# Electronic Motor Speed Controller ADR010 with 0 - 10V output for Inverter and EC-Motors



# Application

The electronic speed controller ADR010 is designed for the use with our inverters FLC (Fan motors) and E21045 (Rotary Compressors) but also for other commercial inverters with a 0 -10V analog input. The ADR010 is also designed for all DC Motors developed for an control signal of 0-10V.

#### Structure, design, connections

Its structure, its connections and the handling itself is very similar to the controls of our MicroNova ADR- series. It is based on our more than 14 years experience and development in electronic speed controlling.

#### **Power supply**

The ADR010 is supplied for an input voltage of 24 V AC / DC as well as 230 V AC (ADR010—230 with transformer). It can be used for both single- and three-phase inverters and EC-Motors

# Chiller and Heat pump

One can use it for the "Chiller" as well as heat pump operation. The ADR010, similar to ADR80/230, is equipped with to 2 analog inputs, like 2 NTC-temperature-sensors and/or 2 pressure transmitters, 4-20mA, 0-20mA, 0-5V, 0-10V. An external control signal of 0-10V or 4-20 mA can also be merged.

#### Languages

In order to enable a worldwide use, the settings are implemented in understandable words in English, German, French, Italian and Spanish.

# Refrigerants

For use in refrigeration and heat pump technology the ADR010 contains pressure and temperature data of the refrigerants R410A, R407C, R404A, R507, R134A, R22, R32, R290, R600A, R717, R744.

# Firmware update

Through an appropriate port, it is possible to merge the latest firmware. For the next generation a port for internet is provided. This connection will allow an Internet modem to query the system status and a change in the system parameters.

### Changing parameter

The multilingual display can be parameterized by 5 keys. Two seperate LEDs indicate power and alarm.

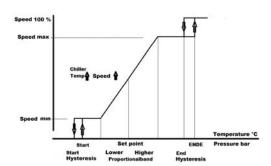
# **Analogue Input**

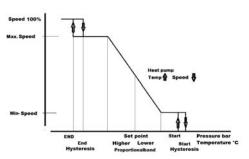
2 x 4-20mA or 2x 0-20mA or 2 x 0-5V or 2 x 0-10V

2 x NTC (10kOhm) or SPS 1x 0-10V or 1x 4-20mA

Тур	Supply Voltage to ADR010	Output signal to Inverter or EC-Motor	Execution
ADR010	24 V AC/DC	0 - 10 V	In Box
ADR010-230	230V AC	0 - 10 V	In Box









ALARM		0	Alarm
ENABLE		00	Enable externally or bridge
0 - 10V	- +	0	0-10 V Signal (EC Motor, Inverter, TRIAC)
IN 1	- +	0	Signal Input 1 —NTC, Transmitter, SPS
IN 2	- +	0	Signal Input 2 —NTC, Transmitter, SPS
12V	- +	0	Power supply pressure transducer
Bypass	- +	0	Sensors dependent/independent
ON/OFF	: +	0	External release (or bridge)
24Vac	- +	00	Power supply 24Vac
230V	- +	0	Power supply 230Vac

Power supply **ADR010** 24 VAC/DC.

ADR010-230 230 V AC and 24 VAC/DC,

Power supply Connection Screw-type connections for max. 2.5 mm<sup>2</sup>

LCD

View area Width 62.0 mm View area Height 26.0 mm

Number of characters 16 characters x 4 lines

LCD type STN Negative, Blue Transmissive

LED, White **Backlight Type** 

Keys & LEDs

Number of keys 5 (up, right, down, left, ON/OFF/ OK)

Number of LEDs 2 (alarm, power)

Analogue Input

1 or 2 Pressure Transducer 4-20 mA, 0-20 mA, 0-5 V, 0-10V

1 or 2 Temperature sensor(s) NTC (10 kOhm) 1 external SPS control 4 - 20 mA, 0 - 10 V

Removable screw-type connections, **Analogue Input Connections** 

max. 2.5 mm<sup>2</sup>

0 - 60 bar (depending on pressure trans-Pressure range

ducer)

-40 to +80 °C (depending on Temperatur range

temperature sensor)

Available in next edition

Output

0 - 10 V, (0-5V available on request) To control inverter

Yes

Yes

Alarm signal Normally open

Other connections

Bypass connection for a dual-set Yes

control

Connection to upload and update the software.

Connection for internet device

Jumpers to select NTC/Current/

Voltage

Other features

Working modes Chiller, Heat pump

R410A, R407C, R404A, R507, R134A, Available Refrigerant data

R22, R32, R290, R600A, R717, R744

in bar or C° Pressure control data

Deutsch, English, Italian, Français, Espa-Languages

-10 - +55 °C, Humidity: less than 90% Operating conditions

R.F, not condensing

# Electronic Controller Speed ADR010 with 0-10V Output





# **Dimensions**

