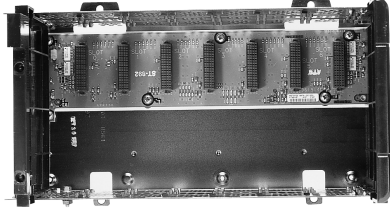


## 1756 ControlLogix Chassis Specifications



### Standard Catalog Numbers - Series B

1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17

### ControlLogix-XT Catalog Numbers

1756-A4LXT, 1756-A5XT, 1756-A7LXT

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The ControlLogix system is a modular system that requires a 1756 I/O chassis. All of the chassis are designed for horizontal-only, back-panel mounting. Place any module into any slot. The backplane provides a high-speed communication path between modules.

AutoCAD product drawings are available at

<http://www.rockwellautomation.com/en/e-tools/drawings.html>

## Important User Information

Solid state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation and Maintenance of Solid State Controls (publication [SGI-1.1](#) available from your local Rockwell Automation sales office or online at <http://www.rockwellautomation.com/literature/>) describes some important differences between solid state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

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Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

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**WARNING**

Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.

---

**IMPORTANT**

Identifies information that is critical for successful application and understanding of the product.

---

**ATTENTION**

Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard, and recognize the consequence

---

**SHOCK HAZARD**

Labels may be on or inside the equipment, for example, a drive or motor, to alert people that dangerous voltage may be present.

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**BURN HAZARD**

Labels may be on or inside the equipment, for example, a drive or motor, to alert people that surfaces may reach dangerous temperatures.

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## 1756 Standard Chassis

The chassis backplane provides a high-speed communication path between modules and distributes power to each of the modules within the chassis.

### Technical Specifications - 1756 Standard Chassis

Attribute	1756-A4	1756-A7	1756-A10	1756-A13	1756-A17
Backplane current, chassis/slot max @ 1.2V DC	1.5 A/1.5 A				
Backplane current, chassis/slot max @ 3.3V DC	4 A/4 A				
Backplane current, chassis/slot max @ 5.1V DC	15 A/6 A				
Backplane current, chassis/slot max @ 24V DC	2.8 A/2.8 A				
Slots	4	7	10	13	17
Mounting method	Horizontal only				
Dimensions (WxHxD), approx. <sup>(1)</sup>	263 x 169 x 145 mm (10.35 x 6.65 x 5.71 in.)	368 x 169 x 145 mm (14.49 x 6.65 x 5.71 in.)	483 x 169 x 145 mm (19.0 x 6.65 x 5.71 in.)	588 x 169 x 145 mm (23.15 x 6.65 x 5.71 in.)	738 x 169 x 145 mm (29.06 x 6.65 x 5.71 in.)
Cabinet size (WxHxD), min	507 x 507 x 203 mm (20 x 20 x 8 in.)	507 x 609 x 203 mm (20 x 24 x 8 in.)	762 x 507 x 203 mm (30 x 20 x 8 in.)	762 x 609 x 203 mm (30 x 24 x 8 in.)	914 x 762 x 203 mm (36 x 30 x 8 in.)
Weight, approx.	0.75 kg (1.7 lb)	1.10 kg (2.4 lb)	1.45 kg (3.2 lb)	1.90 kg (4.2 lb)	2.20 kg (4.8 lb)
Location	Panel				
North American temperature code	T5				
IEC temperature code	T6				
Enclosure type rating	None (open-style)				

<sup>(1)</sup> Dimensions include mounting tabs and power supply. Depth with extended terminal housing (catalog number 1756-TBE) is 160 mm (6.3 in.).

### Environmental Specifications - 1756 Standard Chassis

Attribute	1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17
Temperature, operating IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	0...60 °C (32...140 °F)
Temperature, surrounding air	60 °C (140 °F)
Temperature, storage IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock)	-40...85 °C (-40...185 °F)
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged Nonoperating Damp Heat)	5...95% noncondensing
Vibration IEC 60068-2-6 (Test Fc, Operating)	5 g @ 10...500 Hz
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	50 g
Emissions	CISPR 11: Group 1, Class A
ESD immunity IEC 61000-4-2	6 kV contact discharges 8 kV air discharges

**Environmental Specifications - 1756 Standard Chassis**

<b>Attribute</b>	<b>1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17</b>
Radiated RF immunity IEC 61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 80... 2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz
EFT/B immunity IEC 61000-4-4	±4 kV at 5 kHz on signal ports
Conducted RF immunity IEC 61000-4-6	10Vrms with 1 kHz sine-wave 80% AM from 150 kHz...80 MHz

**Certifications - 1756 Standard Chassis**

<b>Certification<sup>(1)</sup></b>	<b>1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17</b>
UL	UL Listed Industrial Control Equipment.
CSA	CSA Certified Process Control Equipment. CSA Certified Process Control Equipment for Class I, Division 2 Group A,B,C,D Hazardous Locations.
CE	European Union 89/336/EEC EMC Directive, compliant with: <ul style="list-style-type: none"> <li>• EN 50082-2; Industrial Immunity</li> <li>• EN 61326; Meas./Control/Lab., Industrial Requirements</li> <li>• EN 61000-6-2; Industrial Immunity</li> <li>• EN 61000-6-4; Industrial Emissions</li> </ul>
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions
Ex	European Union 94/9/EC ATEX Directive, compliant with: EN 60079-15; Potentially Explosive Atmospheres, Protection "n" (Zone 2)
FM	FM Approved Equipment for use in Class I Division 2 Group A,B,C,D Hazardous Locations
TÜV	TÜV Certified for Functional Safety: up to and including SIL 2

<sup>(1)</sup> When marked. See the Product Certification link at <http://www.ab.com> for Declarations of Conformity, Certificates, and other certification details.

## 1756 ControlLogix-XT Chassis

The ControlLogix-XT chassis support extreme temperature environments. The chassis are conformally coated for increased survivability in ISA G3 environments.

### Technical Specifications - 1756 ControlLogix-XT Chassis

Attribute	1756-A4LXT	1756-A5XT	1756-A7LXT
Backplane current, chassis/slot max @ 1.2V DC	1.5 A/1.5 A		
Backplane current, chassis/slot max @ 3.3V DC	4 A/4 A		
Backplane current, chassis/slot max @ 5.1V DC	10 A/6 A		
Backplane current, chassis/slot max @ 24V DC	2 A/2 A		
Slots	4	5	7
Mounting method	Horizontal only		
Dimensions (WxHxD), approx. <sup>(1)</sup>	158 x 267 x 145 mm (6.22 x 10.5 x 5.71 in.)	158 x 483 x 145 mm (6.22 x 19 x 5.71 in.)	158 x 368 x 145 mm (6.22 x 14.49 x 5.71 in.)
Cabinet size (WxHxD), min	507 x 507 x 203 mm (20 x 20 x 8 in.)	507 x 507 x 203 mm (20 x 20 x 8 in.)	507 x 609 x 203 mm (20 x 24 x 8 in.)
Weight, approx.	0.75 kg (1.7 lb)	1.45 kg (3.2 lb)	1.1 kg (2.4 lb)
Location	Panel		
North American temperature code	T5		
IEC temperature code	T5		
Enclosure type rating	None (open-style)		

<sup>(1)</sup> Dimensions include mounting tabs and power supply. Depth with extended terminal housing (catalog number 1756-TBE) is 160 mm (6.3 in.).

### Environmental Specifications - 1756 ControlLogix-XT Chassis

Attribute	1756-A4LXT	1756-A5XT	1756-A7LXT
Temperature, operating IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	-25...60 °C (-13...140 °F)	-25...70 °C (-13...158 °F)	-25...60 °C (-13...140 °F)
Temperature, storage IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock)	-40...85 °C (-40...185 °F)		
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged Nonoperating Damp Heat)	5...95% noncondensing		
Vibration IEC 60068-2-6 (Test Fc, Operating)	2 g @ 10...500 Hz		
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g		
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	50 g		
Emissions	CISPR 11: Group 1, Class A		
ESD immunity IEC 61000-4-2	6 kV contact discharges 8 kV air discharges		
Radiated RF immunity IEC 61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 80... 2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz 3V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz		

**Certifications - ControlLogix-XT Chassis**

<b>Certification<sup>(1)</sup></b>	<b>1756-A4LXT, 1756-A5XT, 1756-A7LXT</b>
c-UL-us	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584.  UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810.
CE	European Union 2004/108/EC EMC Directive, compliant with: <ul style="list-style-type: none"> <li>• EN 61000-6-4; Industrial Emissions</li> <li>• EN 61326-1; Meas./Control/Lab., Industrial Requirements</li> <li>• EN 61000-6-2; Industrial Immunity</li> <li>• EN 61131-2; Programmable Controllers (Clause 8, Zone A &amp; B)</li> </ul>
Ex	European Union 94/9/EC ATEX Directive, compliant with: <ul style="list-style-type: none"> <li>• EN 60079-15; Potentially Explosive Atmospheres, Protection "n" (Zone 2)</li> <li>• EN 60079-0; General Requirements II 3 G Ex nA IIC T5 X</li> </ul>
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions

<sup>(1)</sup> When marked. See the Product Certification link at <http://www.ab.com> for Declarations of Conformity, Certificates, and other certification details.

**1756 Chassis Accessories**

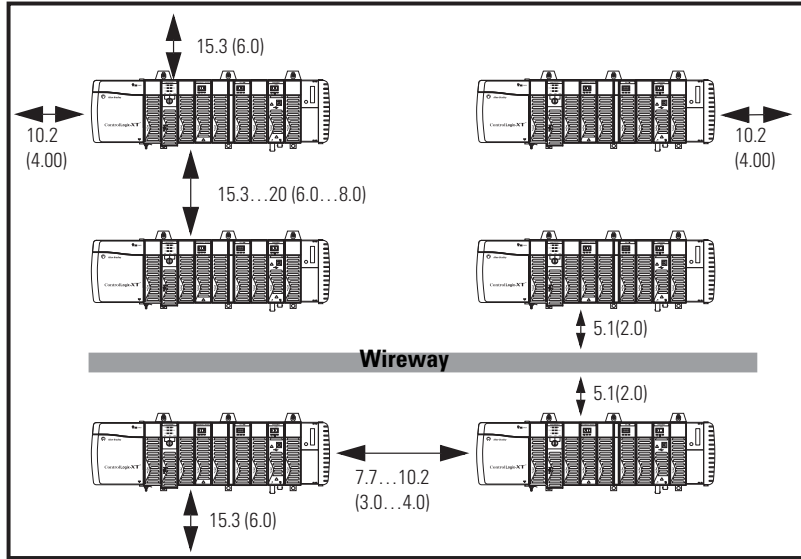
Use a slot filler module to fill empty slots.

<b>Cat. No.</b>	<b>Description</b>
1756-N2	Slot filler module for empty slots in standard ControlLogix chassis
1756-N2XT	Slot filler module for empty slots in ControlLogix-XT chassis

## Spacing Requirements

When you mount a chassis with a standard power supply in an enclosure, meet these spacing requirements.

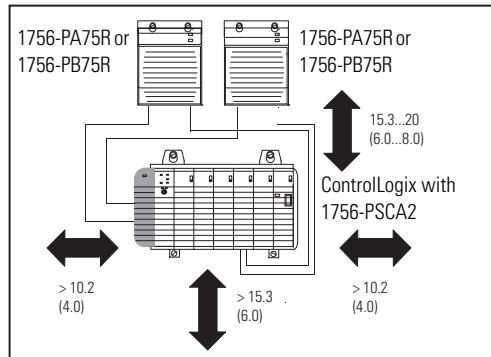
### Enclosure



Dimensions are in cm (in.).

If you use a 1756-PSCA2 chassis adapter with a redundant power supply, follow the same spacing requirements as for a standard power supply. You need the clearance on the left of the chassis for cable access.

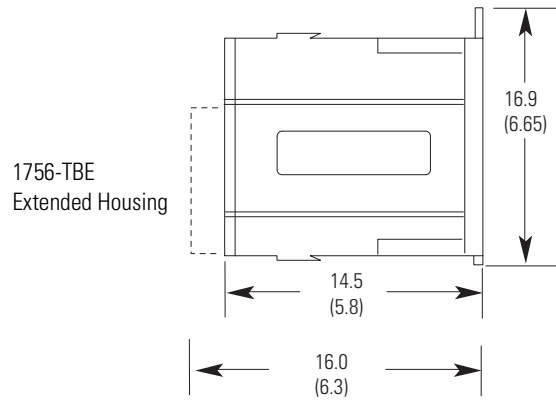
### Enclosure



Dimensions are in cm (in.).

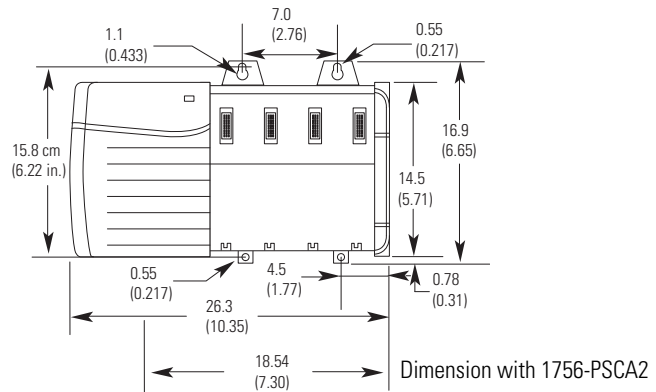
## Standard Mounting Dimensions

### Right-side View of Standard Chassis



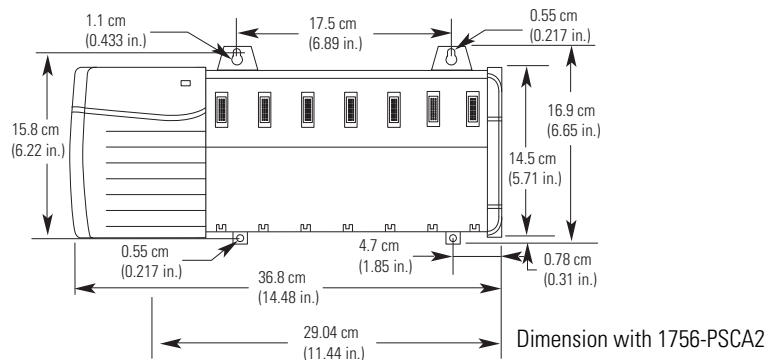
Dimensions are in cm (in.).

### 1756-A4 Chassis with Power Supply



Dimensions are in cm (in.).

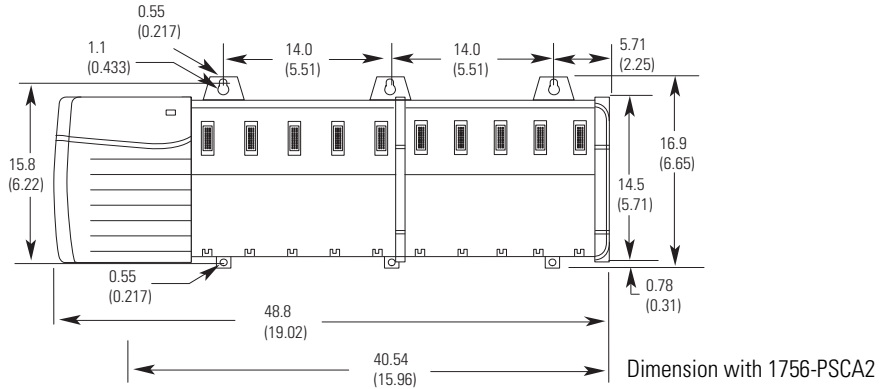
### 1756-A7 Chassis with Power Supply



Dimensions are in cm (in.).

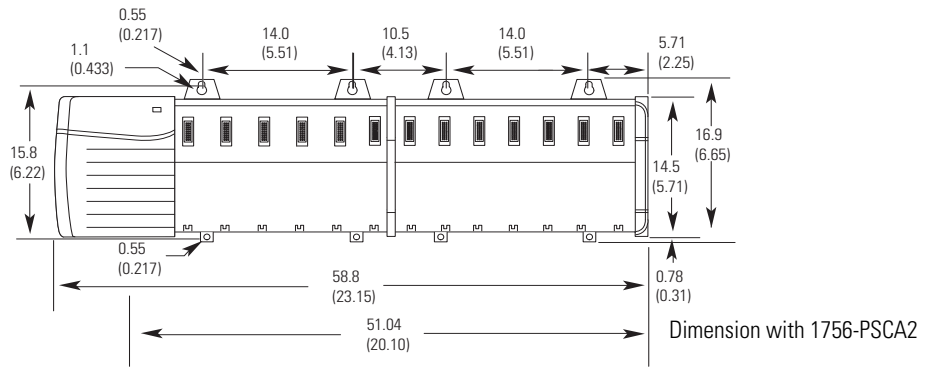


### 1756-A10 Chassis with Power Supply



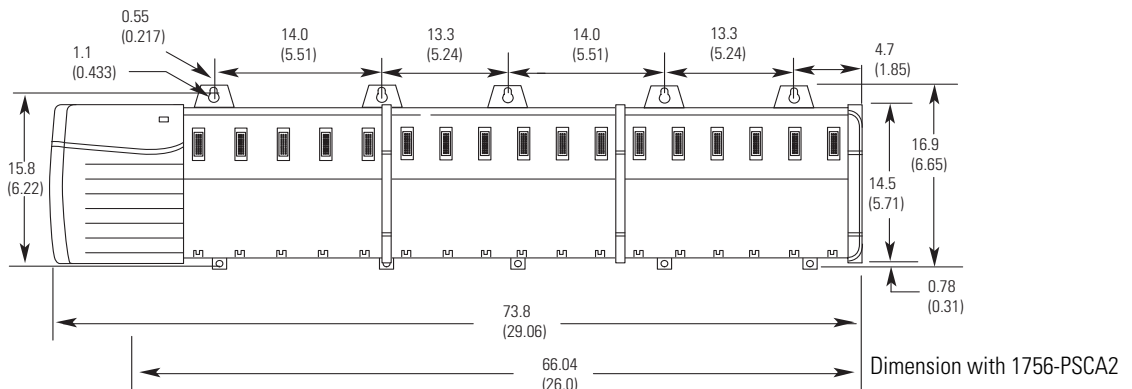
Dimensions are in cm (in.).

### 1756-A13 Chassis with Power Supply



Dimensions are in cm (in.).

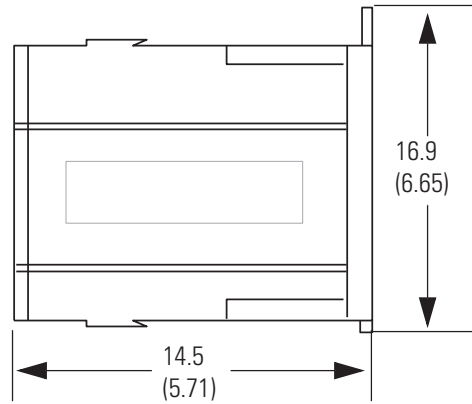
### 1756-A17 Chassis with Power Supply



Dimensions are in cm (in.).

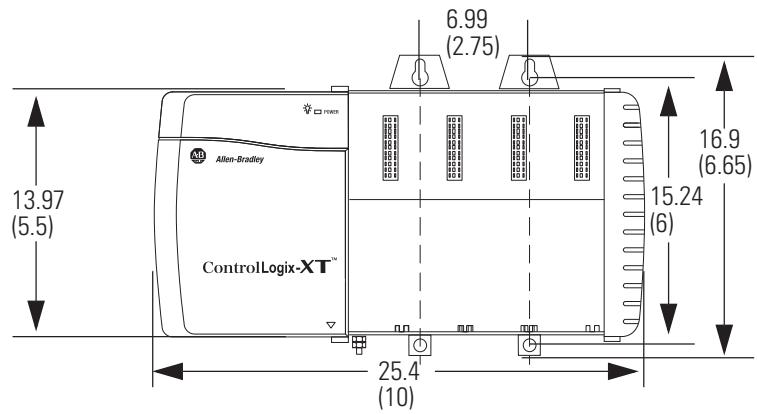
## ControlLogix-XT Mounting Dimensions

### Right-side View of ControlLogix-XT Chassis



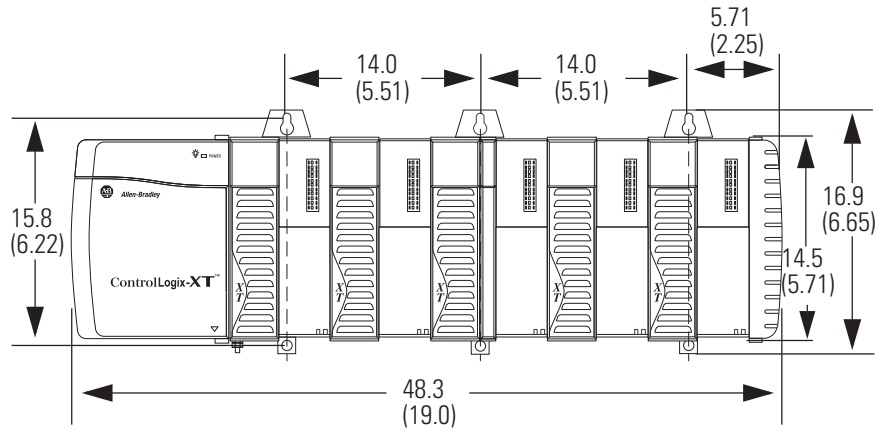
Dimensions are in cm (in.).

### 1756-A4LXT Chassis with Power Supply



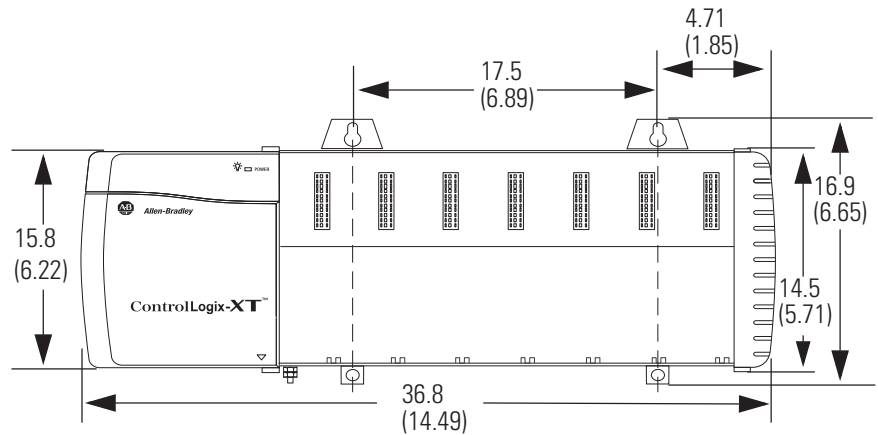
Dimensions are in cm (in.).

### 1756-A5XT Chassis with Power Supply



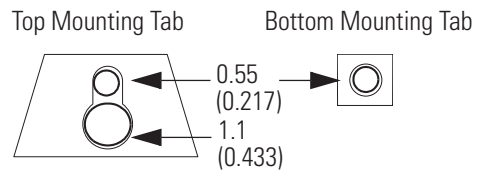
Dimensions are in cm (in.).

### 1756-A7LXT Chassis with Power Supply



Dimensions are in cm (in.).

### ControlLogix-XT Mounting Tab Dimensions



# Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products. At <http://www.rockwellautomation.com/support/>, you can find technical manuals, a knowledge base of FAQs, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools.

For an additional level of technical phone support for installation, configuration, and troubleshooting, we offer TechConnect support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://www.rockwellautomation.com/support/>.

## Installation Assistance

If you experience an anomaly within the first 24 hours of installation, review the information that is contained in this manual. You can contact Customer Support for initial help in getting your product up and running.

United States or Canada	1.440.646.3434
Outside United States or Canada	Use the <a href="#">Worldwide Locator</a> at <a href="http://www.rockwellautomation.com/support/americas/phone_en.html">http://www.rockwellautomation.com/support/americas/phone_en.html</a> , or contact your local Rockwell Automation representative.

## New Product Satisfaction Return

Rockwell Automation tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned, follow these procedures.

United States	Contact your distributor. You must provide a Customer Support case number (call the phone number above to obtain one) to your distributor to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for the return procedure.

## Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete this form, publication [RA-DU002](#), available at <http://www.rockwellautomation.com/literature/>.

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Publication 1756-TD006B-EN-E - June 2010

Supersedes 1756-TD006A-EN-E - May 2009

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