Apter Power

Installation Instructions

Allen-Bradley

Industrial Integrated Display Computers with Keypad

Catalog Numbers 6180P-12KSXP, 6180P-12BSXP, 6180P-12BPXP, 6180P-12BPXPDC, 6180P-12KPXP, 6180P-15KSXP, 6180P-15BSXP, 6180P-15BPXP, 6180P-15KPXP, 6180P-15BPXPDC

Topic	Page
Important User Information	2
Environment and Enclosure Information	3
European Union Directive Compliance	3
Installation Guidelines	4
Operating Systems	4
Before You Begin	5
Before You Begin	5
Install the Computer	5
Connect Peripherals	10
Connect AC Power	11
Connect DC Power	11
Functional Ground Screw	12
Connect to the Network	13
Replace the RTC Battery	13
Backlight Assembly Disposal	16
Transport the Product	16
Specifications	17
Additional Resources	19

Apter Power

Apter Power

Panel Cutout Dimensions

The 6180P products must be appropriately mounted in the panel cutout specified below.

Model	Cut-out Dimensions (HxW), approx.
1200P	279.0 x 450.0 mm (10.98 x 17.72 in.)
1500P	326.4 x 429.3 mm (12.85 x 16.90 in.)

Mount the Display Computer in a Panel

Mounting clips secure the computer to the panel. The 1200P and 1500P both require 10 mounting clips. Follow these steps to mount the computer in a panel.

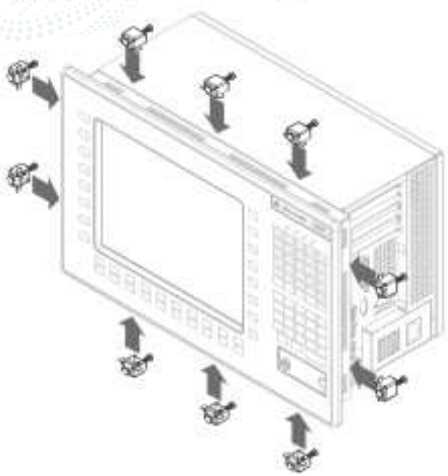
1. Remove power from the panel before making the cutout.
2. Verify that the panel surface around the area to be cut is clean and free of debris.



ATTENTION: Take precautions so metal cuttings do not enter components already installed in the panel to avoid personal injury or damage to the panel components.

3. Cut an opening in the panel using the appropriate panel cutout dimensions.
4. Make sure the sealing gasket is properly positioned on the computer.

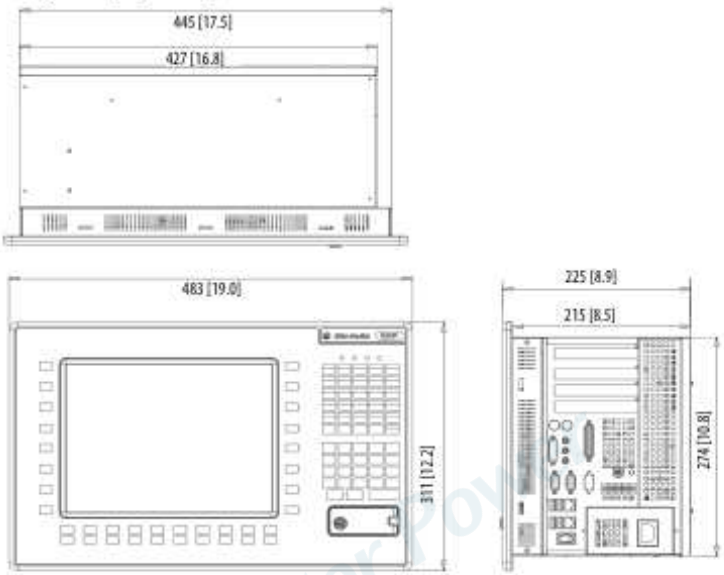
   This gasket forms a compression-type seal. Do not use sealing compounds.
5. Place the computer in the panel cutout.
6. Slide the mounting clips into the slots on the top, bottom, and sides of the computer.



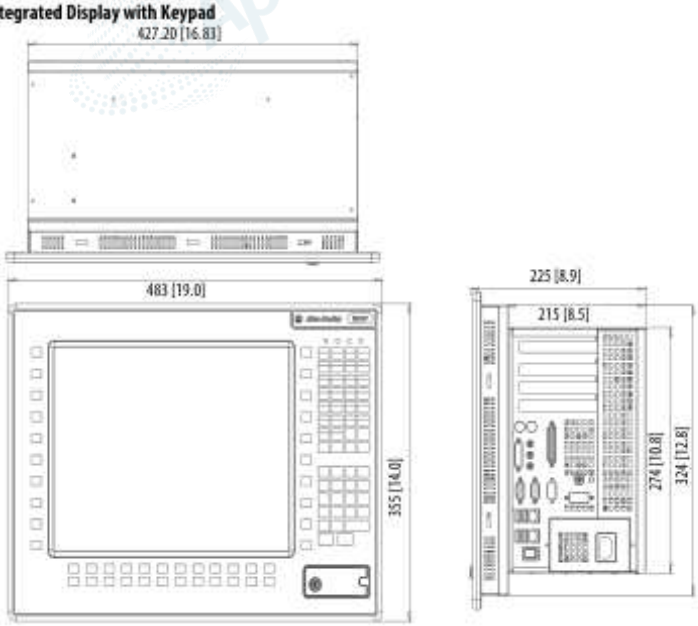
Product Dimensions

Product dimensions for each display computer model are given in mm (in.)

1200P Integrated Display with Keypad

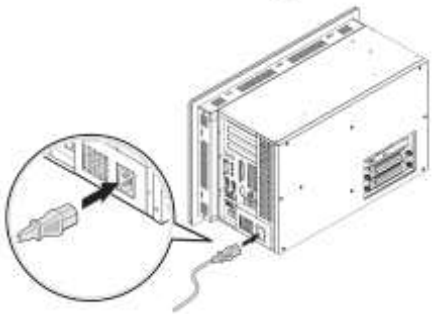


1500P Integrated Display with Keypad



Connect AC Power

A grounded 3-prong inlet IEC320-C14 power cord provides power to the computer. The power supply input accepts 90...264V AC and is autoswitching.



Operate the computer in an industrial or control room environment, which uses some form of power isolation from the public low-voltage mains.

ATTENTION: Connect the AC power cable to a power source with an earth ground to prevent electrical shock. Failure to follow this warning could result in electrical shock.

We recommend that the computer circuit has its own disconnect. Use an uninterruptible power source (UPS) to protect against unexpected power failure or power surges.

Always shut down the operating system before removing power to minimize performance degradation and operating system failures.

Connect DC Power

The following 6180P models are available with a DC power option, using a 3-screw terminal block (+24VDC, 24VTRN, GND):

- 6180P-12BPXPDC
- 6180P-15BPXPDC

The DC power option supports operation from either SELV or PELV power source. A ground bus strip is provided to allow a user to connect the DC common and functional ground terminals together. This is to support SELV cases where the end user requires grounding at the computer.

The power supply is internally protected against reverse polarity.

ATTENTION: Use a Class 2/SELV (Safety Extra-Low Voltage) isolated and ungrounded power supply as input power to the computer. This power source provides protection so that under normal and single-fault conditions, the voltage between the conductors and Functional Earth/Protective Earth does not exceed a safe value.

Apter Power

Specifications

Hardware and Electrical Specifications

Attributes	6180P-12 and 6180P-15 Models
Display	
Display type	Color Active Matrix TFT
Touch screen, optional	Resistive antiglare
Display size, diagonal 1200P 1500P	 308 mm (12.1 in.) 381 mm (15.0 in.)
Display area (WxH), approx 1200P 1500P	 246 x 185 mm (9.7 x 7.3 in.) 305 x 229 mm (12 x 9 in.)
Native resolution 1200P 1500P	 800 x 600 1024 x 768
Viewing angle Horizontal Vertical	 60° 40°
Response time	20 ms
Electrical	
Input voltage, AC	90…264V AC, autoswitching
Line frequency	47…63 Hz
Power consumption, AC	144VA (1.4 A at 100V rms, 0.6 A at 240V rms)
Power consumption, DC	144 W (8 A at 18V DC, 4.5 A at 32V DC)
Power dissipation, AC	144 W
Power dissipation, DC	144 W
Input voltage, DC	18…32V DC
Inrush current at 24V	20 A peak, 5 ms
Mechanical	
Dimensions (HxWxD), approx 1200P 1500P	 311 x 483 x 225 mm (12.25 x 19.01 x 8.86 in.) 355 x 483 x 225 mm (13.97 x 19.01 x 8.86 in.)
Weight 1200P 1500P	 16.0 kg (35.3 lb) 17.6 kg (38.8 lb)
Enclosure ratings, panel-mounted	IEC IP66

Apter Power

Environmental Specifications

Attribute	6180P-12 and 6180P-15 Models
Temperature, operating	0…55 °C (32…131 °F)
Temperature, storage	-20…60 °C (-4…140 °F)
Relative humidity, operating[1]	20…85% without condensation
Relative humidity, nonoperating[2]	5…90% without condensation
Vibration, operating	0.006 in. p-p, (10…57 Hz); 1 g (57…640 Hz)
Vibration, nonoperating	0.012 in. p-p, (10…57 Hz); 2 g (57…640 Hz)
Shock, operating	15 g (1/2 sine, 11 ms)
Shock, nonoperating	30 g (1/2 sine, 11 ms)

(1) Derate above 40 °C to 45% at 50 °C.
(2) Derate above 40 °C to 39% at 60 °C.

Certifications

Regulatory Area	Standards Group	Regulatory Standard
Americas	Safety requirements	UL 60950-1 CSA C22.2 - 60950-1
	Emissions requirements	FCC Rules for class A devices
	Product certification marks	c-UL-us
Europe	Enclosure rating	IP66 per EN60529
	Safety requirements	EN60950-1
	Immunity requirements	EN55024 EN61000-3-2 EN61000-3-3
	Emissions requirements	EN55022 Class A
	Product certification marks	CE mark
	EMC directive	EU Directive 2004/108/EC
	Low voltage directive	EU Directive 2006/95/EC
	Restriction of Hazardous Substance (RoHS)	EU Directive 2002/95/EC Turkey RoHS (EEE Yonetmeliğine Uygundur. In Conformity with the EEE Regulation)
Asia Pacific	Emissions requirements	CISPR-22
	Product certification marks	C-Tick mark
	RoHS	China RoHS