# MIDASub

Variable Speed Drive for Submersible Pumps





# MIDA Sub, The Inverter for Submersible Pumps.







MIDA Sub can be installed to wall or, if required, on motor terminal box. It ensures:

- Energy saving due to variable speed control.
- Soft start and soft stop.
- Extended system life and reliability.
- Installation on humid and dusty environments made possible by IP66 (NEMA 4X) protection degree.
- Simplified installation on motor or wall.
- Easy and fast commissioning thanks to initial configuration wizard.
- High thermal and mechanical performance thanks to aluminium case and independent ventilation.



### Features:

# OLED display\*

- Graphic OLED display with extended range of operating temperature and wide viewing angle.
- Led indication for stand-by, run and alarm conditions.
- Easy reading of main parameters and alarms.
- Complete programming through smartphone



# Several control modes:

- Constant pressure control.
- Constant or proportional differential pressure control.
- Constant temperature control.
- Constant differential temperaturecontrol.
- Constant flow control.
- External frequency control (trimmer) or 1 or 2 preset frequencies control.

# Built-in protections against:

- Overvoltage and undervoltage.
- Overcurrent and no load.
- Dry running.
- Overtemperature.



EMC compatibility for residential environment: Integrated PFC (P.F. 1) to meet EN61000-3-2



#### Advanced motor controls:

MIDA Sub can control most of motors, both submersible and surface:

- Singlephase 2 wire PSC Up to 1 ½ Hp
- Singlephase 3 wire PSC Up to 1 ½ Hp
- Singlephase 3 wire CS/CR Up to 1 ½ Hp
- Singlephase 3 wire CS/IR Up to 1 ½ Hp
- Singlephase 2 wire split-phase Up to 1 Hp
- Threephase asynchronous Up to 1 ½ Hp
- Synchronous PM Up to 1 ½ Hp

# Unmatched user experience

Thanks to Nastec NOW App it's possible to communicate with all Nastec devices Bluetooth® SMART in order to:

- Monitor multiple operating parameters simultaneously on the wide, high definition, coloured screen of your smartphone or tablet.
- Get statistics of energy consumption and check alarms history.
- Make programs, save them in the archive, copy them to other devices and share them among multiple users.
- Perform reports with the possibility to insert notes, images and email them or keep them into the digital archive.
- Remotely control, via wi-fi or GSM, a Nastec device, using a smartphone nearby as a modem.







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# **Technical Specifications**

Model	Vin ± 15% VAC	Max I in A	Motor type	Maximum P2 motor power *	Max I out A
MIDA S 207 1 X 23		12	2 wire, 1 phase, splitphase	0,75 kW (1 HP)	12
			3 wire, 1 phase, CS/IR	0,75 kW (1 HP)	12
	1 × 220		2 wire, 1 phase PSC	1,1 kW (1,5 HP)	12
	1 X 230		3 wire, 1 phase PSC	1,1 kW (1,5 HP)	12
			3 wire, 1 phase CS/CR	1,1 kW (1,5 HP)	12
			3 phase	1,1 kW (1,5 HP)	7.5

\* Service Factor included

- Rated frequency: 50 60 Hz (+/- 2%)
- Ambient temperature: 10 40°C (14 104 °F)
- Max. altitude at rated current: 1000 m
- Protection degree: IP66 (NEMA 4X)
- Settable digital outputs N.O. or N.C.:
   1. Motor run signal
   2. Alarm signal
- Analog inputs (10 or 15 VDC):
   1. 4 20 mA 3. 0 10 VDC
   2. 4 20 mA 4. 0 10 VDC
- 4 digital inputs, configurable N.O. or N.C. for motor run/stop
- RS485 MODBUS RTU, Bluetooth® SMART\* (4.0)







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#### Nastec srl

Via della Tecnica 8 36048 Barbarano Mossano Vicenza - Italy tel +39 0444 886289 nastec.eu

### PD Water Systems llc

2310 NW 23 St. Hialeah, FL 33016 tel +1 954 4749090 pdwastersystems.com



