domat
control system

M600   Analog output module

Summary

The M600 analog output module is a microprocessor-controlled, communicative module containing one analog output. The module uses a RS485 bus for communication, and can be easily integrated in a variety of supervision and control systems.

Applications

- ▪ **HVAC and industrial control systems – analog signal output**

Functions

The output of the module is controlled via the communication bus and can be used either as a 0...20mA current output or 0...10V voltage output.

The module communicates by means of a RS485 data bus. The communication protocol ensures smooth and easy integration in a number of control and data acquisition systems.

Removable connectors are used for all signals as well as for the data line so that mounting is fast and easy. As some communication cables include more pairs in one cable, free cores may be used for powering the module.

The communication circuits are protected against overvoltage. If the module is terminating the communication bus, i.e. it is the last in line, a terminating 120 Ω resistor may be switched on by short-circuiting of the BUS END jumpers. Two LEDs located inside of the housing enable fast diagnostics – power up and communication.
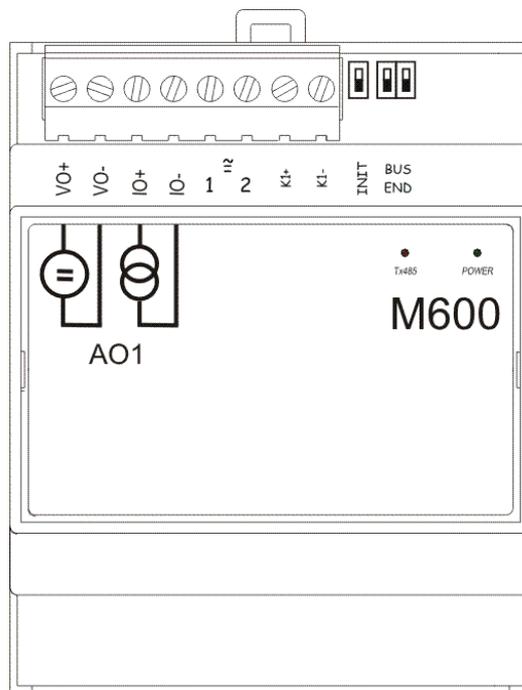
See *domat - Technical application notes* for connection examples.

All the settings are backed up in a EEPROM chip. The module is equipped with a watchdog circuit and the communication part is galvanically separated.
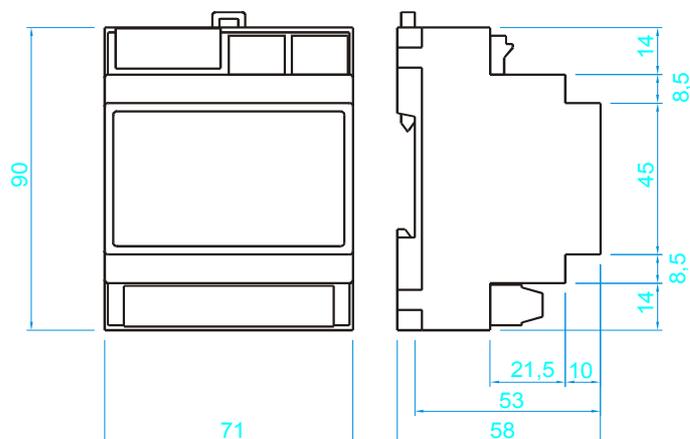
Technical data

Supply voltage	10 V ÷ 35 V DC, 14 V ÷ 24 V AC
Consumption	2500 mW
Working temperature of the module	0 ÷ 70°C
Communication	RS485, 1200 ... 19200 bit/s
Max. bus length	1200m
Max. number of modules on the bus	256
Number of analog outputs	1
Output ranges	configurable: 0...10V, 0...20mA, 4...20mA
Effective resolution	12 bit
Output load	10kΩ, max. current 10mA
Current output load	< 500 Ω
Dimensions	see below

Terminals

Marking	Description
VO+	„+" voltage output terminal
VO-	„-"voltage output terminal
IO+	„+" current output terminal
IO-	„-" current output terminal
1, 2	power, any polarity
K1+, K1-	communication bus

Dimensions

11/2004 Subject to technical changes.