

# HMS-EN2MB-R Linking Device INSTALLATION SHEET



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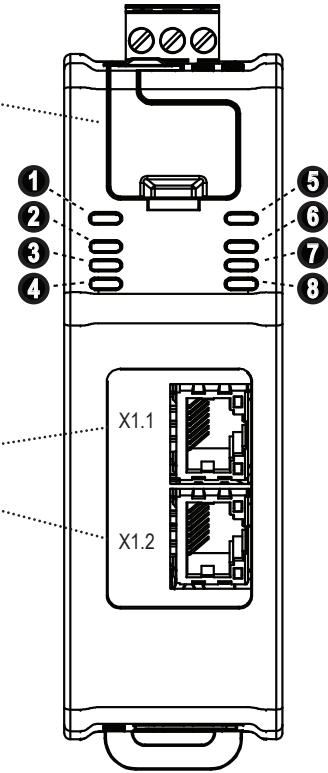
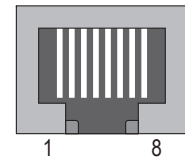
SP2093, rev 1.00, Oct 2016. HMS-EN2MB-R. [www.anybus.com](http://www.anybus.com)

## Device Front

USB port:  
 Connect a PC to the USB port  
 for firmware upgrades.

EtherNet/IP  
 Connector:

Pin no	Description
1	TX+
2	TX-
3	RX+
6	RX-
4, 5, 7, 8	Termination



## LED Indicators

No	Name	Indication	Meaning
1	Module Status EtherNet/IP	Off Alternating red/green Flashing green Green Flashing red Red	Power off Boot sequence Idle Running Major or minor unrecoverable error Major or minor unrecoverable error (Exception state or FATAL)
2	Network Status EtherNet/IP	Off Green Flashing green Red Flashing red	No power or no IP address Online, one or more connections estab- lished (CIP Class 1 or 3) Online, no connections established Duplicate IP address, FATAL error One or more connections timed out (CIP Class 1 or 3)
3 4	EtherNet/IP Ethernet Link 1 and 2	Off Flashing green Flashing yellow	No link Receiving/transmitting Ethernet packets at 100 Mbit Receiving/transmitting Ethernet packets at 10 Mbit
5	SD Card	Green Red	Accessing SD card Failure
6	Modbus-TCP Status	Off Green Flashing green Flashing red Red	Power off Communicating with Modbus-TCP network Idle Transaction error or timeout Fatal error
7 8	Modbus-TCP Ethernet Link 1 and 2	Off Flashing green Flashing yellow	No link Receiving/transmitting Ethernet packets at 100 Mbit Receiving/transmitting Ethernet packets at 10 Mbit

## Installation and Startup Summary

- Attach the linking device to the DIN-rail.
- Connect the device to the EtherNet/IP network.
- Connect the device to the Modbus-TCP network.
- Turn on the device (+24 V DC).
- Assign an IP address to the device using BOOTP-DHCP server.
- Start the Studio 5000 software.
- Search in the catalogue for the HMS-EN2MB-R.
- Add the device to the Ethernet network in the I/O configuration.
- In the general tab, assign a name and the previously chosen IP address to the device.
- Configure the device using the configuration manager and down-  
load the configuration to the device.
- Set up the EtherNet/IP communication according to the device  
configuration.

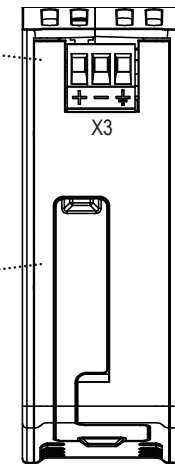
## Technical Details

- Power supply:  
24 V DC (-15% to +20%).
- Power consumption:  
Maximum power consumption is 300 mA @ 24 V DC.  
Typical power consumption: 150 mA @ 24 V DC.
- Surrounding temperature  
70 degrees C @ 225 mA @ 24 V DC.
- Functional Earth (FE):  
Internal connection to FE via DIN-rail or, if the DIN-rail can not be  
used, via the power connector.  
**Note:** Make sure the DIN-rail is properly connected to FE.

## Top View

Power:  
 (+) +24 V DC  
 (-) GND  
 (⊕) FE

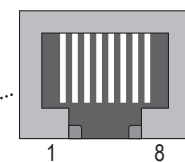
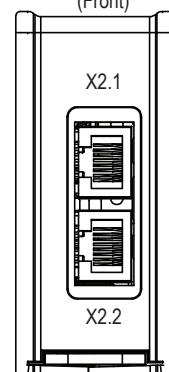
SD card slot:



## Bottom View

Modbus-TCP Connector:

(Front)



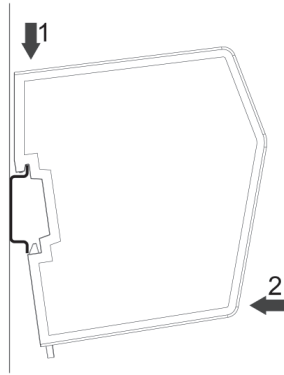
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4, 5, 7, 8	Termination

For maintenance and support, contact the HMS support department.  
 Contact information is available at the support pages on  
[www.anybus.com](http://www.anybus.com).

Further information and documents about this product can be found at  
 the product pages on [www.anybus.com](http://www.anybus.com).

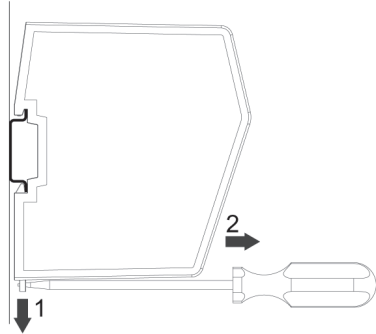
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## DIN-rail Mounting



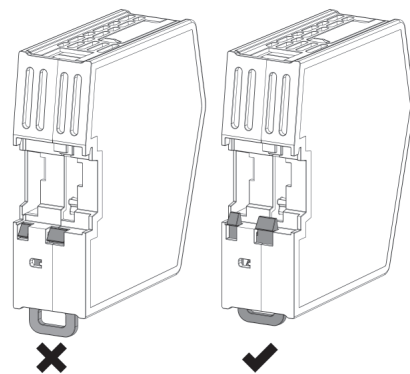
Ensure that the DIN-rail fastening mechanism on the back of the module is in a fixed and closed position, i. e. that it is pushed all the way up.

To mount the device, first hook it on to the DIN-rail (1), then push it against the DIN-rail to make it snap on (2).



To unmount the device, use a screwdriver to push the DIN-rail fastening mechanism on the back of the device down until it locks in a fixed and open position (1). Then unhook the device from the DIN-rail (2).

**Note:** Do not leave the device with the DIN-rail fastening mechanism in a fixed and open position. This may cause unnecessary wear on the fastening mechanism, so that it cannot be used efficiently. Be sure to push the DIN-rail fastening mechanism back into the fixed and closed position after unmounting the device, with reference to the picture below.



## Additional Installation and Operating Instructions

Supply voltage: The linking device requires a regulated 24 (20.4-28.8V) VDC power source.

Field wiring terminal markings (wire type Cu only, 14-30AWG)  
"Use 90°C copper (Cu) wire only"  
Terminal tightening torque (5-7 lb-in).

Use in Overvoltage Category I Pollution Degree 2 Environment.

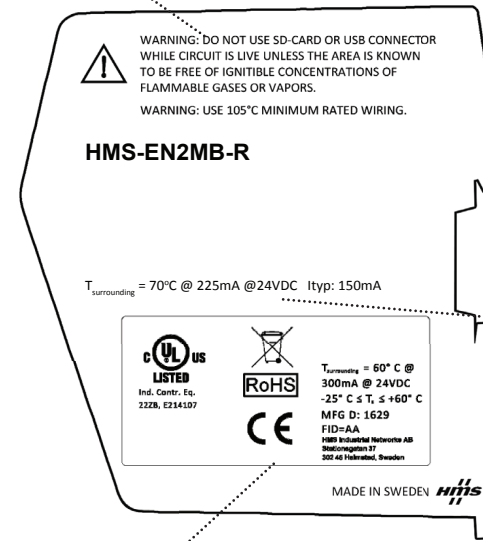
Operating temperature/Surrounding temperature:  
-25° to +60° degrees C @ 300 mA @ 24 V DC.  
**NOTE:** If the surrounding temperature exceeds +40° C, install the unit with at least 10 mm of air on each side.

Maximum surface temperature: 135 degrees C.

Pressure: 850 - 1050 millibar.

## Label Markings

Warnings



Surrounding air temperature and electrical ratings

Certification markings

## UL Certification



## EMC Compliance (CE)



This product is in accordance with the EMC directive 2014/30/EU through conformance with the following standards:

- **EN 61000-6-4**  
Emission standard for industrial environment  
EN 55016-2-3, Class A
- **EN 61000-6-2**  
Immunity for industrial environment  
EN 61000-4-2  
EN 61000-4-3  
EN 61000-4-4  
EN 61000-4-5  
EN 61000-4-6

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Further information and documents about this product can be found at the product pages on [www.anybus.com](http://www.anybus.com).