

Transmitter for Coriolis Mass Flow Meter

UMC3 with Modbus – Interface (RS 485)

- Microprocessor based
- Modbus-Interface (RS 485)
- Current output
- Binary outputs
- Intrinsically or non intrinsically safe

Function

The microprocessor controlled UMC3 transmitter for use with TM, TME TMR, and TMU sensors is a programmable transmitter that processes measurement data and displays and transmits various types of measurement results.

Application

The Modbus interface of the UMC3 offers the possibility of reading measured values, reading and changing of parameters if required. The interface fulfils the requirements of the RS485-IS. It may be operated intrinsically safe or not intrinsically safe. Modbus-RTU-Protocol is supported.

As digital field bus instrument communication via Modbus complements the analogue outputs (current output and binary outputs) of the standard design. With the exception of current output 2 all outputs described in the operation manual of the UMC3 standard version are still available.





Technical Data

Transmitter

Power supply:	19 – 36 VDC, 24 VAC \pm 20 % or 90 – 265 VAC
Outputs:	Galvanically isolated
Current:	0/4-20 mA
Binary 1:	passive, optocoupler, $U_i=30$ V, $I_i=200$ mA, $P_i=3$ W or active, potential free 24 V=, max. 20 mA
Frequency:	1 kHz
Binary 2:	passive, optocoupler, $U_i=30$ V, $I_i=200$ mA, $P_i=3$ W
Status:	passive, optocoupler, $U_i=30$ V, $I_i=200$ mA, $P_i=3$ W
Protocol:	Modbus-RTU
Transfer rates:	1200 Bd up to 38400 Bd
Ambient temperature:	-20 °C up to +60 °C
Ingress protection	IP 68 (EN60529)
Explosion protection:	BVS 05 ATEX E 021 X
Increased safety EEx e (connection area):	II (1)2G EEx de [ia] IIC/IIB T6–T3
Explosion proof EEx d (connection area):	II (1)2G EEx d [ia] IIC/IIB T6–T3
Intrinsically safe EEx i (signal output):	II (1)2G EEx de [ia] IIC/IIB T6–T3, II (1)2G EEx d [ia] IIC/IIB T6–T3
CE-Marking:	EMC-Directive 89/336/EEC, EN 61000-6-3:2001 (emissions residential environments) EN 61000-6-2:1999 (immunity for industrial environments) Explosion Protection Directive 94/9/EC

For further information see manual UMC3_Modbus_BA_XX_en.

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