

### Interface overview

- 2x Ethernet with integrated switch
- 1x Ethercat
- 8x 24VDC digital outputs
- 8x 24VDC digital inputs, isolated
- 2x 0-10VDC analog inputs
- 1x RS-232

### Abstract of ports and indicators

#### POWER

Provide power for the module, with an external 24V power supply.

The status LEDs are located on the left side of the power terminal.

As soon as the controller is powered on, the ERROR LED (orange) lights up to indicate a correctly connected external power supply.

When the system has finished its boot procedure it is signaled with the RUN LED (blue).

#### RS-232

A real RS-232 interface is provided.

The status LEDs are located on the left side of the RS-232 terminal.

They indicate activity on the RS-232 interface by blinking.

#### 24V DIGITAL OUT

Eight digital outputs are provided.

They can be supplied with a separate power supply if required.

For each output there is an indicator LED fitted behind the terminal.

#### 24V DIGITAL IN (isolated)

Eight digital inputs are provided.

For each input there is an indicator LED fitted behind the terminal.

#### 0-10V ANALOG IN

Two analog inputs are provided.

They can be used, for example, to plug potentiometers.

#### 2x ETH0 (LAN)

These are two Ethernet ports with internal switch.

They are intended to connect the controller to the local network.

#### ETH1 (Ethercat)

Separate Ethernet port for remote I/O via Ethercat master.

#### RESET

Pressing the reset button restarts the controller.

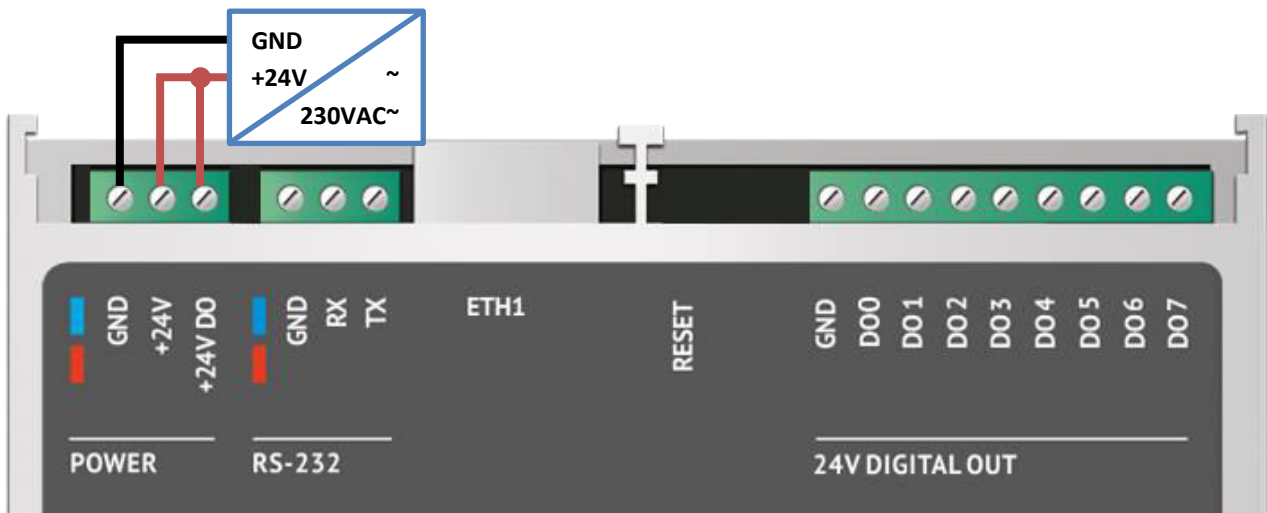
# DCS10

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### Wiring diagram

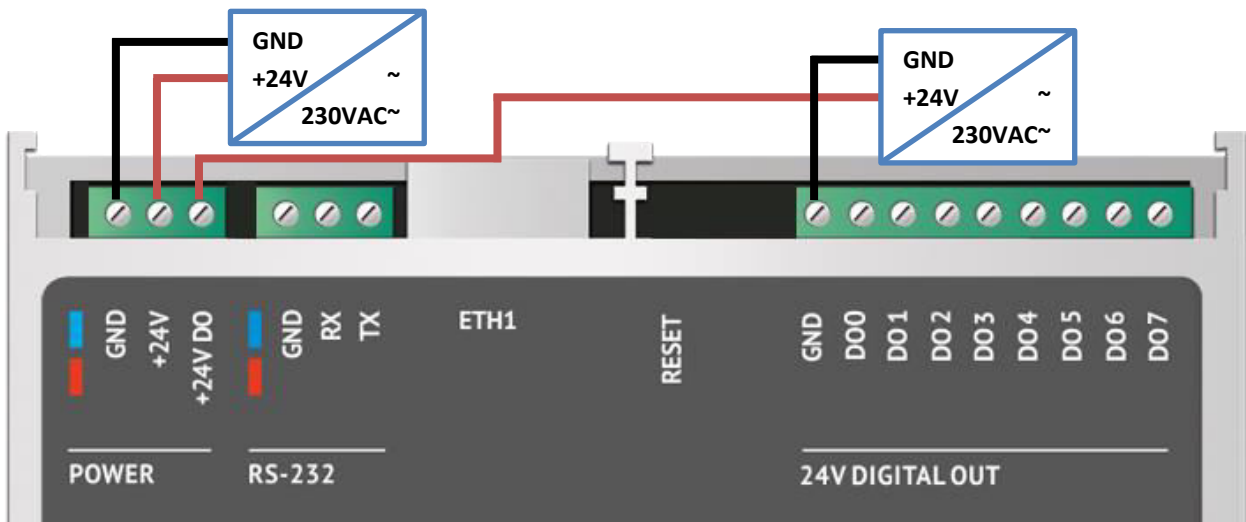
#### ONE COMMON 24VDC SUPPLY

If only one supply (power adapter) is used to supply the controller as well as the digital outputs, the power section has to be wired up as shown:



#### SEPARATE SUPPLY OF CONTROLLER AND DIGITAL OUTPUTS

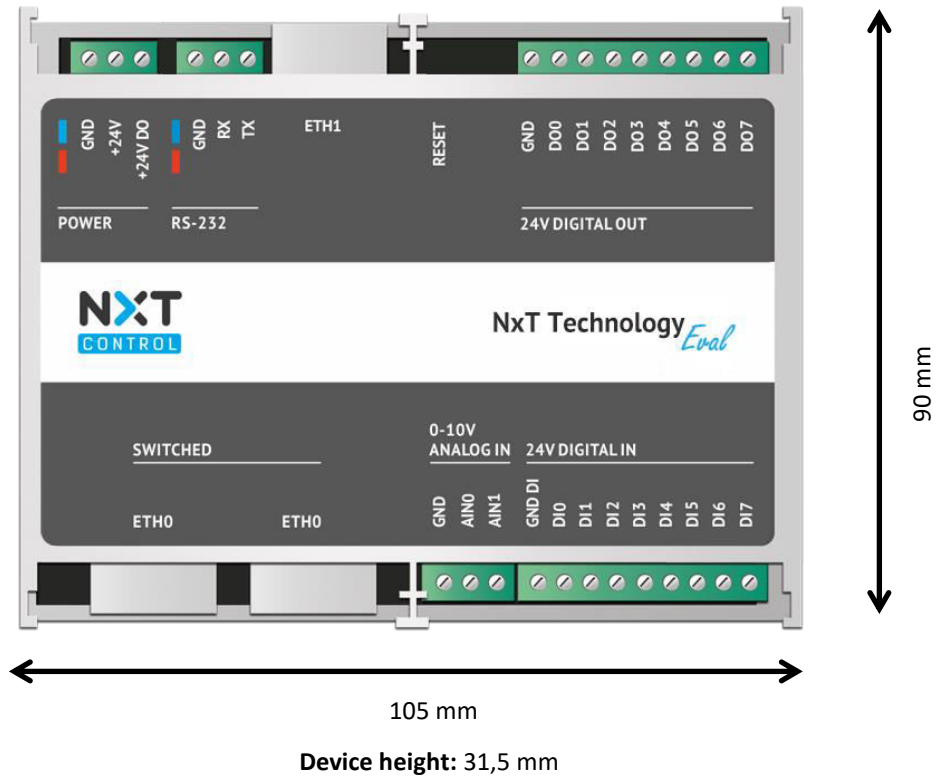
If a separate supply of controller and digital outputs is preferred, a further 24VDC supply has to be connected to the terminals +24V DO and GND (common).



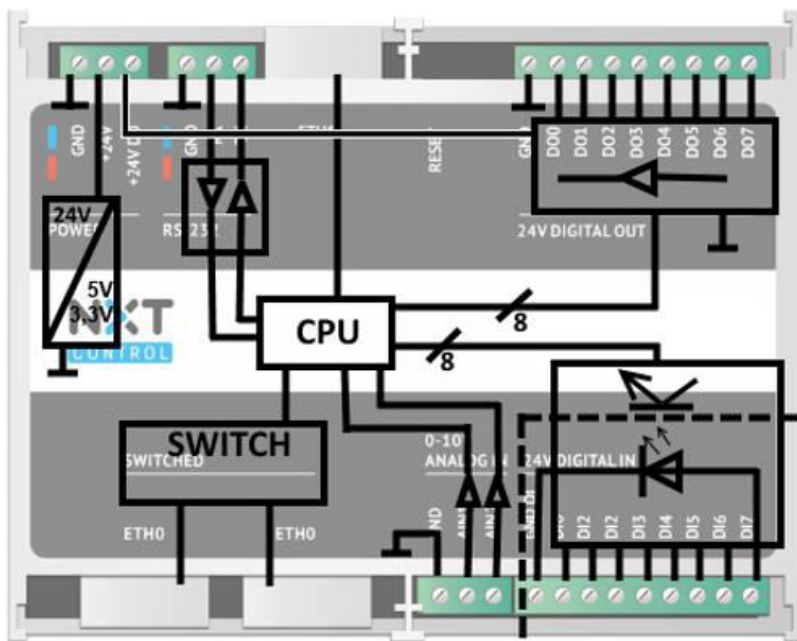
# DCS10

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## Dimensions



## Block diagram



### Technical data (Rev.1.3)

Power supply	24VDC $\pm$ 10%
Power consumption	3,5W typ. (0,15A@24VDC)
Operation temperature	5 ... 25 °C (non-condensing)
Recommended installation position	Vertical/upright, font readable

#### Digital input

Signal voltage logical „0“	0 – 12VDC
Signal voltage logical „1“	16 – 30VDC
Signal current logical „1“	2 mA typ.
Additional features	Galvanically isolated, polarity protection

#### Digital output

Ext. power supply	24VDC $\pm$ 10%
Output current per channel	0,5A
Load type	Ohmic, inductive, capacitive
Additional features	Overload and short-circuit proof

#### Analog input

Range	0 – 10VDC
Resolution	12 Bit
Internal resistance	12k $\Omega$
Additional features	24VDC tolerant (for 24h)
Suitable applications	Potentiometers, ext. voltage source

#### RTC (Real Time Clock)

Precision	$\pm$ 1,73 sec/day
Power reserve	12 days@25°C (capacitor buffered)

#### Mechanical data

##### Dimensions

Width	105 mm
Height	90 mm
Depth	31,5 mm
Weight	152 g