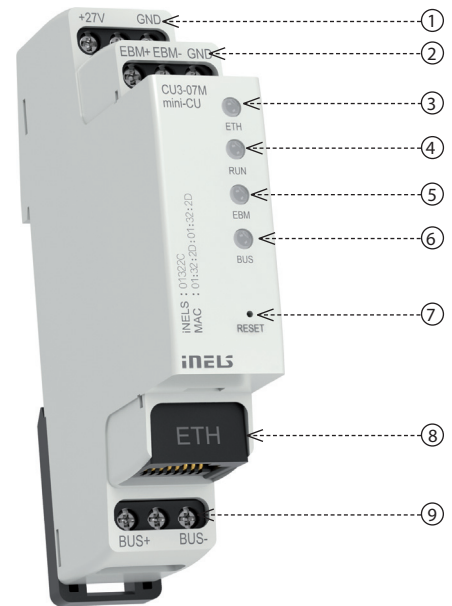




Characteristics

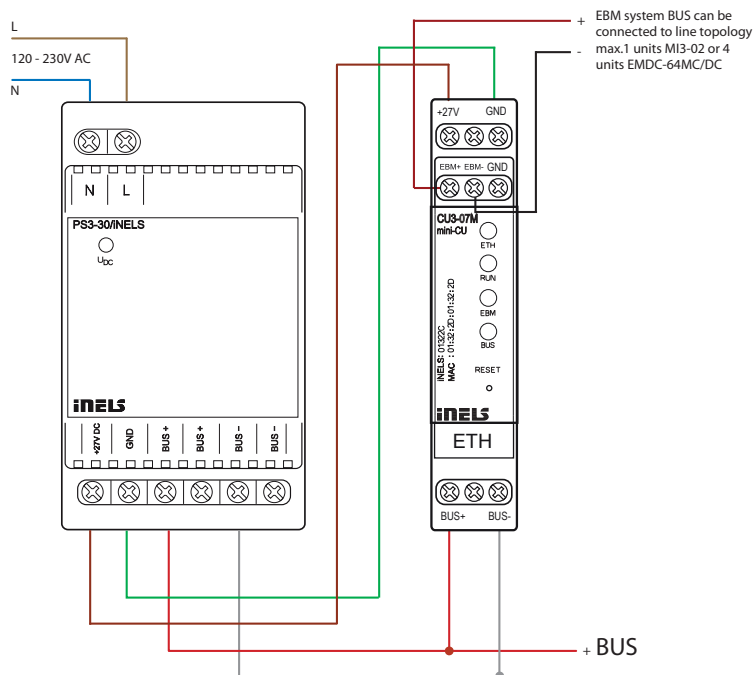
- CU3-07M is one of the basic system control units of iNELS BUS installations.
- The unit can work independently, as an autonomous project, or it can be controlled by the IP-MASTER as part of a larger project.
- The unit is equipped with one BUS to which it is possible to connect up to 32 elements from the iNELS BUS portfolio.
- The current load of one line is max, 1 A, BPS3-01M with 3 A can be used in case of connected device with more than 1 A.
- The CU3-07M unit is equipped with one EBM bus. The EBM system bus allows to connect central unit with converter DALI/DMX EMDC-64M, (max 4 Nos).
- The RJ45 100 Mbps Ethernet connector is used for direct communication with the cloud for mobile app control or for communication with the superior unit within the iNELS IP topology.
- Configuration takes place in the iNELS3 Designer & Manager software (iDM3).
- Through iDM3 it is possible to update the firmware of central units and bus connected peripheral units.
- The unit is powered by 27 V DC from inels power supply.
- System units CU3-07M in 1-MODULE design are designed for mounting into a switchboard on DIN rail EN60715.

Description of device



- | | |
|---|----------------------------------|
| 1. Supply voltage terminals | 6. LED indication of the BUS |
| 2. Bus EBM | 7. Reset button |
| 3. LED indication Ethernet LINK/SPEED | 8. Ethernet port 100 Mbps (RJ45) |
| 4. LED indication of the operating status of the unit | 9. BUS data bus |
| 5. LED bus indication EBM | |

Connection



max. 32 units per BUS branch; max. 1A (PS3-30 / iNELS) per BUS branch

CU3-07M

Indication LED STATUS

Green LED RUN:	Flashing - communication with BUS, ON - no communication
Red LED ERR:	Flashing - no project, ON - unit STOP

Communication

iNELS BUS

Indication (LED BUS):	green - unit status indication red - BUS fault indication
Maximum number of units:	max. 32 units to one BUS line
Maximum cable length:	max. 300 m (depends on power loss)

BUS EBM

Indication:	green - indication communication red - fault indication
Maximum cable length:	max. 300 m

Ethernet

Connector:	RJ45
Communication speed:	100 Mbps
Indication of the Ethernet (LED ETH):	green - Ethernet communication yellow - Ethernet speed 100 Mbps
The default IP address:	192.168.1.1

Button RESET

Restart:	short press
Reset (Factory Reset):	press the button to apply power, release the button 10s after power is applied

Power supply

Supply voltage/tolerance:	27 V DC, -20/+10 %
Rated current:	50 mA (at 27 V DC)

Operating conditions

Operating temperature:	-20 .. +55 °C
Storage temperature:	-25 .. +70 °C
Humidity:	max. 80%
Protection degree:	IP20 devices, IP40 with cover in the switchboard
Overvoltage category:	II.
Pollution degree:	2
Operating position:	any
Installation:	to the switching board on the EN60715 DIN rail
Design:	1-MODULE
Terminal:	max. 2.5 mm ²

Dimensions and weight

Dimensions:	94 x 17.6 x 64 mm
Weight:	72 g

Installation BUS:

- Two-wired BUS with an arbitrary topology (not only to be as closed circle).
- With its own modulated communications on the DC voltage supply.
- One line of BUS allows you to connect up max. 32 units of iNELS3. The current load of one line is max. 1 A. When connecting units which draw greater than 1A, power supply PS3-100 iNELS and BPS3-01M with max. 3 A sampling can be used.
- Maximum length of the BUS is approximately 300 m (depends on the voltage drop).
- Recommended cable:
 - iNELS BUS Cable - Twisted pair of copper wires with size of AWG20 wire (diameter of 0.8 mm, cross-section of 0.5 mm²).

System BUS EBM:

- Used to connect the CU3-07M central unit with MI3-02M external masters, GSM communicator GSM3-01M or converter DALI/DMX EMDC-64M.
- EBM has strictly linear topology and wires are connected to terminals EBM+ and EBM-, wires can not be interchanged.
- When installing the bus, it is necessary to observe all the requirements for installing the EBM interface (see the installation manual of the iNELS system).
- Max. length of the line of BUS is 300 m.
- The BUS EBM has to be terminated at both ends resistor with a nominal resistance of 120 Ω. This part adapted to be inserted between terminals is included into central units packages and it is necessary to insert between terminals EBM+ and EBM-.
- Recommended cabling:
 - CAT5e UTP and higher, or FTP CAT5e and higher or STP CAT5e and higher.
- The configurations of units and the whole system are done via Ethernet, through configuration software - iNELS3 Designer & Manager (iDM3), which is designed for operating systems Windows 7, Windows 8 and Windows 10.
- The central unit features two communication protocols:
 - ELKONET - to communicate with Connection Server or directly with the application iHC.
- Supported Software:
 - Parameterization, configuration, control and visualization: iNELS3 Designer & Manager (iDM3).
- By means of iDM3, you can update firmware of central units and peripheral units connected by BUS.

Warning

Before the device is installed and operated, read this instruction manual carefully and with full understanding and Installation Guide System iNELS3. The instruction manual is designated for mounting the device and for the user of such device. It has to be attached to electro-installation documentation. The instruction manual can be also found on a web site www.inels.com. Attention, danger of injury by electrical current! Mounting and connection can be done only by a professional with an adequate electrical qualification, and all has to be done while observing valid regulations. Do not touch parts of the device that are energized. Danger of life-threat! While mounting, servicing, executing any changes, and repairing it is essential to observe safety regulations, norms, directives and special regulations for working with electrical equipment. Before you start working with the device, it is essential to have all wires, connected parts, and terminals de-energized. This instruction manual contains only general directions which need to be applied in a particular installation. In the course of inspections and maintenance, always check (while de-energized) if terminals are tightened.