

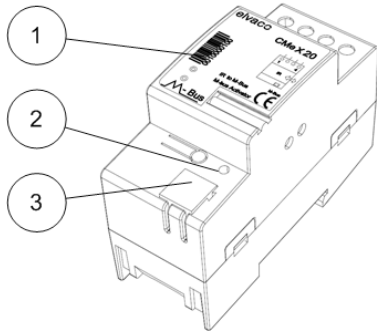
CMeX20

External MCM for ABB B21/B23/B24, M-Bus

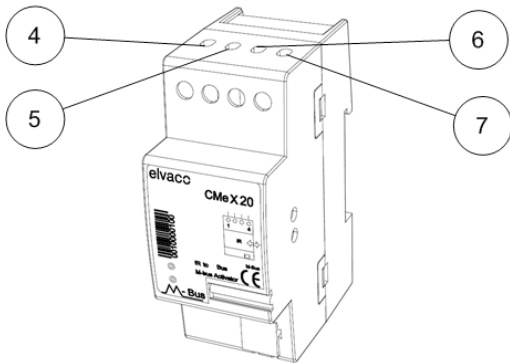
INTRODUCTION

CMeX20 is a DIN-mounted External MCM that converts IR to M-Bus. It enables standard M-Bus communication for all CMeX Series products and DIN-mounted ABB electricity meters using IR interface. For a complete description of the product or for information in Swedish, visit the Elvaco AB website, www.elvaco.com.

OVERVIEW

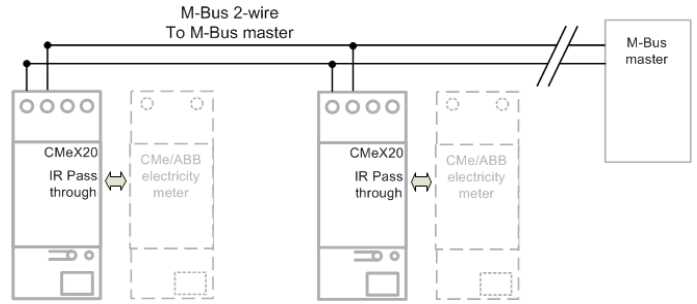


1. Serial number (secondary address)
2. LED
3. M-Bus connector
4. M-Bus in
5. M-Bus in
6. M-Bus out
7. M-Bus out



MOUNTING

The CMeX20 is mounted on a DIN-rail. The metallic clip on the bottom is used to mount and demount the unit from the DIN-rail. Mount the CMeX20 on the left side of an ABB electricity meter or another CMeX Series product.



M-BUS 2-WIRE BUS

M-Bus is a multi-drop 2-wire bus with no polarity. Use a cable of area 0.25-1.5 mm², e.g. a standard telephone cable (EKKX 2x2x0.5). Connect the M-Bus 2-wire to the screw terminals (4) and (5) or pin terminal (3).

IMPORTANT

- All connected M-Bus slave devices must have unique M-Bus secondary or primary addresses depending on addressing mode.
- Measure voltage over M-Bus slave connection to verify M-Bus master connection. Voltage should be between 21-42 VDC.

LED INDICATIONS

The product is equipped with a single orange LED, which shows communication status.

Orange LED

Mode	Product state	Visual
Permanently on	M-Bus connected	
Flashing	M-Bus communication	

TROUBLESHOOTING

Product does not respond to M-Bus master commands
Please verify your M-Bus slave configuration and connection:

- Voltage over M-Bus connection should be between 21 VDC and 42 VDC.
- All M-Bus slaves connected to the M-Bus master must have unique primary addresses or secondary addresses depending on addressing mode.
- Verify M-Bus slave baud rate used by M-Bus master. M-Bus master baud rate must be identical to M-Bus slave baud rate.

SAFETY

The warranty does not cover damage to the product caused by usage in any other way than described in this manual. Elvaco AB can not be liable for personal injury or property damage caused by usage in any other way than described in this manual.

TECHNICAL SPECIFICATIONS

Mechanics

Protection class	IP20
Mounting	Mounted on DIN rail (DIN 50022) 35 mm

Electrical connections

Supply voltage	From M-Bus
Connection M-Bus	Screw terminal 0.25-1.5 mm ²

Electrical characteristics

Nominal voltage	21-42 VDC through M-Bus connection, independent of wiring polarity
Unit loads	3 mA M-Bus 2T

User interface

Orange LED	Power/M-Bus activity
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M-Bus slave interface

M-Bus baud rate	300 and 2400 Bit/s
M-Bus information	All fields in the first telegram of the electricity meter

Integration

Meter implementation	ABB meters with IR interface
Maximum number of connected meters	1

Approvals

EMC	EN 61000-6-2, EN 61000-6-3
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ORDERING INFORMATION

Product	Part number	Description
CMeX20	1050010	External MCM for ABB B21/B23/B24, M-Bus


CONTACT INFORMATION

Elvaco AB Technical support:

Phone: +46 300 434300

E-mail: support@elvaco.com

Online: www.elvaco.com

<p style="text-align: center;">EU DECLARATION OF CONFORMITY</p> <p style="text-align: center;">This declaration of conformity is issued under the sole responsibility of the manufacturer: Elvaco AB, Kabelgatan 2T, S-43437 Kungälv, Sweden</p> <p>Product: CMeX20 Year of CE-marking: 2016</p> <p>The object(s) of the declaration listed above is in conformity with the relevant Community harmonization legislation: EMC Directive 2014/53/EU RoHS 2011/65/EU</p> <p>And are in conformity with the following harmonization standards or other normative documents: EN55022 (Radiated emission) EN 61000-4-6 (Immunity to HF-injection) EN 61000-4-3 (Immunity to RF-field) EN 61000-4-2 (Immunity to ESD)</p> <p>Kungälv, Sweden, 2016-04-16</p> <p> David Vonasek, CEO</p>
