ABB CP6407 1SAP540710R0001

Control Panel

CP600 operator interface. ABB CP6407 1SAP540710R0001 is a second-generation CP600 operator panel for machine and process visualization. It supports PB610 HMI applications as well as visualization from an AC500 V3 web server, allowing the panel's role to follow the selected engineering approach. Its 7-inch color touchscreen presents process information and accepts operator input; PB610 projects can include alarms, trends and recipes. Ethernet and configurable serial interfaces provide the communication paths, while the complete CP6407 ordering code identifies the Linux-based panel platform required by the application.



Technical Specifications

Product Identity	
Manufacturer / ordering code	ABB / CP6407 1SAP540710R0001
Product family	CP600 control panel
Front dimensions / panel cut-out	187 × 147 mm front; 176 × 136 mm cut-out
Depth / weight	40 mm housing depth plus 4 mm front; 1 kg
Functional Configuration	
Display	7-inch TFT LCD; 800 × 480 pixels; 65,536 colors
Touch technology	4-wire resistive touchscreen; single touch
Brightness / backlight	400 cd/m²; LED backlight, typical life 40,000 h at 25 °C
Processor / operating system	Cortex-A8, 1 GHz; Linux RT
Ethernet	2 × 10/100 Mbit/s
Serial / USB	1 configurable RS-232 / RS-485 / RS-422 port; 2 × USB 2.0 host, maximum 500 mA
Performance & Power	
Memory	512 MB RAM; 4 GB flash; maximum user project memory 150 MB
Power supply	24 V DC nominal; permitted range 18–32 V DC; rated current 0.35 A
Environment	
Operating temperature	–20 to +60 °C; observe installation clearances and ventilation
Relative humidity	5–85%, non-condensing
Degree of protection	IP66 at the correctly installed front; IP20 at the rear
Mounting orientation	Landscape or portrait

Selected original manufacturer material follows on page 3.

Compatibility & Selection Guide

Project and browser compatibility. ABB lists PB610 Panel Builder 600 engineering and a web browser for AC500 V3. Confirm the panel BSP and the engineering release before transferring a project. The installation instructions describe specific version requirements for panels delivered with BSP 1.3.x; the photographs do not establish the offered unit’s installed BSP.

Wiring & Installation Reference

Power and communication connections

Power terminal · 24 V DC supply · Disconnect power before connecting or disconnecting the panel

Protective earth · Earth terminal 3 · Connect the earth conductor according to the operating instructions

Ethernet ports · 2 × 10/100 Mbit/s · Match the machine network design and assigned IP settings

COM1 · RS-232 / RS-485 / RS-422 · Select the required mode and use the ABB pin assignment

Mounting and replacement

1. Check the replacement Match the complete order code, panel cut-out, supply, interfaces, project and installed BSP. A matching screen size alone does not establish compatibility.

2. Prepare the enclosure Use the 176 × 136 mm cut-out and the specified clearances. For IP66, follow the gasket and mounting requirements, including a flat surface and panel thickness of 1.5–6 mm.

3. Mount, connect and commission Secure the brackets using the prescribed 130 Ncm tightening condition. With power isolated, connect supply, earth and communication cables. Restore the validated project and check touch operation, communications and application behavior.

Installation precautions

Switch off the power before connecting or disconnecting the product. Installation and maintenance are for qualified electricians.

The front IP66 rating depends on correct enclosure installation; the rear remains IP20. Do not treat the entire exposed panel as IP66.

Check PB610 and BSP compatibility before replacement or project transfer. Do not assume a newer panel or BSP accepts an older project without the documented procedure.

Clean with a soft cloth and neutral soap. Do not use solvents that can damage the touchscreen or front surface.

Manufacturer reference 1

DATA SHEET

Control Panel CP600 2nd Generation

CP6407



1 Ordering Data

Part No.	Description	Product Life Cycle Phase
1SAP540710R0001	CP6407, control panel, TFT graphical display, single-touch screen, 7”, 800 x 480 pixel, for PB610 applications and visualization of AC500 V3 web server	Active