

# WEA 102

# **KNX** - Power supply

Installation instruction: Please read the manual carefully before installment. The manual should be kept.

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# **1.Technical data**

Size		4 DIN-rail modules of 18mm
Input voltage		120-230 VAC, 50 / 60Hz, allowed range 102-253 VAC
Power consumption		approx 24VA (nominal)
Output voltage		29 VDC (nominal value), allowed range 28-30 VDC, low current (SELV)
Output current		640 mA (nominal value), short circuit current limited to 1,5 A
Buffer time		by power failure of the engagement voltage approx 200ms by nominal load
Connection	Input (net)	plug-in terminals - 0,5…3,3mm² (AWG 12) onewired, stripping length 9-10mm
	Output (bus)	spring contact on data rail bus terminals, 0,60,8mm <sup>2</sup> onewired
	Output voltage (unthrottlet)	bus terminal (yellow-white), plug-in terminals, 0,60,8mm <sup>2</sup> onewired
Protection type		IP 20
EMC-requirements		EN 50090-2-2
Surrounding conditions	Working	Working temperature -5 - +45°C Rel. humidity 5% - 93% (non condensation)
	Storage	Storage temperature -25 - +70°C rel. Humidity 5% - 93% (non condensation)

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# 2. Declaration of conformity

We hereby confirm that power supply WEA 102 complies with

- EMC directive 89/336/EEC, as amended (91/263/EEC, 92/31/EEC, 93/68/EEC)
- Low Voltage Directive 73/23/EEC as amended (93/68/EEC) and

- EIB Handbook version 3 Volume 4 Part 2 (Electrical Safety, EMC, environmental conditions) and

Volume 9 part 1/Part 2/del 3 (Electrical and mechanical features standardized EIB).

WindowMaster A/S:

(Jan Norup, Manager Product Solutions)

Skelstedet 13, DK-2950 Vedbæk, 25. May 2010

Declaration no. 029 0510 CE

# 3. Placement and functions of LEDs- and switches



Picture 2

A1 Bus terminal red-black (low current terminal)

A2 Reset-contact

A3 Bus terminal yellow-white (low current terminal)

A4 Red LED - indicates that the WEA 102 is positioned in reset mode

A5 Green LED - indicates that the WEA 102 is working correct

A6 Red LED – indicates that the bus line is overloaded or short circuited

A7 Plug-in terminals for connection supply voltage (net terminal)

A8 Earth terminal

### Installation conditions

The instrument can be used for permanent installations indoor in dry rooms for built-in distribution board or cabinets with DIN-rail.

### Warning

- The product must be built-in to a powercurrent distribution board (230/400).
- The product must be installed and started by an authorized electrician.
- For safety reasons it must be possible to disconnect the WEA 102.
- The existing safety precautions must be kept.
- The product must not be opened.
- The planning and working on electric systems must respect all relevant national guidelines, directions and regulations.



# 4. Mounting and connecting



Picture 3

### **Connection to Bus without DIN-rain**

If the connection to the Bus terminals is established without the use of a DIN-rail, the screening cap on the data rail connection must be removed and replaced with the enclosed isolation cap, to ensure sufficient isolation from the DIN-rail.

Removal of cap: (picture 3)

On the back side of the power supply (D1) a cap (D3) is covering the connection contact (D2). Insert a screwdriver between the power supply (D1) and the cap (D3) and remove the cap.

Mounting of isolation cap: (picuture 3)

Place the isolation cap (D4) on top of the contact system and press it down until it clicks.

### Connection to bus with DIN-rail

WEA 102 is clicked onto the DIN-rail.

Ensure that the type shields on <u>all</u> the products placed on the DIN-rail are turning in the same direction (reading direction), this will ensure that the polarization of the products are correct. Free areas on the DIN-rail must be shielded / covered.

### Connection of main voltage (picture 4)



Connection is carried out with the plug-in terminals (E1). The wire (E2) is stripped ca. 9-10mm.

Picture 4

### Disconnection of main voltage (picture 4)

With a screwdriver, press on the lock (E3) on the terminal and pull out the wire (E2) of the terminal (E1).

### Installation of the bus terminal

Place the terminal in the guiding groove and press the terminal down to the stop.

### Connection of bus terminals (picture 5)



- For terminal (F2) a 0,6...0,8mm<sup>2</sup> onewired conductor is used.

- Terminal F2 consists of a red (yellow) terminal (F2.1) and a black (white) terminal F2.2.
- Each terminal can be connected to up to 4 onewired of 0,6...0,8mm<sup>2</sup>.
- Conductor F2.4 is stripped approx 5mm and inserted into terminal F2 (red/yellow = +, black/white = -).

## Dismounting of the low current terminal (picture 5)

Pull the terminal F2 off and wriggle the BUS conductor F2.4 back and forth while pulling.

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