcurrent protection system, that allows to maintain a constant output pressure through an innovative system of reduction and regulation of the same.

It integrates a digital display with instantaneous indication of pump absorption current and output pressure. The device consists of an integrated non-return valve, flow sensor, a storage membrane, a manometer and light indicators. In addition, a dry running protection, the ART function (Automatic Reset Test) and the APR function (Periodic Self Test), allow the system to stabilize and adjust the output pressure, avoiding overpressure and unwanted water hammer, improving the comfort and durability of the system.



TECHNICAL FEATURES

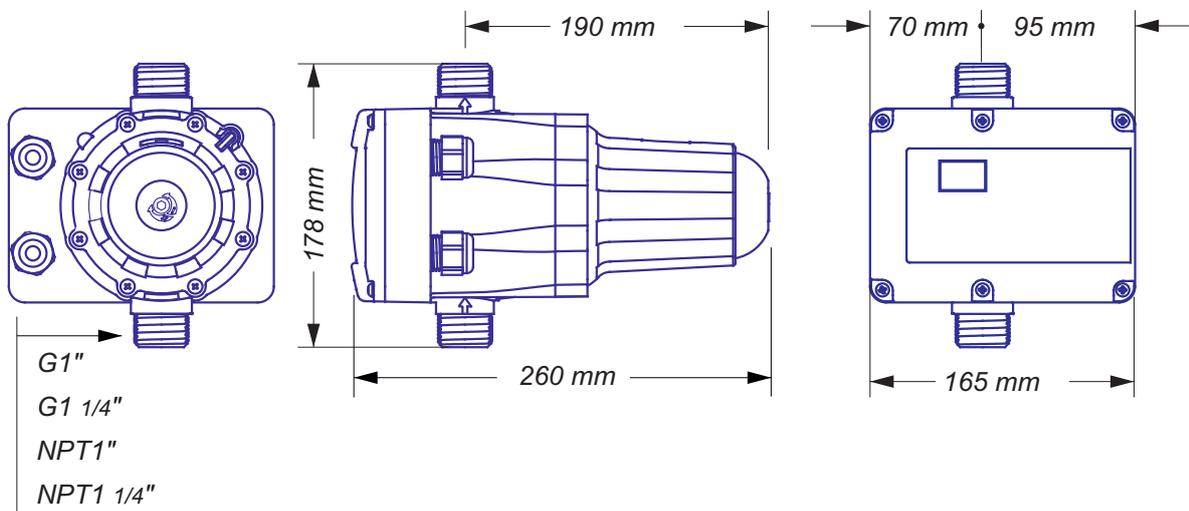
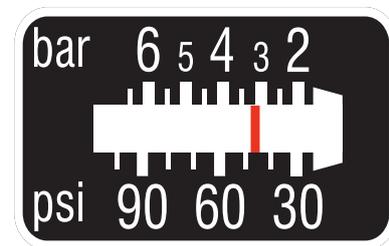
	TEKPRESS PRO
Power supply	1~ 110-230 Vac (50/60 Hz)
Max. current	16 A; cos fi ≥ 0,6
Power pump	2,2 kW (3 HP)
Nominal pressure (P _{out})	2 ÷ 6 bar / 29 ÷ 87 psi
Differential pressure	0,5 ÷ 5,5 bar / 7,5- 80 psi
Protection degree	IP65
Max. water temperature	50 °C
Max. pressure	12 bar / 174 psi
Hydraulic connections	G1", G1-1/4", NPT1", NPT1-1/4"
Weight	2 Kg

MAIN FEATURES

- Multifunctional LED display for visualization: nominal pressure, current, working hours, number of starts and alarm history log
- Yellow led (power presence)
- Green LED (active pump)
- Red led (alarm)
- Buttons for custom function selection and parameterization
- Hydraulic connections G1", G1-1/4", NPT1", NPT1-1/4"
- Power relay to handle pumps up to 2.2 kW (3HP)
- Manual output pressure adjustment (with indicator)
- Digital start pressure adjustment
- Internal pressure transducer
- Internal flow sensor
- Avoids the pump oversized thanks to the integral use of the flow-pressure curve
- ART function (Automatic Reset Test). When the control panel is in dry run protection, ART tries, with a programmed periodicity, to restart the pump until the water flow is re-established
- APR function (Periodic Self Search). After 3 days without starting the pump, the device creates a 10-second start to avoid the engine block
- Integrated storage system that prevents the pump from starting due to leakage in the hydraulic system

PROTECTION

- Control and protection system of electric pumps against overcurrent.
- Dry running protection system of the electric pump.
- Flow failure control system.
- Protection against overpressure/water hammer



tekpress EVO

Pressflow switch with adjustment and reduction of start and output pressures to ensure constant pressure

Tekpress EVO is an electronic regulator and pressure reducer for single-phase pumps with power up to 2.2kw (1~115 - 230V), which allows to maintain a constant output pressure through an innovative system of reduction and regulation of the same.

It integrates an analog manometer with instant output pressure indication.

The device consists of a non-return valve, flow sensor, a storage membrane, a manometer and light indicators. In addition, a protection against dry running and the ART function (Automatic Reset Test), allow the system to stabilize and adjust the output pressure, avoiding overpressure and unwanted water strokes, improving the comfort and durability of the system.



TECHNICAL FEATURES

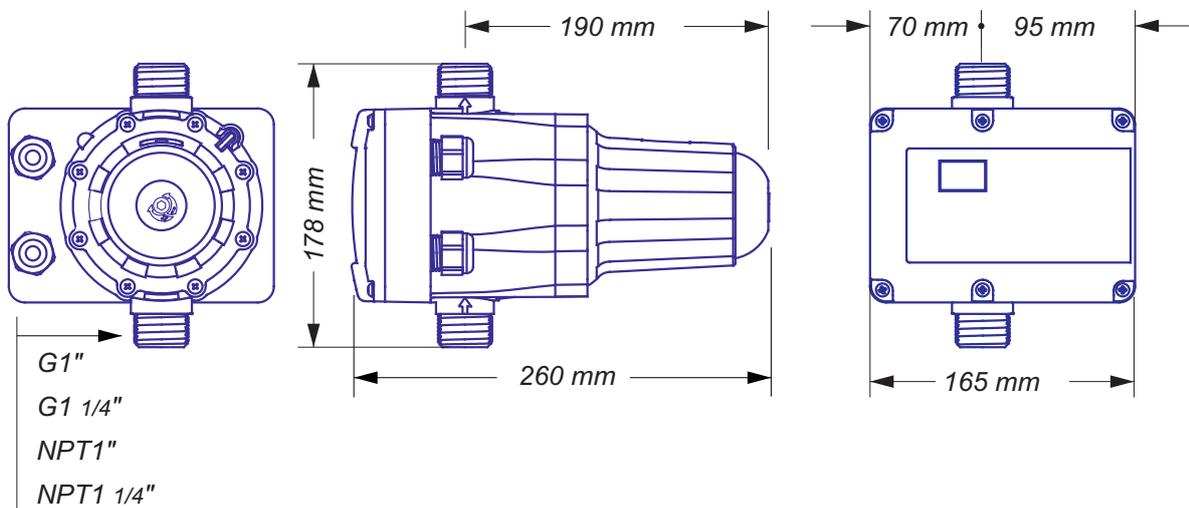
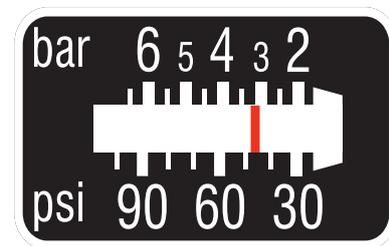
	TEKPRESS EVO
Power supply	1~ 110-230 Vac (50/60 Hz)
Max. current	16 A; cos fi ≥ 0,6
Power pump	2,2 kW (3 HP)
Nominal pressure (P _{out})	2 ÷ 6 bar / 29 ÷ 87 psi
Differential pressure	1 ÷ 5 bar / 14,5- 72,5 psi
Protection degree	IP65
Max. water temperature	50 °C
Max. pressure	12 bar / 174 psi
Hydraulic connections	G1", G1-1/4", NPT1", NPT1-1/4"
Weight	2 Kg

MAIN FEATURES

- Analog manometer
- Yellow led (power presence)
- Green LED (active pump)
- Red led (alarm)
- Buttons for function selection
- Hydraulic connections G1", G1-1/4", NPT1", NPT1-1/4"
- Power relay to handle pumps up to 2.2 kW (3HP)
- Manual output pressure adjustment (with indicator)
- Manual start pressure adjustment
- Internal flow sensor
- Avoids the pump oversized thanks to the integral use of the flow-pressure curve
- ART function (Automatic Reset Test). When the control panel is in dry run protection, ART tries, with a programmed periodicity, to restart the pump until the water flow is re-established
- APR function (Periodic Self Search). After 3 days without starting the pump, the device creates a 10-second start to avoid the engine block
- Integrated storage system that prevents the pump from starting due to leakage in the hydraulic system

PROTECTION

- Dry running protection system of the electric pump
- Protection against overpressure/water hammer

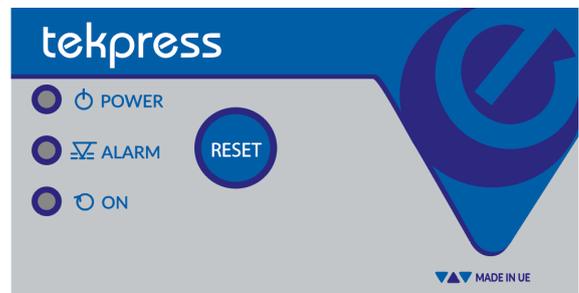


tekpress

Pressflow switch with adjustment of the pressure for pressurization systems

Tekpress is a compact pressure regulator for controlling and protecting electric pumps from dry running.

It can completely replace traditional autoclave systems, drastically reducing the footprint of the pressurization system and eliminating all the classic periodic maintenance operations of the expansion tank system.



TECHNICAL FEATURES

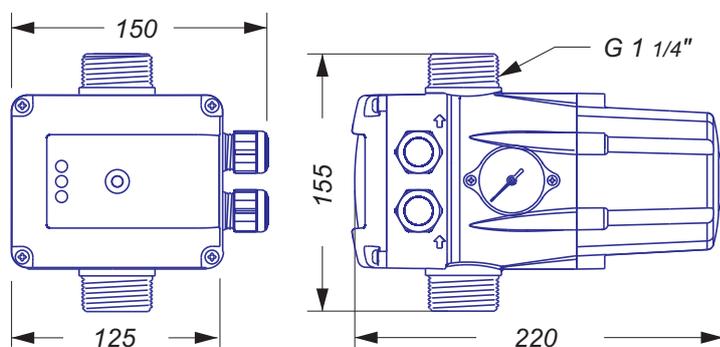
	TEKPRESS
Start pressure	1,5-3 bar
Power pump	2,2 kW
Power supply	1~230 V/1~120 V
Frequency	50/60 Hz
Max. current	16 A; cos ϕ \geq 0.6
Protection degree	IP65
Max. temperature	50 °C
Max. pressure	10 bar
Max. capacity	10.000 l/h
Weight	1,35 Kg

MAIN FEATURES

- Analog manometer
- Yellow led (power presence)
- Green LED (active pump)
- Red led (alarm)
- Buttons for function selection;
- Hydraulic connections G1-1/4"
- ART function (Automatic Reset Test). When the control panel is in dry run protection, ART tries, with a programmed periodicity, to restart the pump until the water flow is re-established
- Integrated storage system that prevents the pump from starting due to leakage in the hydraulic system

PROTECTION

- Dry running protection system of the electric pump
- Protection against overpressure/water hammer



tekswitch

Multifunction digital electronic pressure switch with over-current protection electropump and dry running

Tekswitch is an electronic pressure switch with integrated digital pressure manometer. It allows to manage the start, stop and protection of a single-phase pump of up to 2.2 kW (3 HP). The pressures are easily set by the user and the connections are similar to that of a traditional pressure switch for pressurization systems.

It can operate as a differential or reverse pressure switch, it includes the reading of the ampers of the electric pump and protects it in case of overcurrent, it can be mounted individually or in groups of 2 pumps operating in cascade with alternation and contemporaneity management.

It is equipped with a dry running protection system and lock for too many close starts.



Display LED

- Led system status
- Led unit: Bar-Psi-A
- Pump status: START-STOP
- Buttons: setting parameters
- ENTER: manual start and stop

TECHNICAL FEATURES

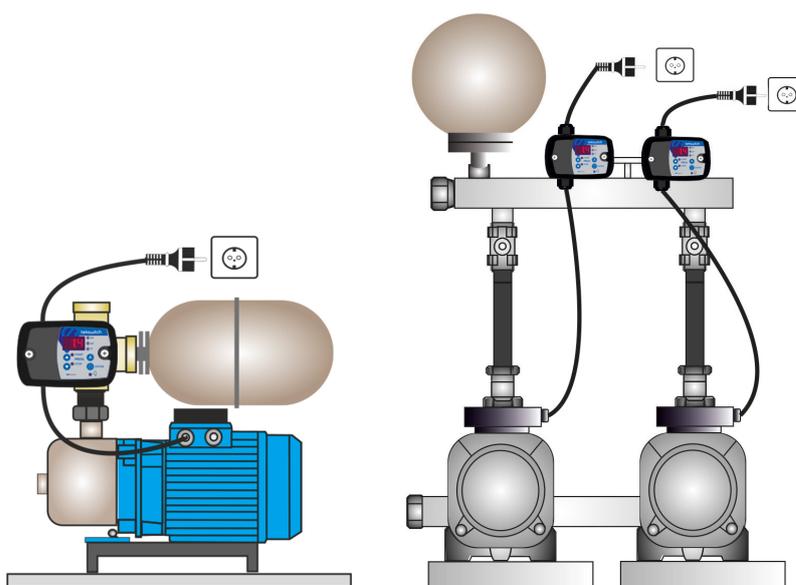
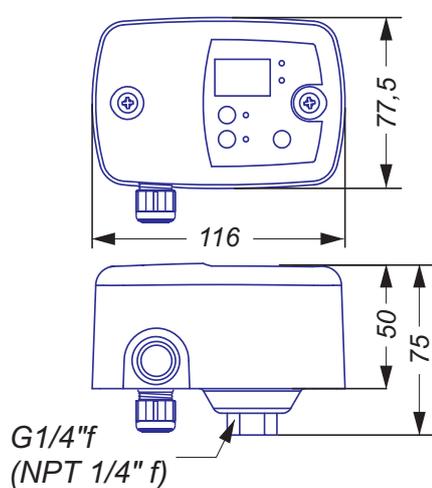
	TEKSWITCH
Power supply	~1 x 110-230 Vac
Frequency	50/60 Hz
Max.current	16 A
Max. Power pump	2,2 kW (3 HP)
Differential pressure	0,5 ÷ 7 bar
Nominal pressure	1 ÷ 8 bar
Protection degree	IP55
Max. water temperature	40 °C
Max. ambient temperature	50 °C
Net weight	0,4 Kg
Hydraulic connections	G1/4" F rotary NPT1/4" F

MAIN FEATURES

- LED display multifunction for visualization: nominal pressure, current
- Manual start button
- LED for function signalling
- Operating modes: differential, reverse and synchronized
- Internal pressure transducer
- ART function (Automatic Reset Test). When the device is in dry running protection, ART shall test, at a programmed frequency, to restart the pump until the water flow is restored
- Low power consumption standby mode
- Expert configuration menu selection: differentials, delay times and other settings

PROTECTION

- Control system and protection of electric pumps against overcurrent
- Dry running protection system of the electric pump
- Start-stop rapid cycle control and protection system: when the expansion vessel leaks and frequent shutdowns and starts occur, an alarm is activated



elentek®

Always
One Step
Forward

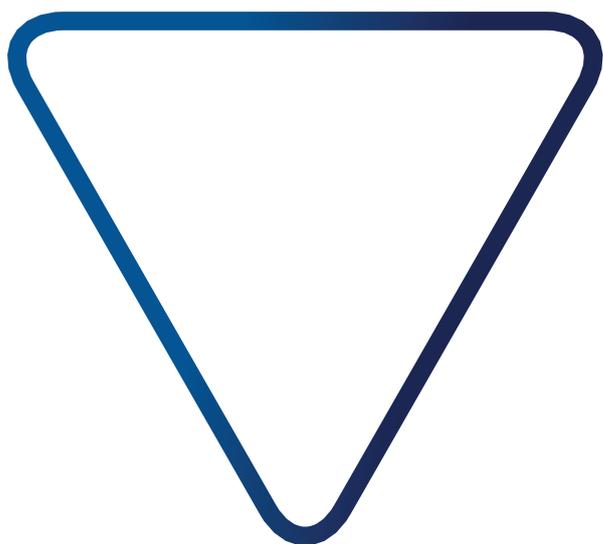
Elentek srl

Via Chiusa 1/A, 35020
Sant'Angelo di Piove di Sacco (PD)
ITALY

Tel. +39 049 9730367
Fax +39 049 9731063
info@elentek.com

www.elentek.com





Elentek srl

Via Chiusa 1/A, 35020
Sant'Angelo di Piove di Sacco (PD)
ITALY

Tel. +39 049 9730367
Fax +39 049 9731063
info@elentek.com

www.elentek.com