

1756 ControlLogix Chassis and Power Supplies

**ATTENTION:**

- Before installing, configuring, operating or maintaining this product, read this document and the documents listed in the Additional Resources section for installing, configuring, or operating equipment. Users should familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.
- Installation, adjustments, putting into service, use, assembly, disassembly, and maintenance shall be carried out by suitably trained personnel in accordance with applicable code of practice. In case of malfunction or damage, no attempts at repair should be made. The module should be returned to the manufacturer for repair. Do not dismantle the module.
- If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- Equipment designated as "XT" is certified for use only within surrounding air temperature range of -25...70 °C (-13...158 °F). Equipment designated as "LXT" is certified for use only within a surrounding air temperature range of -25...60 °C (-13...140 °F) even when used with other "XT" equipment. Non-XT equipment is certified for use only within surrounding air temperature range of 0...60 °C (32...140 °F). The equipment must not be used outside its range.
- 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 [561-1.1](#), 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.

IMPORTANT

Any illustrations, charts, sample programs, and layout examples shown in this publication are intended solely for the purposes of example. Since there are many variables and requirements associated with any particular installation, Rockwell Automation does not assume responsibility or liability for actual use based upon the examples shown in this publication.



ATTENTION: Do not install this product until you read the documentation in your local language. Go to <http://www.rockwellautomation.com/literature> or contact your local sales office or Rockwell Automation representative.

ATENÇÃO: Não instale este produto antes de ler os documentos em sua língua. Clique <http://www.rockwellautomation.com/literature> ou entre em contato com o escritório ou representante da Rockwell Automation regional.

ATTENTION: N'installez pas ce produit tant que vous n'avez pas lu la documentation dans votre langue locale. Rendez-vous sur le site <http://www.rockwellautomation.com/literature> ou contactez votre agence commerciale ou votre représentant Rockwell Automation local.

ATTENZIONE: Non installare questo prodotto senza prima avere letto la documentazione nella propria lingua. Consultare la pagina web <http://www.rockwellautomation.com/literature> oppure contattare l'ufficio commerciale o il rappresentante Rockwell Automation di zona.

ACHTUNG: Bitte installieren Sie dieses Produkt erst, nachdem Sie sich die Produktdokumentation in Ihrer jeweiligen Sprache durchgelesen haben. Gehen Sie zu <http://www.rockwellautomation.com/literature> oder nehmen Sie Kontakt mit Ihrem lokalen Vertriebsbüro bzw

ATENCIÓN: No instale este producto antes de leer los documentos en su idioma. Para hacerlo, haga clic en <http://www.rockwellautomation.com/literature> o póngase en contacto con su oficina o representante de Rockwell Automation regional.

注意: 各国語版の資料をお読みになるまでは、この製品を取付けないでください。資料を入手するには、<http://www.rockwellautomation.com/literature> にアクセスするか、ロックウェル・オートメーションまたは販売代理店までご連絡ください。

주의: 반드시 해당 국가의 언어로 본 문서를 숙지한 후 이 제품을 설치하십시오. <http://www.rockwellautomation.com/literature> 를 방문하거나 해당 국가의 대리점 또는 지사에 연락하시기 바랍니다.

请注意: 在您阅读当地语言版的文档之前不要安装本产品。请登录 <http://www.rockwellautomation.com/literature> 或者联系您的本地办公室或罗克韦尔自动化销售代表获取本文档

North American Hazardous Location Approval

The following information applies when operating this equipment in hazardous locations:

Products marked "CL I, DIV 2, GP A, B, C, D" are suitable for use in Class I Division 2 Groups A, B, C, D, Hazardous Locations and nonhazardous locations only. Each product is supplied with markings on the rating nameplate indicating the hazardous location temperature code. When combining products within a system, the most adverse temperature code (lowest "T" number) may be used to help determine the overall temperature code of the system. Combinations of equipment in your system are subject to investigation by the local authority having jurisdiction at the time of installation.

**WARNING: EXPLOSION HAZARD**

- Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.
- Do not disconnect connections to this equipment unless power has been removed or the area is known to be nonhazardous. Secure any external connections that mate to this equipment by using screws, sliding latches, threaded connectors, or other means provided with this product.
- Substitution of components may impair suitability for Class I, Division 2.
- If this product contains batteries, they must be changed only in an area known to be nonhazardous.

Informations sur l'utilisation de cet équipement en environnements dangereux:

Les produits marqués "CL I, DIV 2, GP A, B, C, D" ne conviennent qu'à une utilisation en environnements de Classe I Division 2 Groupes A, B, C, D dangereux et non dangereux. Chaque produit est livré avec des marquages sur sa plaque d'identification qui indiquent le code de température pour les environnements dangereux. Lorsque plusieurs produits sont combinés dans un système, le code de température le plus défavorable (code de température le plus faible) peut être utilisé pour déterminer le code de température global du système. Les combinaisons d'équipements dans le système sont sujettes à inspection par les autorités locales qualifiées au moment de l'installation.

**AVERTISSEMENT: RISQUE D'EXPLOSION**

- Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher l'équipement.
- Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher les connecteurs. Fixer tous les connecteurs externes reliés à cet équipement à l'aide de vis, loquets coulissants, connecteurs filetés ou autres moyens fournis avec ce produit.
- La substitution de composants peut rendre cet équipement inadapté à une utilisation en environnement de Classe I, Division 2.
- S'assurer que l'environnement est classé non dangereux avant de changer les piles.

European Hazardous Location Approval

The following applies to products marked II 3 G: Such modules:

- Are Equipment Group II, Equipment Category 3, and comply with the Essential Health and Safety Requirements relating to the design and construction of such equipment given in Annex II to Directive 94/9/EC. See the EC Declaration of Conformity at <http://www.rockwellautomation.com/products/certification> for details. The type of protection used is "Ex nA IIC T" or "Ex nC IIC T" according to EN 60079-15. The specific temperature code is marked on the product.
- Are intended for use in areas in which explosive atmospheres caused by gases, vapors, mists, or air or dust mixtures are unlikely to occur, or are likely to occur only infrequently and for short periods. Such locations correspond to Zone 2 classification according to ATEX directive 1999/92/EC.

**WARNING: Special Conditions for Safe Use:**

- This equipment must be installed in an enclosure providing at least IP54 protection when applied in Zone 2 environments.
- This equipment shall be used within its specified ratings defined by Rockwell Automation.
- Provision shall be made to prevent the rated voltage from being exceeded by transient disturbances of more than 40% when applied in Zone 2 environments.
- This equipment must be used only with ATEX certified Rockwell Automation backplanes.
- Secure any external connections that mate to this equipment by using screws, sliding latches, threaded connectors, or other means provided with this product.
- Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.

Environment and Enclosure



This equipment is intended for use in a Pollution Degree 2 industrial environment, in overvoltage Category II applications (as defined in IEC 60664-1), at altitudes up to 2000 m (6562 ft) without derating.

This equipment is considered Group 1, Class A industrial equipment according to IEC/CISPR 11. Without appropriate precautions, there may be difficulties with electromagnetic compatibility in residential and other environments due to conducted and radiated disturbances.

This equipment is supplied as open-type equipment. It must be mounted within an enclosure that is suitably designed for those specific environmental conditions that will be present and appropriately designed to prevent personal injury resulting from accessibility to live parts. The enclosure must have suitable flame-retardant properties to prevent or minimize the spread of flame, complying with a flame spread rating of 5VA or be approved for the application if non-metallic. The interior of the enclosure must be accessible only by the use of a tool. Subsequent sections of this publication may contain additional information regarding specific enclosure type ratings that are required to comply with certain product safety certifications.

In addition to this publication, see the following:

- Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#), for additional installation requirements
- NEMA 250 and IEC 60529, as applicable, for explanations of the degrees of protection provided by different types of enclosure

Wires, Cables and Torque Ratings

Cat. Nos.	Description	Wire Size/Cable	Torque
1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17, 1756-A4LXT, 1756-ASXT, 1756-A7LXT, 1756-A7XT	Protective Earth Ground (terminal stud)	2.1 mm ² (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater	16.27 N·m (12 lb·in)
	Functional Earth Ground (mounting tab)	8.3 mm ² (8 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater	N/A
1756-PA72, 1756-PA75, 1756-PB72, 1756-PB75, 1756-PC75, 1756-PH75, 1756-PAXT, 1756-PBXT	Protective Earth Ground	2.1 mm ² (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater	0.8 N·m (7 lb·in)
	Power	2.5 mm ² (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation max	
1756-PA75R, 1756-PB75R	Protective Earth Ground	2.1 mm ² (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater	0.8 N·m (7 lb·in)
	Power	2.5 mm ² (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation max	
	Annunciator Cable	0.25... 2.5 mm ² (22...14 AWG) solid or stranded copper wire rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation max	

Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
ControlLogix Selection Guide, publication 1756-SG001	Provides overview of the ControlLogix® system and its products.
ControlLogix Chassis Specifications Technical Data, publication 1756-TD006	Provides technical specifications for ControlLogix chassis.
ControlLogix Power Supplies Specifications Technical Data, publication 1756-TD005	Provides technical specifications for ControlLogix power supplies.
ControlLogix Chassis and Power Supplies Installation Instructions, publication 1756-IN005	Provides planning and installation information for the ControlLogix chassis and power supplies.
ControlLogix System User Manual, publication 1756-UM001	Provides information on how to install, configure, program, and use ControlLogix controllers.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, http://www.ab.com	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>.

To order paper copies of technical documentation, contact your local Allen-Bradley® distributor or Rockwell Automation sales representative.

Allen-Bradley, ControlLogix, Rockwell Software, and Rockwell Automation are trademarks of Rockwell Automation, Inc.

Trademarks not belonging to Rockwell Automation are property of their respective companies.

Rockwell Otomasyon Ticaret A.Ş., Kar Plaza İş Merkezi E Blok Kat:6 34752 İçerenköy, İstanbul, Tel: +90 (216) 5698400

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 1756-PC007A-EN-P - December 2011

PN-109069

Copyright © 2011 Rockwell Automation, Inc. All rights reserved. Printed in the U.S.A.