

VSD1D

VSD1DM
VSD1DTT

hydroo®

VSD1DM: Wall-mounted pump driver for the control of two pumps both with variable speed

Single-phase or 3-phase pumps managed by two INVERTERS. General electrical supply is single-phase 230V. The device makes work in cascade and in alternance both pumps. Each pump is controlled by an inverter.

VSD1DTT: Wall-mounted pump driver for the control of two three-phasic electropumps

Compact automatic control device designed for the automation of pressure groups with 2 pumps, with an electronic system managed by a software responding to the rigorous requirements of efficiency and safety of the most important builders of pumps. It includes a frequency inverter for the main pump control regulating the speed in order to keep constant the pressure independently of the flow given, the auxiliary pump is managed by mean of power relay. There is alternated operating sequence, these means that the pump managed by the inverter is changed in each operating cycle and it is always the first to start.



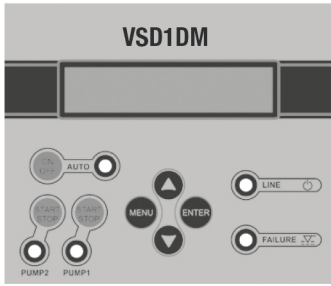
Operating characteristics

- VSD1DM drives with two frequency inverters controlled by a single control for the management of two electropumps.
- VSD1DTT drives a set with a single frequency converter (inverter). Power relay for the auxiliary pump control.
- 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.
- Alternated operative sequence.
- Automatic restore system after an interruption of power supply. System restores the previous mode keeping the configuration parameters.
- Electronic input for detection of minimum water level in aspiration tank- optional-. This system is independent of the safety system against dry-running operation.
- Volt-free contact for monitoring the alarms displayed in screen originated by irregularities or problems of the system. This option is only on one-phase devices.
- STC function (Smart Temperature Control): when temperature of electronic circuit is over 85 °C reduce automatically the frequency of the pump and decrease the generation of heat but keeping the flow of water.
- Input 4-20 mA for external pressure transducer.
- Control and information panel with LCD screen.
- External pressure transducer 0-10 bar or 0-16 bar (under request).
- Inner current sensor with instantaneous digital reading.
- Register of operational controls. Information about: operating hours, counter of starts, counter of connections to the power supply.
- Register of alarms. Information about type and number of alarms since the starting up of the device.
- Open PID in the expert menu.

Safety systems

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

Control panel



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

Technical specifications

	VSD1DM	VSD1DTT
Power supply voltage	~1 x 230 Vac	~3 x 400 Vac
Frequency	50/60 Hz	50/60 Hz
Max current pump 1	9 A (~3 x 230 Vac) or 12A (~1 x 230 Vac)	9 A (~3 x 400 Vac)
Max current pump 2	9 A (~3 x 230 Vac) or 12A (~1 x 230 Vac)	9A (~3 x 400 Vac)
Max peak current	20% 10"	20% 10"
Range of set pressure	0,5 ÷ 16 bar	0,5 ÷ 16 bar
Protection degree	IP65	IP55
Input transducer	4-20 mA	4-20 mA
Max environment temperature	50 °C	50 °C
Net weight (without cables)	4,8 kg	4,8 kg
Cooling system	Forced Convection	Forced Convection
Inlet/Outlet	~1ph/~1ph or ~1ph/~3ph	~3ph/~3ph

Dimensions

