

# VSD1

# hydroo®

## Pump driver ON-BOARD assembled for a single pump with variable speed.

Single-phase or 3-phase pumps managed by INVERTER. General electrical supply is single-phase and 3-phase ~3x230 or ~3x400 Vac -depending on model. It can be mounted individually or in groups of 2 pumps communicated and operating in MASTER-SLAVE mode with alternated sequence of operation. It will be installed over connection box of the motor through a wide range of fastenings.

VSD1-MT6      VSD1-TT5  
VSD1-MT10    VSD1-TT9  
VSD1-MM6     VSD1-TT14  
VSD1-MM12

## Operating characteristics

- Frequency inverter for the pump control.
- Adaptable to any connection box of the motor through a wide range of fastenings.
- 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 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 monophasic devices.
- Control and information panel with LCD screen.
- Output 4-20 mA for an external pressure transducer.
- 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.
- Aluminium heat exchanger.
- Cooling by forced convection by the fan of the motor with an intelligent temperature.



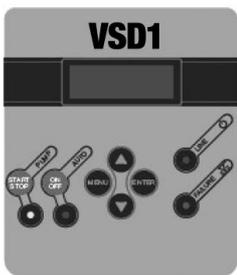
	VSD1-MT6	VSD1-MT10	VSD1-MM6	VSD1-MM12	VSD1-TT5	VSD1-TT9	VSD1-TT14
Power supply voltage	~1 x 230 Vac	~3 x 400 Vac	~3 x 400 Vac	~3 x 400 Vac			
Frequency	50/60 Hz						
Output voltage	~3 x 230 Vac	~3 x 230 Vac	~1 x 230 Vac	~1 x 230 Vac	~3 x 400 Vac	~3 x 400 Vac	~3 x 400 Vac
Max current	6 A	10 A	6 A	12 A	5 A	9 A	14 A
Max peak current	20% 10"	20% 10"	20% 10"	20% 10"	20% 10"	20% 10"	20% 10"
Range of set pressure	0,5 ÷ 16 bar 0,5 ÷ 10 bar						
Protection degree	IP65 (or maximum of engine)						
Output transducer	4-20 mA						
Max environment temperature	50 °C						
Net weight (without cables)	2,1 kg	2,1 kg	2,1 kg	2,1 kg	3,5 kg	3,5 kg	3,5 kg
Cooling system	Natural Convection	Forced Convection	Natural Convection	Forced Convection	Forced Convection	Forced Convection	Forced Convection
	i/o: ~1/~3		i/o: ~1/~1		i/o: ~3/~3		

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## Control Panel

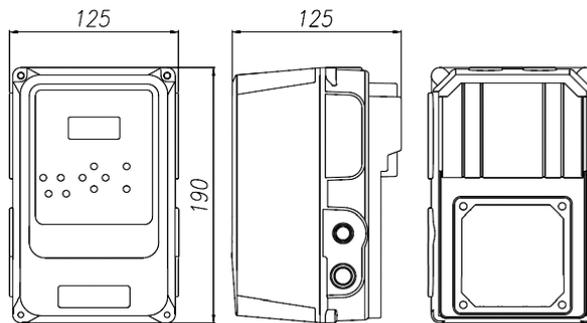
Control panel includes LCD screen, warning leds, push-buttons, START-STOP, AUTOMATIC and configuration system.



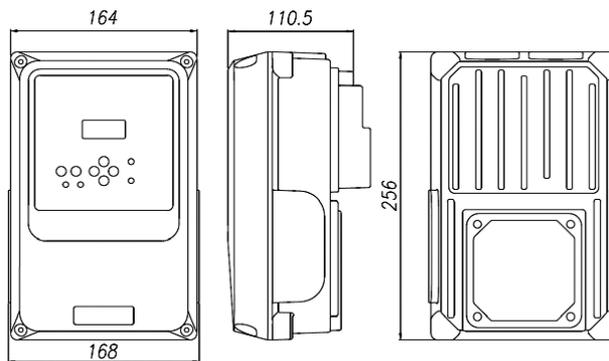
## Safety Systems

- Control and safety system against overcurrent.
- 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

## Dimensions



VSD1 - MT6  
VSD1 - MT10  
VSD1 - MM6  
VSD1 - MM12



VSD1 - TT5  
VSD1 - TT9  
VSD1 - TT14

