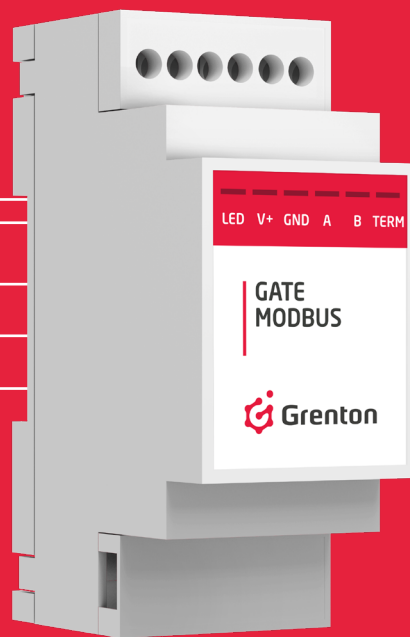


GRENTON GATE MODBUS

INT-011-E-01

UNIVERSAL GATE MODULE
FOR DIN RAIL ASSEMBLY



Module for integration with external devices and systems. Gate MODBUS enables integrations with every device supporting MODBUS RTU

- possibility to control any Modbus-based devices by means of a mobile application
- great integration flexibility thanks to the support for simultaneous communication with various devices, which may also use different transmission parameters
- reliable ethernet communication with the Grenton CLU unit

CONFIGURATION PARAMETERS CHARACTERISTICS

| Name | Description |
|----------------------|--|
| Uptime | Time of device operation since last reset (in seconds) |
| UnixTime | Current Unix time |
| FirmwareVersion | Gate software version |
| ClientReportInterval | Characteristics change report period |
| DeviceAddress | Modbus slave device address |
| AccessRights | Mode: Read or Read/Write |
| RegisterAddress | Supported register address |
| TransmissionSpeed | Transmission Speed |
| ValueType | Variable type |
| BitPosition | Bit position |
| BitCount | Number of register's bits |
| RefreshInterval | Refresh interval |
| ResponseTimeout | Response timeout |
| Divisor | Divisor |
| Endianess | Byte order |
| RegisterType | Modbus register type |
| ErrorCode | Error code |
| Value | Read or write value |
| RegisterValue | Register value |

METHODS

| Name | Description |
|-------------------------|---|
| SetDateTime | Sets date and time |
| SetClientReportInterval | Sets the characteristics change report period |
| SetDeviceAddress | Sets modbus slave device address |
| SetAccessRights | Sets the mode for read or read/write |
| SetRegisterAddress | Sets the supported register address |
| SetTransmissionSpeed | Sets the transmission speed |
| SetValueType | Sets the variable type |
| SetBitPosition | Sets bit position |

| Name | Description |
|--------------------|------------------------------------|
| SetBitCount | Sets the number of register's bits |
| SetRefreshInterval | Sets the refresh interval |
| SetResponseTimeout | Sets the response timeout |
| SetDivisor | Sets the divisor |
| SetEndianness | Sets byte order |
| SetRegisterType | Sets the modbus register type |
| SetValue | Sets read or write value |

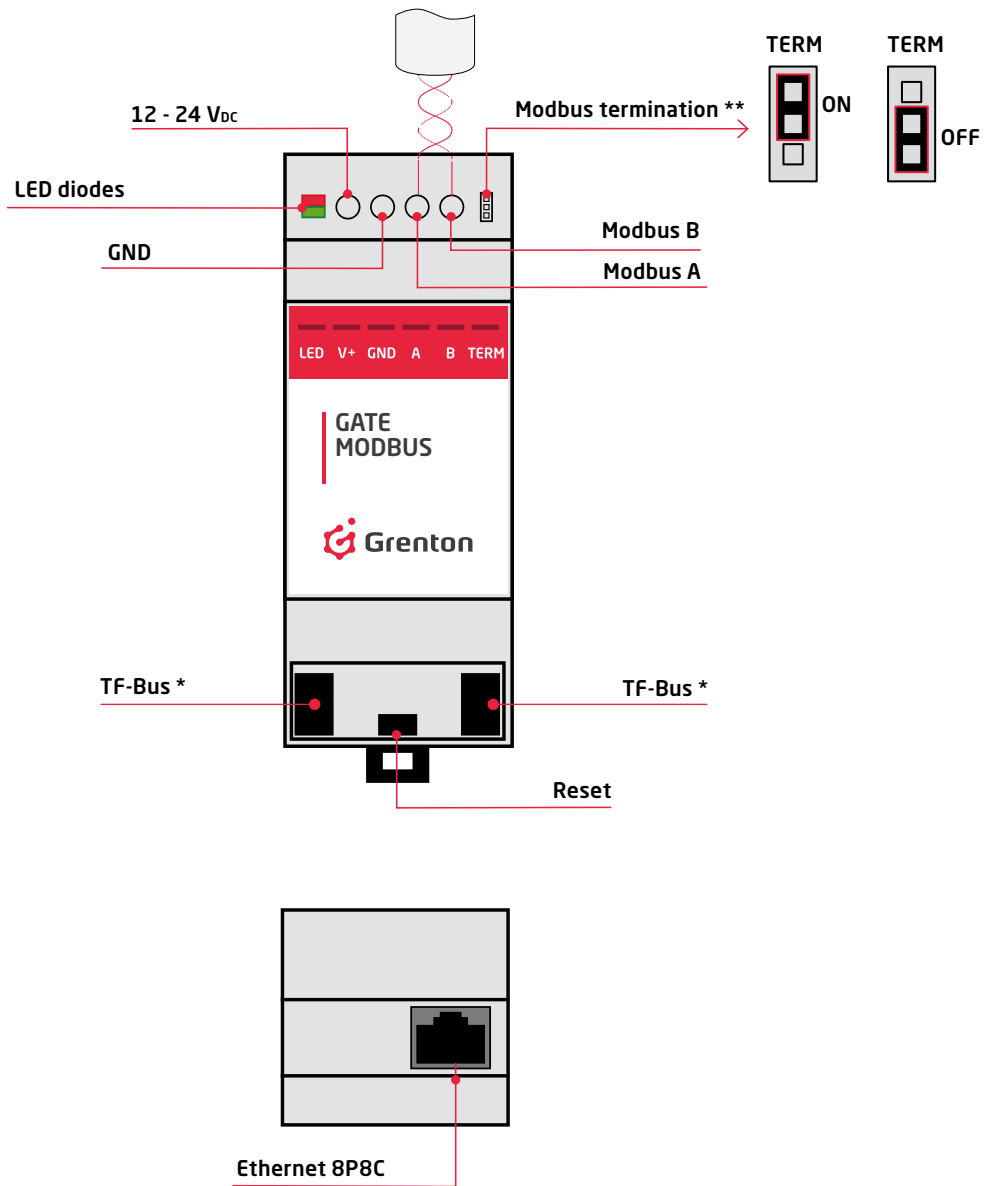
EVENTS

| Name | Description |
|----------|--|
| OnInit | Event occurring once during device initialization |
| OnChange | Event occurring when a change in the state takes place (regardless of the value) |
| OnError | Event occurring when the slave device reports an error |

TECHNICAL SPECIFICATION

| | | |
|-----------------------------|-----------|-------------|
| power options | supply DC | 12 - 24 V |
| | TF-Bus | 5 V |
| max. current input for 12 V | | 80 mA |
| max. current input for 24 V | | 50 mA |
| weight | | 80 g |
| dimensions (H/W/D) | | 52/57/21 mm |
| operating temperature range | | 0 to +45°C |
| Modbus physical layer | | RS-485 |

WIRING DIAGRAM



*) The device can be alternatively powered by means of the TF-Bus connector that provides 5 V_{DC} power supply. However, it is recommended to use external 12 - 24 V_{DC} supplies as it improves the stability of the system. The device works as a TF-Bus relay so it can be easily installed in the middle of other Grenton modules.

***) If the GATE MODBUS is located at a physical end of the bus (Modbus), a terminator jumper should be placed in the ON position. For correct operation of the Modbus, termination is required at both ends.

LED - status indication:

○ ○ No supply

● ○ Green diode blinks - system OK

● ● Slave device reports an error

● ○ Error or no configuration