

**Приложение 2**  
к Положению о Четырнадцатом Санкт-Петербургском конкурсе  
молодых переводчиков «*Sensum de sensu*»

**Конкурсные задания**  
**Четырнадцатого Санкт-Петербургского конкурса молодых переводчиков**  
**«SENSUM DE SENSU»**  
**2014**

**Раздел «Английский язык»**

*Работая с английским языком, береги русский язык.*

**Номинация I. «Перевод специального текста с английского языка на русский язык».**

**Задание. Перевести с английского языка на русский язык пункты 4.1 и 4.2:**

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## 4. INSTALLATION

### 4.1 Mounting on DIN rail and dimensions

The controller is designed to be mounted on a DIN rail. The figure below shows the dimensions for each size.

Mounting:

- place the controller on the DIN rail and press it down gently. The tabs at the back will snap into place and lock the controller.

Removing:

- lift the tabs using a screwdriver applied to their release slots. The tabs are kept in place by springs.

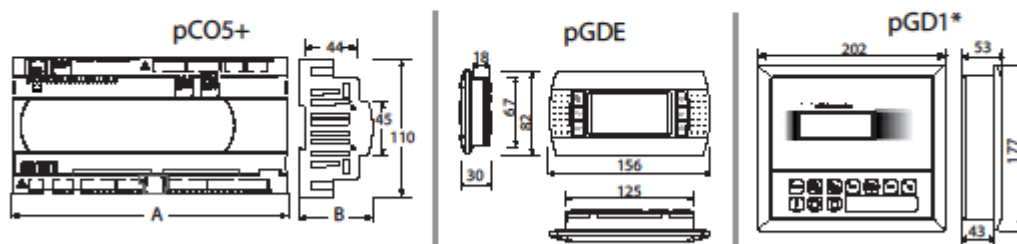


Fig. 4.a

DIMENSIONS (mm)					
	Small	Medium	Built-in driver	Large	Extralarge
A	227.5	315	315	315	315
B	60	60	60	60	60
B - with USB port/built-in terminal	70	70	70	70	70
B - with ULTRACAP module	-	-	75	-	-

Tab. 4.a

### 4.2 Installation

#### Environmental conditions

Avoid installing the controller and the terminal in places with:

- exposure to direct sunlight and to the elements in general;
- temperature and humidity outside the product's range of operation (see "Technical Specifications");
- large, rapid fluctuations in room temperature;
- strong magnetic and/or radio frequency interference (avoid installing near transmitting antennas);
- strong vibrations or knocks;
- presence of explosives or flammable gas mixtures;
- exposure to aggressive and polluting atmospheres (e.g. sulphur and ammonia vapours, salt mist, fumes) that can cause corrosion and/or oxidation;
- exposure to dust (formation of a corrosive patina with possible oxidation and reduced insulation);
- exposure to water.

#### Positioning the controller inside the electrical panel

Install the controller inside an electrical panel in a position where it cannot be reached and is protected from knocks or impacts. The controller should be placed inside the panel in a position where it is physically separated from power components (solenoids, contactors, actuators, inverters, etc.) and their respective cables. The ideal solution is to house these two circuits in two separate cabinets. Proximity to such devices/cables may cause random malfunctions that are not immediately evident. The panel's casing must allow an adequate flow of cooling air.

ENG

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**Important:**

- For safety reasons the controller should be installed inside an electrical panel so that the only accessible parts are the display and the built-in terminal's keypad.
- Install the controller so that the disconnection devices can be used safely and without hindrance.
- When laying out the wiring, separate as much as possible the probe cables, digital input cables and serial line cables from the power cables (connected to contactors, thermomagnetic devices, etc.) avoid electromagnetic interference.
- Never run power cables and probe signal cables in the same conduits (including the ones in the electrical panels).
- For control signals, use shielded cables with twisted wires. If the control cables have to cross over power cables, the intersections should be as close as possible to 90 degrees; under no circumstances should the control cables be laid parallel to the power cables.
- Keep the paths of the probe cables as short as possible and avoid making spiral paths that enclose power devices.
- In case of malfunctions do not attempt to repair the device, but contact a CAREL service centre.

**Electrical installation**



**Important:** Before servicing the equipment in any way disconnect the controller from the power mains by putting the system's main switch on OFF.

Make sure the system is provided with a power disconnect conforming to regulations. Use cable lugs that are suitable for the terminals used. Loosen each screw and insert the cable lugs, then tighten the screws. There is no limit to the number of wires that can be connected to each individual terminal. When tightening the terminal screws apply a tightening torque no greater than 0.6 Nm. For information on the maximum allowable length of the connections to the analogue/digital inputs and to the analogue outputs please refer to the "Technical Specifications" table. In environments subject to strong disturbance use shielded cables with the braiding bonded to the earthing conductor in the electrical panel. The terminals can accept wires with a maximum cross-section of 2.5 mm<sup>2</sup> (12 AWG). After making the connection, gently tug on the wire to make sure it is sufficiently tight.



**Note:**

- secure the cables connected to the controller with clamps placed at 3 cm from the connectors;
- if the power transformer's secondary winding is earthed, make sure the earth conductor is bonded to the conductor that goes to the controller and is connected to terminal G0. This applies to all the devices connected to the controller through a serial network.



**Important:**

- Using a supply voltage other than specified can seriously damage the system.
- Connect the fuse close to the controller.
- Installing, servicing and inspecting the controller should be done only by qualified personnel and in compliance with national and local regulations.
- All the very low voltage connections (24 Vac/Vdc or 28 to 36 Vdc analogue and digital inputs, analogue outputs, serial bus connections, power supplies) must have reinforced or double insulation from the power mains.
- Avoid touching or nearly touching the electronic components mounted on the boards to avoid electrostatic discharges from the operator to the components, which can be very damaging.
- Do not press the screwdriver on the connectors with excessive force, to avoid damaging the controller.
- Using the device in any way other than specified by the Manufacturer can compromise its protection system.
- Use only optional boards and connectors supplied by CAREL.

**4.3 Preliminary operations**

**Installing the serial cards**

The Fieldbus and BMS2 cards can be added to the controller. If, for the required application, you can add a Fieldbus serial port and a BMS serial port, which are available as accessories (see chap.1).

To install them, proceed as follows:

1. Locate the Fieldbus or BMS serial port.
2. Unplug the cover from the cover.
3. Using a pair of nippers, cut out the perforated plastic part to create an opening.
4. Plug the optional card into the edge-card connector, making sure it is firmly secured and makes contact.
5. Put back the cover so that the serial card's connector is aligned with the opening.
6. Make the electrical connections required.

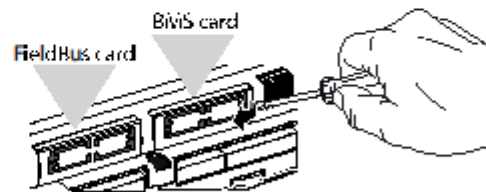


Fig. 4.b



**Note:** For details, refer to the instructions sheets of the cards to install.

**Installing the pCOe expansion card**

See instructions sheet code +050003265.

**Installing the Ultracap module**

See instructions sheets codes +0500042IE and +0500041IE.

**4.4 Serial network electrical connections**

To improve the controller's immunity against electromagnetic interference, the serial connection cable should be a shielded twisted pair cable, 2-pole or 3-pole depending on the insulation of the serial connection. The following rule applies:

- if the serial port is isolated (functionally) from the power supply, a third wire is required in the serial cable to act as a common reference for the controllers. If the serial port is not optically isolated and the common reference is already present, no third wire is required.

**Technical specifications for connections**

Use a shielded, twisted pair cable (AWG 20-22) with inter-conductor capacitance <90pF/m.

Master device	HW	Lmax(m)	Wire/wire capacitance (pF/m)	Resistance on first and last devices	Max. no. of slave devices on bus	Data rate (bit/s)
FBUS PC	RS485	1000	< 90	125 Ω	32	250000
		1000	< 90	125 Ω	32	250000
pLAN		500	< 90	-	32	625000/ 115200

Tab. 4.b



**Note:** In case of a Master-Slave network the max. allowable length is 90 m. If the network is ring, then 60 m. Cable 120 Ω, 120 Ω terminating resistors to the first and last devices in the network.

**Non-optically-isolated serial port**

This is the case of the serial ZERO - pLAN (J11), Fieldbus 2 (J23 and J26) and BMS2 if not optically isolated (on models with built-in ports that are not optically isolated).

## Раздел «Английский язык»

### **Номинация II. «Художественный перевод прозы с английского языка на русский язык».**

#### **Задание. Перевести с английского языка на русский язык:**

**Elizabeth Gaskell**

**WIVES AND DAUGHTERS**

(from Chapter 39)

'Mamma, it may sound very cross, but I must tell Molly and you, and everybody, once for all, that as I don't want and did not ask for more than my allowance, I'm not going to answer any questions about what I do with it.'

She did not say this with any want of respect; but she said it with quiet determination, which subdued her mother for the time, though often afterwards when Mrs. Gibson and Molly were alone, the former would start the wonder as to what Cynthia could possibly have done with her money, and hunt each poor conjecture through woods and valleys of doubt, till she was wearied out;' and the exciting sport was given up for the day.

At present, however, she confined herself to the practical matter in hand; and the genius for millinery and dress, inherent in both mother and daughter, soon settled a great many knotty points of contrivance and taste, and then they all three set to work to 'gar auld claes look amaist as weel's the new.'

Cynthia's relations with the squire had been very stationary ever since the visit she had paid to the Hall the previous autumn. He had received them all at that time with hospitable politeness, and he had also been more charmed with Cynthia than he liked to acknowledge to himself when he thought the visit all over afterwards.

'She's a pretty lass sure enough,' thought he, 'and has pretty ways about her too, and likes to learn from older people, which is a good sign; but somehow I don't like madam her mother, but still she is her mother, and the girl is her daughter; yet she spoke

to her once or twice as I should not ha' liked our little Fanny to have spoken, if it had pleased God for her to ha' lived. No, it's not the right way, and it may be a bit old-fashioned, but I like the right way. And then again she took possession o' me as I may say, and little Molly had to run after us in the garden walks that are too narrow for three, just like a little four-legged doggie; and the other was so full of listening to me, she never turned round for to speak a word to Molly. I don't mean to say they're not fond of each other, and that's in Roger's sweetheart's favour, and it's very ungrateful in me to go and find fault with a lass who was so civil to me, and had such a pretty way with her of hanging on every word that fell from my lips. Well! a deal may come and go in two years! and the lad says nothing to me about it. I'll be as deep as him, and take no more notice of the affair till he comes home and tells me himself.'

So although the squire was always delighted to receive the little notes which Cynthia sent to him every time she heard from Roger, and although this attention on her part was melting the heart he tried to harden, he controlled himself into writing her the briefest acknowledgements. His words were strong in meaning, but formal in expression; she herself did not think much about them, being satisfied to do the kind actions that called them forth. But her mother criticized them and pondered them. She thought she had hit on the truth when she had decided in her own mind that it was a very old-fashioned style, and that he and his house and his furniture all wanted some of the brightening up and polishing which they were sure to receive, when—she never quite liked to finish the sentence definitely, although she kept repeating to herself that 'there was no harm in it.'