

**BCD 100  
BCD Decoder  
User manual**



<i>Company:</i>	<i>Device:</i>	<i>Document:</i>	<i>Code:</i>	<i>Date:</i>
Ediseja 21	BCD 100	User manual	BCDMU367	05.09.2020

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# 1 PREFACE

## Liability statement

We have checked the contents of this manual to ensure that the descriptions of both hardware and software are as accurate as possible. However, deviations may occur so that no liability can be accepted for any errors or omissions contained in the information given.

The contents of this manual will be checked in periodical intervals, corrections will be made in the following editions.

We reserve the right to make technical improvements without notice.

## Contact

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## Copyright

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## Explanation of the symbols



Read the instructions!



Device was tested with 2,5 kV AC voltage to check the device insulation.



Device ground terminal.



Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC; the affixed product label indicates that you must not discard this electrical/electronic product in domestic household waste.

## Warnings

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In this paper the following terms are used:

Danger

indicates that death, severe personal injury or substantial property damage will result if proper precautions are not taken.

Warning

indicates that death, severe personal injury or substantial property damage can result if proper precautions are not taken.

Caution

indicates that minor personal injury or property damage can result if proper precautions are not taken. This particularly applies to damage on or in the device itself.

**General information**

These paper contain the information that is necessary for the proper and safe operation of the described devices. This paper is intended for technically qualified personnel.



**Warning!**

**Hazardous voltage is present inside the device during operation. Disregarding of safety rules can result in severe personal injury or property damage.**

**Only qualified personnel may work with described devices after being familiar with warnings and safety notices in this paper and other safety regulations.**

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**Warning!**

**Device must operate completely assembled! Device must be used as described. No modifications of the device should be made.**

---



**Warning!**

**Do not open device while it is energized! Hazardous voltage is present inside the device. Disconnect all connectors before opening!**

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**Warning!**

**If device is damaged disconnect all connectors! Send it to the manufacturer for inspection.**

---



**Warning!**

**Connect to earth before attaching any connector!**

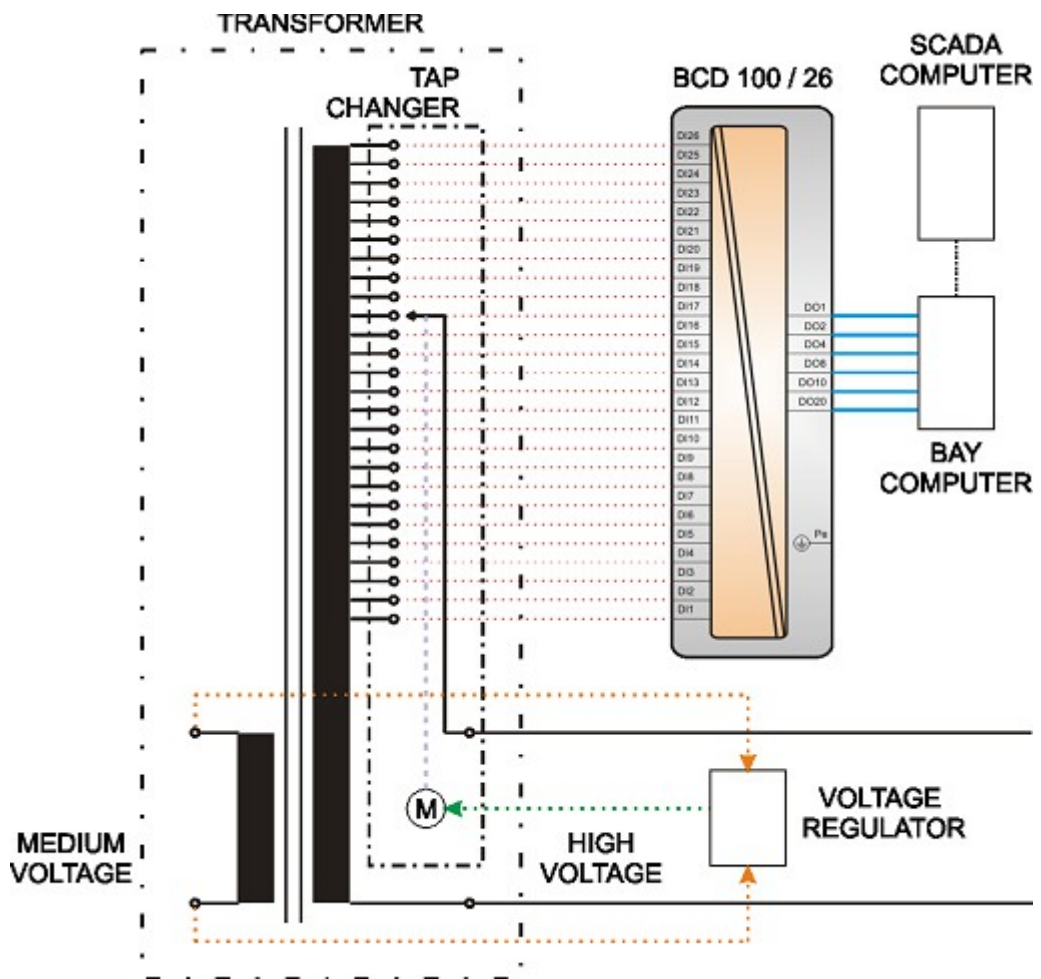
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## 2 DESCRIPTION

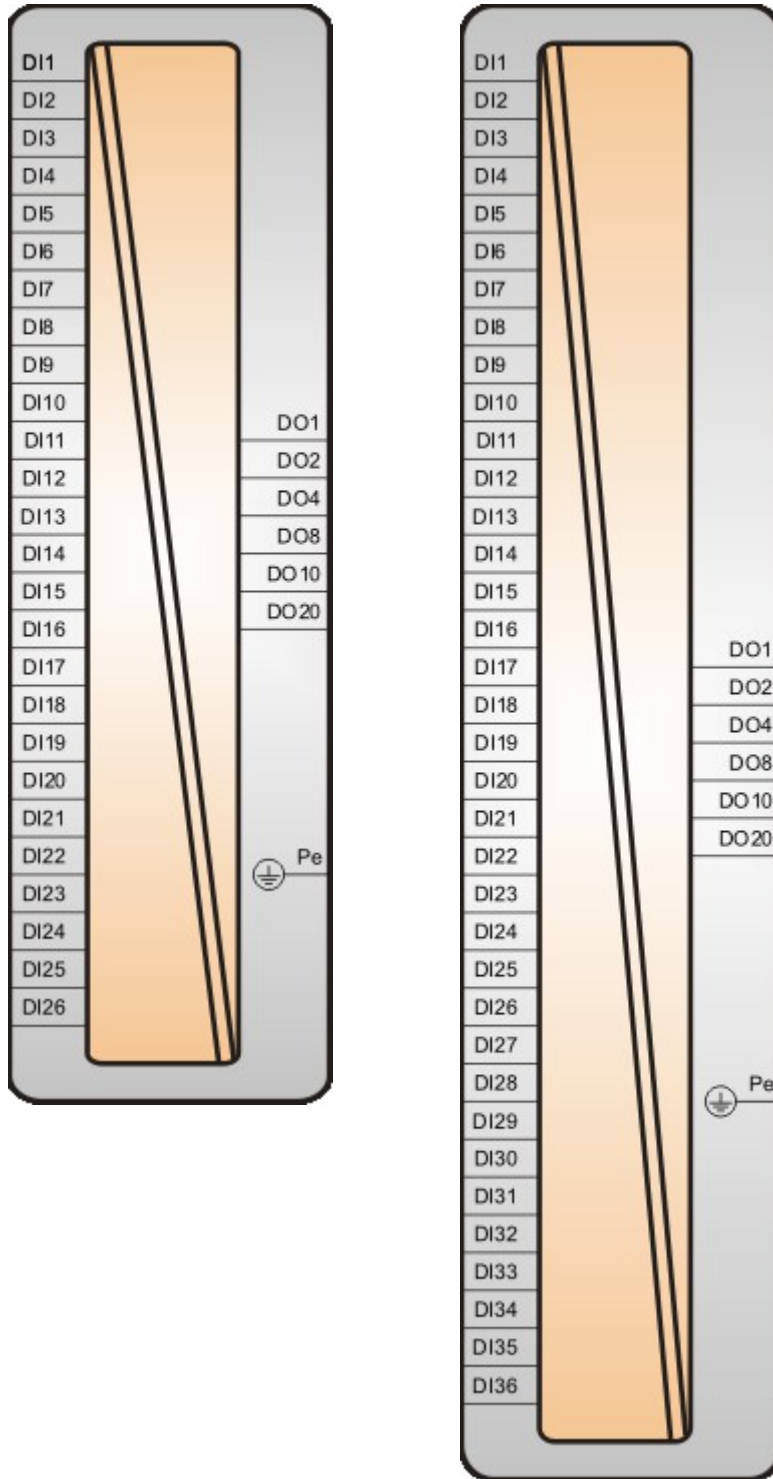
BCD 100 is device which converts DC signals to BCD code. Usually is used for converting many transformer tap changer positions into BCD code. BCD code is then captured by bay computer which send tap changer position to SCADA.

Device BCD 100 / 26 has 26 inputs and 6 outputs. Device BCD 100 / 36 has 36 inputs and 6 outputs. Device does not need power supply as it is powered from inputs.

### 2.1 TYPICAL APPLICATION



### 3 SCHEMATIC



Picture 1: General diagram BCD 100 / 26 (left) & BCD 100 / 36 (right)

## 4 INSTALLATION

### 4.1 INSTALLATION



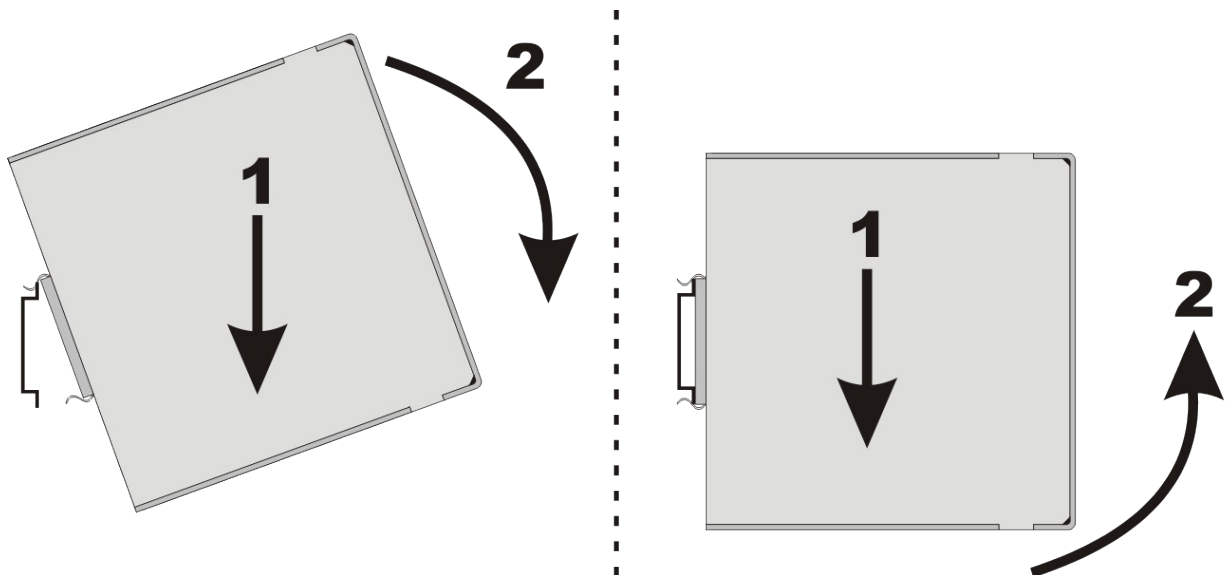
#### Warning!

Hazardous voltage is present inside the device during operation. Disregarding of safety rules can result in severe personal injury or property damage.

Only qualified personnel may work with described devices after being familiar with warnings and safety notices in this paper and other safety regulations.

#### Following instruction must be taken into consideration:

- ◆ The device must be accessible to qualified personnel only.
- ◆ The device is permitted to operate in enclosed housing or cabinet only.
- ◆ The device location must be vibration-free.
- ◆ The admissible operating temperature must be observed.
- ◆ Check the device for damage at unpacking. If device is damaged it must not be installed but it should be send to the manufacturer for repair.
- ◆ The device should not be opened.
- ◆ The device should be mounted on a 35 mm rail (acc to EN 50022).
- ◆ Attach ground wire before attaching power supply. Device must be grounded during operation! Use 2,5 mm<sup>2</sup> wire.
- ◆ Single core or stranded wire 0,5 – 2,5 mm<sup>2</sup> must be used. If stranded wire is used, ferrules must be used to prevent fraying. Recommended stripping length is 5 mm.
- ◆ Protective earthing wire must be terminated with tinned copper ear terminal.



Picture 2: left; installation, right: deinstallation

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## 5 COMMISSIONING & MAINTENANCE

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### 5.1 COMMISSIONING

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**Warning!**

Hazardous voltage is present inside the device during operation. Disregarding of safety rules can result in severe personal injury or property damage.

Only qualified personnel may work with described device after being familiar with warnings and safety notices in this paper and other safety regulations.

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**Following instruction must be taken into consideration:**

- ◆ Device must operate completely assembled! Device must be used as described. No modifications of the device should be made.
- ◆ Attach ground wire before attaching any connector. Device must be grounded during operation!
- ◆ Do not open device while it is energized! Hazardous voltage is present inside the device.

### 5.2 MAINTENANCE

The device is maintenance-free. Disconnect power supply before cleaning it. Use moist cloth. Do not use liquids.

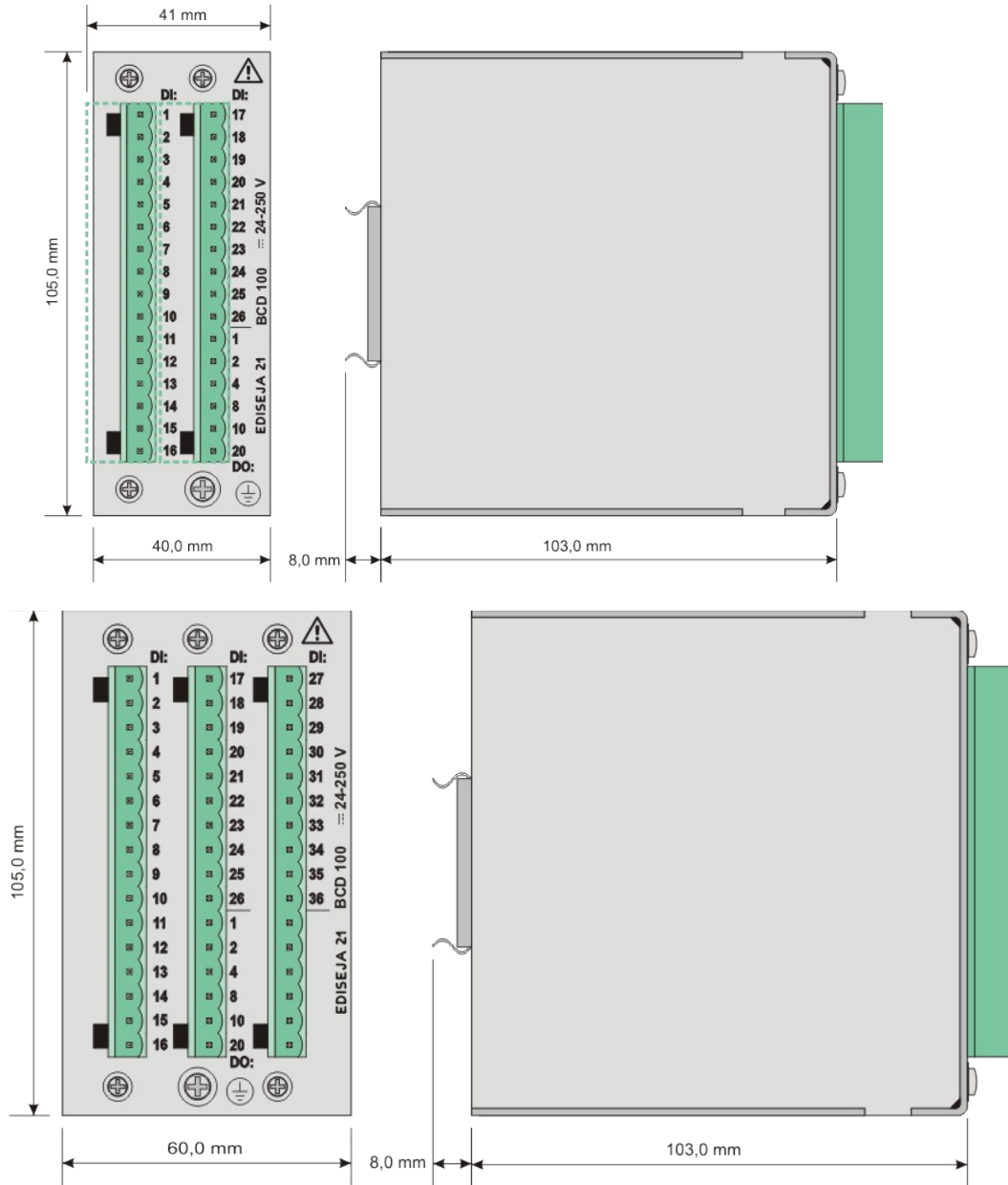


## 6 TECHNICAL DATA

Input / Output		
Rated voltage	DC	24 - 250 V
Permissible voltage range	DC	19 V - 275 V
Current	DC	0,5 A max
Connector type	screw type „MSTB“ Phoenix 16 pin	
Wire	crosssection	0,5 – 2,5 mm <sup>2</sup>
	type	single or stranded wire
	voltage rating	500 V
	colour	see valid standard
Ground wire	crosssection	Cu, 2,5 mm <sup>2</sup>
	colour	see valid standard

Device			
Weight	cca 0,3 kg		
Dimensions (see picture)	(H)	(D)	(W)
	105 mm	111 mm + connectors	40 mm (BCD 100 / 26) 60 mm (BCD 100 / 36)
Temperature range	0 °C to +55 °C		
Humidity operating	up to 95 % (noncondensing)		
Enclosure	Material	Al	
	IP	20	
Mount type	standard DIN 35 rail (acc. to DIN EN 50022)		
Class	I		
Overvoltage category	II		

# 7 DIMENSIONS



Picture 3: Dimensions

## 8 ORDERING

ORDERING NUMBER:

BCD 100 /

**Number of inputs:**

26 inputs .....	26
36 inputs .....	36

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