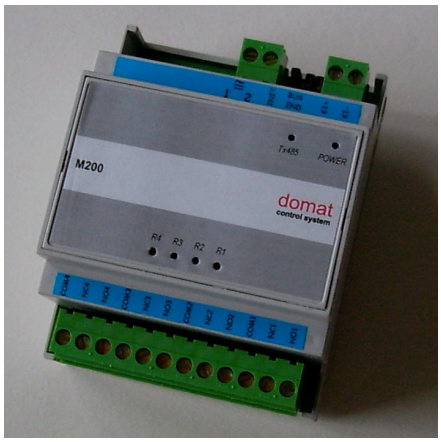
domat
control system

M700 Digital counter module



Summary

The M700 digital counter module is a microprocessor-controlled, communicative 2 binary input counter module. 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 – pulse counting from meters etc.**

Functions

The M700 module has two binary inputs which provide 12V for external contact or open collector signal. The COM terminals are interconnected inside of the module and are common for both inputs.

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 incoming and outgoing 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.

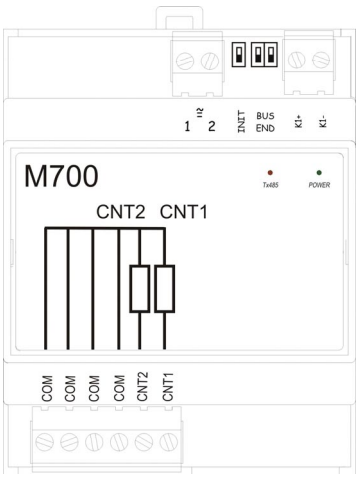
See *domat - Technical application notes* for connection examples.

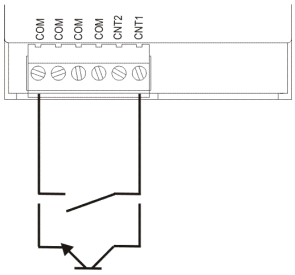
All the settings are backed up in a EEPROM chip. The module is equipped with a watchdog circuit and the communication part is galvanically separated.

Technical data

Supply voltage Consumption	10 V ÷ 35 V DC, 14 V ÷ 24 V AC 800 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	128 (the module takes 2 addresses)
Number of binary inputs	2
Max. input frequency	50 Hz
Min. „low“ level time	10 ms
Voltage at CNTx	+12 V DC
Current CNTx to COM	5 mA
Signal contact type	Reed relay or open collector
Dimensions	see below

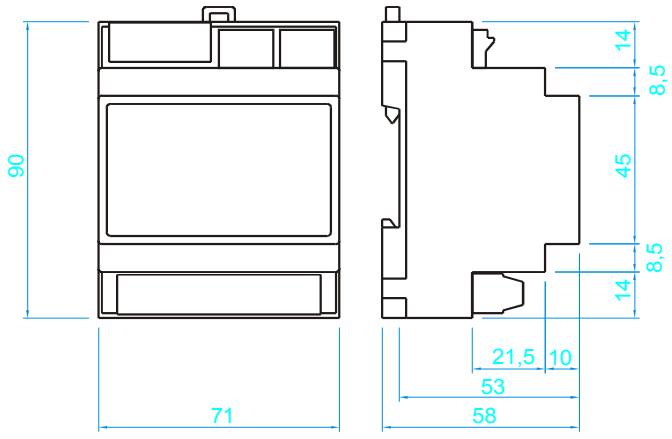
Terminals





Example of connecting of the CNT1 input

Dimensions



01/2005 Subject to technical changes.