

Packing Contents

Original Instructions



Allen-Bradley

by ROCKWELL AUTOMATION

FLEXHA 5000 Media Landing Card

Catalog Number 5015-MLTRXT

IMPORTANT FLEXHA 5000™ Media Landing Cards (MLCs) are part of 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 MLC. For more information on how to install a complete FLEXHA 5000 I/O system, see the FLEXHA 5000 System Installation Instructions, publication [5015-IN001](#).

FLEXHA 5000 MLCs connect the EtherNet/IP™ adapter to an EtherNet/IP network via RJ45 Ethernet ports.

An MLC provides the following:

- Two 10/100/1000 Mbps Ethernet ports
- A quarter-turn actuator to lock the MLC in place
- Status indicators to monitor module status, LINK 1 status, and LINK 2 status



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 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。ユーチャーは、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.

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 gerekşimlerine ek olarak kurulum ve kablolarla taliimatlarını da öğrenmek zorundadır.

Kurulum, ayarlama, hizmete alma, kullanma, parçaları birleştirme, parçaların söküme ve bakım gibi aktiviteler sadece uygun eğitimliler 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 hrazených instalací, nastavení, uvedení do provozu, užívání, montáž, demontáž a údržbu musí vykonávat vhodně proškolený personál v souladu s příslušnými prováděcími předpisy.

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

UWAGA: Przed instalacją, konfiguracją, użyciokowaniem 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.

Jestli 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, konfigurerering 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 försväts 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.

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 [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.

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 for 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 60064-1) 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.
- This 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-BEBCRXT	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.

**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.

**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.

Before You Begin

Before you install the Media Landing Card, at minimum, you must install a mounting plate and an Adapter Base on the mounting plate.

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.

2. To lock the MLC in place, use an RA 1492 N90 or equivalent-sized screwdriver to push the quarter-turn actuator in and turn it 90° clockwise.

IMPORTANT

If you turn the quarter-turn actuator more than 90° clockwise, you can damage the actuator.

3. Repeat the steps for the second MLC.

IMPORTANT

When the actuator is locked, the MLC is locked mechanically and electrically and enabled for use.

The system monitors the state of actuator during normal operation. If an MLC becomes unlocked, it is disabled and the system is alerted.

The detection and monitoring is important because, during normal operation, if one of the MLCs is unlocked, the system alerts you to such a state and the possibility that the other adapter provides network communication. As such, fault tolerance is compromised until both MLCs are locked in place and functioning properly.

Install the Media Landing Card on the Adapter Base

MLCs provide Ethernet ports that let the FLEXHA 5000 I/O system connect to an EtherNet/IP network. The MLCs operate concurrently with, and independent of, each other. The 5015-MLTRXT MLC has two RJ45 ports.

MLCs have one quarter-turn actuator. Out of the box, the quarter-turn actuator on the front of the MLC is in the up position. The other end of the quarter-turn actuator, at the back of the MLC, installs into the Adapter Base.

1. Push the MLC into position under the left EtherNet/IP adapter slot on the Adapter Base.

Quarter-turn Actuators Operation on an MLC

The quarter-turn actuators must be locked before initial power-up or the MLC does not power up.

IMPORTANT

A quarter-turn actuator can be positioned between locked and unlocked and not popped out. In this case, the MLC is unlocked. Be sure that the quarter-turn actuator is turned to the fully locked position.

When the quarter-turn actuator is locked, the MLC is locked mechanically and electrically and enabled for use.

If the quarter-turn actuator is locked, during power-up, the MLC runs a quarter-turn actuator diagnostic. If the diagnostic fails, the MLC does not power up. The system alerts you to such a condition via a red MOD status indicator on the MLC and via Studio 5000 Logix Designer® software.

If the quarter-turn actuator is unlocked, during normal operation, the MLC powers down and the EtherNet/IP adapter that is associated with the MLC longer can communicate with the devices in the system. The other EtherNet/IP adapter maintains network communication. Fault tolerance is compromised until the MLC is locked again and the EtherNet/IP adapter that is associated with it resumes normal operations.

Specifications

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

5015-MLTRXT Media Landing Card 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)
BP (Backplane power)	550 mA @ 15V DC IMPORTANT: This value represents the total backplane power for the FLEXHA 5000 Media Landing Card and the FLEXHA 5000 EtherNet/IP adapter, catalog number 5015-AENFTXT.
Wiring category ⁽¹⁾	2 - signal ports (Ethernet)
Isolation voltage	250V (continuous), Basic Insulation Type, Ethernet ports to Backplane 250V (continuous), Basic Insulation Type, Ethernet port to Ethernet

- (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 [I770-41](#), 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 5015-IN001	Describes how to install a FLEXHA 5000 I/O system.
FLEXHA 5000 I/O System User Manual, publication 5015-UM001	Describes how to configure, maintain, and troubleshoot a FLEXHA 5000 I/O system.
FLEXHA 5000 I/O System Specifications Technical Data, publication 5015-TD001	Provides specifications and wiring diagrams for FLEXHA 5000 I/O modules, EtherNet/IP adapter, and other system components.
Ethernet Reference Manual, ENET-RM002	Describes basic Ethernet concepts, infrastructure components, and infrastructure features.
Industrial Components Preventive Maintenance, Enclosures, and Contact Ratings Specifications, publication IC-TD002	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 SGI-11	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 I770-41	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.

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

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For technical support, visit [rok.auto/support](#).

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

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