Franklin Electric

PUMP CONTROL AND PROTECTION SYSTEMS

RESISTART FM15 & FM22, RESIMATIC ART, FAS, FDS

INDEX

NOTE: Franklin Electric S.r.l. reserves the right to amend specification without prior notice
For the most up-to-date product information, visit **franklinwater.eu**.

RESISTART FM15 & FM22

Compact device for automatic control and pump protection with fixed start-up pressure

FEATURES & BENEFITS

APPLICATIONS

Water Distribution
Residential

COMPACT DEVICE FOR AUTOMATIC CONTROL AND PUMP PROTECTION

- Its patented system includes special electronic sensors of flow and pressure, integrated in an electronic circuit that drives the pump operation and keeps pressure and flow accordingly
- Equipped with a safety system that avoids the dry-running operation
- Replaces traditional systems of hydrosphere, pressure-switch, check-valve and level switches, with the advantage of smaller dimensions and avoiding periodic maintenance
- It automatically starts the pump when any foucet is opened. When the water flow is over due to tap closure, the device stops the pump after 10 seconds set-up time.

QUICK INSTALLATION AND MAINTENANCE-FREE OPERATION

- Compact and reduced dimensions
- Protection against water hammer effect
- Avoids oversizing the pump by using the full performance curve
- Removal of protecting devices (level switch)
- ART function (Automatic Reset Test) - If the device has been stopped due to the action of the safety system against dry running, the ART attempts to start the pump with a programmed periodicity without manual operation of the RESET button.
- Easily replaceable electronic board with protection cover
- Integrated accumulation system that prevents frequent start/stop of the pump due to a leaking tap

CONSTRUCTION OPTIONS

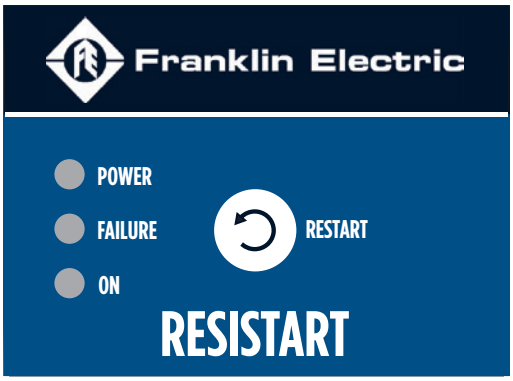
- Pressure gauge
- Connecting cables
- Adjustable starting pressure

RESISTART FM15 & FM22

GENERAL FEATURES

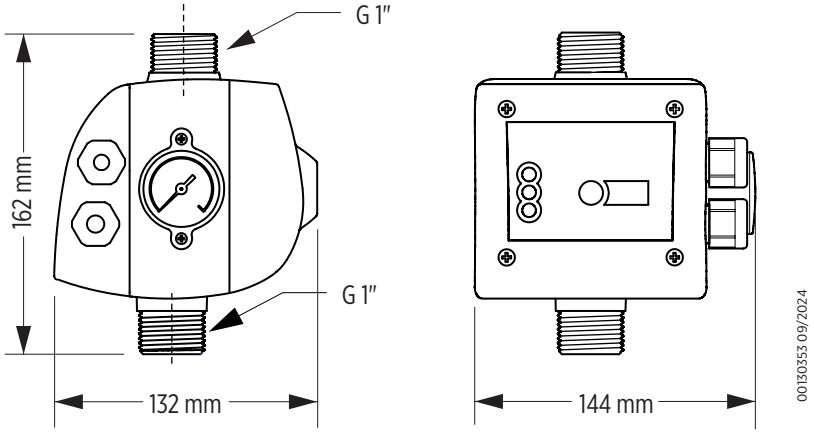
Technical data		
Model	**FM15**	FM22
Start pressure	1,5 bar	2,2 bar
Power	1,5 kW	1,5 kW
Voltage	~1 x 110-230 Vac	~1 x 110-230 Vac
Frequency	50/60 Hz	50/60 Hz
Max. current intensity	10 A; cosφ ≥ 0,6	10 A; cosφ ≥ 0,6
Protection Degree	IP65	IP65
Max. temperature	50 °C	50 °C
Max. pressure	10 bar	10 bar
Max. head	8.000 l/h	8.000 l/h
Inlet and outlet thread	G 1"	G 1"
Net weight (without cables)	0,9 kg	0,9 kg

CONTROL PANEL



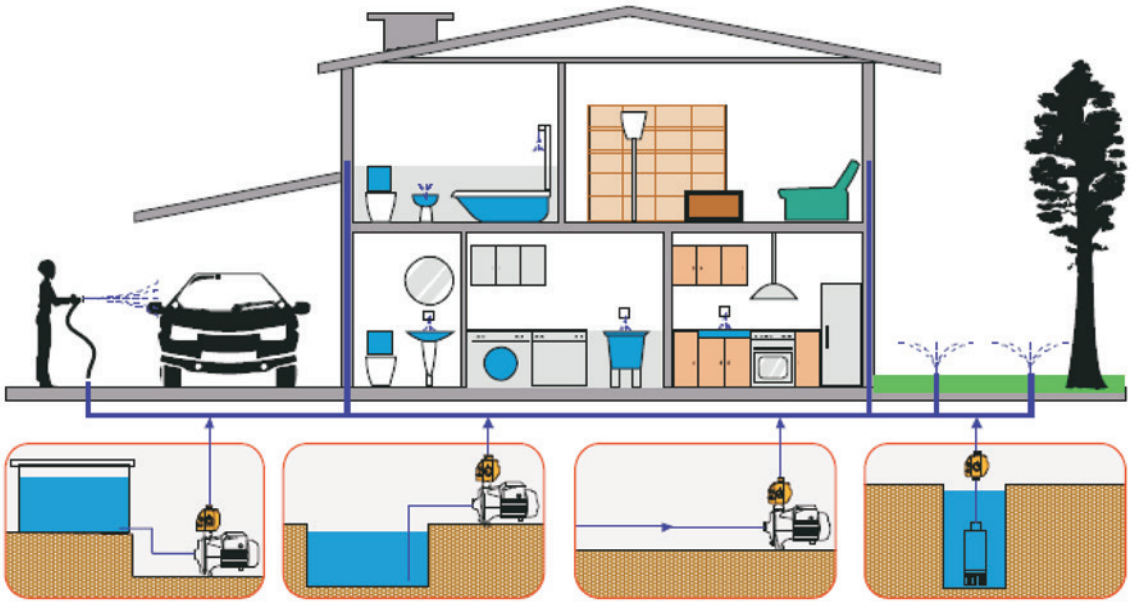
1. POWER: yellow LED
2. PUMP ON: green LED
3. FAILURE: red LED
4. Tactile push button for manual start

DIMENSIONAL DRAWINGS



RESISTART FM15 & FM22

INSTALLATION



Water tank above pump suction | Water tank under pump suction | Direct water supply | Waterwell submersible pump

RESIMATIC ART

Compact device for automatic control and pump protection with adjustable start-up pressure

FEATURES & BENEFITS

APPLICATIONS

Water Distribution
Residential

COMPACT DEVICE FOR AUTOMATIC CONTROL AND PUMP PROTECTION

- Its patented system includes special electronic sensors of flow and pressure, integrated in an electronic circuit that drives the pump operation and keeps pressure and flow accordingly
- Equipped with a safety system that avoids the dry-running operation
- Replaces traditional systems of hydrosphere, pressure-switch, check-valve and level switches, with the advantage of smaller dimensions and avoiding periodic maintenance
- Automatically starts the pump when any foucet is opened. When the water flow is over due to tap closure, the device stops the pump after 10 seconds set-up time

QUICK INSTALLATION AND MAINTENANCE-FREE OPERATION

- Compact and reduced dimensions
- Protection against water hammer effect
- Avoids oversizing the pump by using the full performance curve
- Removal of protecting devices (level switch)
- ART function (Automatic Reset Test) - If the device has been stopped due to the action of the safety system against dry running, the ART attempts to start the pump with a programmed periodicity without manual operation of the RESET button.
- Easily replaceable electronic board with protection cover
- Integrated accumulation system that prevents frequent start/stop of the pump due to a leaking tap
- Resinated electronic circuit (optional).

CONSTRUCTION OPTIONS

- Model with integrated Schuko socket on request.
- Model powered by direct current (24 V DC).

RESIMATIC ART

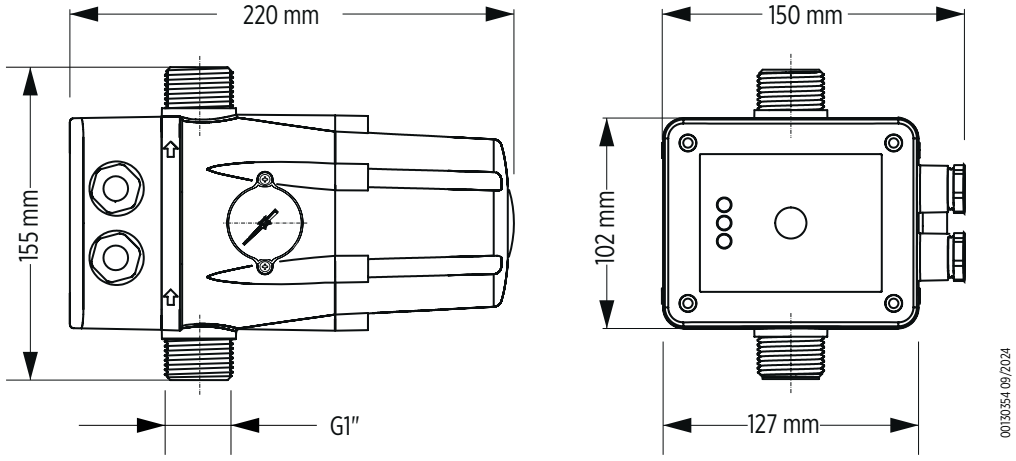
GENERAL FEATURES

Technical data	
Start pressure	1,5-3 bar
Power	1,5 kW
Voltage	~1x110-230 Vac
Frequency	50/60 Hz
Max. current intensity	10 A; cosφ ≥ 0,6
Protection Degree	IP65
Max. temperature	50 °C
Max. pressure	10 bar
Max. head	8.000 l/h
Inlet and outlet thread	G 1"
Net weight (without cables)	1,3 kg

CONTROL PANEL

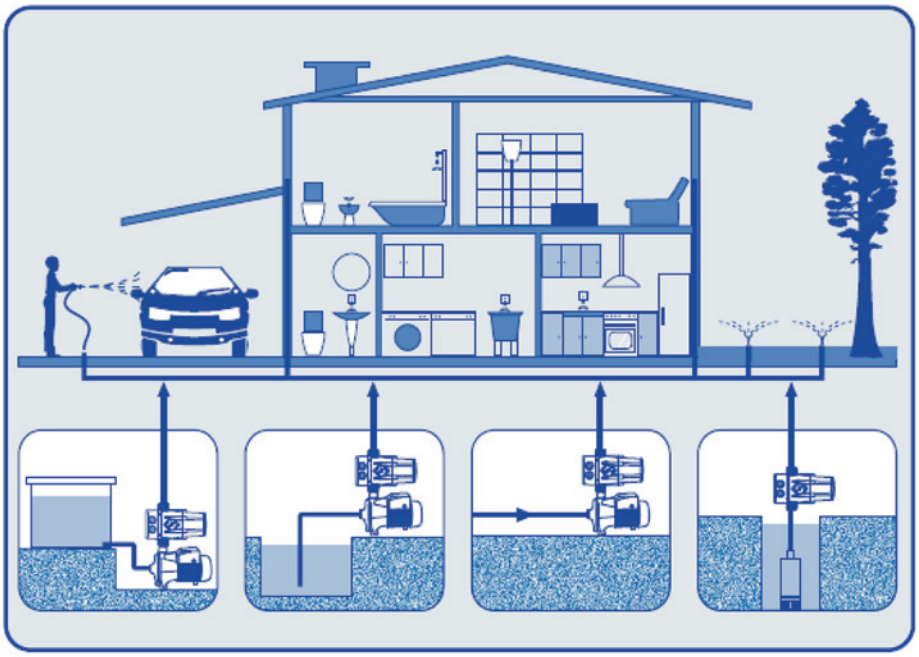
1. POWER: yellow LED
2. PUMP ON: green LED
3. FAILURE: red LED
4. Tactile push button for manual start

DIMENSIONAL DRAWINGS



RESIMATIC ART

INSTALLATION



Water tank above pump suction | Water tank under pump suction | Direct water supply | Waterwell submersible pump

FAS – FRANKLIN ANALOGIC SYSTEM

Automatic device for reducing and regulating start-up and output pressure, ensuring the stable maintenance of pump pressure

FEATURES & BENEFITS

APPLICATIONS

Water Distribution
Residential

COMPACT DEVICE FOR AUTOMATIC CONTROL AND PROTECTION OF SINGLE-PHASE PUMPS

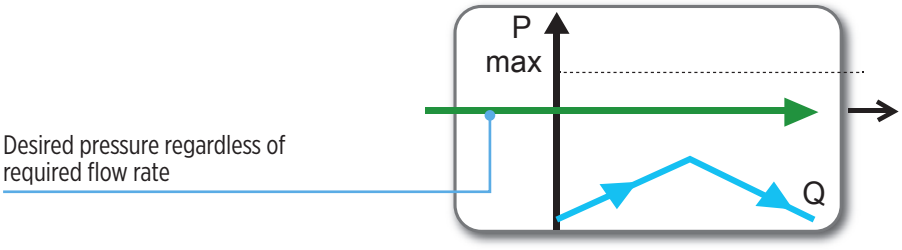
- Equipped with an innovative reducing/regulating outlet pressure system
- In addition to the typical features of traditional electronic pump controllers, it allows to adjust and stabilize the outlet pressure, avoiding overloads, water hammer and, improving end-user comfort

MANUAL OUTPUT PRESSURE ADJUSTMENT

- Output pressure adjustment display
- Automatic start-up pressure setting linked to output pressure
- Built-in dual scale (bar/psi) pressure gauge
- Built-in accumulator diaphragm and check valve
- Built-in protection system that stops the pump in case of water shortage
- APR function (Periodic Anti-Blocking Routine) - After 3 days of pump inactivity, the device automatically starts a 10-second cycle to prevent rotor blockage.
- ART function (Automatic Reset Test) - If the device has been stopped due to the action of the safety system against dry running, the ART attempts to start the pump with a programmed periodicity without manual operation of the RESET button.

STEADY OUTPUT PRESSURE REGARDLESS OF FLOW DEMAND

Traditional pump control systems, which use pressure switches with hydropneumatic tanks, are affected by fluctuating output pressure. Modern frequency converters (inverters) solve these issues but at a high cost. FAS - Franklin Analogic System is the economical solution that offers steady output pressure regardless of flow demand, using simpler electronics that enhance reliability and durability.

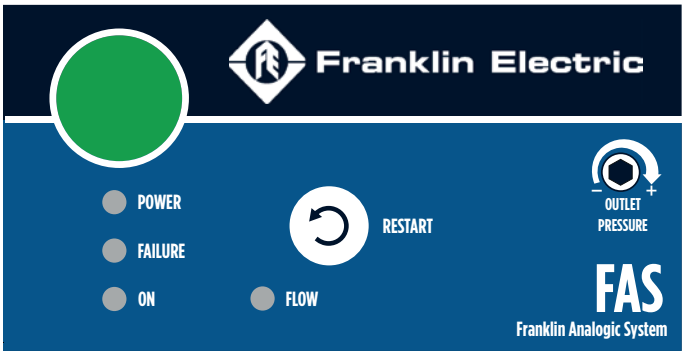


FAS - FRANKLIN ANALOGIC SYSTEM

GENERAL FEATURES

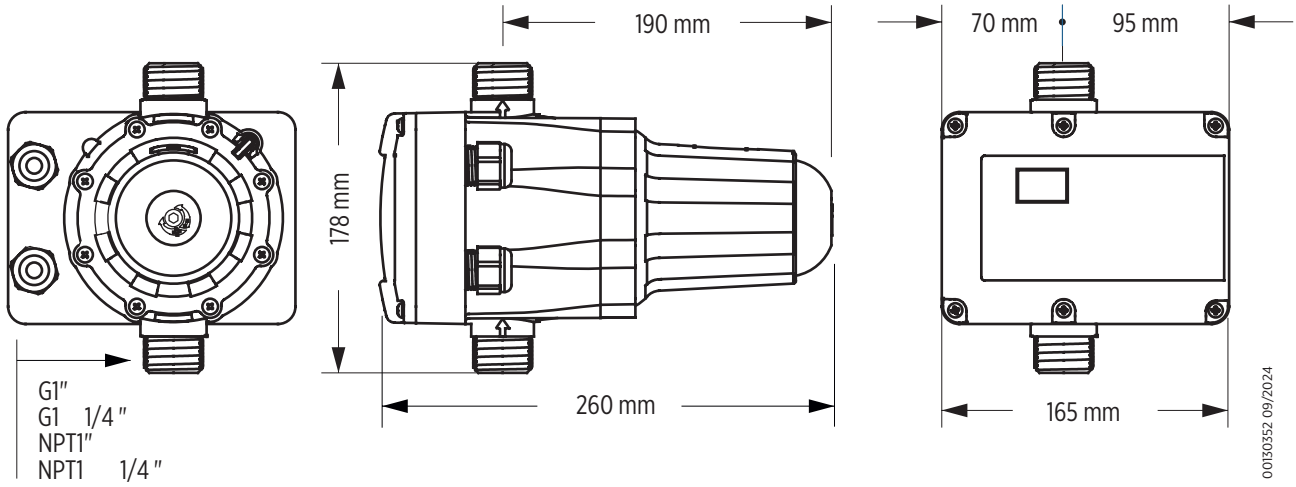
Technical data	
Power	2,2 kW (3 HP)
Voltage	~1x110-230 Vac
Outlet pressure range	2-6 bar / 29-87 psi
Start pressure range	1-5 bar / 14,5-72,5 psi
Frequency	50/60 Hz
Max. current intensity	16 A; cosφ ≥ 0,6
Protection Degree	IP65
Max. temperature	50 °C
Max. pressure	12 bar / 174 psi
Inlet and outlet thread	G 1"
Net weight (without cables)	2 kg

CONTROL PANEL



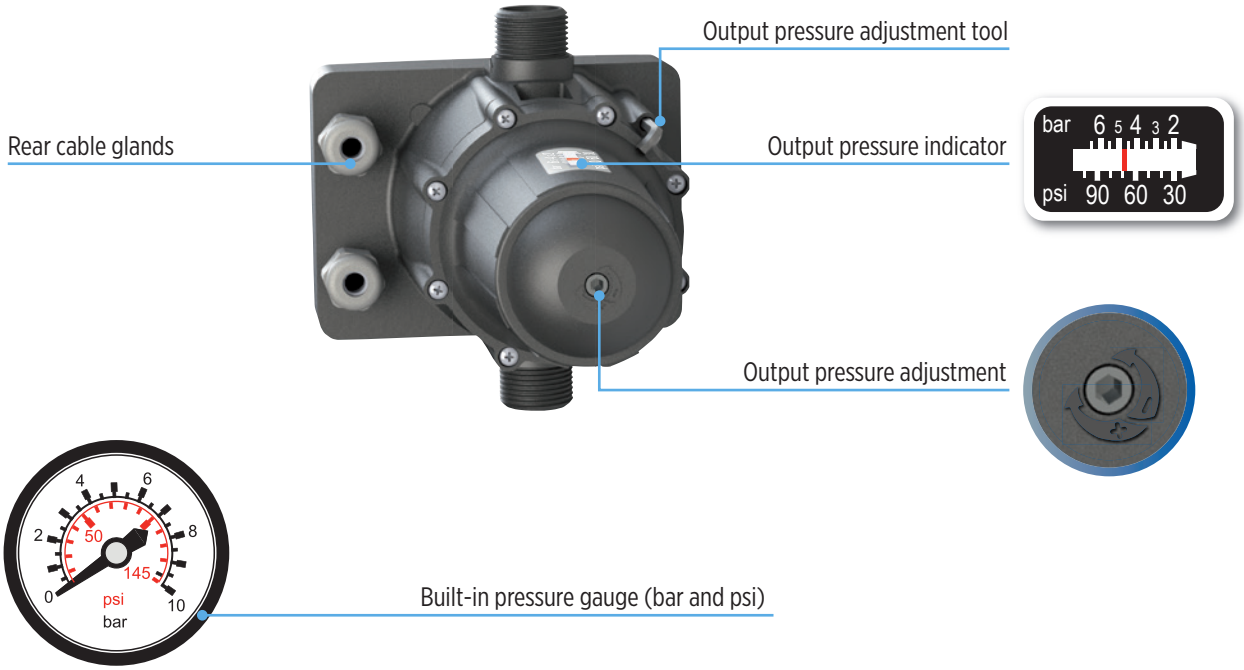
1. POWER: yellow LED
2. PUMP ON: green LED
3. ALARM: red LED
4. FLOW: green LED
5. Tactile push button for manual start

DIMENSIONAL DRAWINGS



FAS - FRANKLIN ANALOGIC SYSTEM

MAIN PARTS



FDS – FRANKLIN DIGITAL SYSTEM

Automatic device for reducing and regulating start-up and output pressure, ensuring the stable maintenance of pump pressure

FEATURES & BENEFITS

APPLICATIONS

Water Distribution
Residential

AUTOMATIC CONTROL AND PROTECTION OF SINGLE-PHASE PUMPS

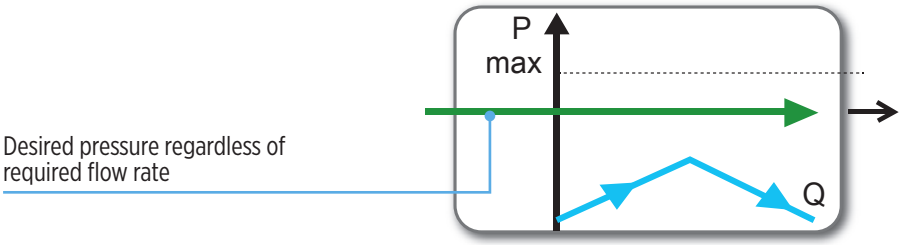
- Equipped with an innovative reducing/regulating outlet pressure system
- Digital display that provides real-time readings of current consumption and outlet pressure, thanks to the built-in current and pressure transducers
- In addition to the typical features of traditional electronic pump controllers, it allows to adjust and stabilize the outlet pressure, avoiding overloads, water hammer and, improving end-user comfort

ADJUSTABLE OUTPUT PRESSURE AND MOTOR RUN

- Suitable for pressure boosting systems due to communication mode for 2 pumps
- Output pressure adjustment display
- Digital adjustment of starting pressure
- Digital pressure gauge in bar and psi
- Integrated pressure, flow and consumption current sensors
- Configurable for flood protection: If enabled, the pump will stop after a preset period of continuous operation.
- Stand-by mode
- Electric pump control and protection system against overcurrents, dry operation due to lack of water, overpressure, flooding and rotor blockage
- Operating data logging and alarms
- Built-in storage diaphragm and check valve
- APR function (Periodic Anti-Blocking Routine) - After 3 days of pump inactivity, the device automatically starts a 10-second cycle to prevent rotor blockage.
- ART function (Automatic Reset Test) - If the device has been stopped due to the action of the safety system against dry running, the ART attempts to start the pump with a programmed periodicity without manual operation of the RESET button.

STEADY OUTPUT PRESSURE REGARDLESS OF FLOW DEMAND

Traditional pump control systems, which use pressure switches with hydropneumatic tanks, are affected by fluctuating output pressure. Modern frequency converters (inverters) solve these issues but at a high cost. FDS - Franklin Digital System is the economical solution that offers steady output pressure regardless of flow demand, using simpler electronics that enhance reliability and durability.



FDS - FRANKLIN DIGITAL SYSTEM

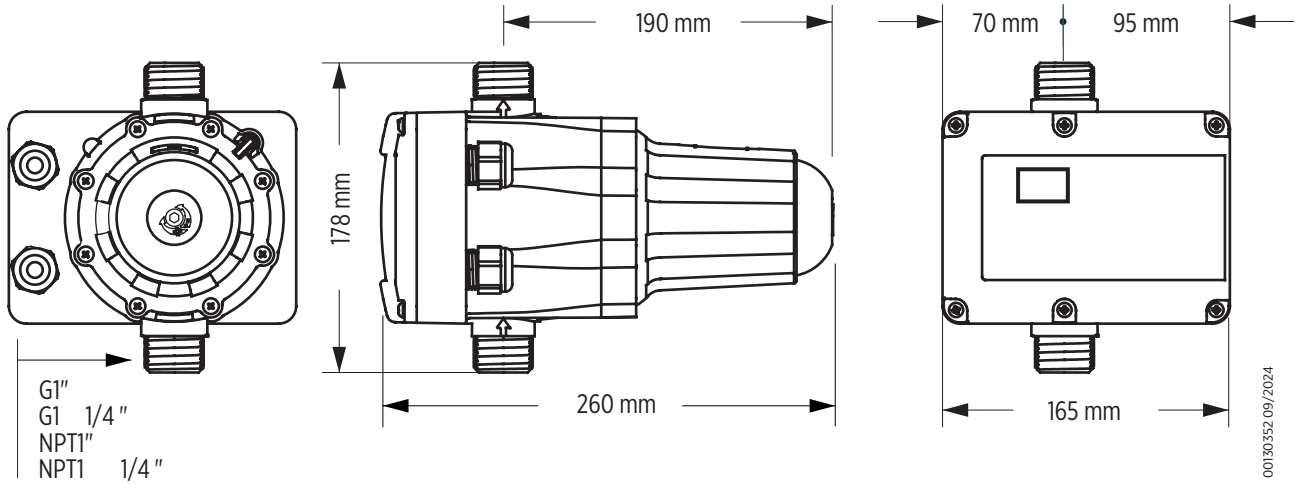
GENERAL FEATURES

Technical data	
Power	2,2 kW (3 HP)
Voltage	~1x110-230 Vac
Outlet pressure range	2-6 bar / 29-87 psi
Start pressure range	0,5-5,5 bar / 7,5-80 psi
Frequency	50/60 Hz
Max. current intensity	16 A; cosφ ≥ 0,6
Protection Degree	IP65
Max. temperature	50 °C
Max. pressure	12 bar / 174 psi
Inlet and outlet thread	G 1"
Net weight (without cables)	2 kg

CONTROL PANEL

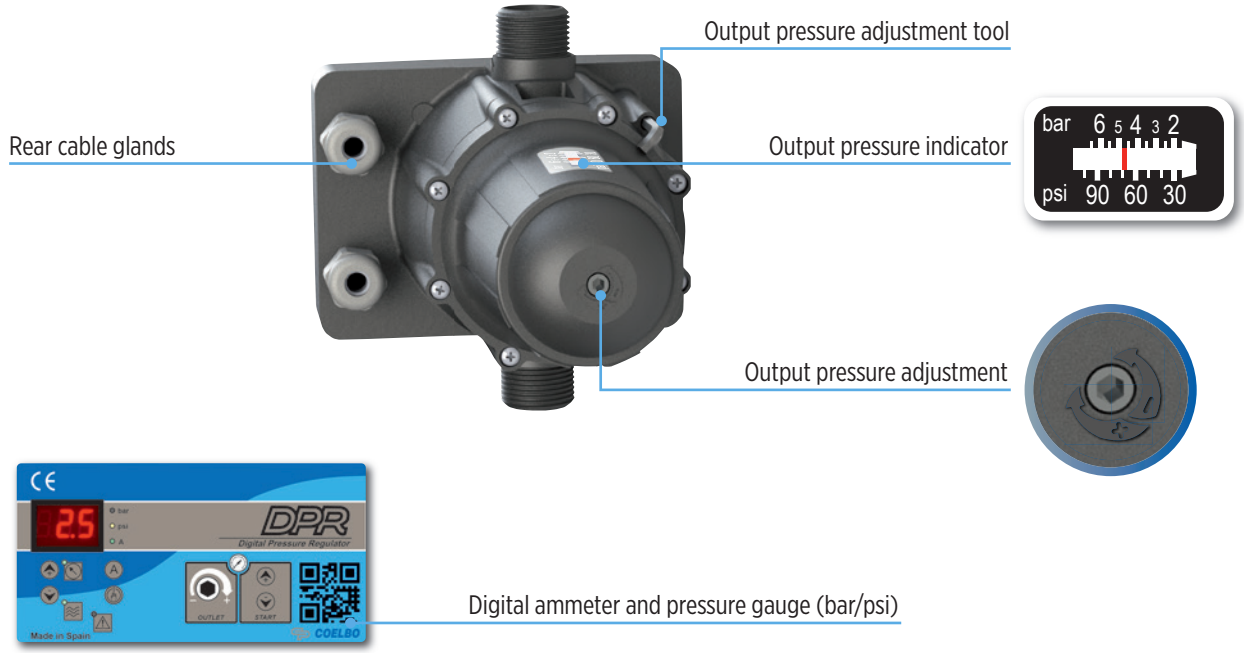
1. 3-digit display
2. Flow indicator
3. Bar/psi indicator
4. Alarm indicator
5. Push buttons

DIMENSIONAL DRAWINGS



FDS - FRANKLIN DIGITAL SYSTEM

MAIN PARTS



NOTES

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