SMSD-4.2Modbus

STEPPER MOTOR CONTROLLER

SMSD-4.2Modbus is a programmable stepper motor controller with extended functionality. The controller can act as a master or slave in an RS-485 Modbus network, capable of controlling external devices or receiving control commands from a PLC via the Modbus RTU/ASCII protocol. It also supports standalone operation according to a predefined user program.
The controller provides microstepping 1/1 to 1/256. The morphing function provides a smooth transition from microstepping mode to full-step mode at a given speed, thereby maintaining torque at high speeds. Overheating protection is provided.

Technical parameters

- Voltage – 24 – 48 VDC
- Max. current per phase – 1 – 4.2 A
- Microstepping – 1/1 - 1/256
- Interfaces – USB, RS-485 (Modbus ASCII/RTU)

Inputs/Outputs

8 logic inputs:
2 fast inputs (> 70 nsec)
6 general inputs (> 5 mks)

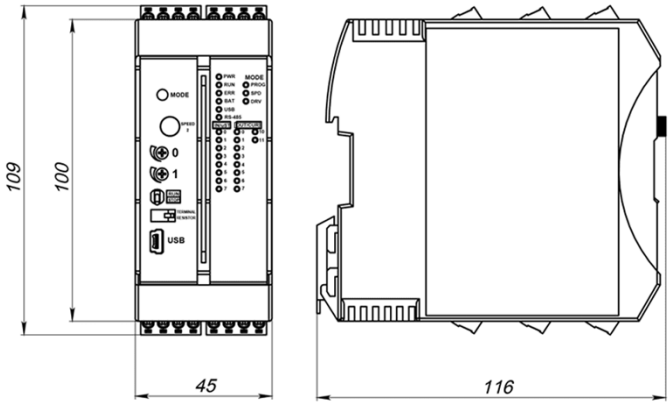
10 logic outputs:
8 transistor type
2 relay type

The state of logic I/O can be read or set programmatically from a user program or by a direct command via the Modbus protocol.

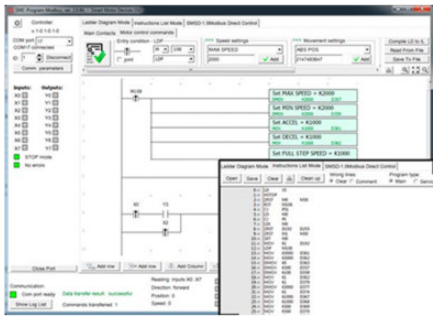
Control modes

- Program mode - this mode is designated for operation according to a given user program or for direct control of a stepper motor using the Modbus protocol. The controller can be pre-programmed similarly to general industrial PLC. The software for adjusting of the device, user programs assembling and motor control is offered free of charge.
- The controller can operate either autonomously or within an RS-485 Modbus network, acting as a slave or master device. In master mode, the controller can control external devices using Modbus protocol commands.
- SMSD-4.2Modbus provides the function for debugging of user programs. This function makes it easier to write long and complex operation algorithms and allows finding errors quickly at the stage of user program debugging.

Dimensions



Software for the controller



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SMART MOTOR DEVICES
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