MASCONTROL 3PHASE UP

NEW

ELECTRONIC DEVICE FOR CONTROL AND PROTECTION OF THE THREE-PHASE PUMP

It can be supplied either three-phase 230 Vac or three-phase 400 Vac.

Protection against accidental inversion of the pump direction of rotation.

Motor protection in case of phase failure during power supply.

Starts and stops the pump depending on opening and closing of the taps.

It has 1"1/4 male connections to guarantee a higher flow rate.

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

Is equipped with automatic restart in case of failure and anti-jamming function.

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

Can be installed on surface and submersible pumps up to 3 HP.

Maintenance free.

TECHNICAL FEATURES

Three-phase mains voltage	230 Vac / 400 Vac
Three-phase pump motor voltage	230 V Δ / 400 V Y
Acceptable voltage fluctuation	+/- 10%
Frequency	50-60 Hz
Current max.	6 A
Power max.	1,1 kW (1,5 HP) a 230 VΔ
	2,2 kW (3 HP) a 400 V Y
Protection degree	IP 65
Operating pressure max.	12 bar
Operating temperature max.	60°C
Minimum flow	~1 l/min
Male connections	Gc 1"1/4
Standard equipped cables	Gc H07RN-F 4x1,5mm²
Certifications	TÜV SÜD

CONTROL PANEL

SIGNALING OF THE WORKING PHASES AND ANOMALIES

POWER ON	Green led on	Device energized
PUMP ON	Yellow led on	Pump running
FAILURE	Red led blinking	Water shortage
RESTART	Button	Reset after failure

PATENT PENDING

TÜV SÜD

CE

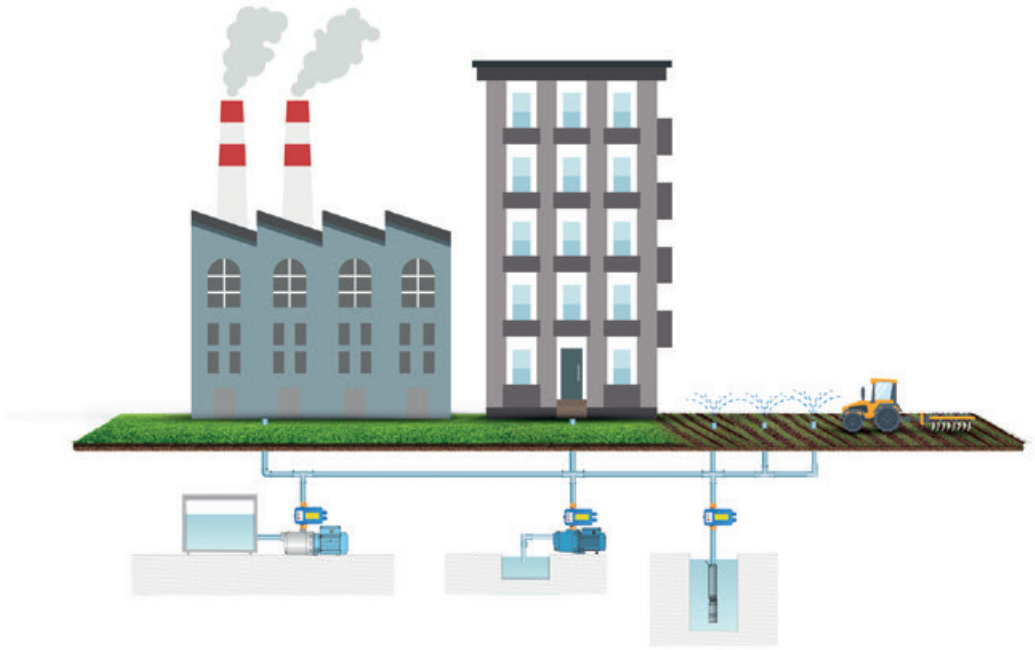
Made in Italy

INSTALLATION AND STARTUP

The device can be installed directly on the pump or between the pump and the first tap.
Make electrical connections, verify the motor direction of rotation, check that the pump is correctly primed, open a tap and energize.
The green Power on led will light up on the control panel and the pump will start (yellow "Pump on" led on) and will keep running for several seconds to pressurize the system. If this time is insufficient, the device will stop the pump (red "Failure" led blinking). Press and hold down the Restart button until the red Failure led turns off and the water comes out of the open tap. When the tap is closed, the pump will stop after a few seconds (yellow "Pump on" led turns off). From now on, the device will turn the pump on and off depending on the opening and closing of the tap.
In case of a temporary blackout, the device will automatically rearm once the electricity returns.

PROTECTIONS

In case of water shortage, the device stops the pump and protects it from dry running.
In case of accidental inversion of a phase on the supply, the device detects the anomaly and automatically maintains the correct direction of rotation of the motor as set and verified during the first installation.
In case of a missing phase on the supply, the device recognizes the anomaly and prevents the pump starting from starting.

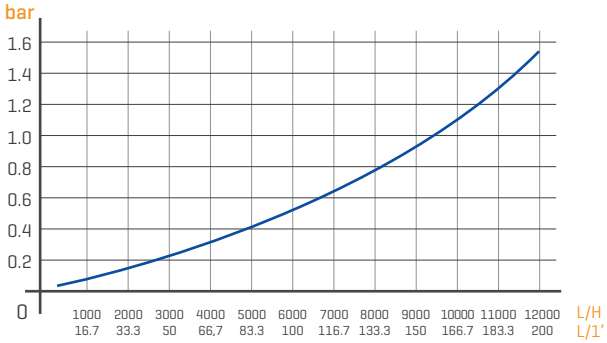


SELECTION OF THE DEVICE WITH APPROPRIATE RESTART VALUE

RESTART PRESSURE	1,2 bar	1,5 bar	2,2 bar	3 bar	4 bar
FLOORS NUMBER	4	5	7	10	13
BUILDING HEIGHT (H)	12 mt	15 mt	22 mt	30 mt	40 mt
MAX PUMP PRESSURE	min 2,5 bar	min 3 bar	min 3,5 bar	min 4,5 bar	min 5,5 bar

Standard restart value: 1,5 bar.
The restart values indicated in the table are available on request.

PRESSURE LOSS DIAGRAM
VERSION 1"1/4



AUTOMATIC RESTART AND ANTI-JAMMING FUNCTION

In case of stopping due to a water shortage, the device 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 device at any time by pressing the Restart button.
If for any reason the pump remains idle for 24 consecutive hours, the device will carry out a start-up of the pump motor for about 5 seconds.

OPTIONALS

On request, the device can be supplied with:

- Version with Gc 1"male connections.
- Wired electrical cables.
- R version with adjustable restart value between 1,5 and 3 bar.
- RM version with adjustable restart value between 1,5 and 3 bar and a pressure gauge.