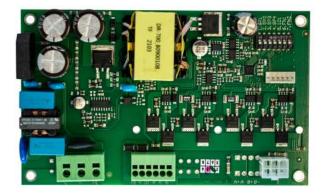


#### **Variable Speed Drive**

## **DR-700**



#### Features:

- Rotary heat exchanger stepper motor control
- Top-level energy efficiency
- Quiet and smooth sine wave control
- Hygroscopic higher speed rotor support
- Integrated power supply with EMC filter
- Analog or RS-485 Modbus interface

## **Drive design**

Simna DR-700 is designed for the air handling unit (AHU) rotary heat exchanger control. Top-level energy efficiency is achieved using best-in-class electronic components and energy saving algorithms. Drive features stepless sine wave therefore quiet and smooth motor operation.

#### Rotary heat exchanger

Drive controls standard foil or higher speed hygroscopic type rotary heat exchanger rotor. Motor and it's load is constantly monitored to detect possible failure, for example the belt. Rotor rotation sensing is provided without any external rotation sensors, but it's possible to connect the sensor for additional stage of safety, if needed.

# Flexible control options

Drive can be controlled using digital or analog control interface with automatic selection. In case of control by analog signal, default preset parameters can be used without need to configure the drive. Basic configuration, including rotation speed, can be managed using configuration switches. Using DIN input to stop operation and start the drive. More settings are available via RS-485 serial connection using Modbus protocol.

## **Drive types**

DR-700 series consist of 3 types with different power supply and control cable connection types. Motor cable is the same with both type for fast and simple connection with our FL86 bipolar motors.

#### **Technical data**

Supply voltage	230Vac ±10% 50Hz
EMC filter	Integrated
Output voltage	Up to 30V
Output current	2.8A (3A for 30minutes)
Output frequency	0350Hz
Ambient operating temp.	-40+40°C
Storage temp.	-40+70°C
Ambient humidity	585%RH, non-condensing
Protections	Overload, Short-circuit, Overvoltage
Connectors	DR-700E: 4.2mm VAL-U-LOK connectors (4 pins, 8 pins)
(Power supply, Control)	DR-700D: Spring terminals (3 pins, 6 pins)
Connector (Motor)	4.2mm VAL-U-LOK connector
Analog interface	1xAIN 010V or 420mA, 1xDIN
Digital interface	RS-485 Modbus
Dimensions	90x140x37mm