

DATA SHEET

# Control Panel CP600-eCo

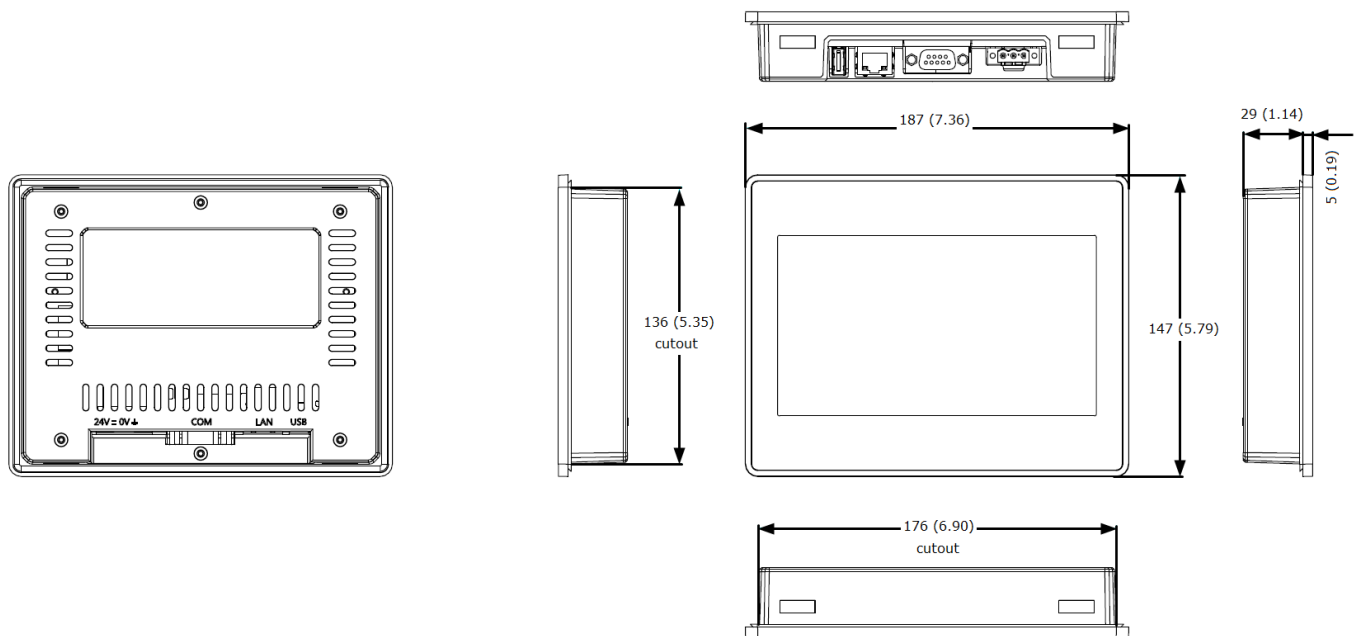
CP607, CP607-B



## 1 Ordering Data

| Part No.        | Description                                                                                                                                                     | Product Life Cycle Phase |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 1SAP507100R0001 | CP607, control panel, TFT graphical display, single-touch screen, 7", 800 x 480 pixel, for PB610 applications and visualization of AC500 V3 web server          | Active                   |
| 1SAP507100R2001 | CP607-B, control panel, TFT graphical display, single-touch screen, 7", 800 x 480 pixel, for PB610 applications and visualization of AC500 V3 web server, black | Active                   |

2 Dimensions



 The dimensions are given in mm and in brackets in inch.

3 Technical Data

3.1 Product Data

| Parameter        |                    | Value                                            |
|------------------|--------------------|--------------------------------------------------|
| Display          |                    |                                                  |
|                  | Size diameter      | 7"                                               |
|                  | Resolution         | 800 x 480 pixels                                 |
|                  | Dimensions (L x H) | 155,50 mm x 88 mm                                |
|                  | Type               | TFT-LCD                                          |
|                  | Number of colors   | 65536                                            |
|                  | Brightness         | 200 cd/m²                                        |
| Backlight        |                    |                                                  |
|                  | Type               | LED                                              |
|                  | Lifetime, typical  | 20 000 h at 25 °C                                |
| Touch screen     |                    |                                                  |
|                  | Type               | Single-touch,<br>resistive touch screen, 4 wires |
|                  | Material           | glass, covered by plastic film                   |
|                  | Design             |                                                  |
|                  | CP607              | ABB design passepartout                          |
|                  | CP607-B            | Black passepartout                               |
| System resources |                    |                                                  |

|                  |                              |                                                                                     |
|------------------|------------------------------|-------------------------------------------------------------------------------------|
|                  | Processor type               | Up to revision E0: ARM Cortex-A8, 300 MHz<br>From revision F0: ARM Cortex-A8, 1 GHz |
|                  | Operating system             | Linux RT                                                                            |
|                  | Application memory           | For HMI projects of up to 60 MB                                                     |
|                  | RAM                          | 256 MB                                                                              |
|                  | Flash                        | 2 GB                                                                                |
|                  | Card slot                    | none                                                                                |
| Data backup      |                              | Supercapacitor                                                                      |
|                  | Battery type                 | none                                                                                |
|                  | Data buffering time at 25 °C | Ca. 72 h at 25 °C                                                                   |
| Real-time clock: |                              |                                                                                     |
|                  | Accuracy                     | < 100 ppm at 25 °C                                                                  |
|                  | With battery back-up         | Yes (supercapacitor)                                                                |

## 3.2 Interfaces

| Parameter          |                 | Value                                  |
|--------------------|-----------------|----------------------------------------|
| Network interfaces |                 |                                        |
|                    | Ethernet port 0 | 10/100 Mbit                            |
| Serial interfaces  |                 |                                        |
|                    | COM1            | RS-232/-485/-422 software configurable |
|                    | COM1 connection | D-sub                                  |
| USB interfaces     |                 |                                        |
|                    | USB port 1      | Host interface V2.0, max. 500 mA       |

## 3.3 Power Supply

| Parameter              |                                     | Value                                                |
|------------------------|-------------------------------------|------------------------------------------------------|
| Supply voltage 24 V DC |                                     |                                                      |
|                        | Voltage                             | 24 V DC (18...32 V DC)                               |
|                        | Protection against reverse polarity | yes                                                  |
|                        | Connection at the control panel     | Removable 3-pin terminal block with screw connection |
|                        | Current consumption from 24 V DC    | 0.3 A                                                |

## 4 System Data CP600-eCo

### 4.1 Environmental Conditions

| Parameter                                                              |                                                                                                       | Value                                              |               |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------|---------------|
| Allowed interruptions of power supply                                  |                                                                                                       |                                                    |               |
| Voltage dips, short interruptions and voltage variations immunity test |                                                                                                       |                                                    |               |
|                                                                        | Port: AC mains;<br>Phase: 0°...180°; Test executed on the 230 VAC side of the power supply,<br>Level: |                                                    | EN 61000-4-11 |
|                                                                        | 40 % duration:                                                                                        | 10 cycles (50 Hz);                                 |               |
|                                                                        | 70 % duration:                                                                                        | 25 cycles (50 Hz);                                 |               |
|                                                                        | 100 % duration:                                                                                       | 1 cycle and 250 cycles (50 Hz)                     |               |
| Temperature                                                            |                                                                                                       |                                                    |               |
|                                                                        | Operating                                                                                             | 0...50 °C                                          |               |
|                                                                        | Storage                                                                                               | -20...+70 °C                                       |               |
|                                                                        | Transport                                                                                             | -20...+70 °C                                       |               |
| Humidity                                                               |                                                                                                       | 5...85 % relative humidity, without condensation   |               |
| Air pressure                                                           |                                                                                                       | > 800 hPa / < 2000 m                               |               |
| Ingress protection                                                     |                                                                                                       |                                                    |               |
|                                                                        | Front                                                                                                 | IP66                                               |               |
|                                                                        | Rear                                                                                                  | IP20                                               |               |
| Mechanical resistance                                                  |                                                                                                       |                                                    |               |
|                                                                        | Vibration                                                                                             | 5 ... 9 Hz, 7 mm; 9 ... 150 Hz, 1 g <sup>p-p</sup> | EN 60068-2-6  |
|                                                                        | Shock                                                                                                 | ± 50 g, 11 ms, 3 pulses per axis                   | EN 60068-2-27 |

### 4.2 Electromagnetic Compatibility

| Parameter |                                                                     | Value                                                                                                              |              |
|-----------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------|
|           | Radiated disturbance test                                           | Class A                                                                                                            | EN 55011     |
|           | Electrostatic discharge immunity test                               | 8 kV (air electrostatic discharge)<br>4 kV (contact electrostatic discharge)                                       | EN 61000-4-2 |
|           | Radiated, radio-frequency, electromagnetic field immunity test      | 80 MHz ... 1 GHz, 10 V/m<br>1.4 GHz ... 2 GHz, 3 V/m<br>2 GHz ... 2.7 GHz, 1 V/m                                   | EN 61000-4-3 |
|           | Burst immunity test                                                 | ±2 kV DC power port<br>±1 kV signal line                                                                           | EN 61000-4-4 |
|           | Surge immunity test                                                 | ±0,5 kV DC power port (line to earth)<br>±0,5 kV DC power port (line to line)<br>±1 kV signal line (line to earth) | EN 61000-4-5 |
|           | Immunity to conducted disturbances inducted by radiofrequency field | 0.15...80 MHz, 10 V                                                                                                | EN 61000-4-6 |

## 5 Mechanical Data

| Parameter                      |                              | Value                       |
|--------------------------------|------------------------------|-----------------------------|
| Housing                        |                              |                             |
|                                | Front frame material         | Plastic                     |
|                                | Front frame color            |                             |
|                                | CP607                        | grey                        |
|                                | CP607-B                      | black                       |
|                                | Reverse side material        | Plastic                     |
|                                | Reverse side color           |                             |
|                                | CP607                        | grey                        |
|                                | CP607-B                      | black                       |
|                                | Faceplate dimensions (L x H) | 187 mm x 147 mm             |
|                                | Faceplate depth              | 5 mm                        |
|                                | Housing depth                | 29 mm                       |
| Weight                         |                              | 0.6 kg                      |
| Mounting                       |                              |                             |
|                                | Cutout dimensions (L x H)    | 176 mm x 136 mm             |
|                                | Mounting type                | Panel mounting in cutout    |
|                                | Mounting variants            | Landscape and portrait mode |
| Minimum Compass Safe Distances |                              |                             |
|                                | of standard compass          | 500 mm (19.68")             |
|                                | of steering compass          | 400 mm (15.74")             |

### 5.1 Approvals and Certifications

Information on approvals and certificates can be found in the corresponding chapter of the Main catalog, PLC Automation

---

ABB Automation Products GmbH  
Eppelheimer Str. 82  
69123 Heidelberg, Germany  
Telephone: +49 (0)6221 701 1444  
Fax: +49 (0)6221 701 1382  
E-mail: [plc.support@de.abb.com](mailto:plc.support@de.abb.com)  
**[abb.com/plc](http://abb.com/plc)**

---

© Copyright 2018 ABB.

We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express authority is strictly forbidden.