

## Features

- Speed/torque control
- Potentiometer and analog inputs
- Supply voltage 12 to 24 VDC
- Motor overload protection with adjustable current limiting 2 to 20 A
- START/STOP and DIRECTION discrete signals and buttons
- Soft start and stop settings
- HARD\_STOP emergency signal
- SECOND\_SPEED function
- Motor brake control
- Hardware short circuit protection
- Thermal protection

## RS PRO, DC Motor Controller, 12 → 24 V, 20A, Potentiometer, voltage, PWM and current input, speed and torque control

RS Stock No.: 0717550



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## Product Description

The controller is an electronic device designed to control the rotation torque, speed, direction and acceleration of a DC brush motor. The controller provides a motor overload protection function with adjustment of the maximum permissible current value.

A brake control function is provided. A function of switching during operation to a second preset speed by an external discrete signal is implemented.

## General Specifications

Compatible Motor Type	DC brush motors
Phase	1
Control Input	Voltage; Current loop, PWM, Potentiometer
Operating Modes	Open-loop speed and torque control
Protective Functions	Current limit, overcurrent, excess temperature, under voltage, short circuit

### Display

Status operation indicator	Green and red LED
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## Electrical Specifications

DC Motors up to	480W
Supply Voltage	12VDC to 24VDC
Current Rating	Up to 20A
Voltage Rating	12VDC to 24VDC
Maximum Output Voltage	24V
Current limiting setting	2A to 20A
Hardware short-circuit protection	30A, 15 $\mu$ s

### Inputs

Digital Inputs	6
Functionality Of Digital Inputs	<ul style="list-style-type: none"> <li>• Start/stop,</li> <li>• rotation direction,</li> <li>• emergency STOP,</li> <li>• motor brake control,</li> <li>• second speed,</li> <li>• reset</li> </ul>
Analogue Inputs	5

Functionality Of Analogue Inputs	<ul style="list-style-type: none"> <li>• Speed/torque control 0...5V</li> <li>• Speed/torque control 0...10V</li> <li>• Speed/torque control <math>\pm</math> 10V</li> <li>• Speed/torque control 4...20mA</li> <li>• Speed/torque control PWM</li> </ul>
Potentiometers	4
Functionality Of The Potentiometers	<ul style="list-style-type: none"> <li>• Speed/torque control</li> <li>• Speed 2 control</li> <li>• Current limit</li> <li>• Soft start/stop adjustment</li> </ul>
<b>Outputs</b>	
Analogue Outputs	2
Functionality Of Analogue Outputs	Motor brake, Fault signal

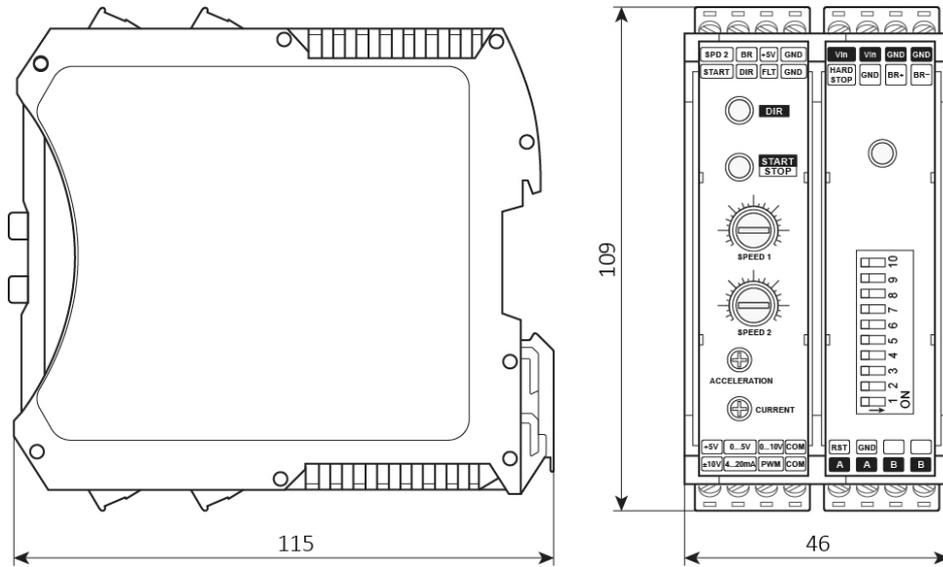
### Mechanical Specifications

Mounting Style	DIN-rail Mount
Dimensions	115 mm x 46mm x 109 mm
Height	109 mm
Width	46 mm
Depth	115 mm
Weight	0.32 kg

### Operation Environment Specifications

Operating Temperature Range	0°C to 40°C
Humidity (non-condensing)	up to 90%

Dimensions:



Connection:

