DATA SHEET

Control Panel CP600

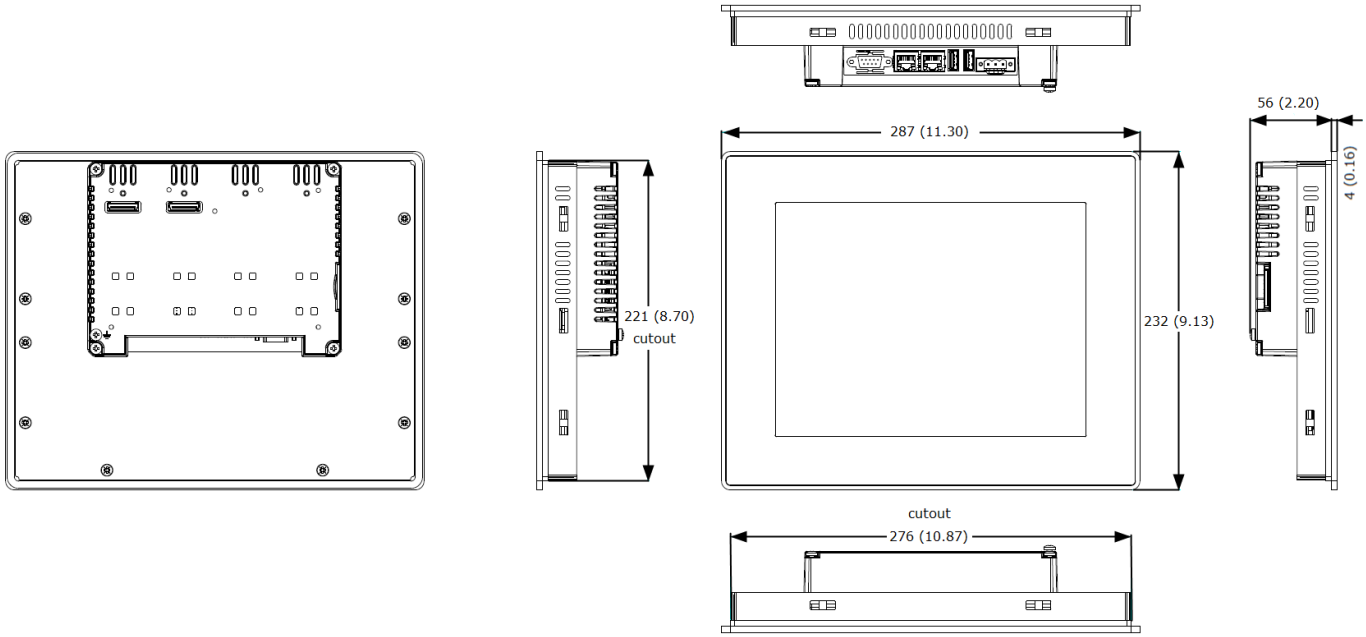
CP651, CP651-WEB



1 Ordering Data

Part No.	Description	Product Life Cycle Phase
1SAP551100R0001	CP651, control panel, TFT graphical display, single-touch screen, 10.4”, 800 x 600 pixel, for PB610 applications	Classic
1SAP551200R0001	CP651-WEB, control panel, TFT graphical display, single-touch screen, 10.4”, 800 x 600 pixel, for visualization of AC500 V2.3 web server	Classic

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	10.4”
	Resolution	800 x 600 pixels
	Type	TFT-LCD
	Number of colors	65536
	Brightness	300 cd/m²
Backlight		
	Type	LED
	Lifetime, typical	40 000 h at 25 °C
Touch screen		
	Type	Single-touch, resistive touch screen, 4 wires
	Material	glass, covered by plastic film
	Design	ABB design passepartout
System resources		
	Processor type	ARM Cortex-A8, 1 GHz
	Operating system	Microsoft Windows 6.0 Core
	Application memory	For HMI projects of up to 60 MB

	RAM	256 MB
	Flash	256 MB
	Card slot	SD card
Data backup		Battery
	Battery type	3 V, 50 mAH, Lithium, rechargeable, not user-replaceable
	Data buffering time at 25 °C	Ca. three months
Real-time clock:		
	Accuracy	< 100 ppm at 25 °C
	With battery back-up	Yes

3.2 Interfaces

Parameter		**Value**
Network interfaces		
	Ethernet port 0	10/100 Mbit (with integrated switch function)
	Ethernet port 1	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
	USB port 2	Host interface V2.0 and V1.1

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	1.0 A

4 System Data CP600

4.1 Environmental Conditions

Parameter		Value	
Allowed interruptions of power supply			
Voltage dips, short interruptions and voltage variations immunity test			
	Port: AC mains; Phase: 0°…180°; Test executed on the 230 VAC side of the power supply, 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^{p-p}	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) 4 kV (contact electrostatic discharge)	EN 61000-4-2
	Radiated, radio-frequency, electromagnetic field immunity test	80 MHz … 1 GHz, 10 V/m 1.4 GHz … 2 GHz, 3 V/m 2 GHz … 2.7 GHz, 1 V/m	EN 61000-4-3
	Burst immunity test	±2 kV DC power port ±1 kV signal line	EN 61000-4-4
	Surge immunity test	±0,5 kV DC power port (line to earth) ±0,5 kV DC power port (line to line) ±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	Aluminium
	Front frame color	Aluminium
	Reverse side material	Aluminium
	Reverse side color	Aluminium
	Faceplate dimensions (L x H)	287 mm x 232 mm
	Faceplate depth	4 mm
	Housing depth	56 mm
Weight		2.1 kg
Mounting		
	Cutout dimensions (L x H)	276 mm x 221 mm
	Mounting type	Panel mounting in cutout
	Mounting variants	Landscape and portrait mode
Minimum Compass Safe Distances		
	of standard compass	600 mm (23.62”)
	of steering compass	400 mm (15.75”)

5.1 Approvals and Certifications

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