



Next generation of motor on-board inverter



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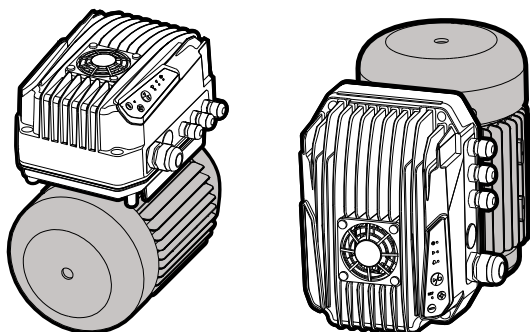

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Ideal for water booster sets, HVAC systems with circulating pumps and control of submersible pumps

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 IP55 (NEMA 4) 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.

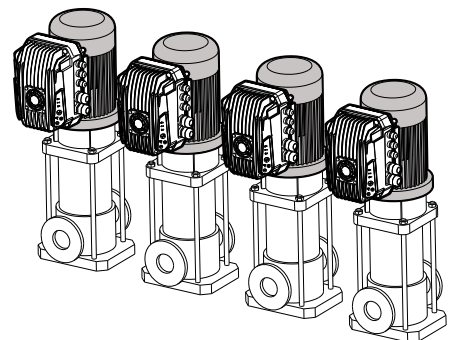
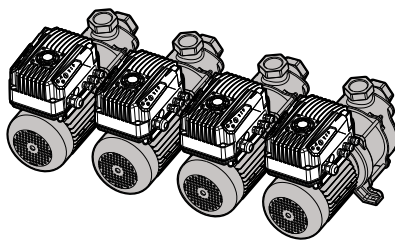
MIDA can be installed directly on motor terminal box of horizontal or vertical axis pumps





Multi-pump operation COMBO

- Up to 8 units.
- Alternance for uniform pump wearing.
- Master or slave replacement in case of failure to ensure continuity of operation.



Several control modes:

- Constant pressure control.
- Constant or proportional differential pressure control.
- Constant temperature control.
- Constant differential temperature control.
- 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 on single phase models:

- Integrated PFC (P.F. 1) to meet EN61000-3-2
- Integrated input filter for Category C1 (EN61800-3), Class B (EN55011)

Advanced motor controls:

- Next generation control of asynchronous motors.
- Sensorless control of permanent magnet synchronous motors.





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.



Alarm
UNDERVOLTAGE

Description
Power supply voltage is lower than limit or not enough energy is available from power source. If input voltage is verified to be within limits and still UNDERVOLTAGE alarm comes out, contact technical service.

Control mode	Constant value 2 set
Max alarm value (°C)	10.0
Max command (°C)	3.5
External enabling	<input type="checkbox"/>
Set value 1 (°C)	-1.0
Command 1 (°C)	-0.5
Set value 2 (°C)	-2.0
Command 2 set 1 (°C)	-0.1
Value set update (bar)	5
Frequency max control (Hz)	50
Trips delay (bar)	5
Control ramp (bar)	40.0
Delta start (°C)	0.5

- UNDERVOLTAGE**
Power supply voltage is lower than limit or not enough...
- OVERVOLTAGE**
Power supply voltage is higher than limit...
- DRY RUN COSPHI**
Motor current is lower than the security current...
- OVERCURRENT MOTOR**
Motor current is higher than the rated maximum current...
- SENSOR FAULT**
Sensor reading error...
- OVER TEMPERATURE INVERTER**
Inverter over temperature...
- IGBT TRIP ALARM**
The inverter is driven by the IGBT inverter trip signal...
- NO COMMUNICATION**
Communication between master and slave is disconnected...

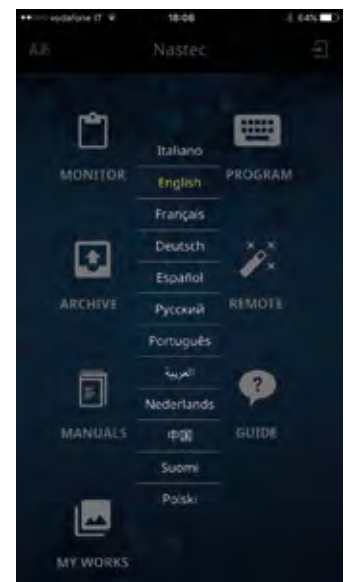
STATE: Ready

Allow to be controlled
Give the following ID to the operator, then confirm the request.

YOUR ID: 548 003 081

Control another device.
Insert here the ID provided by remote operator and send access request.

CONTROL REMOTE DEVICE



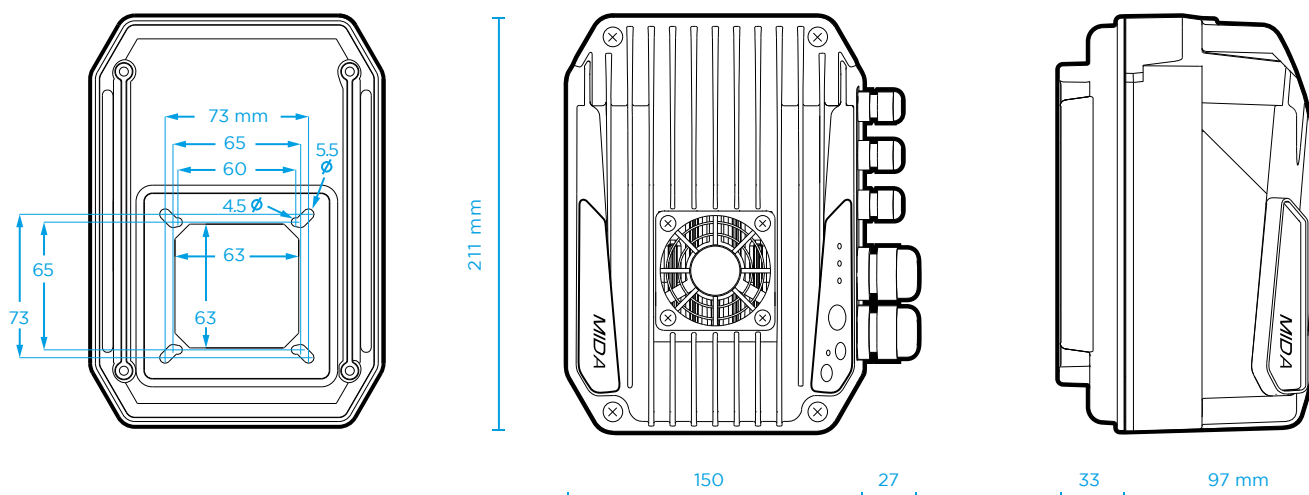
Technical specifications

Model	Vin ± 15% VAC	Max V out VAC	Max I in A	Max I out A	P2 motor power * kW
MIDA 203	1 x 230	3 x Vin	4,5	3	0,55
MIDA 205	1 x 230	3 x Vin	7,5	5	1,1
MIDA 207	1 x 230	3 x Vin	11	7,5	1,5
MIDA 304	3 x 230	3 x Vin	3,7	4	0,75
MIDA 306	3 x 230	3 x Vin	5,4	6	1,1
MIDA 309	3 x 230	3 x Vin	8	9	2,2
MIDA 404	3 x 380 - 460	3 x Vin	3,7	4	1,1
MIDA 406	3 x 380 - 460	3 x Vin	5,4	6	2,2
MIDA 409	3 x 380 - 460	3 x Vin	8	9	4

* Typical motor power. It is recommended to refer to rated motor current when selecting the MIDA model.

General specifications

- Rated frequency: 50 - 60 Hz (+/- 2%)
- Ambient temperature: - 10 - 40°C (14 - 104 °F)
- Max. altitude at rated current: 1000 m
- Protection degree: IP66
- 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
 2. 4-20 mA
 3. 0 - 10 VDC
 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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