PHŒNIX CONTACT

HART multiplexer - MACX MCR-S-MUX - 2865599

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HART Multiplexer for online configuration and diagnostics of HART-compatible field devices, as well as for continuous documentation of process variables and states with a PC or management system for mounting on NS 35/7.5 or NS 32

Your advantages

☑ Supports online configuration and diagnostics for the connected HART-compatible field devices

☑ Communication via software tool (e.g., HART OPC server) using RS-485 interface

☑ Up to 128 HART multiplexers on one PC interface

☑ 32 HART channels per multiplexer

☑ Continuous documentation of process variables and states

☑ Electrical isolation between auxiliary voltage, RS-485 bus, and the HART channels

☑ HART field devices are accessed parallel to the transmission of the measurement signal without affecting measured value processing

☑ HART field devices connected via universal HART connection boards; direct connection if processing non-Ex signals, with separate Ex i signal isolator connected upstream if processing Ex signals

☑ Power supply via HART connection board

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 153898
GTIN	4046356153898

Technical data

Dimensions

Width	35.2 mm
Height	108.8 mm
Depth	113.6 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C (aligned)
	-20 °C ... 70 °C (Stand-alone device)

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Technical data

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 80 °C
Max. permissible relative humidity (operation)	≤ 95 % (non-condensing)

Field devices interface (HART)

Channels	16 or 32; adjustable using a switch
Connection method	Flat-ribbon cable, 14-pos. (inclusive)
Signal	HART FSK
HART specification	HART Field Communication Protocol Rev. 6.0 (downward compatible up to Rev 4.0); FSK Physical Layer Specification (Rev. 8.1)
Data transmission display	Two yellow "Tx" and "Rx" "HART" LEDs
Display error	Red "ERR" LED (flashes in case of an error in the HART bus)

RS-485 interface

Connection method	D-SUB-9 female connector
Signal	RS-485
Data flow control/protocols	Compatible with OPC HART server, PDM, PRM, and FDT/DTM
Number of HART multiplexers per bus segment	Max 31
Address setting	0...127; using a rotary switch at the front
Data rate	9600 / 19200 / 38400 / 57600 [bps]; via rotary switch at the front
Transmission length	≤ 1200 m
Display	Two yellow "Tx" and "Rx" "RS-485" LEDs

General data

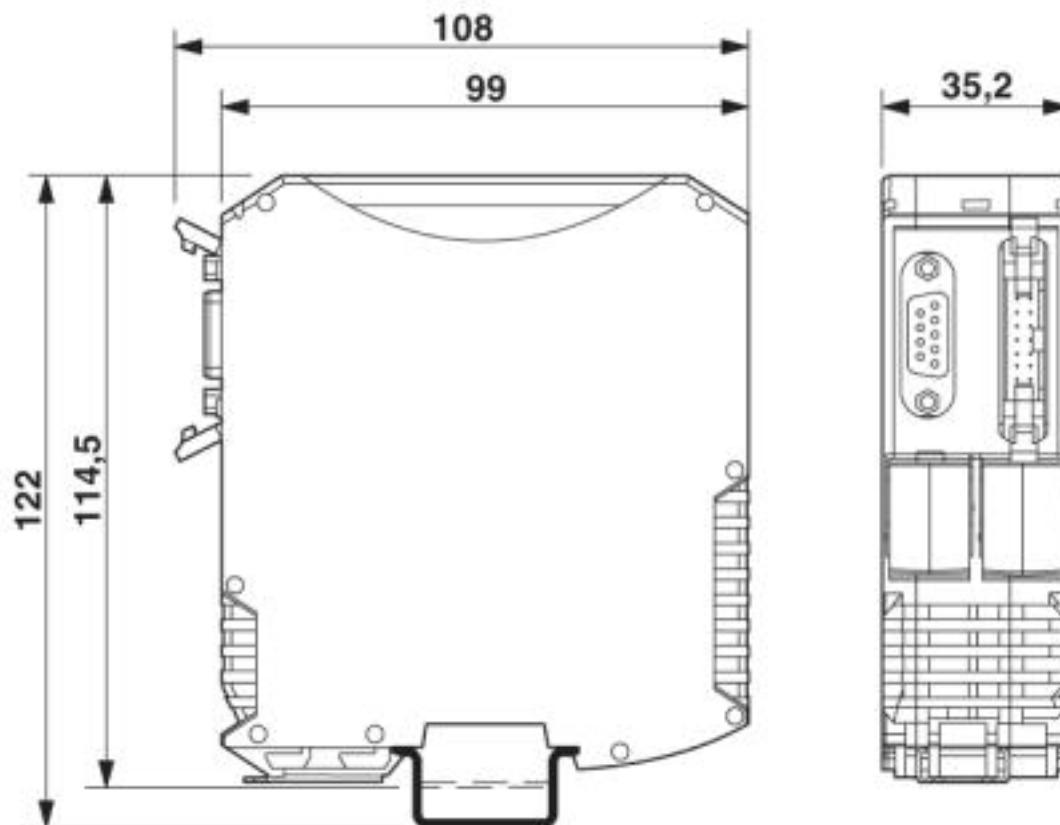| Supply voltage	24 V DC
Supply voltage range	18 V ... 31.2 V
Typical current consumption	55 mA
Nominal power consumption	1.35 W
Operating voltage display	Green "PWR" LED
Undervoltage monitoring	Yes (no faulty devices / output states)
Error monitoring	Processor error: The "PWR" LED flashes; error in the HART communication: the "ERR" LED flashes

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

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Dimensional drawing

Classifications

eCl@ss

eCl@ss 10.0.1	27242608
eCl@ss 4.0	27210100
eCl@ss 4.1	27210100
eCl@ss 5.0	27210100
eCl@ss 5.1	27210100
eCl@ss 6.0	19179200
eCl@ss 7.0	19179290
eCl@ss 8.0	27242608
eCl@ss 9.0	27242608

ETIM

ETIM 2.0	EC000310
ETIM 3.0	EC000310
ETIM 4.0	EC000310
ETIM 5.0	EC000310
ETIM 6.0	EC001604
ETIM 7.0	EC001604

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Classifications

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	43222604
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

			RU C-
EAC	EAC		DE.A*30.B.01082

Accessories

Accessories

Data plug

D-SUB bus connector - SUBCON-PLUS M1 - 2761826

D-SUB connector, 9-pos., male connector, two cable entries < 35°, bus system: Modbus, Modbus Plus, BITBUS, ARCNET, MULT/MININET (B&R), SYSTEM 2003 (B&R), P-NET, pin assignment: 1, 2, 3, 5, 6, 8 to two screw connection terminal blocks

Interface converter

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Accessories

Interface converter - PSM-ME-RS232/RS485-P - 2744416

Interface converter, for converting RS-232 (V.24) to RS-422 (V.11) and RS-485, with electrical isolation, 2 channels, rail-mountable

Repeater - PSM-ME-RS485/RS485-P - 2744429

Repeater, for potential separation and range increase in RS-485 2-wire bus systems, 3-way isolation, rail-mountable

Interface converters - FL COMSERVER UNI 232/422/485 - 2313452

Second generation FL COMSERVER UNI..., serial device server for converting a serial 232/422/485 interface to Ethernet, supports TCP, UDP, Modbus gateway, and PPP applications, incl. COM port redirector software and user documentation

Multiplexer

HART transfer board - MACX MCR-S-MUX-TB - 2308124

The HART transfer board is used to operate the MACX-MCR-S-MUX HART multiplexer. The signals from the HART-compatible signal converters are applied to the terminal strip of the transfer board where they are then transmitted to the multiplexer via an FLK.