

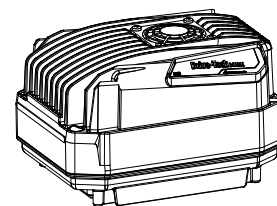
DRIVE-TECH MINI

APPLICATIONS

- Water booster sets
- HVAC systems with circulating pumps
- Control of submersible pumps (when installed on wall)

FEATURES

- Energy saving due to variable speed control
- Soft start and soft stop
- Extended system life and reliability
- Simplified installation on motor or wall
- Easy and fast commissioning thanks to initial configuration wizard
- Installation on humid and dusty environment made possible by IP55 (NEMA 4) protection degree
- High thermal and mechanical performance thanks to aluminum case and independent ventilation



SPECIFICATIONS

Advanced functionalities:

- Monitoring and programming with smartphone and FE Connect App, available for Android and iOS mobile devices
- Remote control using a smartphone nearby as a modem
- Copy and paste of programming recipes
- Ability to send reports via email
- Multilingual support

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 protection 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
- Integrated input filter for Category C1 (EN61800-3), Class B (EN55011)

Multi-pump operation (COMBO):

- Up to 8 units
- Working alternation for uniform pumps wearing
- Master or slave replacement in case of failure to ensure continuity of operation

Advanced motor controls:

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

Inputs and outputs:

- 2 programmable digital inputs for motor start & stop
- Modbus RTU
- 2 output relays for alarm and run indication
- 2 analog inputs 4-20 mA
- 2 analog inputs 0-10 V

SYSTEM PERFORMANCE

- P.F. line side: 1
- Power frequency: 50-60 Hz ($\pm 2\%$)
- Storing temperature: from $-30\text{ }^{\circ}\text{C}$ to $+70\text{ }^{\circ}\text{C}$
- Minimum ambient temperature at rated current: $-10\text{ }^{\circ}\text{C}$
- Maximum ambient temperature at rated current: $+40\text{ }^{\circ}\text{C}$
- Maximum altitude at rated current: 1000 m
- Maximum relative humidity: 95% without condensation
- Grade of protection: IP55 (NEMA 4) or motor IP when connected to motor terminal box (protect the device from exposure to sunlight and atmospheric agents)
- Connectivity: serial RS 485 for COMBO operation (up to 8 units) + Bluetooth SMART for motoring programming + MODBUS RTU

TRASDUCER SPECIFICATION

- Nominal output signal (protected against shortcut): $4 \div 20\text{ mA}$
- Power voltage [U_B], protection antipolarity: $9 \div 28\text{ V}$
- Sensor temperature range: $0\text{ }^{\circ}\text{C} \div +80\text{ }^{\circ}\text{C}$
- Environment temperature range (based on electric connection): $-20\text{ }^{\circ}\text{C} \div +80\text{ }^{\circ}\text{C}$
- Shielded cable: 2 m
- Protection degree achieved with connector coupled: IP67

New inverter device: Drive-Tech MINI and pump systems EH-DTm and EM-DTm

Franklin Electric is pleased to introduce the new inverter device Drive-Tech MINI, which is mounted onto the motor of EH and EM pumps. For many years the E-Tech Multistage Pump Series EH and EM have been considered as the most efficient pumping systems in the market. With the Drive-Tech MINI the energy-saving benefits of these systems will be even higher.



Drive-Tech MINI

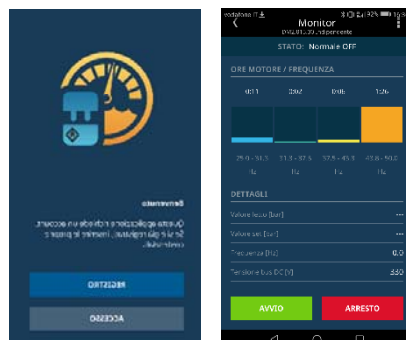
The Drive-Tech MINI has a cast aluminum casing (with IP55 enclosure rating), which is equipped with an integrated ventilation system to improve thermal and mechanical performance.

The Drive-Tech MINI with its state-of-the-art technology combines efficiency, simplicity, innovation and safety:

Efficiency: The Drive-Tech MINI achieves overall energy savings up to 40 %, compared to conventional speed control systems.

Simplicity: The Drive-Tech MINI is mounted directly onto the motor control box. It is already supplied with a 2.0 meter power cable and a 1.50 meter cable to connect with the pressure transducer.

Innovation: The Drive-Tech MINI can be controlled manually by the board panel or via Bluetooth by the Franklin Smartphone App “FE Connect Drivetechn” (Android and IOS), enabling you to set and monitor the system remotely, save working data and increase the pump performance.



**Smartphone App FE
CONNECT DRIVETECH MINI**

Safety: The integrated Class B (EN55011) input-filter prevents any type of disturbances in the domestic network to ensure a reliable use. The filter follows EMC Directives (electromagnetic compatibility).



EM-DTm



EH-DTm

In combination with the Drive-Tech MINI, the performance of the EH-DTm and EM-DTm systems has been improved even further. There are six models with flows up to 17 m³/h, head up to 101 m and power ranges from 0.55 kW up to 1.5 kW making EH-DTm and EM-DTm Pumping Systems the ideal solution for boosting systems, HVAC plants and general water supply.

The EH-DTm and EM-DTm systems can be operated with up to 8 combined units (COMBO setting) with each Drive-Tech MINI controlling and protecting its pump. The operation is shared among all connected pumps to balance the pump wearing. In case of an operation failure of a pump, the remaining pumps continue to work.

For more information, please contact us at: info@geoquipservices.co.uk or 01473 462046