

## Packing Contents

Original Instructions



**Allen-Bradley**

by ROCKWELL AUTOMATION

## FLEXHA 5000 Removable Terminal Blocks

### IMPORTANT

Multiple different removable terminal blocks (RTBs) are used in a FLEXHA 5000™ I/O system. The system is designed so that individual components can be installed and removed independent of each other. This publication only includes information about the different removable terminal blocks (RTBs). For more information on how to install a complete FLEXHA 5000 I/O system, see the FLEXHA 5000 I/O System Installation Instructions, publication [5015-IN001](#).

We recommend that, before you install RTBs, you create a catalog of asset information of what's used in the system. You can scan the RTB labels to record such asset information as serial number.

[Table 1](#) lists the RTBs that you use to install a FLEXHA 5000 I/O system.

**Table 1 - FLEXHA 5000 RTBs**

Catalog Number	Component	Description
5015-RTBPWPXT (Can be used for different purposes)	MOD Power RTB	Connects module (MOD) power to the Adapter Base. <b>IMPORTANT:</b> Use another external power source for MOD power than the one for SA Power.
	SA Power RTB	Connects SA power to an I/O Base. <b>IMPORTANT:</b> Use another external power source for SA power than the one for MOD power.
5015-RTBPXT (Can be used for different purposes)	Simplex RTB	Connect field devices to I/O modules operating in Simplex mode.
	Diagnostic Input RTB	Connects the following: <ul style="list-style-type: none"><li>• Diagnostic monitor devices to an Adapter Base</li><li>• Field devices to I/O modules operating in Simplex mode.</li></ul>
5015-RTBRPXT	Duplex RTB	Connects field devices to I/O modules operating in Duplex mode.
5015-STBPXT	Shield Terminal Block (STB)	Provides termination for I/O cable shields for grounding purposes. Resistors, Capacitors, and metal-oxide varistors (MOVs) are used in the STB.
5015-N2RTBXT	Simplex RTB Filler	Used instead of a Simplex RTB when a module is not installed in an I/O Base. Two are used instead of a Duplex RTB when two I/O modules are not installed in an I/O Base or, if two are installed, they are not used in Duplex mode.
5015-N2SAXT	SA Power RTB Filler	Installed on the right side of the last I/O Base in the system.



**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, ensamblaje, desensamblaje y mantenimiento de conformidad con el código de práctica aplicable. Si este equipo es usado 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を目を通してください。ユーハは、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, 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.

**DİKKAT:** Bu ürünün kurulumu, yapılandırılması, işletilmesi veya bakımı öncesinde bu dokümanı ve bu ekipmanın kurulumu, yapılandırılması ve işletimi ile ilgili İİave Kaynaklar bölümünde yer listelenmiş dokümanları okuyun. Kullanıcılar yürürlükteki tüm yonetmelikler, yasalar ve standartların gereklisimlerine ek olarak kurulum ve kablolama talimatlarını da öğrenmek zorundadır.

Kurulum, ayarlama, hizmete alma, kullanma, parçaları birleştirme, parçaların söküme ve bakım gibi aktiviteler sadece uygun eğitimleri almış kişiler tarafından yürürlükteki uygulama yonetmeliklerine uygun şekilde yapılabilir.

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

**注意事項：**在安裝、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經過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 provozovat 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 vyhlášek, zákonů a norem nutně seznámit také s pokyny pro instalaci a elektrické zapojení.

Cinnosti hrajující instalaci, nastavení, uvedení do provozu, užívání, montáž, demontaž a údržbu musí vykonávat vhodně proškoleny 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 oprzewodowania, 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.

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

**OBS!** Läs detta dokument samt dokumentet, som står listat i avsnittet Övriga resurser, om installation, konfigurerings 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 kabeldragnings, 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 förstörts 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, configureren, bedient of onderhoudt. Gebruikers moeten zich vertrouwd maken met de installatie en de bedrijfsinstructies, 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.



**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 [I170-4.1](#), for more installation requirements.
- NEMA Standard 250 and EN/IEC 60529, as applicable, for explanations of the degrees of protection provided by enclosures.

**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.

**ATTENTION:**

- SELV source approved to EN/IEC60950-1, EN/IEC61010-2-201 or EN/IEC62368-1 (ES1)
- PELV source approved to EN/IEC60950-1, EN/IEC61010-2-201 or EN/IEC62368-1 (ES1)

**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 IECEx/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.
- Secure any external connections that mate to this equipment by using screws, sliding latches, threaded connectors, or other means provided with this product.
- If you connect or disconnect the removable terminal block (RTB) for I/O connections with power applied, to avoid the spark, UNLOCK the I/O module before removing the SA RTB.
- If you connect or disconnect the removable terminal block (RTB) for SA connections with power applied, an electric arc can occur. This could cause an explosion in hazardous location installations.
- 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-A2AXT	Adapter Base Dual with Power Conditioner
5015-BIMXT	Backplane Interface Module
Bus Expansion Module, Power Cable and Communication Cable, used if extension of the backplane is needed. The 5015-BEKITXT consists of the following models:	
Catalog Number	Description
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.

**IMPORTANT**

To ensure proper operation and high immunity to electrical noise, always use Belden 8761 (shielded, twisted-pair) or equivalent wire.  
For points that require 3 wires, always use Belden 8771 (shielded, twisted) or equivalent wire.

## Before You Begin

Before you install the RTBs, at minimum, you must install a mounting plate, an Adapter Base, and an I/O Base on the mounting plate. Each mounting plate must use a ground lug, catalog number 5015-BPGNDXT, for proper grounding. For more information see, the FLEXHA 5000 I/O system, see the FLEXHA 5000 System Installation Instructions, publication [5015-IN001](#).

### 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.

## Install the MOD Power Removable Terminal Blocks

You install a MOD Power RTB for each Power Conditioner. The power RTB has + and - terminals on the top and bottom, respectively. The power RTB is polarized so that you can only install the RTB in the Adapter Base in the correct orientation.

To install a power RTB, complete the following steps.

1. Plug the first power RTB under the left Power Conditioner on the Adapter Base.
2. Use a flat screwdriver to turn the screw in the middle of the RTB and secure it to the Adapter Base. The torque is 0.7 +/-0.11 Nm (6 +/-1 in•lb).
3. To install the power RTB under the right Power Conditioner on the Adapter Base, repeat the steps.

## Install the SA Power Removable Terminal Blocks

You install an SA Power RTB on the left side of an I/O Base. The power RTB has + and - terminals on the top and bottom, respectively. The power RTB is polarized so that you can only install the RTB in the I/O Base in the correct orientation.

### IMPORTANT

You do not use an SA Power RTB on the right side of an I/O Base. You use an SA Power RTB Filler.

To install an SA Power RTB, complete the following steps.

1. Plug the RTB under the leftmost I/O module on the I/O Base.
2. Use a flat screwdriver to turn the screw in the middle of the RTB and secure it to the I/O Base. The torque is 0.7 +/-0.11 Nm (6 +/-1 in•lb).

## Install the Diagnostic Removable Terminal Block

To install the diagnostic RTB, complete the following steps.

1. Plug the diagnostic RTB into position between the MOD Power RTBs on the Adapter Base. The diagnostic RTB is polarized so that you can only install it in one position. If you try to plug the RTB in and meet significant resistance, you might have the RTB upside down. Rows (A...D) and columns (0...7) printing on the RTB indicate the correct orientation.
2. Use a flat screwdriver to turn the screw in the middle of the RTB and secure it to the Adapter Base. The torque is 0.7 +/-0.11 Nm (6 +/-1 in•lb).

## Install a Duplex RTB

You use one Duplex RTB with a pair of I/O modules that are used in Duplex configuration.

To install a Duplex RTB, complete the following steps.

1. Plug the RTB into the I/O Base centered beneath the Duplex pair of I/O modules. The RTB is designed so that you can only install it in one position. If you try to plug the RTB in and meet significant resistance, you might have the RTB upside down. Rows (A...D) and columns (0...7) printing on the RTB indicate the correct orientation.
2. Use a flat screwdriver to turn the screw in the middle of the RTB and secure it to the I/O Base. The torque is 0.7 +/-0.11 Nm (6 +/-1 in•lb).

## Install a Simplex RTB

You use a Simplex RTB for each I/O module that is used in Simplex configuration. To install a Simplex RTB, complete the following steps.

### IMPORTANT

You can use a Simplex RTB Filler instead of a Simplex RTB when you are not using an I/O module and instead have an I/O Module Slot Filler in that slot. The same installation steps apply for the Simplex RTB filler.

1. Plug the Simplex RTB into the I/O Base under the I/O module that operates in Simplex mode. The RTB has a polarized design so that you can only install it in one position. If you try to plug the RTB in and meet significant resistance, you likely have the RTB upside down. Rows (A...D) and columns (0...7) printing on the RTB indicate the correct orientation.
2. Use a flat screwdriver to turn the screw in the middle of the RTB and secure it to the I/O Base. The torque is 0.7 +/-0.11 Nm (6 +/-1 in•lb).

## Install the Shield Removable Terminal Block

You must install an STB to terminate I/O cable shields. You install the STB in the chase at the bottom of the mounting plate on which the FLEXHA 5000 I/O system is installed.

The STB has eight terminals that serve as shield termination points for the I/O channels on a Simplex or Duplex RTB. Install the STB directly below the I/O module.

You must use shielded wires with Universal I/O modules.

To install the STB, complete the following steps.

1. Position the STB so that the screw in the middle of the STB is positioned over the chase.
2. Use a flat screwdriver to turn the screw until it is secure against the chase at the bottom of the mounting plate. The torque is 2 +/-0.11 Nm (18 +/-1 in•lb).

## Wire the Removable Terminal Blocks

[Table 2](#) 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 2 - 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>

Table 2 - FLEXHA 5000 RTB Wire Sizes

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

1. Insert wires into the push-in RTB terminals in one of the following ways:
  - If you use a ferruled wire or large gauge solid wire, you can push the wire into the terminal.
  - If the wire is non-ferruled, that is, stranded or small gauge wire, you must use a small screwdriver to push and hold in the orange tab before you insert the wire. In this case, make sure that the wire is fully inserted before you remove the screwdriver. When the orange tab comes out, the wire is locked in the terminal.
2. Use a digital multimeter (DMM) to make sure that the appropriate level of power is applied at the wired terminals on each RTB.

## Specifications

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

### 5015 RTB Specifications

Attribute	Value
Temperature, operating IEC 60068-2-14 (Test Na and Nb, Non Operating and Operating Thermal Shock)	-40 °C ≤ Ta ≤ +70 °C (-40 °F ≤ Ta ≤ +158 °F)
Temperature, surrounding air, max	70 °C (158 °F) - When the RTB is used in the Adapter Base or an I/O Base that is installed in a horizontal orientation 60 °C (140 °F) - When the RTB is used in an I/O Base that is installed in a vertical orientation.
Wiring category <sup>(i)</sup>	
5015-RTBPWPXT	2 - power ports (via RTBs on Adapter Base or I/O Base)
5015-RTBPXT	2 - signal ports (via RTBs on Adapter Base or I/O Base)
5015-RTBRPXT	2 - signal ports (I/O) (via RTBs on I/O Base)
5015-STBPXT	2 - signal ports (I/O) (I/O signals on I/O Base)

(i) 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 [I770-4.1](#), 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-IN001</a>	Describes how to install a FLEXHA 5000 I/O system.
FLEXHA 5000 I/O System User Manual, publication <a href="#">5015-UH001</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 11-1987 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="#">I770-4.1</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, Knowledgebase, and product notification updates.	<a href="http://rok.auto/support">rok.auto/support</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>Technical Documentation Center</b>	Quickly access and download technical specifications, installation instructions, and user manuals.	<a href="http://rok.auto/techdocs">rok.auto/techdocs</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>

## Documentation Feedback

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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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