



Made in Italy

LOGIC

WATER COOLED INVERTER

Varies the number of motor revolutions of the pump depending on the withdrawal from the system in order to maintain constant pressure and flow.

Allows to adjust the pressure of the system and the restart of the pump.

Stops the pump in case of water shortage and protects it from dry running.

Equipped with automatic reset in case of failure and anti-jamming function.

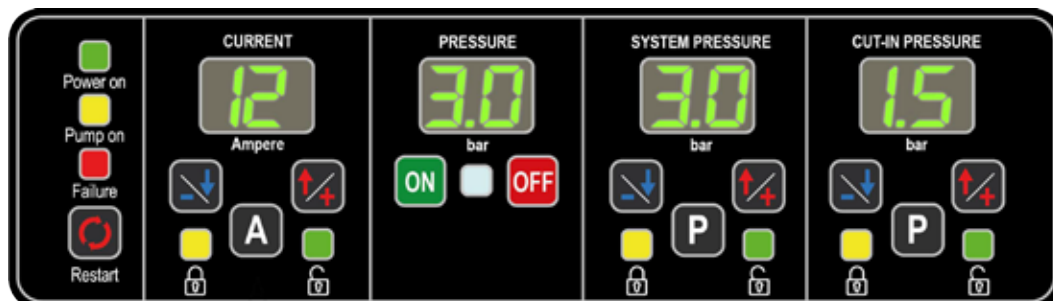
Ensures energy saving.

Can be mounted on surface pumps and submersible pumps.

No need for an expansion tank, check valve, filter and fittings.

Maintenance free.

CONTROL PANEL



Setting up and starting Logic series devices is simple and intuitive.

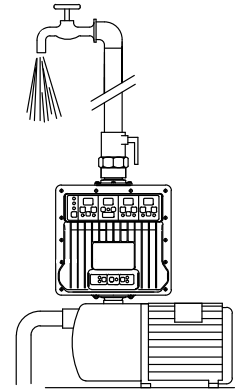
Thanks to the 4 displays, the operating parameters of the system are clearly visible and easy to consult.

INSTALLATION AND STARTUP

Install the device vertically directly on the pump or between the pump and the first use.

Make electrical connections, give power and set the operating parameters.

Press on button to start.



AUTOMATIC RESTARTS

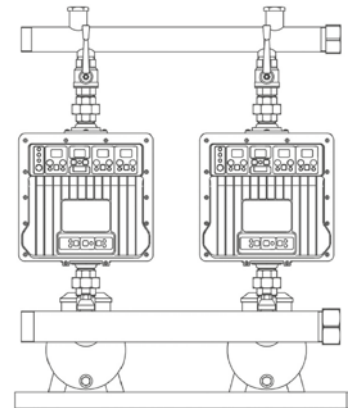
In case of stopping due to a water shortage, the devices will automatically make 10 double attempts to rearm over the 24 hours following the failure, each lasting approximately 5 seconds to allow the pump and the system to reload if possible. The user can try to rearm the devices at any time by pressing the Restart button.

ANTI-JAMMING FUNCTION

If for any reason the pump remains idle for 24 hours, the unit starts the motor for about 5 seconds.

BOOSTER SETS

Each model of Logic series in the "COM" version is standardly equipped with communication interface and cable to make booster sets.



INSTALLATION AND STARTUP

Connect the devices to each other via the serial port.

Select the Master device and the Slave devices via the communication panel.

OPERATION

The Master device controls the Slave devices and manages the operation of the booster set.

Initially, the pump on which the Master device is installed will start first, but if the demand for water is such that this pump is unable to maintain the set system pressure value, then the second pump on which the Slave device is installed will automatically start. Every time the pumps stop, it will be the second, third and/or fourth pump etc. to start first, depending on how many pumps are installed, to return to the Master device and so on.

PUMPS ALTERNATION DURING CONTINUOUS OPERATION

If for any reason one or more pumps are working continuously, in order to guarantee uniform wear of the pumps, every sixty minutes of continuous operation of a pump, a forced exchange will be made with another pump on stand-by.

The changeover respects the alternating sequence of all the devices.

VARIABLE MASTER

In case of malfunctioning of the Master device, the system will transfer the operation to the Slave device immediately following the Master. If the original Master device has been reset, it will automatically be reintegrated into the system.

AUTOMATIC RESTARTS AND ANTI-JAMMING FUNCTION

For details refer to the paragraph above.

OPTIONALS

- Alarm panel.

TECHNICAL FEATURES

| | SINGLE-PHASE / SINGLE-PHASE | | |
|--|--|-----------------|-----------------|
| | MODELS SP 8,5 | SP 11 | SP 13 |
| Mains voltage | 1 ~ 230 Vac | 1 ~ 230 Vac | 1 ~ 230 Vac |
| Acceptable voltage fluctuations | +/- 15% | +/- 15% | +/- 15% |
| Frequency (automatic recognition) | 50 / 60 Hz | 50 / 60 Hz | 50 / 60 Hz |
| Pump motor voltage | 1 ~ 230 V | 1 ~ 230 V | 1 ~ 230 V |
| Maximum pump motor current | 8,5 A | 11 A | 13 A |
| Maximum pump motor power | 1,1 kW - 1,5 HP | 1,5 kW - 2 HP | 2,2 kW - 3 HP |
| Motor soft start | Yes | Yes | Yes |
| Electrical connection cable to mains H07 RN-F | 3Gx1,5 mm ² L 1,5 m schuko plug | | |
| Electrical connection cable to motor H07 RN-F | 3Gx1,5 mm ² L 1,5 m | | |
| Length motor cable up to 80 m. | Yes | Yes | Yes |
| Maximum operating pressure | 16 bar | 16 bar | 16 bar |
| Adjustable system pressure | 2 ÷ 12 bar | 2 ÷ 12 bar | 2 ÷ 12 bar |
| Adjustable cut-in pressure | 1 ÷ 11 bar | 1 ÷ 11 bar | 1 ÷ 11 bar |
| Minimum flow | ~ 1 l/min | ~ 1 l/min | ~ 1 l/min |
| Maximum operating temperature | 60 °C | 60 °C | 60 °C |
| Protection degree | IP 65 | IP 65 | IP 65 |
| Digital manometer | Yes | Yes | Yes |
| Digital ammeter | Yes | Yes | Yes |
| Dry running protection | Yes | Yes | Yes |
| Timed automatic rearming | Yes | Yes | Yes |
| Anti-jamming function | Yes | Yes | Yes |
| Protection fuse | Yes | Yes | Yes |
| Short-circuit protection between phases | Yes | Yes | Yes |
| Short-circuit protection between phases and earth | Yes | Yes | Yes |
| Over-current protection | Yes | Yes | Yes |
| Voltage surge protection | Yes | Yes | Yes |
| Over-temperature protection | Yes | Yes | Yes |
| Pressure sensor fault detection | Yes | Yes | Yes |
| Float switch and level probe connections | Yes | Yes | Yes |
| Remote ON/OFF connection predisposition | Yes | Yes | Yes |
| Remote alarm connection predisposition | Yes | Yes | Yes |
| Accumulation | Integrated | Integrated | Integrated |
| Check valve | Integrated | Integrated | Integrated |
| Water discharge | Yes | Yes | Yes |
| Male connections | 1" - 1" | 1" 1/4 - 1" 1/4 | 1" 1/4 - 1" 1/4 |
| Interchangeable male connections | 1" 1/4 - 1" 1/4 | 1" 1/2 - 1" 1/2 | 1" 1/2 - 1" 1/2 |
| Stainless steel screws | Yes | Yes | Yes |
| Overall dimensions (L x H x W) and weight | 260 x 312 x 285 mm ~ 5 Kg | | |

- Communication between devices: for each model is available the "COM" version that is standardly equipped with interface and communication cable.

| SINGLE-PHASE / THREE-PHASE | | THREE-PHASE / THREE-PHASE | | | |
|--|-----------------|--------------------------------|-----------------|--------------------------------|-----------------|
| STP 8,5 | STP 11 | TP 6 | TP 9 | TP 12 | TP 16 |
| 1 ~ 230 Vac | 1 ~ 230 Vac | 3 ~ 400 Vac | 3 ~ 400 Vac | 3 ~ 400 Vac | 3 ~ 400 Vac |
| +/- 15% | +/- 15% | +/- 15% | +/- 15% | +/- 15% | +/- 15% |
| 50 / 60 Hz | 50 / 60 Hz | 50 / 60 Hz | 50 / 60 Hz | 50 / 60 Hz | 50 / 60 Hz |
| 3 ~ 230 V Δ | 3 ~ 230 V Δ | 3 ~ 400 V Y | 3 ~ 400 V Y | 3 ~ 400 V Y | 3 ~ 400 V Y |
| 8,5 A | 11 A | 6 A | 9 A | 12 A | 16 A |
| 1,9 kW - 2,5 HP | 2,2 kW - 3 HP | 2,2 kW - 3 HP | 3 kW - 4 HP | 5,5 kW - 7,5 HP | 7,5 kW - 10 HP |
| Yes | Yes | Yes | Yes | Yes | Yes |
| 3Gx1,5 mm ² L 1,5 m schuko plug | | 4Gx1,5 mm ² L 1,5 m | | 4Gx2,5 mm ² L 1,5 m | |
| 4Gx1,5 mm ² L 1,5 m | | 4Gx1,5 mm ² L 1,5 m | | 4Gx2,5 mm ² L 1,5 m | |
| Yes | Yes | Yes | Yes | Yes | Yes |
| 16 bar | 16 bar | 16 bar | 16 bar | 16 bar | 16 bar |
| 2 ÷ 12 bar | 2 ÷ 12 bar | 2 ÷ 12 bar | 2 ÷ 12 bar | 2 ÷ 12 bar | 2 ÷ 12 bar |
| 1 ÷ 11 bar | 1 ÷ 11 bar | 1 ÷ 11 bar | 1 ÷ 11 bar | 1 ÷ 11 bar | 1 ÷ 11 bar |
| ~ 1 l/min | ~ 1 l/min | ~ 1 l/min | ~ 1 l/min | ~ 1 l/min | ~ 1 l/min |
| 60 °C | 60 °C | 60 °C | 60 °C | 60 °C | 60 °C |
| IP 65 | IP 65 | IP 65 | IP 65 | IP 65 | IP 65 |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes |
| Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Integrated | Integrated | Integrated | Integrated | Integrated | Integrated |
| Yes | Yes | Yes | Yes | Yes | Yes |
| 1" - 1" | 1" 1/4 - 1" 1/4 | 1" 1/4 - 1" 1/4 | 1" 1/4 - 1" 1/4 | 1" 1/4 - 1" 1/4 | 1" 1/4 - 1" 1/4 |
| 1" 1/4 - 1" 1/4 | 1" 1/2 - 1" 1/2 | 1" 1/2 - 1" 1/2 | 1" 1/2 - 1" 1/2 | 1" 1/2 - 1" 1/2 | 1" 1/2 - 1" 1/2 |
| Yes | Yes | Yes | Yes | Yes | Yes |
| 260 x 312 x 285 mm ~ 5 Kg | | 260 x 312 x 320 mm ~ 7 Kg | | | |