PRESSFLOW TECH

TOTAL CONTROL FOR PUMPS

COELBO

PUMP DRIVERS

Since the end of the last century, the constant technological evolution has allowed the industry to incorporate new concepts and systems based on electronics, digitalization, and specific software that, properly combined, can be considered under the scope of artificial intelligence. The sophistication required in the use of these new means has induced a willingness to innovate at a business level and a progressive sectorial specialization.

COELBO was founded in 1988 with a business philosophy based on this innovative spirit and with the initial objective of producing a new electronic device (internationally patented) based on a new system for the automatic control of electric pumps for domestic use, which uses a pressure&flow dependent principle that consists of activating the pump by pressure drop to a preset value and deactivating it when the flow or consumption ceases. This technological innovation, based on electronics, basically makes it possible to dispense with traditional pressure switches and accumulators or hydropneumatic tanks, to the benefit of greater system reliability and offering the network greater stability and constant pressure. This innovation has been quickly accepted in the world market and is nowadays adopted by multiple replicas based on the same principle. COELBO has developed multiple variants that make up the most important range of pressure&flow dependent devices on the market, which we call the **Pressflow Tech** range.

The progressive and constant experience and know-how acquired by COELBO has allowed the creation of new **Hi Tech** systems and devices (*Drivers*), with sophisticated hardwares and specific and intelligent sofware, based on the principle of variable frequency drives (VSD) that confer to the current booster systems and to the fed network, all kinds of functional safety, energy efficiency, pressurization stability and reliability of all their functions. The wide range available offers all types of mounting, such as the *SPEEDMATIC* series for direct mounting on the hydraulic part of the electric pump, *SPEEDBOARD* for direct mounting on the electric motor or *SPEEDBOX* for independent wall mounting.

In addition to the ranges described above, COELBO has created a new range of **Smart Tech** devices and accessories with the same objective of automatic control of single or group electric pumps through single-phase or three-phase *SWITCHMATIC* electronic pressure switches. The **Smart Tech** family also includes transducers and auxiliary devices to protect the electric pump against water shortage or power supply overcurrent.

COELBO has also developed a range called **Panelmatic** of control panels, which combine its own experienced basic electronics with the software derived from its own *know-how*, offering excellent versatility and a wide range of features that allows the control of all types of electric pumps, with single or multiple groups, allowing the programming of all the functional inputs attributable to any type of installation.

COELBO through its history and constant technological innovation, supported by multiple patents and internationally registered designs, is today one of the leading specialists in the field of electric pump Drivers and its products are exported to more than seventy countries that guarantee a recognized international prestige.
The success of some of our products has created a trend in the market and are the reason for replicas, but only COELBO original products are distinguished by our brand.

The information and technical data contained in this commercial catalog are subject to change without notice.

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Pressflow Tech

The range of devices PRESSFLOW-TECH it is formed by all traditional pressure and flow dependent electronic pump controllers, invented by COELBO, that have made become us world leaders throughout last 30 years.
All the models can be completed with options like pressure gauges, adjustable pressure, threaded adaptors, integrated Schuko sockets, or the option of being cabled.

CONTROLPUMP

Electronic pump controller through internal flow and pressure sensors with internal accumulation membrane. Inlet and outlet at 90 degrees.

CONTROLMATIC

Electronic pump controller through internal flow and pressure sensors with internal accumulation membrane. Indication led lights. Inlet and outlet at 90 degrees. Optional adjustable starting pressure.

DIGIMATIC

Digital pump driver for the control and protection of electric pumps. It has the same features and functions of the traditional pressflow electronic controller and also incorporates additional features through inner current and pressure sensors. The starting pressure can be adjusted with high precision, it has a digital pressure gauge and adjustable over current protection.

ONEMATIC

Electronic pump driver for a single pump (single-phase or 3-phase supplied) with 2 operation modes: pressure-dependent or pressure/flow-dependent. Inner flow sensor, inner pressure transmitter with digital indicator, inner current sensor and control and information panel with LCD display.

COMPACT SERIES

COMPACT 1: electronic pump controller, flow-dependent. The pump is started when flow is detected and stopped when there is not flow. Inlet and outlet at 180 degrees.

COMPACT 2: electronic pump controller through internal flow and pressure sensors with an small internal accumulation membrane. Indication led lights. Automatic reset. Inlet and outlet at 180 degrees. Optionally, adjustable starting pressure.

COMPACT 22: same characteristics than Compact 2 but up to 3 HP. Adjustable starting pressure.

COMPACT 3: electronic pump controller through internal flow and pressure sensors with an internal accumulation membrane. Indication led lights. Automatic reset. Inlet and outlet at 180 degrees.

OPTIMATIC SERIES

OPTIMATIC: electronic pump controller through internal flow and pressure sensors with an internal accumulation membrane. Indication led lights. Inlet and outlet at 180 degrees. Optionally, adjustable starting pressure.

OPTIMATIC 22: Electronic pump controller up to 3 HP through internal flow and pressure sensors with an internal accumulation membrane. Indication led lights. Automatic reset. Inlet and outlet at 180 degrees. Adjustable starting pressure.

OPTIPLUS: same characteristics than OPTIMATIC 22 but with inlet and outlet G 1 1/4". Low pressure loss.

OPTIMATIC DC NAUTICAL: electronic pump controller DC supplied (24 V) for nautical applications.

EPR/DPR SERIES

EPR: Electronic Pressure Regulator. Pump driver with integrated pressure-regulating valve, providing adjustable and constant outlet pressure.

DPR: Digital Pressure Regulator.
It is an evolved EPR with all its features and, in addition, same characteristics than DIGIMATIC in terms of instantaneous digital reading of current intensity and pressure.

DPR MASTER: special version of DPR for duty-assist control of 2 pumps systems with alternated starting sequence and cascade operation at constant outlet pressure.

DPR ALT: special version of the DPR for duty-standby control of groups of 2 pumps with pure alternation at constant outlet pressure.

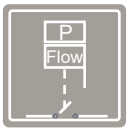
	Type	Hydraulic connection	Max. power	Inlet/Outlet	Starting Pressure	Optional integrated Schuko Socket
	Controlpump	G1" M > G1" F	2 HP / 1,5 kW	90°	1,2 bar 1,5 bar 2,2 bar 1,5-2,5 bar	NO
	Controlmatic	G1" M > G1" M	2 HP / 1,5 kW	90°	1,2 bar 1,5 bar 2,2 bar 1,5-2,5 bar	YES
	Compact 1	G1" M > G1" M NPT 1" > NPT 1"	2 HP / 1,5 kW ~1x110-230 V (10 A)	180°	1,5 l/min	NO
	Compact 2		2 HP / 1,5 kW ~1x110-230 V (10 A)	180°	1,0 bar 1,5 bar 2,5 bar 1,5-3,5 bar	NO
	Compact 22		3 HP / 2,2 kW ~1x110-230 V (16 A)	180°		NO
	Compact 3		2 HP / 1,5 kW ~1x110-230 V (10 A)	180°	1,5 bar 2,5 bar	NO
	Optimatic	G1" M > G1" M	2 HP / 1,5 kW	180°	1,5 bar 2,2 bar 1,5-3 bar	YES
	Optimatic 22	G1" M > G1" M	3 HP / 2,2 kW	180°	1,5-3 bar	YES
	Optimatic DC 24V	G1" M > G1" M	0.5 HP / 0,38 kW	180°	1,5 bar	NO
	Optiplus	G11/4" M > G11/4" M	3 HP / 2,2 kW	180°	1,5-3 bar	NO
	Digimatic 1	G1" M > G1" M		180°	0,5-7 bar	NO
	Digimatic 2	G1" M > G1" M	3 HP / 2,2 kW ~1x110-230 V (16 A)	180°	0,5-7 bar (start) 1-8 bar (stop)	NO
	Digiplus	G11/4" M > G11/4" M		180°		NO
	Onematic	G11/4" M > G11/4" M	~3x400 V (10 A) ~3x230 V (10 A) ~1x230 V (10 A)	180°	start: 0,5-6,5 bar stop: 1-7 bar	NO
	EPR	G1" > G1" NPT 1" > NPT 1" G1 1/4" > G1 1/4" NPT 1 1/4" > NPT 1 1/4"	3 HP / 2,2 kW ~1x110-230 V (16 A)	180°	start: 1 - 5 bar outlet: 2 - 6 bar	NO
	DPR				start: 0,5 - 5,5 bar outlet: 2 - 6 bar	
	DPR MASTER					
	DPR ALT					

Controlpump

Automatic Device for electric pump integral control

The **Controlpump** are a compact device for the automatic control and protection of electric pumps, its patented system includes special electronic sensor of flow and pressure, integrated in electronic circuit that guides the electric pump operation and keeps pressure and flow accordingly. Moreover, it has a safety system to avoid the dry-running operation.

Controlpump replaces the system of hydrosphere, pressure-switch, check-valve and level switches, with the advantage of smaller dimensions and periodic maintenance elimination. The unit automatically starts the electric pump when any point of use is open and stop it –after a 10 seconds programmed time– when closing the consumption point.



Controlpump F12

Controlpump F15

Controlpump F22

Controlpump R

OPERATING CHARACTERISTICS

- No maintenance.
- Installation time saving.
- Protection against water hammer effect.
- Compact and reduced dimensions.
- Removal of protecting devices (level switches).
- Avoids the pump oversizing using integratelly their flowpressure curve.
- Integrated protection system again dry running operation.
- Tactile push button for manual start.
- Electronic circuit group with protection cover easily replaceable.
- Integrated accumulation system, spring-membrane set, preventing pump´s cycling as a result of dripping taps or small losses in the hydraulic installation.
- Other options like pressure gauge, connecting cables, adjusting starting pressure, etc
- EMC and electrical safety certified.

ATTESTATION DE CONFORMITÉ SANITAIRE ACS

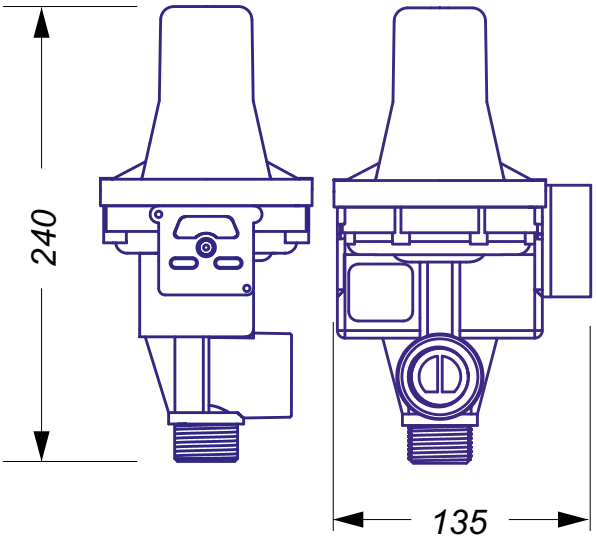
CE

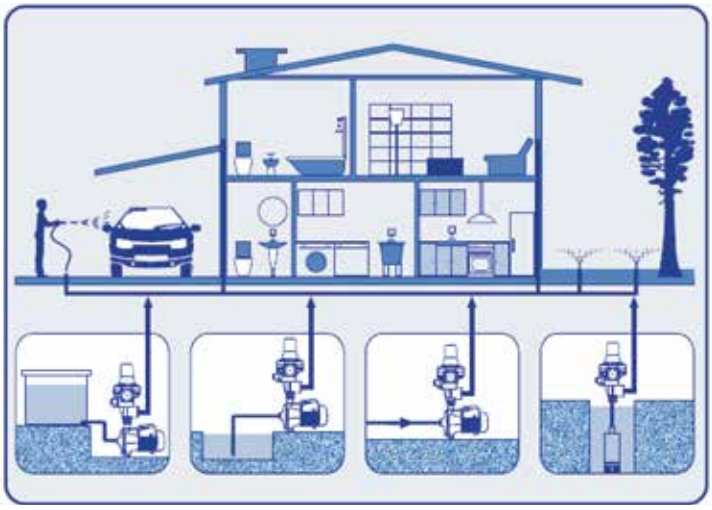
Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

TECHNICAL CHARACTERISTICS

	F12	F15	F22	R
Start pressure	1,2 bar	1,5 bar	2,2 bar	1,5-2,5 bar
Power	1,5 kW	1,5 kW	1,5 kW	1,5 kW
Voltage	1~230 V / 1~120 V	1~230 V /1~120 V	1~230 V/1~120 V	1~230 V/1~120 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Max peak of current	10 A; cos fi ≥0.6	10 A; cos fi ≥0.6	10 A; cos fi ≥0.6	10 A; cos fi ≥0.6
Protection degree	IP54	IP54	IP54	IP54
Maximum temperature	50 °C	50 °C	50 °C	50 °C
Maximum pressure	10 bar	10 bar	10 bar	10 bar
Maximum flow	6.000 l/h	6.000 l/h	6.000 l/h	6.000 l/h
Net weight (without cables)	1,15 Kg	1,15 Kg	1,15 Kg	1,15 Kg

DIMENSIONS AND INSTALLATION



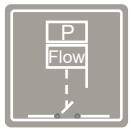


Controlmatic

Automatic Device for electric pump integral control.

Controlmatic is a compact device for the automatic control and protection of electric pumps, its patented system includes special electronic sensor of flow and pressure, integrated in electronic circuit that guides the electric pump operation and keeps pressure and flow accordingly. Moreover, it has a safety system to avoid the dry-running operation.

Controlmatic replaces the system of hydrosphere, pressure-switch, check-valve and level switches, with the advantage of smaller dimensions and periodic maintenance elimination. The unit automatically starts the electric pump when any point of use is open and stop it –after a 10 seconds programmed time– when closing the consumption point.



Controlmatic F12

Controlmatic F15

Controlmatic F22

Controlmatic R

OPERATING CHARACTERISTICS

- No maintenance.
- Installation time saving.
- Protection against water hammer effect.
- Compact and reduced dimensions.
- Removal of protecting devices (level switches).
- Avoids the pump oversizing using integratelly their flowpressure curve.
- Integrated protection system which stops the pump in case of dry-running operation.
- Control panel:
    - Yellow Led POWER.
    - Green Led ON.
    - Red Led FAILURE.
    - Tactile push button for manual start.
- Electronic circuit group with protection cover easily replaceable.
- Integrated accumulation system, spring-membrane set, preventing pump´s cycling as a result of dripping taps or small losses in the hydraulic installation.
- Other options like pressure gauge, connecting cables, adjustable starting pressure.
- EMC and electrical safety certified.
- Schuko socket integrated in the cover (optional) - Controlmatic E - IP44

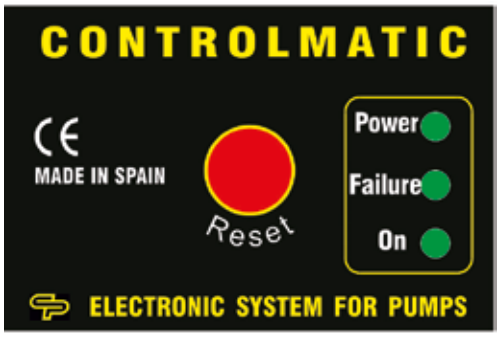
ATTESTATION DE CONFORMITÉ SANITAIRE ACS

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

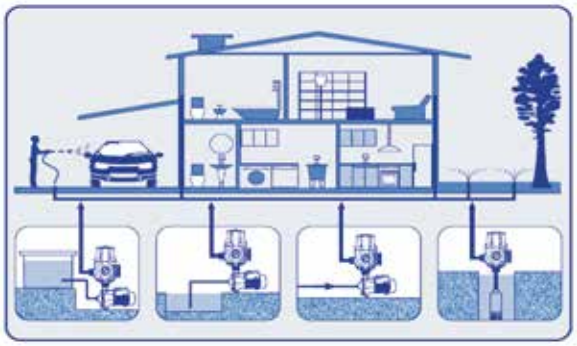
TECHNICAL CHARACTERISTICS

	F12	F15	F22	R
Start pressure	1,2 bar	1,5 bar	2,2 bar	1,5-2,5 bar
Power	1,5kW	1,5kW	1,5kW	1,5kW
Voltage	1~230 V/1~120 V	1~230 V/1~120 V	1~230 V/1~120 V	1~230 V/1~120 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Max peak of current	10 A; cos fi ≥0.6	10 A; cos fi ≥0.6	10 A; cos fi ≥0.6	10 A; cos fi ≥0.6
Protection degree	IP65	IP65	IP65	IP65
Maximum temperature	50 ºC	50 ºC	50 ºC	50 ºC
Maximum pressure	10 bar	10 bar	10 bar	10 bar
Maximum flow	8.000 l/h	8.000 l/h	8.000 l/h	8.000 l/h
Net weight (without cables)	1,15 Kg	1,15 Kg	1,15 Kg	1,15 Kg

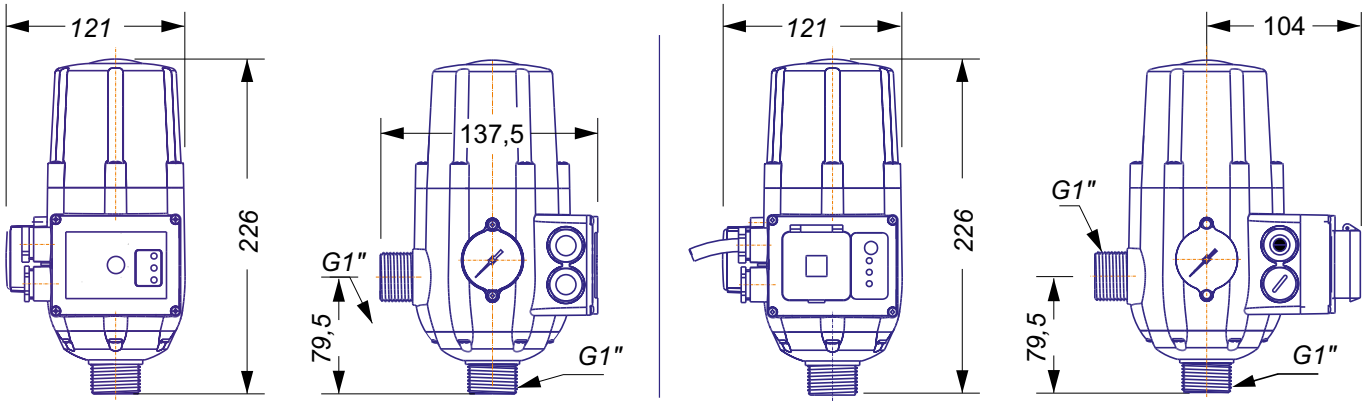
CONTROL PANEL



INSTALLATION



DIMENSIONS



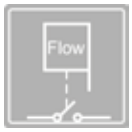
COMPACT 1

Automatic Device for electric pump integral control by flow.

The electronic controller **COMPACT 1** orders the automatic start and stop of the water pump when opening or closing any tap or valve of the installation. One of its special features is to keep the installation without pressure when the flow finishes. (It supplies pressure only when the water pump works).

When the water pump starts, it keeps running while there is any tap opened in the system, giving a constant flow and pressure to the network.

The operation automatically starts the electric pump when any point of use is open and close it– after a 10 seconds programmed time– when closing the consumption pont.



OPERATING CHARACTERISTICS

- Compact and small dimensions.
- No need of maintenance.
- Electronic circuit easily replaceable.
- Security system against dry running operation.
- Manual Start push-button (RESET).
- Hydraulic connections G1" (NPT 1" on request).

REGISTERED DESIGN

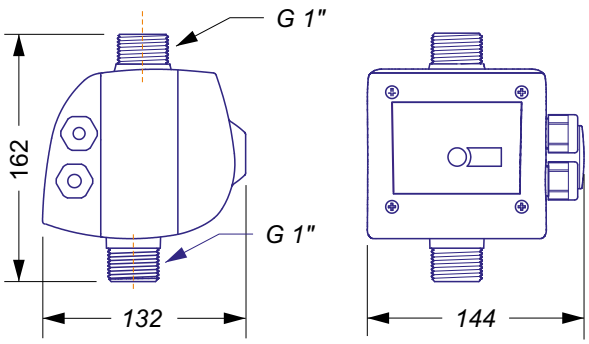
Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

TECHNICAL CHARACTERISTICS

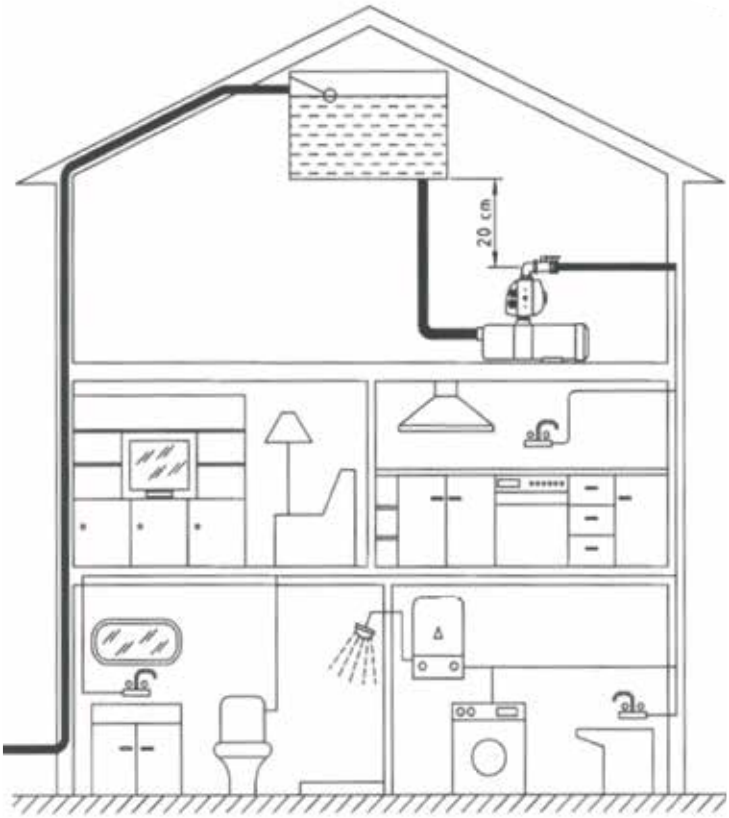
	COMPACT 1
Power	1,5 kW (2 HP)
Voltage	~1 x 110÷230 Vac
Frequency	50/60 Hz
Max peak of current	10 A; cos fi ≥0.6
Protection degree	IP65
Maximum temperature	50 ºC
Maximum pressure	10 bar
Maximum flow	8.000 l/h
Net weight (without cables)	0,8 Kg

CONTROL PANEL

DIMENSIONS



INSTALLATION

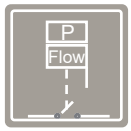


COMPACT 2 & 22

Automatic Device for electric pump integral control.

COMPACT 2 & 22 are compact devices for the automatic control and protection of electric pumps, its patented system includes special electronic sensor of flow and pressure, integrated in electronic circuit that guides the electric pump operation and keeps pressure and flow accordingly. Moreover, it has a safety system to avoid the dry-running operation.

COMPACT 2 & 22 replace traditional systems of hydrosphere, pressure-switch, check-valve and level switches, with the advantage of smaller dimensions and avoiding periodic maintenance. These units automatically start the electric pump when any point of use is open and stop it –after a 10 seconds programmed time– when closing the consumption point.



COMPACT 2

COMPACT 22

OPERATING CHARACTERISTICS

- No maintenance.
- Installation time saving.
- Protection against water hammer effect.
- Compact and reduced dimensions.
- Removal of protecting devices (level switches).
- Avoids the pump oversizing using integratelly their flowpressure curve.
- Integrated protection system which stops the pump in case of dry-running operation.
- **ART** function (Automatic Reset Test). If the device has been stopped due to the action of the safety system against dry operation, the ART tries to connect the pump, with a programmed periodicity because the water supply could have been restored
- Control panel:
    - Yellow Led POWER.
    - Green Led ON.
    - Red Led FAILURE.
    - Tactile push button for manual start.
- Electronic circuit group with protection cover easily replaceable.
- Hydraulic connections G1" (NPT 1" on request).
- Integrated accumulation system, spring-membrane set, preventing pump´s cycling as a result of dripping taps or small losses in the hydraulic installation.- Other options like pressure gauge, connecting cables, adjustable starting pressure.

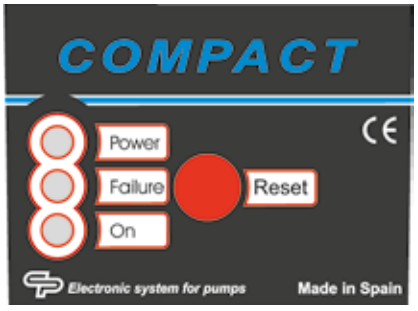
REGISTERED DESIGN

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

TECHNICAL CHARACTERISTICS

	COMPACT 2				COMPACT 22			
	F10	F15	F25	R	F10	F15	F25	R
Start pressure	0,8 bar	1,5 bar	2,5 bar	1,5-3,5 bar	0.8 bar	1,5 bar	2,5 bar	1,5-3,5 bar
Power	1,5 kW				2,2 kW			
Voltage	~1 x 110÷230 Vac				~1 x 110 Vac / ~1 x 230 Vac			
Frequency	50/60 Hz							
Max peak of current	10 A; cos fi ≥ 0.6				16 A; cos fi ≥ 0.6			
Protection degree	IP65							
Maximum temperature	50 ºC							
Maximum pressure	10 bar							
Maximum flow	8.000 l/h							

CONTROL PANEL



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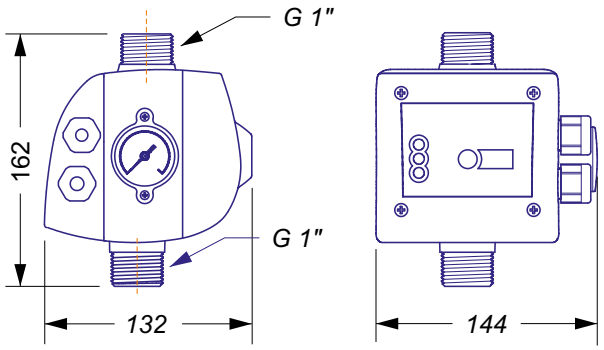
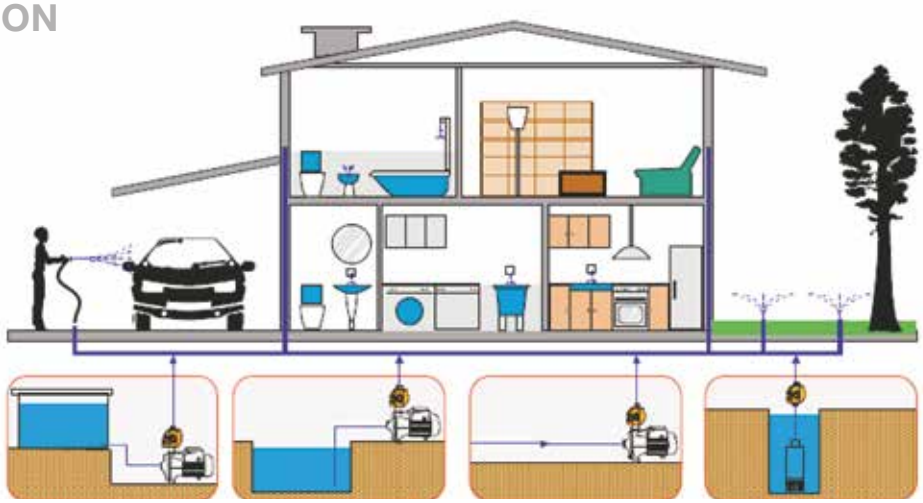


INSTALLATION

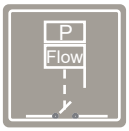


COMPACT 3

Automatic Device for electric pump integral control

COMPACT 3 is a compact device for the automatic control and protection of electric pumps, its patented system includes special electronic sensor of flow and pressure, integrated in electronic circuit that guides the electric pump operation and keeps pressure and flow accordingly. Moreover, it has a safety system to avoid the dry-running operation.

COMPACT 3 replaces traditional systems with hydrosphere, pressure-switch, non-return valve and level switches, with the advantage of smaller dimensions and avoiding periodic maintenance. The unit automatically starts the electric pump when any point of use is open and stop it –after a 10 seconds programmed time– when closing the consumption point.



COMPACT 3 F15

COMPACT 3 F25

OPERATING CHARACTERISTICS

- No maintenance.
- Installation time saving.
- Protection against water hammer effect.
- Compact and reduced dimensions.
- Removal of protecting devices (level switches).
- Avoids the pump oversizing using integratelly their flowpressure curve.
- Integrated protection system which stops the pump in case of dry-running operation.
- **ART function** (Automatic Reset Test). If the device has been stopped due to the action of the safety system against dry operation, the ART tries to connect the pump, with a programmed periodicity because the water supply could have been restored.
- Control panel:
    - Yellow Led POWER.
    - Green Led ON.
    - Red Led FAILURE.
    - Tactile push button for manual start.
- Electronic circuit group with protection cover easily replaceable.
- Hydraulic connections G1" (NPT 1" on request).
- Integrated accumulation system, spring-membrane set, preventing pump´s cycling as a result of dripping taps or small losses in the hydraulic installation.
- Other options like pressure gauge, connecting cables.

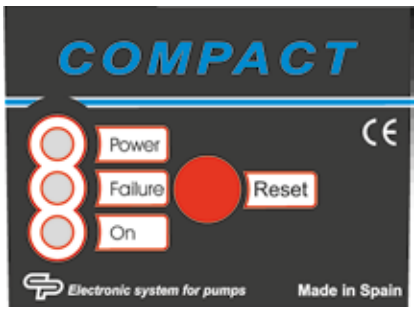
REGISTERED DESIGN

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

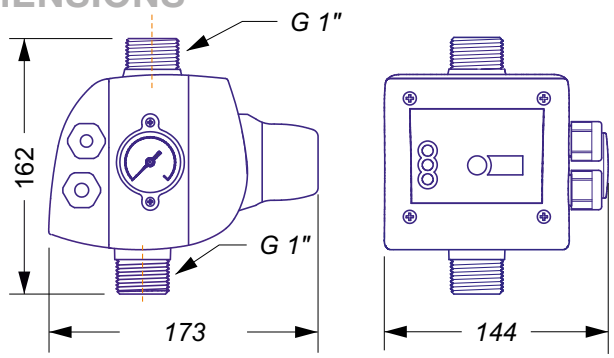
TECHNICAL CHARACTERISTICS

	F15	F25
Start pressure	1,5 bar	2,5 bar
Power	1,5 kW	
Voltage	~1 x 110÷230 Vac	
Frequency	50/60 Hz	
Max peak of current	10 A; cos fi ≥0.6	
Protection degree	IP65	
Maximum temperature	50 °C	
Maximum pressure	10 bar	
Maximum flow	8.000 l/h	
Net weight (without cables)	0,9 Kg	

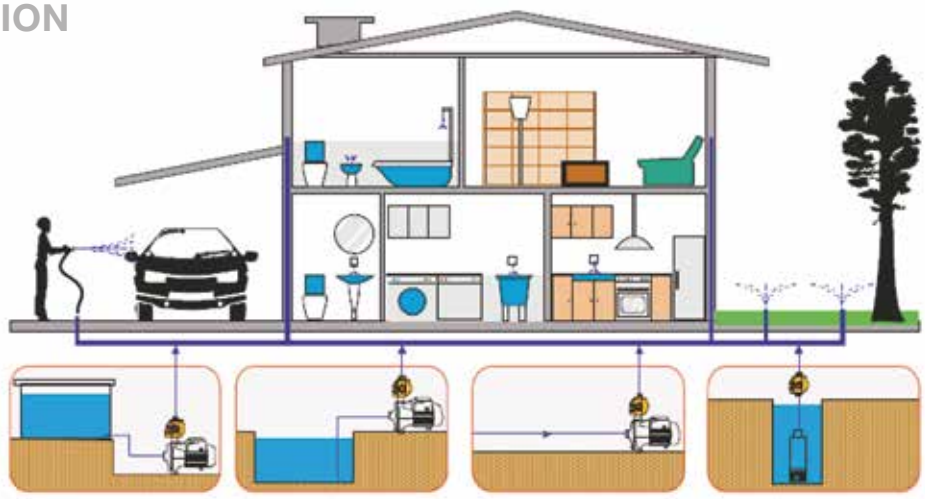
CONTROL PANEL



DIMENSIONS



INSTALLATION

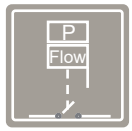


Optimatic & Optimatic 22

Automatic Device for electric pump integral control.

Optimatic is a compact device for the automatic control and protection of electric pumps, its patented system includes special electronic sensor of flow and pressure, integrated in electronic circuit that guides the electric pump operation and keeps pressure and flow accordingly. Moreover, it has a safety system to avoid the dry-running operation.

Optimatic replaces traditional systems of hydrosphere, pressure-switch, check-valve and level switches, with the advantage of smaller dimensions and avoiding periodic maintenance. The unit automatically starts the electric pump when any point of use is open and stop it –after a 10 seconds programmed time– when closing the consumption point.



Optimatic

Optimatic ART

Optimatic 22

Optimatic DC NAUTICAL

OPERATING CHARACTERISTICS

- No maintenance.
- Installation time saving.
- Protection against water hammer effect.
- Compact and reduced dimensions.
- Removal of protecting devices (level switches).
- Avoids the pump oversizing using integratelly their flowpressure curve.
- Integrated protection system which stops the pump in case of dry-running operation.
- **ART function** (Automatic Reset Test). If the device has been stopped due to the action of the safety system against dry operation, the ART tries to connect the pump, with a programmed periodicity because the water supply could have been restored (only Optimatic ART, Optimatic 22 and Optimatic DC NAUTICAL).
- Control panel:
    - POWER: yellow LED light.
    - PUMP ON: green LED light.
    - FAILURE: red led light.
    - Tactile push button for manual start.
- Electronic circuit set with protection cover easily replaceable.
- Resin-coated electronic circuit (optional).
- Integrated accumulation system, spring-membrane set, preventing pump´s cycling as a result of dripping taps or small losses in the hydraulic installation.
- Other options like pressure gauge, connecting cables, adjustable starting pressure.
- Modello alimentato a corrente continua (24 V DC) - Optimatic DC NAUTICAL.

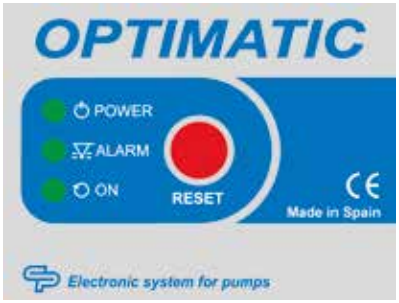
ATTESTATION DE CONFORMITÉ SANITAIRE ACS

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

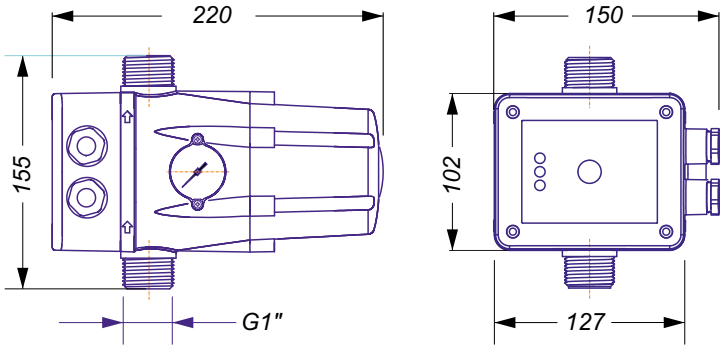
TECHNICAL CHARACTERISTICS

	OPTIMATIC F15 OPTIMATIC ART F15	OPTIMATIC F22 OPTIMATIC ART F22	OPTIMATIC R OPTIMATIC ART R	OPTIMATIC 22	OPTIMATIC DC NAUTICAL
Start pressure	1,5 bar	2,2 bar	1,5-3 bar	1,5-3 bar	1,5 bar
Power	1,5 kW	1,5 kW	1,5 kW	2,2 kW	0,38 kW
Voltage	1~230 V/1~120 V	1~230 V/1~120 V	1~230 V/1~120 V	1~230 V/1~120 V	24 V DC
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	-
Max peak of current	10 A; cos fi ≥0.6	10 A; cos fi ≥0.6	10 A; cos fi ≥0.6	16 A; cos fi ≥0.6	16 A
Protection degree	IP65	IP65	IP65	IP65	IP65
Maximum temperature	50 °C	50 °C	50 °C	50 °C	50 °C
Maximum pressure	10 bar	10 bar	10 bar	10 bar	10 bar
Maximum flow	8.000 l/h	8.000 l/h	8.000 l/h	8.000 l/h	8.000 l/h
Net weight (without cables)	1,3 Kg	1,3 Kg	1,3 Kg	1,35 Kg	1,3 Kg

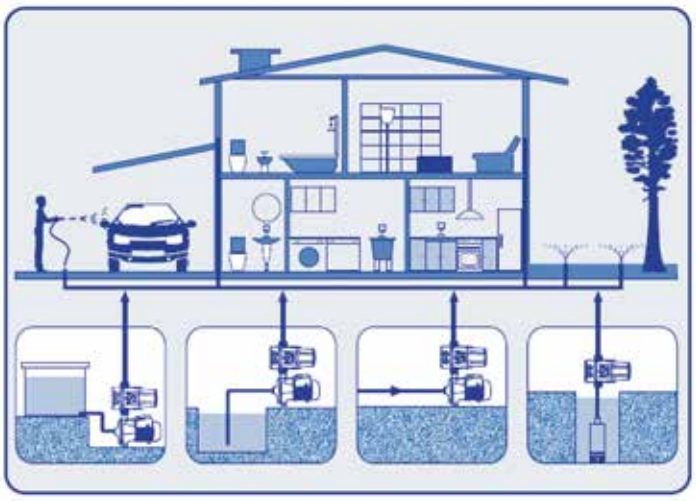
CONTROL PANEL



DIMENSIONS



INSTALLATION

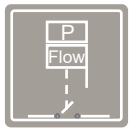


Optiplus

Automatic Device for electric pump integral control. G 1 1/4” - low pressure loss.

Optiplus is a compact device for the automatic control and protection of electric pumps, its patented system includes special electronic sensor of flow and pressure, integrated in electronic circuit that guides the electric pump operation and keeps pressure and flow accordingly. Moreover, it has a safety system to avoid the dry-running operation.

Optiplus replaces traditional systems with hydrosphere, pressure-switch, check-valve and level switches, with the advantage of smaller dimensions and avoiding periodic maintenance. The unit automatically starts the electric pump when any point of use is open and stop it –after a 10 seconds programmed time– when closing the consumption point.



Optiplus

OPERATING CHARACTERISTICS

- Inlet and outlet thread G1 1/4”.
- No maintenance.
- Installation time saving..
- Protection against water hammer effect.
- Compact and reduced dimensions.
- Removal of protecting devices (level switches).
- Avoids the pump oversizing using integratelly their flowpressure curve.
- Integrated protection system which stops the pump in case of dry-running operation.
- **ART function** (Automatic Reset Test). If the device has been stopped due to the action of the safety system against dry operation, the ART tries to connect the pump, with a programmed periodicity because the water supply could have been restored.
- Control panel:
    - Yellow Led POWER.
    - Green Led ON.
    - Red Led FAILURE.
    - Tactile push button for manual start.
- Electronic circuit group with protection cover easily replaceable.
- Integrated accumulation system, spring-membrane set, preventing pump´s cycling as a result of dripping taps or small losses in the hydraulic installation.
- Other options like pressure gauge, connecting cables, adjustable starting pressure.

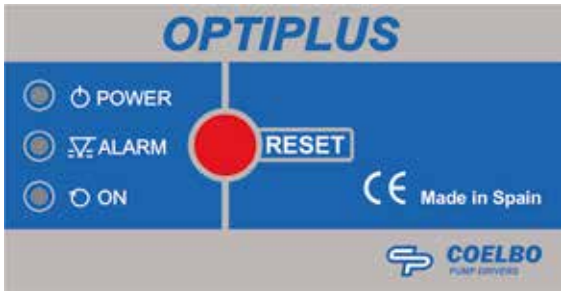
ATTESTATION DE CONFORMITÉ SANITAIRE ACS

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

TECHNICAL CHARACTERISTICS

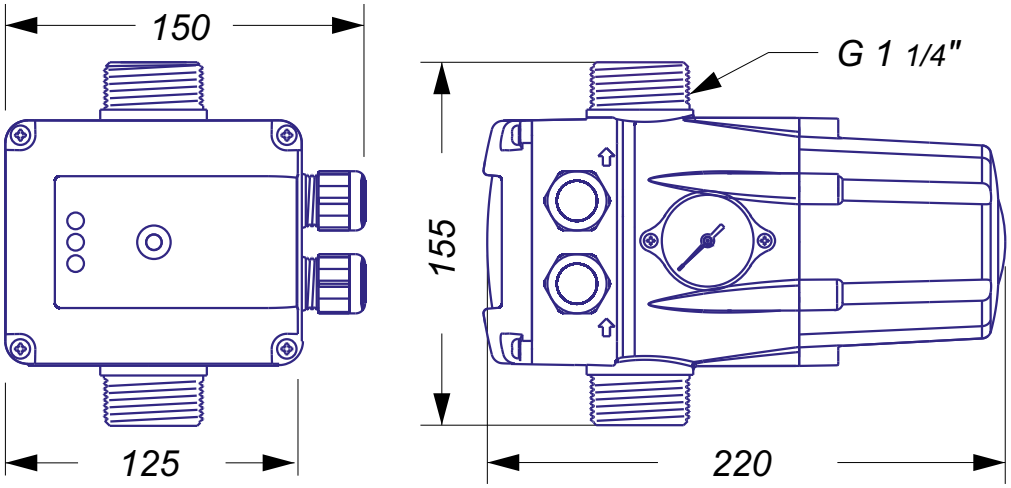
	OPTIPLUS
Start pressure	1,5-3 bar
Power	2,2 kW
Voltage	1~230 V/1~120 V
Frequency	50/60 Hz
Max peak of current	16 A; cos fi ≥0.6
Protection degree	IP65
Maximum temperature	50 ºC
Maximum pressure	10 bar
Maximum flow	10.000 l/h
Net weight (without cables)	1,35 Kg

CONTROL PANEL



INSTALLATION

DIMENSIONS

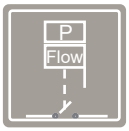


Digimatic 1
Digimatic 2 complet pump protection

Automatic digital pump-driver for electric pump integral control and protection.

DIGIMATIC is a compact device for the automatic control and protection of electric single-phase pumps up to 3 HP (2,2 kW). This unit includes all the characteristics and functions of the traditional electronic pump controllers: electronic flow sensor, integrated accumulation membrane, integrated check-valve, warning led-lights in electronic circuit that guides the electric pump operation and keeps pressure and flow accordingly.

Moreover, it has an internal pressure transmitter and instantaneous current sensor (only **Digimatic 2**), providing additional features: the starting pressure can be adjusted with high accuracy, there is a digital pressure gauge and over-current protection adaptable to each pump.



DIGIMATIC 1

DIGIMATIC 2

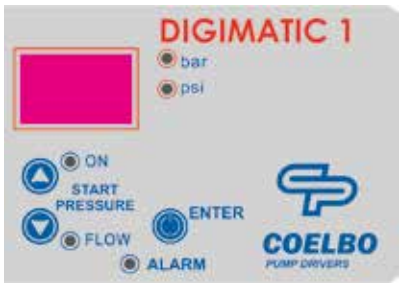
OPERATING CHARACTERISTICS

- Pump managed by power relay.
- Double operation mode: pressure dependent mode and pressure+flow dependent mode - *only DIGIMATIC 2*.
- Accumulation membrane and Integrated non-return valve.
- Digital pressure gauge (bar and psi).
- Inner pressure transmitter
- Inner flow sensor.
- Inner current sensor with instantaneous digital reading - *only DIGIMATIC 2*.
- **Stand-by mode**.
- **ART function** (Automatic Reset Test). If the device has been stopped due to the action of the safety system against dry operation, the ART tries to connect the pump, with a programmed periodicity because the water supply could have been restored.
- **APR function** (Anti-blocking Periodic Routine).
- Control panel includes 3 digits display.
- **Register operation data** - *only DIGIMATIC 2*: controller operating hours, pump operating hours, number of operating cycles, number of connections to the power supply.
- **Alarm counters** - *only DIGIMATIC 2*.
- Inlet and outlet thread G1".

ATTESTATION DE CONFORMITÉ SANITAIRE ACS

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

CONTROL PANEL



Control panel includes 3 digits display, warning leds, push-buttons, START-STOP and configuration system.

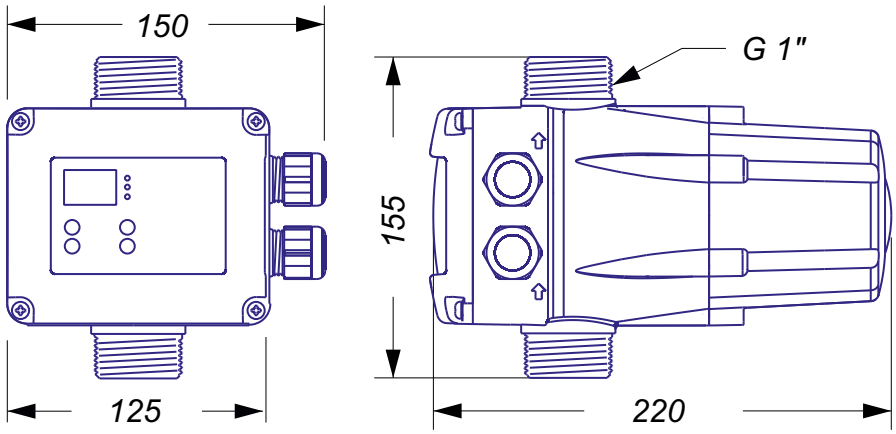
TECHNICAL CHARACTERISTICS

	DIGIMATIC 1	DIGIMATIC 2
Voltage	1~110-230 V (multiVolt)	1~110-230 V (multiVolt)
Frequency	50/60 Hz	50/60 Hz
Maximum Current	16 A; cos fi ≥0.6	16 A; cos fi ≥0.6
Power	2,2 kW	2,2 kW
Maximum Pressure	8 bar	8 bar
Start Pressure	0,5 ÷ 7 bar	0,5 ÷ 7 bar
Protection degree	IP65	IP65
Maximum temperature	50 °C	50 °C
Net weight	1,3 kg	1,3 kg
Maximum flow	8.000 l/h	8.000 l/h

SAFETY SYSTEMS

- Electronic control and safety system against dry-running operation.
- Over-current protection adaptable to each pump - *Digimatic 2*.
- Low pressure protection system.
- Flooding protection system.
- Rotor lock protection system.
- Protection system against cycling in pressure-dependent mode.

DIMENSIONS AND INSTALLATION



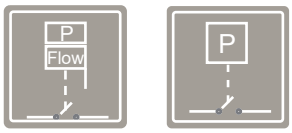
Digiplus

Automatic digital pump-driver G 1 1/4". On-Off and pressure-dependent mode.

The **Digiplus** is a compact device for the automatic control and protection of electric single-phase pumps up to 3 HP (2,2 kW). This unit includes all the characteristics and functions of the traditional electronic pump controllers: flow sensor, integrated accumulation membrane, integrated check-valve, warning led-lights.

It can operate in pressure dependent mode (cut-in and cut-out pressures) or on-off mode (start pressure and stop by no flow).

Moreover, it has an internal pressure transmitter and instantaneous current sensor, providing additional features: the pressures can be adjusted with high accuracy, there is a digital pressure gauge and over-current protection adaptable to the pump.



DIGIPLUS

OPERATING CHARACTERISTICS

- Pump managed by power relay.
- Double operation mode: pressure dependent mode and pressure+flow dependent mode.
- Accumulation membrane and Integrated non-return valve.
- Digital pressure gauge (bar and psi).
- Inner pressure transmitter
- Inner flow sensor.
- Inner current sensor with instantaneous digital reading.
- **Stand-by mode**.
- **ART function** (Automatic Reset Test). If the device has been stopped due to the action of the safety system against dry operation, the ART tries to connect the pump, with a programmed periodicity because the water supply could have been restored.
- **APR function** (Anti-blocking Periodic Routine).
- Control panel includes 3 digits display.
- **Register operation data**: controller operating hours, pump operating hours, number of operating cycles, number of connections to the power supply.
- **Alarm counters**.
- Inlet and outlet G 1 1/4".

ATTESTATION DE CONFORMITÉ SANITAIRE ACS

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

CONTROL PANEL

Control panel includes 3 digits display, warning leds, push-buttons and configuration system.

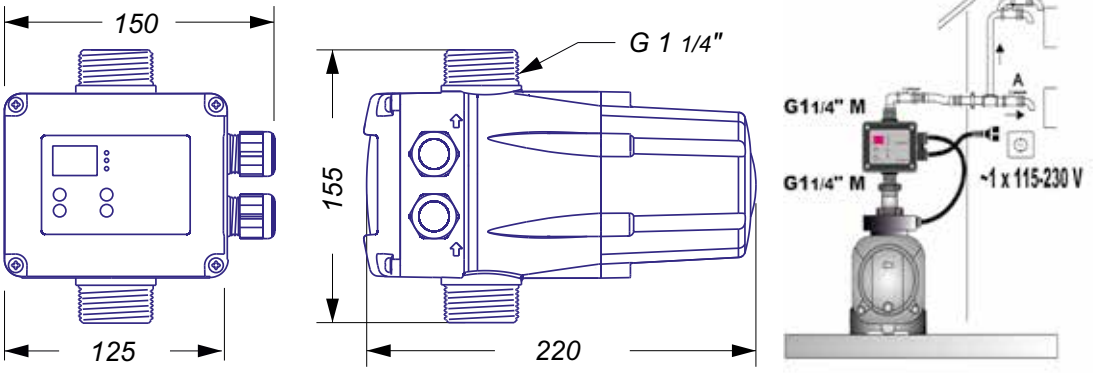
TECHNICAL CHARACTERISTICS

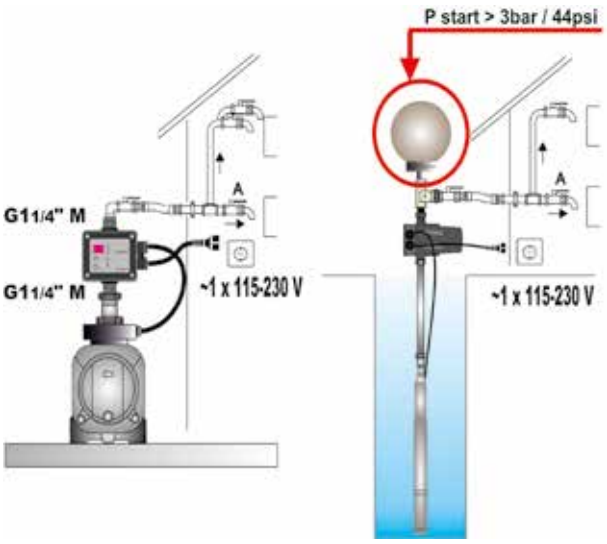
	DIGIPLUS
Voltage	1~110-230 V (multiVolt)
Frequency	50/60 Hz
Maximum Current	16 A; cos fi ≥0.6
Power	2,2 kW
Start pressure	0,5 ÷ 7 bar 7 ÷ 102 psi
Stop Pressure	1 ÷ 8 bar 14 ÷ 116 psi
Protection degree	IP65
Maximum temperature	50 °C
Net weight	1,3 kg
Maximum flow	10.000 l/h
Inlet and Outlet threads	G 1 1/4”

SAFETY SYSTEMS

- Electronic control and safety system against dry-running operation.
- Over-current protection adaptable to each pump.
- Low pressure protection system.
- Flooding protection system.
- Rotor lock protection system.
- Protection system against cycling in pressure-dependent mode.

DIMENSIONS AND INSTALLATION



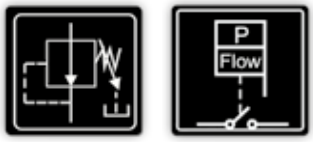


Electronic Pressure Regulator

Pump driver with adjustable outlet pressure. Constant pressure.

EPR is a compact device for automatic control and protection of electric pumps up to 2,2 kW (3 HP), multi-voltage (110-230 V) and equipped with an innovative outlet pressure reducing/regulating system.

Therefore, in addition to the typical characteristics of traditional electronic pump controllers: integrated non-return valve, accumulation diaphragm, pressure gauge, dry-running protection, automatic reset, ... it allows to adjust and stabilize the outlet pressure, avoiding overloads, water hammer and, ultimately, improving end user comfort.



EPR

OPERATING CHARACTERISTICS

- Power relay to manage electric pumps up to 2,2 kW (3 HP).
- Multi-voltage power supply: 110-230 V.
- Manual regulation of the constant outlet pressure with integrated adjusting tool.
- Outlet pressure indicator with pointer.
- Auto-setting of the start pressure linked to the outlet pressure.
- Dual scale integrated pressure gauge (bar/psi).
- Integrated protection system which stops the pump in case of dry-running operation.
- **APR** function (Anti-blocking periodic routine). After 3 days of inactivity, the device starts the pump for 10 seconds in order to avoid rotor-locking.
- **ART** function (Automatic Reset Test). If the device has been stopped due to the action of the safety system against dry run operation, this function tries to connect the pump, with a programmed periodicity, because the water supply could have been restored.
- Control panel:
    - Yellow led light (POWER).
    - Green led light (PUMP ON).
    - Red led light (ALARM).
    - Green led light (FLOW)
    - Tactile push button for manual start.
- Integrated reserve against leaks in the installation and non-return valve.
- Inlet and outlet hydraulic threads: G1", G1-1/4", NPT1", NPT1-1/4".

REGISTERED DESIGN

ATTESTATION DE CONFORMITÉ SANITAIRE ACS

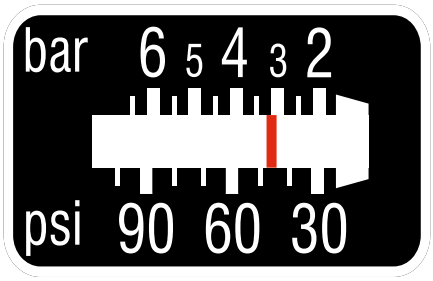
Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

TECHNICAL CHARACTERISTICS

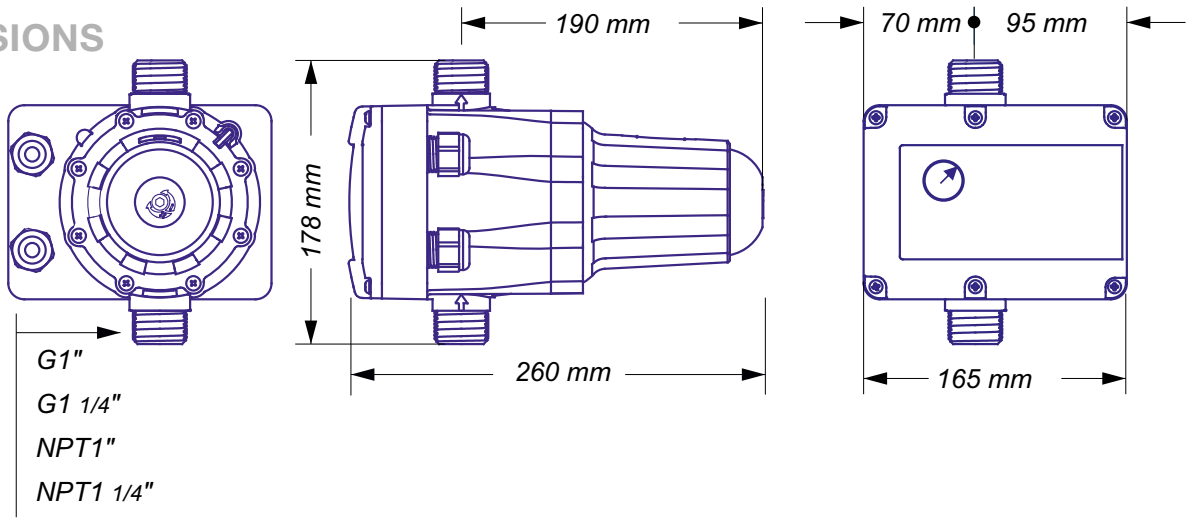
	EPR
Power supply	1~ 110-230 Vac (50/60 Hz)
Max. current intensity	16 A; cos fi ≥ 0,6
Power	2,2 kW (3 HP)
Start pressure range	2 ÷ 6 bar / 29 ÷ 87 psi
Outlet pressure range (P_{out})	1 ÷ 5 bar / 14,5- 72,5 psi
Protection degree	IP65
Max. temperature	50 ºC
Max. pressure	10 bar / 145 psi
Inlet and outlet thread	G1", G1-1/4", NPT1", NPT1-1/4"
Net weight (without cables)	2 Kg

CONTROL PANEL

OUTLET PRESSURE INDICATOR



DIMENSIONS

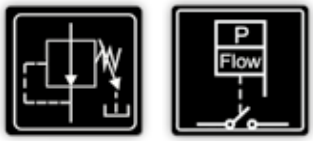


DPR

Digital Pressure Regulator

Digital pump driver with adjustable outlet and starting pressure. Constant outlet pressure.

DPR is a compact device for automatic control and protection of electric pumps up to 2,2 kW (3 HP), multi-voltage (110-230 V) and equipped with an innovative outlet pressure reducing/regulating system.
It also includes a digital display with instantaneous indication of current consumption and outlet pressure since it houses current and pressure transducers inside.
Therefore, in addition to the typical characteristics of traditional electronic pump controllers: integrated non-return valve, accumulation diaphragm, pressure gauge, dry-running protection, automatic reset, ... it allows to adjust and stabilize the outlet pressure, avoiding overloads, water hammer and, ultimately, improving end user comfort.



DPR

OPERATING CHARACTERISTICS

- Power relay to manage electric pumps up to 2,2 kW (3 HP).
- Multi-voltage power supply: 110-230 V.
- Manual regulation of the constant outlet pressure with integrated adjusting tool.
- Outlet pressure indicator with pointer.
- Digital adjustment of the starting pressure.
- Digital pressure gauge (bar and psi).
- Inner pressure transmitter
- Inner flow sensor.
- Inner current sensor with instantaneous digital reading.
- **ART function** (Automatic Reset Test). If the device has been stopped due to the action of the safety system against dry operation, the ART tries to connect the pump, with a programmed periodicity because the water supply could have been restored.
- **APR function** (Anti-blocking Periodic Routine).
- **Flooding** protection system.
- **Stand-by mode**.
- Control and protection systems against: overcurrents, dry run operation, overpressure, flooding and rotor blockage.-
- Control panel includes 3 digits display.
- **Register operation data**: controller operating hours, pump operating hours, number of operating cycles, number of connections to the power supply.
- **Alarm counters**.
- Inlet and outlet: G1", G 1-1/4", NPT 1", NPT 1-1/4"

REGISTERED DESIGN

PATENT filed for international patent PENDING

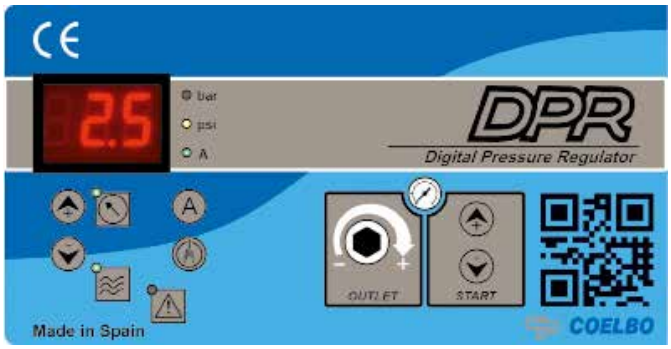
ATTESTATION DE CONFORMITÉ SANITAIRE ACS

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

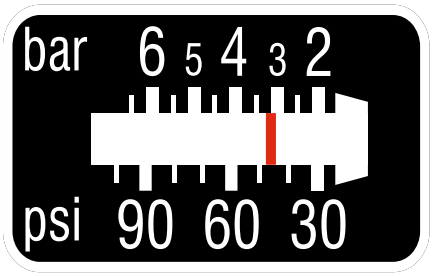
TECHNICAL CHARACTERISTICS

	DPR
Power supply	1~ 110 ÷ 230 Vac (50/60 Hz)
Max. current intensity	16 A; cos fi ≥ 0,6
Power	2,2 kW (3 HP)
Start pressure range	2 ÷ 6 bar / 29 ÷ 87 psi
Outlet pressure range (P_{out})	0,5 ÷ 5,5 bar / 7,5- 80 psi
Protection degree	IP65
Max. temperature	50 °C
Max. pressure	10 bar / 145 psi
Inlet and outlet thread	G1", G1-1/4", NPT1", NPT1-1/4"
Net weight (without cables)	2 Kg

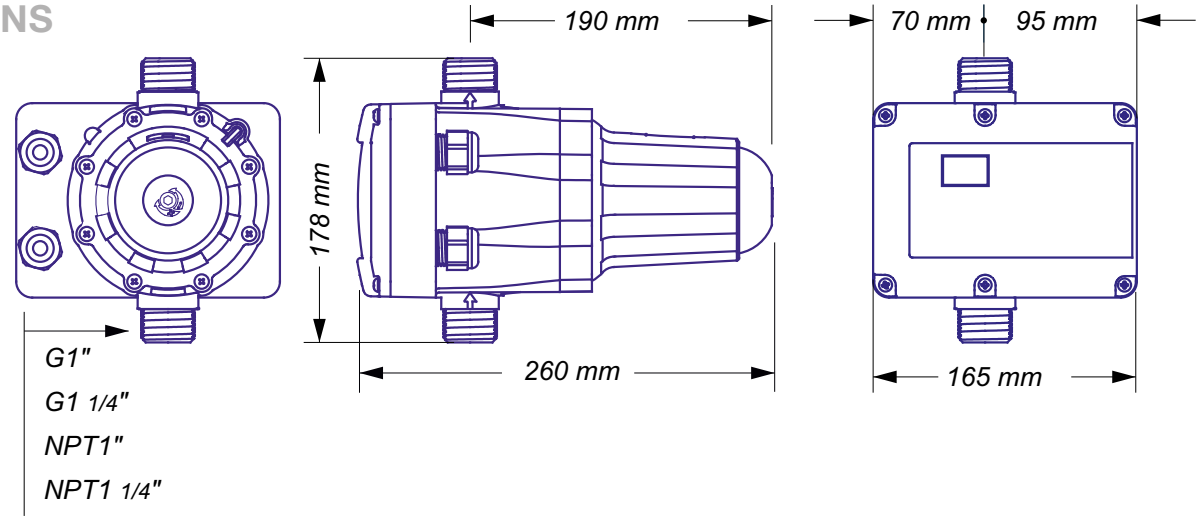
CONTROL PANEL



OUTLET PRESSURE INDICATOR



DIMENSIONS



DPR alt

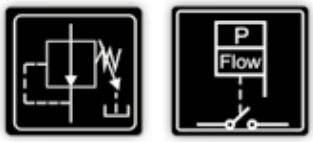
Digital Pressure Regulator

Digital pump driver for 2 pumps systems on **duty-standby** operation at **constant outlet pressure**.

DPR alt is a compact device for automatic control and protection of 2 electric pumps systems, up to 2,2 kW (3 HP), multi-voltage (110-230 V) and equipped with an innovative outlet pressure reducing/regulating system. These 2 pumps will operate in **duty-standby operation** mode.

Both pumps are managed and protected by the same ***DPR*** with alternated starting sequence - they never will operate simultaneously. This system guarantees the flow supply in case of failure of one of the electric pumps and also increase their durability.

DPR alt includes all the same features of an standard ***DPR***.



DPR alt

REGISTERED DESIGN

ATTESTATION DE CONFORMITÉ SANITAIRE ACS

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

OPERATING CHARACTERISTICS

- Duty-stanby operation.
- Power relays to manage 2 electric pumps up to 2,2 kW (3 HP).
- Multi-voltage power supply: 110-230 V.
- Manual regulation of the constant outlet pressure with integrated adjusting tool.
- Outlet pressure indicator with pointer.
- Digital adjustment of the start pressure.
- Digital pressure gauge (bar/psi).
- Inner flow sensor.
- Inner current sensor with instantaneous digital reading.
- Functions: **APR** (Anti-blocking periodic routine), **ART** function (Automatic Reset Test), **Anti-flooding**, **Stand-by** mode.
- Protection against: dry-run operation, overcurrent, over-pressure, low-pressure, fast-cycling, flooding, rotor locking.
- Control panel includes: 3-digit display, flow indicator, bar/psi indicator, alarm indicator and push-buttons.
- Register of operation data an alarms.
- Reserve against leaks in the installation.
- Inlet and outlet hydraulic threads: G1", G1-1/4", NPT1", NPT1-1/4".

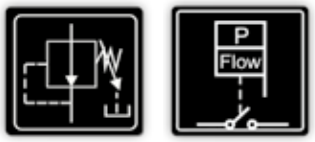
DPR master

Digital Pressure Regulator

Digital pump driver for 2 pumps systems on **duty-assist** operation at constant outlet pressure.
DPR master is made up of 2 communicated ***DPR*** units for automatic control and protection of 2 electric pumps up to 2,2 kW (3 HP), multi-voltage (110-230 V) and equipped with an innovative outlet pressure reducing/regulating system. These 2 pumps will operate in **duty-assist** operation mode.

Each pump is managed and protected by a unit ***DPR***, operating in cascade and with alternated starting sequence - this means that first pump to start will change in each operation cycle, the second pump will start, only, if the first pump cannot afford the flow demand.

DPR master includes all the same features of an standard ***DPR***.



DPR master

REGISTERED DESIGN

PATENT filed for international patent PENDING

ATTESTATION DE CONFORMITÉ SANITAIRE ACS

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

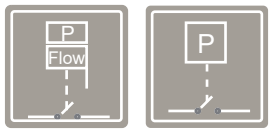
OPERATING CHARACTERISTICS

- Duty-assist operation.
- Power relays to manage 2 electric pumps up to 2,2 kW (3 HP).
- Multi-voltage power supply: 110-230 V.
- Manual regulation of the constant outlet pressure with integrated adjusting tool.
- Outlet pressure indicator with pointer.
- Digital adjustment of the start pressure.
- Digital pressure gauge (bar/psi).
- Inner flow sensor.
- Inner current sensor with instantaneous digital reading.
- Functions: **APR** (Anti-blocking periodic routine), **ART** function (Automatic Reset Test), **Anti-flooding**, **Stand-by** mode.
- Protection against: dry-run operation, overcurrent, over-pressure, low-pressure, fast-cycling, flooding, rotor locking.
- Control panel includes: 3-digit display, flow indicator, bar/psi indicator, alarm indicator and push-buttons.
- Register of operation data an alarms.
- Reserve against leaks in the installation.
- Inlet and outlet hydraulic threads: G1", G1-1/4", NPT1", NPT1-1/4".

Onematic

Driver for a single-phase or three-phase pump at On-Off or pressure-dependent mode.

Compact automatic control device for the automation of either single-phase and three-phase pumps. The system manages the start and stop of the pump depending on the detected pressure by its internal transducer and the flow detected by the flow sensor. It can operate in pressure dependent mode (start pressure and stop pressure) or on/off mode (start pressure between 1÷5 bar and disconnection by the flow sensor).



111310

OPERATING CHARACTERISTICS

- Pump manager by power delay.
- 2 operating modes: pressure-dependent or on/off mode.
- **ART function** (Automatic Reset Test). If the device has been stopped due to the action of the safety system against dry operation, the ART tries to connect the pump, with a programmed periodicity because the water supply could have been restored.
- **Automatic restore system** after an interruption of power supply. System restores the previous state keeping the configuration parametres.
- Electronic input for detection of minium water level in aspiration tank- optional-. This system is independent of the safety against dry-operation.
- Inner current sensor with instantaneus digital reading.
- Inner pressure transducer with digital indicator.
- Control and information panel with LCD display.
- **Register of operational parameters**. Information about: operating hours, counter of starts, counter of connections to the power supply.
- **Register of alarms**. Information about type and number of alarms.
- Volt-free contact for monitoring the alerts displayed in screen, which were caused by irregularities or problems within the system.
- Protection fuse incorporated.

REGISTERED DESIGN

Low Voltage Directive 2014/35/EC
Electromagnetic Compatibility 2014/30/EC
RoHS 2011/65/EC + 2015/863/EC

TECHNICAL CHARACTERISTICS

	111310
Power supply voltage	~1 x 230 / ~3 x 230 / ~3 x 400 Vac
Frequency	50/60 Hz
Max. current per phase	10 A
Max. peak of current	+20% 10seg.
Maximum operating pressure	10 bar
Range of start pressure (On/Off mode)	1 ÷ 5 bar
Max. stop pressure (pressure depends mode)	1,5 ÷ 7 bar
Max. start pressure (pressure depends mode)	1 ÷ 6,5 bar
Protection degree	IP55
Max. water temperature	40 °C
Max environment temperature	50 °C
Max flow	15.000 l/h
Net weight (without cables)	3,3 kg
Inlet and outlet thread	G 1 1/4”

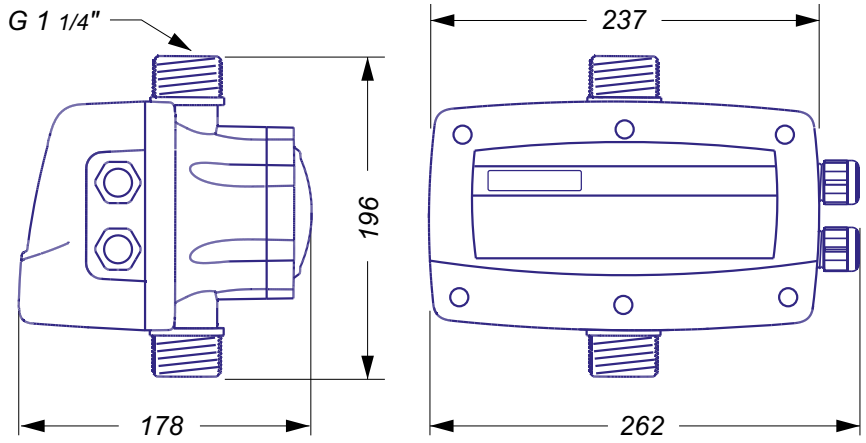
CONTROL PANEL

Control panel includes LCD screen, warning leds, push-buttons, START-STOP, AUTOMATIC and configuration system.

SAFETY SYSTEMS

- Control and safety system against overload.
- Electronic control and safety system against dry operation.
- Control and safety system against short-circuit between output phases.

DIMENSIONS



Management System ISO 9001:2008

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PUMP DRIVERS

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