PRESSURE GROUPS

P Y D

SYSTEM

pγD

> CUSTOMIZED EQUIPMENT> PERSONALISED TECHNICAL ASSISTANCE

PYD.

SCS CE



Manufacturers of pressure groups

Proindecsa was founded in 1975 and since then we have been linked to the hydraulic pump sector, specialising in the handling of fluids intended for the pressurisation of homes, fire-fighting pressure systems, irrigation, industry, etc. Our speciality is to provide integral pumping solutions, with the aim of continuing to improve our services and to offer a product that is always up to the demands of our customers.

As manufacturers of booster sets, we offer a complete range of products, in accordance with the latest changes in the regulations in force and adapting to the specific needs of your installation.





Our complete range of equipment is designed for the automatic supply of pressurised water for all installations where a variable flow rate is required, such as apartment blocks, housing estates, hotels, residences, campsites, schools and industrial processes.

We can supply single, double, triple or multi-pump units, with alternating or variable speed drive with variator. And if you have specific needs, our engineering department will design your booster set with the characteristics your booster set with the features you need. Please contact our technical department technical department to tell us about your case and we will be happy to propose customised solutions.

CUSTOMISED GROUPS

Consult the sales representative in your area or with the Technical Dept. for quotations in less than 24 hours.

PRESSURE GROUP GENERAL OUTLINE



- 1
- Common discharge manifold
- 2 3 4 Service pump
- Pressure switch
- 5 Pressure gauge
- 6 Alternating protection and control panel
- 7 Flexible hose
- 8 Hydro-pneumatic accumulator



- 9
- Frequency inverter Differential pressure transducer 10
- Shut-off valve 11
- 12 90° delivery bend
- Control panel/variator support 13
- 3-piece coupling 14
- 15 Accumulator 25/50 lts.



MODALITIES

- With horizontal or vertical electric pumps
- With one, two or more electric pumps
- With fixed diaphragm tank
- With conventional electric panel or with variable speed drive





ADVANTAGES OF THE VARIABLE SPEED DRIVE

- Avoiding water hammer
- Energy savings
- Extends the service life of the motor
- Large capacity accumulators are avoided
- Constant pressure is maintained at all times, irrespective of required flow rate

OPERATION

Pressure equipment allows the operation of the required number of pumps depending on the water demand. In systems with two or more pumps, the second pump only starts when the first pump is insufficient to supply the required flow. This is cascade operation. The alternation system allows all the pumps that make up the equipment to have a similar wear and tear over time, alternating the starts between them.

In the variable speed drive units, a constant pressure is provided regardless of the requested flow rate by means of the the requested flow rate by regulating one of the pumps through the variable speed drive. The rest of the pumps start as auxiliaries at constant speed and in alternation. A pressure transducer powered by the inverter detects the existing pressure in the pipeline.

The inverter compares this pressure value with the preset value. The drive compares this pressure value with the set value. If the pressure in the pipeline is lower than this value, the inverter starts the controlled pump at the speed required to equalise the pressure to the set value. The regulated pump at the speed required to equalise the pressure to the set value.







PRESSURE GROUPS WITH PROTECTION AND CHANGE-OVER SWITCHBOARD



Hydropneumatic pressure sets for the automatic supply of water to apartment blocks, housing estates, hotels flat blocks, housing estates, hotels and installations requiring high flow and pressure.

They provide protection against overload, over current and temperature; and they allow for alternation between pumps for groups of 2 or 3 pumps.

It is necessary to install a pressurised accumulator in the impulsion of the group, anti-starting function, accumulation of pressurised water and minimising the number of start-ups due to the of start-ups due to the lack of pressure at the supply points.

With electromechanical panel on a base plate support. For other executions or flow and pressure requirements, please consult our technical department. We manufacture customised units.

CUSTOMISED GROUPS

Ouotations in less than 24 h.

PRESSURE GROUPS WITH SPEEDBOARD VARIATOR



SPEEDBOARD pressure boosting units with frequency variation for individual or collective dwellings maintain a constant pressure in the water supply individual or collective houses maintain a constant pressure in the water supply, adjusting it to the demand in real time, thanks to a variable speed drive for on-board installation (directly on the motor terminal box), very easy to on-board (directly on the motor terminal box), very easy to on-board (directly on the motor terminal box), very easy to program. They can be installed individually or in groups of 2 or 3 electric pumps communicated in master-slave regime and alternating intervention order. No need for protection panel or support. Allows regulation of each pump in frequency.

These groups include a 25-litre accumulator.

PRESSURE GROUPS WITH BEDFORD VARIABLE



BEDFORD frequency-controlled pressure regulators for individual or collective dwellings maintain a constant water supply pressure or collective housing maintain a constant pressure in the water supply, adjusting it to the demand in real time, variable speed drive that is very easy to program. very easy to program. It allows alternation between pumps, regulation of each pump and frequency regulation. frequency regulation. Allows a full range of motor protection functions.No need for a protection panel or support. These units include the 25 lt.

PVD

PRESSURE GROUPS WITH PRESSURE SWITCH ELECTRONIC SWITCHMATIC 2



Pressure switchgear SWITCHMATIC 2 with protection and change-over for single-phase pumps up to 3 Hp single-phase pumps up to 3 Hp, presostatic operation with set start and stop values set. Simple installation on discharge manifold, no pressure switches required, protection panel and bracket.

Operation with alternating and cascade start. For double group of single-phase pumps single-phase.



PRESSURE GROUPS WITH ABB DRIVE



Automatic units for constant pressure water supply, controlled by a wall-mounted variable speed drive. by wall-mounted variable speed drive . The same models are manufactured as indicated in the above tables of above tables of characteristics of hydro-pneumatic units and for higher performances. higher performance. Allows alternation between pumps and regulation of each pump in frequency and a complete range of functions These units include the 25-litre accumulator and the pressure transducer. The ACS-310 drive allows the use of a variable speed drive of a pump up to 3 hp.





PRESSURE GROUPS WITH SPEEDMATIC DRIVE

PYD

SET 2110



These groups include the accumulator.

Quotations in less than 24 h.

CUSTOMISED GROUPS





PUMP SELECTION FOR PRESSURE BOO



SERIE VERTI P / VERTI P-A

Description

Monobloc multistage centrifugal electric pumps in vertical execution, designed for the following applications pressurisation of homes, irrigation systems and clean water pumping applications where a robust and compact pump is required where a robust and compact pump is required. Adjustable suction and delivery bodies supplied with oval counterflange DIN 2558. As a novelty, we have added models for higher pressure to the VERTI P range, the VERTI P-A series

Construction materials

Suction and discharge body in cast iron. Stainless steel casing and rotor shaft. Impellers and diffusers in PP.

Working area

Continuous duty. Maximum liquid temperature: 35°C Class F insulation Degree of protection IP55







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Adjustable suction and delivery bodies supplied with oval counterflange DIN 2558.

Materials of construction

Suction and discharge casing in cast iron. Casing, rotor shaft and impellers in stainless steel AISI 304. Technopolymer diffusers. Motor casing in aluminium L-2521.

Working area

Continuous service. Maximum liquid temperature: 35°C Class E insulation Degree of protection IP55





MAIN PUMP: SERIE CTV

Description

Pumping, transferring and pressurisation in domestic, civil, industrial and agricultural sectors. Systems irrigation systems for agriculture and sports facilities. Pressure boosting and water supply systems. Washing installations.

Construction materials

Cast iron suction and discharge body. Casing, tie rods and screws in stainless steel AISI 304. Turbines and diffusers in Noryl reinforced with fibreglass.

Working area

Continuous service. Maximum starts per hour: 20 Liquid temperature from 0° to 80°C. Class F insulation IP58 protection















SERIE ULTRA

Description

Monobloc multistage centrifugal electric pumps in vertical execution, designed for pressurising homes, irrigation systems irrigation systems and clean water pumping applications where a robust and compact pump is required.

Adjustable suction and delivery bodies supplied with oval counterflange DIN 2558.

Materials of construction

Suction and discharge casing in cast iron. Stainless steel casing and rotor shaft. Impellers and diffusers in PP.

Working area

Continuous service. Maximum liquid temperature: 35oC Class F insulation Degree of protection IP55



SERIE VERTINOX

Description

Monobloc multistage centrifugal electric pumps in vertical execution, designed for the pressurisation of homes, irrigation systems and clean water pumping applications where a robust and compact pump is required. Suction and delivery bodies are inline.

For power ratings from 0.75 kW to 7.5 kW the motor is B14(V18). For higher power ratings it is B5.

Materials of construction

All parts in contact with the pumped liquid are manufactured from stainless steel 316. Mechanical seal in silicon carbide/carbon/ EPDM or VITON.

Working Area

Continuous duty. Liquid temperature between -15°C and 104°C. Ambient temperature up to 50°C

MANUFACTURED ENTIRELY IN STAINLESS STEEL 316



MAIN COMPONENTS FOI PRESSURE GROUPS



FREQUENCY INVERTER SPEEDBOARD

The frequency inverter pump controller SPEEDBOARD is suitable for three-phase pumps and is installed directly on the terminal box of the pump motor to be controlled.

Simple configuration of the motor characteristics, being the pressure setting and the nominal current the only parameters to be programmed by the user.

It can be mounted individually or in groups of up to 4 pumps in parallel, communicating and operating in MASTER-SLA-VE mode with alternation.



SPEEDMATIC FREQUENCY INVERTER

Compact device for the control of 1- or 3-pump booster sets (depending on the model) with electronic system managed by a software

software-controlled electronic system that meets the stringent efficiency and safety requirements of the most important pump manufacturers.

the most important pump manufacturers.

It includes an INVERTER to control the main pump, regulating its speed to maintain a constant and fixed optimum pressure in the installation.



BEDFORD 603 FREQUENCY INVERTER

Frequency inverter with a technical design based on the user's needs, suitable for all types of surface pumps, electric pumps of surface, horizontal or vertical electric pumps, with a unique system that is easy to adapt. From According to the punctual need of water demand, it maintains a constant pressure without the need of manipulation, after a correct manipulation, after a correct programming of the required parameters. With automatic stop and reset on the fly, even after loss of power supply to the inverter. Protection against dry running and tank control by means of a level switch. Possibility of centralised control via RS485 connector.



BEDFORD WLD190 FREQUENCY CONVERTER

The Bedford WLD190 is specially designed for water pumps and the compatible and economical integration of the integration of the intelligent single pump controller. The WLD190 intelligent controller has excellent performance and exuberant function, it can meet the requirements of water supply and drainage in a variety of circumstances water supply and drainage requirements, improve the quality of the water supply system, in conformity for energy-saving, water-saving, material-saving and environmental protection.



FREQUENCY INVERTER SPEEDBOX DUO

Wall-mounted frequency inverter (SPEEDBOX). Three-phase or single-phase pumps controlled by two by two INVER-TERS. The power supply of the device is single-phase at 230V. The device makes both pumps work in cascade and in alternation. Each pump is controlled by an inverter.



FREQUENCY INVERTER SPEEDBOX DUO SET

Wall-mounted frequency inverter (SPEEDBOX). The SPEEDBOX DUO SET is a compact device for the compact unit for the control of 2-pump booster sets with a software-controlled electronic system that meets the stringent software that meets the stringent efficiency and safety requirements of the most important pump manufacturers. It includes an INVERTER (frequency inverter) to control the main pump by regulating its speed to maintain a constant and fixed optimum pressure in the installation, regardless of the flow rate that the unit is supplying. The auxiliary pump is controlled by a power relay. The operating sequence of the pumps is alternating, with each operating cycle changing between the first pump to start up and, always, it is started by the inverter.



SWITCHMATIC 2 ELECTRONIC SWITCH

SWITCHMATIC 2 is an electronic pressure switch with an integrated digital pressure gauge that allows you to manage the start and stop of a single-phase pump up to 3 HP. The pressures are easily adjustable through the user control panel.

The SWITCHMATIC 2 unit includes instantaneous current consumption reading. This system monitors and manages overcurrent, dry running and fast duty cycles.



ELECTRONIC SWITCHMATIC 2T

The Switchmatic 2T unit is a three-phase electronic pressure switch with integrated digital pressure gauge. It allows It manages the start and stop of a three-phase pump up to 4 kW (5.5 HP). The pressures are easily adjustable via the user control panel. Wiring is carried out in the same way as for an electromechanical pressure switch to a traditional electromechanical pressure switch.

The Switchmatic 2T includes instantaneous current and voltage reading. It can be mounted individually or in groups of 2 pumps operating in cascade and with alternating start-up sequence. This patented system monitors and manages overcurrent, out-of-range voltage, dry running and fast cycling.



ABB FREQUENCY CONVERTER

Intended for equipment requiring constant pressure. The system adapts the performance of pumps to the water consumption at any given moment. Advantages:

The mains pressure remains stable, without the ups and downs produced by the starts and stops of conventional equipment. Water hammer is avoided, extending the mechanical life of the equipment. Electricity consumption is reduced, adjusting to the needs of the installation. It avoids placing large membrane accumulators and it is possible to dispense with the auxiliary supply tank can be dispensed with, sucking directly from the mains.



PROTECTION AND ALTERNATING SWITCHBOARD

Overload, overcurrent and temperature protection panels. Equipped with a free contact for level switch, acoustic alarm, etc. The double switchboards incorporate an alternating relay, dividing the starts and working hours between the two motors, extending their useful life.

Para más información de grupos de presión escaneé el siguiente código QR:



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