

# Packing Contents

Original Instructions



**Allen-Bradley**

by ROCKWELL AUTOMATION

## FLEXHA 5000 I/O Module Base

Catalog Number: 5015-A410XT

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**IMPORTANT** FLEXHA 5000™ I/O Bases are part of a FLEXHA 5000 I/O system. The system is designed so that each individual component can be installed and removed independently of each other. This publication only includes information about the I/O Base. For more information on how to install a complete FLEXHA 5000 I/O system, see the FLEXHA 5000 System Installation Instructions, publication [5015-IN001](#).

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FLEXHA 5000 I/O Bases are installed on the extruded mounting plate, catalog number 5015-MPxxxxXT (xxxx represents plate length). The I/O Base can be connected to an Adapter Base, an I/O Base, or Bank Expansion Base.

The I/O Base can house the following:

- Four I/O modules
- Two Backplane Interface Modules (BIM) catalog number 5015-BIMXT
- One SA Power Removable Terminal Block (RTB), catalog number 5015-RTBPWPXT
- Any combination of the following:
  - Four Simplex RTBs, catalog number 5015-RTBPXT
  - Two Duplex RTBs, catalog number 5015-RTBRPXT
  - Two Simplex RTBs and one Duplex RTB
- End cap, catalog number 5015-ECRXT
- I/O Slot Filler, catalog number 5015-N210XT (only used if fewer than four I/O modules are installed)
- RTB Slot Filler, Simplex, catalog number 5015-N2RTBXT (only used with I/O Slot Filler)
- SA Power Filler, catalog number 5015-N2SAXT (only used if SA power is not connected)

We recommend that, before you install an I/O Base, you use a 2D barcode scanner to record asset information, for example, serial number.

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**IMPORTANT** You can only mount the Adapter Base in the horizontal orientation. However, it cannot be installed in a horizontal flat, that is, facing the sky, orientation. If you install an I/O Base on the Adapter Bank, it must be installed horizontally. You can only mount the Adapter base in the horizontal orientation. If you install I/O Bases on I/O Banks, you can install the I/O Bases on mounting plates horizontally or vertically. This publication shows how to install I/O Bases in a horizontal orientation. The concepts apply if the I/O Base is installed in a vertical orientation. For more information on how to use an I/O Base in I/O Banks that are installed in a vertical orientation, see the FLEXHA 5000 System Installation Instructions, publication [5015-IN001](#).

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**ATTENTION:** Read this document and the documents listed in the Additional Resources section about installation, configuration and operation of this equipment before you install, configure, operate or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice. If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

注意：在安装、配置、操作和维护本产品前，请阅读本文档以及“其他资源”部分列出的有关设备安装、配置和操作的相应文档。除了所有适用规范、法律和标准的相关要求之外，用户还必须熟悉安装和接线说明。

安装、调整、投运、使用、组装、拆卸和维护等各项操作必须由经过适当训练的专业人员按照适用的操作规范实施。

如果未按照制造商指定的方式使用该设备，则可能会损害设备提供的保护。

**ATENCIÓN:** Antes de instalar, configurar, poner en funcionamiento o realizar el mantenimiento de este producto, lea este documento y los documentos listados en la sección Recursos adicionales acerca de la instalación, configuración y operación de este equipo. Los usuarios deben familiarizarse con las instrucciones de instalación y cableado y con los requisitos de todos los códigos, leyes y estándares vigentes.

El personal debidamente capacitado debe realizar las actividades relacionadas a la instalación, ajustes, puesta en servicio, uso, ensamble, desensamble y mantenimiento de conformidad con el código de práctica aplicable. Si este equipo se usa de una manera no especificada por el fabricante, la protección provista por el equipo puede resultar afectada.

**ATENÇÃO:** Leia este e os demais documentos sobre instalação, configuração e operação do equipamento que estão na seção Recursos adicionais antes de instalar, configurar, operar ou manter este produto. Os usuários devem se familiarizar com as instruções de instalação e fiação além das especificações para todos os códigos, leis e normas aplicáveis.

É necessário que as atividades, incluindo instalação, ajustes, colocação em serviço, utilização, montagem, desmontagem e manutenção sejam realizadas por pessoal qualificado e especializado, de acordo com o código de prática aplicável.

Caso este equipamento seja utilizado de maneira não estabelecida pelo fabricante, a proteção fornecida pelo equipamento pode ficar prejudicada.

**ВНИМАНИЕ:** Перед тем как устанавливать, настраивать, эксплуатировать или обслуживать данное оборудование, прочитайте этот документ и документы, перечисленные в разделе «Дополнительные ресурсы». В этих документах изложены сведения об установке, настройке и эксплуатации данного оборудования. Пользователи обязаны ознакомиться с инструкциями по установке и прокладке соединений, а также с требованиями всех применимых норм, законов и стандартов.

Все действия, включая установку, наладку, ввод в эксплуатацию, использование, сборку, разборку и техническое обслуживание, должны выполняться обученным персоналом в соответствии с применимыми нормами и правилами.

Если оборудование используется не предусмотренным производителем образом, защита оборудования может быть нарушена.

注意：本製品を設置、構成、稼働または保守する前に、本書および本機器の設置、設定、操作についての参考資料の該当箇所に記載されている文書に目を通してください。ユーザは、すべての該当する条例、法律、規格の要件に加えて、設置および配線の手順に習熟している必要があります。

設置調整、運転の開始、使用、組立て、解体、保守を含む諸作業は、該当する実施規則に従って訓練を受けた適切な作業員が実行する必要があります。

本機器が製造メーカーにより指定されていない方法で使用されている場合、機器により提供されている保護が損なわれる恐れがあります。

**ACHTUNG:** Lesen Sie dieses Dokument und die im Abschnitt „Weitere Informationen“ aufgeführten Dokumente, die Informationen zu Installation, Konfiguration und Bedienung dieses Produkts enthalten, bevor Sie dieses Produkt installieren, konfigurieren, bedienen oder warten. Anwender müssen sich neben den Bestimmungen aller anwendbaren Vorschriften, Gesetze und Normen zusätzlich mit den Installations- und Verdrahtungsanweisungen vertraut machen.

Arbeiten im Rahmen der Installation, Anpassung, Inbetriebnahme, Verwendung, Montage, Demontage oder Instandhaltung dürfen nur durch ausreichend geschulte Mitarbeiter und in Übereinstimmung mit den anwendbaren Ausführungsvorschriften vorgenommen werden.

Wenn das Gerät in einer Weise verwendet wird, die vom Hersteller nicht vorgesehen ist, kann die Schutzfunktion beeinträchtigt sein.

**ATTENTION :** Lisez ce document et les documents listés dans la section Ressources complémentaires relatifs à l'installation, la configuration et le fonctionnement de cet équipement avant d'installer, configurer, utiliser ou entretenir ce produit. Les utilisateurs doivent se familiariser avec les instructions d'installation et de câblage en plus des exigences relatives aux codes, lois et normes en vigueur.

Les activités relatives à l'installation, le réglage, la mise en service, l'utilisation, l'assemblage, le démontage et l'entretien doivent être réalisées par des personnes formées selon le code de pratique en vigueur. Si cet équipement est utilisé d'une façon qui n'a pas été définie par le fabricant, la protection fournie par l'équipement peut être compromise.

주의：본 제품 설치, 설정, 작동 또는 유지 보수하기 전에 본 문서를 포함하여 설치, 설정 및 작동에 관한 참고 자료 섹션의 문서들을 반드시 읽고 숙지하십시오. 사용자는 모든 관련 규정, 법규 및 표준에서 요구하는 사항에 대해 반드시 설치 및 배선 지침을 숙지해야 합니다.

설치, 조정, 가동, 사용, 조립, 분해, 유지보수 등 모든 작업은 관련 규정에 따라 적절한 교육을 받은 사용자를 통해서만 수행해야 합니다.

본 장비를 제조사가 명시하지 않은 방법으로 사용하면 장비의 보호 기능이 손상될 수 있습니다.

**ATTENZIONE** Prima di installare, configurare ed utilizzare il prodotto, o effettuare interventi di manutenzione su di esso, leggere il presente documento ed i documenti elencati nella sezione "Altre risorse", riguardanti l'installazione, la configurazione ed il funzionamento dell'apparecchiatura. Gli utenti devono leggere e comprendere le istruzioni di installazione e cablaggio, oltre ai requisiti previsti dalle leggi, codici e standard applicabili.

Le attività come installazione, regolazioni, utilizzo, assemblaggio, disassemblaggio e manutenzione devono essere svolte da personale adeguatamente addestrato, nel rispetto delle procedure previste.

Qualora l'apparecchio venga utilizzato con modalità diverse da quanto previsto dal produttore, la sua funzione di protezione potrebbe venire compromessa.

**DIKKAT:** Bu ürünün kurulumu, yapılandırılması, işletilmesi veya bakımı öncesinde bu dokümanı ve bu ekipmanın kurulumu, yapılandırılması ve işletimi ile ilgili ilave Kaynaklar bölümünde yer listelenmiş dokümanları okuyun. Kullanıcılar yürürlükteki tüm yönetmelikler, yasalar ve standartların gereksinimlerine ek olarak kurulum ve kablolarla talimatlarını da öğrenmek zorundadır.

Kurulum, ayarlama, hizmet alma, kullanma, parçaları birleştirme, parçaları sökme ve bakım gibi aktiviteler sadece uygun eğitimli almış kişiler tarafından yürürlükteki uygulama yönetmeliklerine uygun şekilde yapılabilir.

Bu ekipman üretici tarafından belirlenmiş amacın dışında kullanılırsa, ekipman tarafından sağlanan koruma bozulabilir.

注意事項：在安装、設定、操作或維護本產品前，請先閱讀此文件以及列於「其他資源」章節中有關安裝、設定與操作此設備的文件。使用者必須熟悉安裝和配線指示，並符合所有法規、法律和標準要求。

包括安裝、調整、交付使用、使用、組裝、拆卸和維護等動作都必須交由已經適當訓練的人員進行，以符合適用的實作法規。

如果將設備用於非製造商指定的用途時，可能會造成設備所提供的保護功能受損。

**POZOR:** Než začnete instalovat, konfigurovat či provázovat tento výrobek nebo provádět jeho údržbu, přečtěte si tento dokument a dokumenty uvedené v části Dodatečné zdroje ohledně instalace, konfigurace a provozu tohoto zařízení. Uživatelé se musejí vedle požadavků všech relevantních vyhlásek, zákonů a norem nutně seznámit také s pokyny pro instalaci a elektrické zapojení.

Činnosti zahrnující instalaci, nastavení, uvedení do provozu, užívání, montáž, demontáž a údržbu musí vykonávat vhodné proškolený personál v souladu s příslušnými prováděcími předpisy.

Pokud se toto zařízení používá způsobem neodpovídajícím specifikaci výrobce, může být narušena ochrana, kterou toto zařízení poskytuje.

**UWAGA:** Przed instalacją, konfiguracją, użytkowaniem lub konserwacją tego produktu należy przeczytać niniejszy dokument oraz wszystkie dokumenty wymienione w sekcji Dodatkowe źródła omawiające instalację, konfigurację i procedury użytkowania tego urządzenia. Użytkownicy mają obowiązek zapoznać się z instrukcjami dotyczącymi instalacji oraz przewodowania, jak również z obowiązującymi kodeksami, prawem i normami.

Działania obejmujące instalację, regulację, przekazanie do użytkowania, użytkowanie, montaż, demontaż oraz konserwację muszą być wykonywane przez odpowiednio przeszkolony personel zgodnie z obowiązującym kodeksem postępowania.

Jeśli urządzenie jest użytkowane w sposób inny niż określony przez producenta, zabezpieczenie zapewniane przez urządzenie może zostać ograniczone.

**OBBS!** Läs detta dokument samt dokumentet, som står listat i avsnittet Övriga resurser, om installation, konfigurering och drift av denna utrustning innan du installerar, konfigurerar eller börjar använda eller utföra underhållsarbete på produkten. Användare måste bekanta sig med instruktioner för installation och kabeldragning, förutom krav enligt gällande koder, lagar och standarder.

Åtgärder som installation, justering, service, användning, montering, demontering och underhållsarbete måste utföras av personal med lämplig utbildning enligt lämpligt bruk.

Om denna utrustning används på ett sätt som inte anges av tillverkaren kan det hända att utrustningens skyddsanordningar försätts ur funktion.

**LET OP:** Lees dit document en de documenten die genoemd worden in de paragraaf Aanvullende informatie over de installatie, configuratie en bediening van deze apparatuur voordat u dit product installeert, configureert, bedient of onderhoudt. Gebruikers moeten zich vertrouwd maken met de installatie en de bedieningsinstructies, naast de vereisten van alle toepasselijke regels, wetten en normen.

Activiteiten zoals het installeren, afstellen, in gebruik stellen, gebruiken, monteren, demonteren en het uitvoeren van onderhoud mogen uitsluitend worden uitgevoerd door hiervoor opgeleid personeel en in overeenstemming met de geldende praktijkregels.

Indien de apparatuur wordt gebruikt op een wijze die niet is gespecificeerd door de fabrikant, dan bestaat het gevaar dat de beveiliging van de apparatuur niet goed werkt.

## Environment and Enclosure



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

This equipment is not intended for use in residential environments and may not provide adequate protection to radio communication services in such environments.

This equipment is supplied as open-type equipment for indoor use. 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 nonmetallic. The interior of the enclosure must be accessible only by the use of a tool. Subsequent sections of this publication may contain more 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 more installation requirements.
- NEMA Standard 250 and EN/IEC 60529, as applicable, for explanations of the degrees of protection provided by enclosures.

**Prevent Electrostatic Discharge**



**ATTENTION:** This equipment is sensitive to electrostatic discharge, which can cause internal damage and affect normal operation. Follow these guidelines when you handle this equipment:

- Touch a grounded object to discharge potential static.
- Wear an approved grounding wriststrap.
- Do not touch connectors or pins on component boards.
- Do not touch circuit components inside the equipment.
- Use a static-safe workstation, if available.
- Store the equipment in appropriate static-safe packaging when not in use.

**Specific Conditions of Use**



**WARNING:**

- The equipment can be used as an accessory in only a FLEXHA 5000 I/O system.
- Do not use the equipment outside a FLEXHA 5000 I/O system applications.
- When the equipment is used in a FLEXHA 5000 I/O system application, all system certifications apply.
- This equipment is not resistant to sunlight or other sources of UV radiation.
- This equipment shall be mounted in an UKEX/ATEX/IECEX/INMETRO Zone 2 certified enclosure with a minimum ingress protection rating of at least IP54 (in accordance with EN/IEC/ABNT NBR 60079-0) and used in an environment of not more than Pollution Degree 2 (as defined in EN/IEC 60664-1) when applied in Zone 2 environments. The enclosure must be accessible only by the use of a tool.
- This equipment shall be used within its specified ratings defined by Rockwell Automation.
- Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to the equipment.
- The instructions in the user manual shall be observed.
- This equipment must be used only with UKEX/ATEX/IECEX/INMETRO certified Rockwell Automation backplanes.
- The equipment shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.
- This equipment must be used with the following accessories.

Catalog Number	Description	
5015-A4IOXT	I/O Base	
5015-BIMXT	Backplane Interface Module	
5015-BEKITXT	Bus Expansion Module, Power Cable and Communication Cable, used if extension of the backplane is needed. The 5015-BEKITXT consists of the following models:	
	<b>Catalog Number</b>	<b>Description</b>
	5015-BEBRXT	Bank Expansion Base, Right
	5015-BEBLXT	Bank Expansion Base, Left
	5015-BECPWRXT	Backplane Power Extension Cable (length 2 m)
5015-BECCOMXT	Backplane Communication Extension Cable (length 2 m)	
5015-BPGNDXT	Back Plate GND Lug (part of backplate)	

- This equipment must be used with one of the following accessories.

Catalog Number	Description
5015-MP300XT	Mounting Plate 300 mm
5015-MP700XT	Mounting Plate 700 mm
5015-MP900XT	Mounting Plate 900 mm
5015-MP1250XT	Mounting Plate 1250 mm



**ATTENTION:**

- 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.
- Use only a soft dry anti-static cloth to wipe down equipment. Do not use any cleaning agents.
- Do not discard the end cap. Use this end cap to cover the exposed interconnections on the last module on the DIN rail. Failure to do so could result in equipment damage or injury from electric shock.

## Install an I/O Base

After you install the Adapter Base, you can install I/O Bases in either of the following configurations:

- Installed next to the Adapter Base on the Adapter Bank.
- Installed on an I/O Bank that is connected to the Adapter Bank via extension bases and extension cables.
- Installed on an I/O Bank that is connected to an I/O Bank via extension bases and extension cables.

**IMPORTANT** You must install a mounting plate before you can install Adapter or I/O Bases. For information on how to install a mounting plate, for example, spacing requirements, see the FLEXHA 5000 System Installation Instructions, publication [5015-IN001](#).

### Install an I/O Base on the Adapter Bank

When you install the first I/O Base on the Adapter Bank, the I/O Base is connected directly to the Adapter Base.

To install the I/O Base, complete the following steps.

1. If an end cap is installed on the last EtherNet/IP adapter in the Adapter Base, remove it.
2. Seat the bottom of the I/O Base in the hooked portion of the mounting plate and directly next to the Adapter Base.
3. Push the top of the I/O Base toward the mounting plate.

When the I/O Base is moving toward the mounting plate, a tab on the left side of the I/O Base enters an opening on the right side of the Adapter Base.

As the rotation toward the mounting plate continues, a rectangular opening on the left side of the I/O Base engages a tab on the right side of the Adapter Base.

4. Continue to push the I/O Base toward the top of the mounting plate until it snaps into place.
5. Use a #2 Phillips screwdriver to turn the ST4.8 metric fastener to secure the base to the mounting plate.

The torque is 2 +/-0.11 Nm (18 +/-1 in•lb).

6. If you are using multiple I/O Bases on the Adapter Bank, repeat the tasks that are described in [step 2..step 5](#) the next I/O Base.

### Install an I/O Base on an I/O Bank

You can also install an I/O Base on an I/O Bank. Before you install the I/O Base, you must complete the following tasks:

1. Install an Adapter Bank.
2. If installed, remove the end cap from the Adapter Base.
3. Install a Bank Expansion Base, Left, in the Adapter Base
4. Install a Bank Expansion Base, Right, on the mounting plate for the first I/O Bank

Complete the following steps.

1. Seat the bottom of the I/O Base in the hooked portion of the mounting plate.
2. Push the top of the I/O Base toward the mounting plate.

When the I/O Base is moving toward the mounting plate, a tab on the left side of the I/O Base enters an opening on the right side of the Bank Expansion Base, Right.

As the rotation toward the mounting plate continues, a rectangular opening on the left side of the I/O Base engages a tab on the right side of the Bank Expansion Base, Right.

3. Continue to push the I/O Base toward the top of the mounting plate until it snaps into place.
4. Use a #2 Phillips screwdriver to turn the provided ST4.8 metric fastener to secure the base to the mounting plate.

The torque is 2 +/-0.11 Nm (18 +/-1 in•lb).

5. If you are using multiple I/O Bases on the I/O Bank, repeat the tasks that are described in [step 1..step 4](#) the next I/O Base.

## Install the End Cap

Once all I/O Bases are installed, push an end cap onto the right side of the last I/O Base.

**IMPORTANT** Remember, you can also install I/O Bases on I/O Banks in a vertical orientation and the installation concepts remain the same.

## Remove the Dust Covers from the I/O Bases

Before you can install any components on the bases, you must remove the dust covers. Module lockout latches in a horizontal orientation hold the dust covers in place.

To remove the dust covers, complete the following steps.

1. Confirm that the mounting screws are tightened into place.
2. Turn the module lockout latches to a vertical position.

**IMPORTANT** You cannot install I/O modules if the module lockout latches are not in the vertical position.

3. Pull the dust cover off the base.  
We recommend that you recycle the plastic.
4. To remove the dust covers from all installed I/O Bases, repeat the steps.

## Wire the Removable Terminal Blocks

[Table 1](#) lists the wire sizes that each RTB type supports.

The following apply to all RTBs:

- Torque = 0.7 +/-0.11 Nm (6 +/-1 in•lb)
- Wires are rated at 105 °C (221 ° F) or greater, 1.2 mm (3/64 in.) insulation max

Table 1 - FLEXHA 5000 RTB Wire Sizes

Catalog Number	Supported Wire Sizes
5015-RTBPWPXT	<ul style="list-style-type: none"> <li>• 2.5 mm<sup>2</sup> (12 AWG) solid copper wire, max</li> <li>• 2.5 mm<sup>2</sup> (12 AWG) stranded copper wire, without ferrule, max</li> <li>• 2.5 mm<sup>2</sup> (14 AWG) stranded copper wire, with ferrule, max</li> <li>• 2.5 mm<sup>2</sup> (14 AWG) stranded copper wire, without ferrule, max</li> </ul>
5015-RTBPXT	<ul style="list-style-type: none"> <li>• 0.34...2.5 mm<sup>2</sup> (22...12 AWG) solid copper wire, max</li> <li>• 0.14...2.5 mm<sup>2</sup> (26...14 AWG) stranded copper wire, with ferrule, max</li> <li>• 0.34...2.5 mm<sup>2</sup> (22...14 AWG) stranded copper wire, without ferrule, max</li> </ul>
5015-RTBRPXT	
5015-STBPXT	

## Specifications

For a list of all specifications, see the FLEXHA 5000 I/O System Specifications Technical Data, publication [5015-TD001](#).

### 5015-A4IOXT I/O Base Specifications

Attribute	Value
Temperature, operating IEC 60068-2-14 (Test Na and Nb, Non Operating and Operating Thermal Shock)	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$ ( $-40\text{ }^{\circ}\text{F} \leq T_a \leq +158\text{ }^{\circ}\text{F}$ )
Temperature, surrounding air, max	70 °C (158 °F) - If the I/O Base is mounted horizontally. 60 °C (140 °F) - If the I/O Base is mounted vertically.
Wiring category <sup>(1)</sup>	2 - signal ports (I/O) (via RTBs on I/O Base)
Isolation voltage	250V (continuous), Basic Isolation Type

(1) Use this Conductor Category information for planning conductor routing as described in the appropriate System Level Installation Manual. Also refer to Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#), for more installation information.

## Additional Resources

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

Resource	Description
FLEXHA 5000 I/O System Installation Instructions, publication <a href="#">5015-INO01</a>	Describes how to install a FLEXHA 5000 I/O system.
FLEXHA 5000 I/O System User Manual, publication <a href="#">5015-UM001</a>	Describes how to configure, maintain, and troubleshoot a FLEXHA 5000 I/O system.
FLEXHA 5000 I/O System Specifications Technical Data, publication <a href="#">5015-TD001</a>	Provides specifications and wiring diagrams for FLEXHA 5000 I/O modules, EtherNet/IP™ adapter, and other system components.
Ethernet Reference Manual, <a href="#">ENET-RM002</a>	Describes basic Ethernet concepts, infrastructure components, and infrastructure features.
Industrial Components Preventive Maintenance, Enclosures, and Contact Ratings Specifications, publication <a href="#">IC-TD002</a>	Provides a quick reference tool for Allen-Bradley® industrial automation controls and assemblies.
Safety Guidelines for the Application, Installation, and Maintenance of Solid-state Control, publication <a href="#">SGI-11</a>	Designed to harmonize with NEMA Standards Publication No. ICS 1.1-1987 and provides general guidelines for the application, installation, and maintenance of solid-state control in the form of individual devices or packaged assemblies incorporating solid-state components.
Industrial Automation Wiring and Grounding Guidelines, publication <a href="#">1770-4.1</a>	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, <a href="#">rok.auto/certifications</a>	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at [rok.auto/literature](#).

**Notes:**

**Notes:**

## Rockwell Automation Support

Use these resources to access support information.

<b>Technical Support Center</b>	Find help with how-to videos, FAQs, chat, user forums, and product notification updates.	<a href="http://rok.auto/support">rok.auto/support</a>
<b>Knowledgebase</b>	Access Knowledgebase articles.	<a href="http://rok.auto/knowledgebase">rok.auto/knowledgebase</a>
<b>Local Technical Support Phone Numbers</b>	Locate the telephone number for your country.	<a href="http://rok.auto/phonesupport">rok.auto/phonesupport</a>
<b>Literature Library</b>	Find installation instructions, manuals, brochures, and technical data publications.	<a href="http://rok.auto/literature">rok.auto/literature</a>
<b>Product Compatibility and Download Center (PCDC)</b>	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	<a href="http://rok.auto/pcdc">rok.auto/pcdc</a>

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## Waste Electrical and Electronic Equipment (WEEE)



At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental compliance information on its website at [rok.auto/pec](http://rok.auto/pec).

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