

# Installation Instructions

Original Instructions



**Allen-Bradley**

by ROCKWELL AUTOMATION

## FLEX I/O Dual-port EtherNet/IP Adapters

Catalog Numbers 1794-AENTR, 1794-AENTRXT, Series A

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### Summary of Changes

This publication contains the following new or updated information. This list includes substantive updates only and is not intended to reflect all changes.

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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, 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, yapilandırılması, işletilmesi veya bakımı öncesinde bu dokümanı ve bu ekipmanın kurulumu, yapilandırılması ve işletimi ile ilgili ilave Kaynaklar bölümünde yer listelenmiş dokümanları okuyun. Kullanıcılar yürürlükteki tüm yönetmelikler, yasalar ve standartların gereksinimlerine ek olarak kurulum ve kablolama talimatlarını da öğrenmek zorundadır.

Kurulum, ayarlama, hizmete alma, kullanma, parçaları birleştirme, parçaları sökme ve bakım gibi aktiviteler sadece uygun eğitimleri almış kişiler tarafından yürürlükteki uygulamaya 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.

Činnosti zahrnující instalaci, nastavení, uvedení do provozu, užívání, montáž, demontáž a údržbu musí vykonávat vhodně 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 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.

Jeśli 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, 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 bedringsinstructies, 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.

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**Environment and Enclosure**


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**ATTENTION:** 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 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. It must be mounted within an enclosure that is suitably designed for those specific environmental conditions that is present and appropriately designed to help prevent personal injury resulting from accessibility to live parts. The enclosure must have suitable flame-retardant properties to help 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 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 Standard 250 and IEC 60529, as applicable, for explanations of the degrees of protection provided by enclosures.

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**Prevent Electrostatic Discharge**


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**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.

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**UK and European Hazardous Location Approval**


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**The following applies to products marked  II 3 G:**

- 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 that is given in Schedule 1 of UKEX and Annex II of EU Directive 2014/34/EU. See the UKEX and EU Declaration of Conformity at [rok.auto/certifications](http://rok.auto/certifications) for details.
  - The type of protection is Ex ec IIC T5 Gc for 1794-AENTR and Ex ec IIC T4 Gc for 1794-AENTRXT according to EN IEC 60079-0:2018, EXPLOSIVE ATMOSPHERES - PART 0: EQUIPMENT - GENERAL REQUIREMENTS, Issue Date 07/2018 and EN IEC 60079-7:2015+A1:2018, Explosive atmospheres. Equipment protection by increased safety "e".
  - Comply with Standard EN IEC 60079-0:2018, EXPLOSIVE ATMOSPHERES - PART 0: EQUIPMENT - GENERAL REQUIREMENTS, Issue Date 07/2018, EN IEC 60079-7:2015+A1:2018 Explosive atmospheres. Equipment protection by increased safety "e", reference certificate number DEMKO 14 ATEX 1342501X and UL22UKEX2378X.
  - Are intended for use in areas in which explosive atmospheres caused by gases, vapors, mists, or air are unlikely to occur, or are likely to occur only infrequently and for short periods. Such locations correspond to Zone 2 classification according to UKEX regulation 2016 No. 1107 and ATEX directive 2014/34/EU.
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**IEC Hazardous Location Approval**


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**The following applies to products marked with IECEx certification:**


- Are intended for use in areas in which explosive atmospheres caused by gases, vapors, mists, or air are unlikely to occur, or are likely to occur only infrequently and for short periods. Such locations correspond to Zone 2 classification to IEC 60079-0.
  - The type of protection is Ex ec IIC T5 Gc for 1794-AENTR and Ex ec IIC T4 Gc for 1794-AENTRXT according to IEC 60079-0 and IEC 60079-7.
  - Comply with Standards IEC 60079-0, Explosive atmospheres Part 0: Equipment - General requirements, Edition 7, Revision Date 2017, IEC 60079-7, 5.1 Edition revision date 2017, Explosive atmospheres - Part 7: Equipment protection by increased safety "e", reference IECEx certificate number IECEx UL 14.0066X.
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**WARNING: Special Conditions for Safe Use:**

- This equipment shall be mounted in an UKEX/ATEX/IECEx Zone 2 certified enclosure with a minimum ingress protection rating of at least IP54 (in accordance with EN/IEC 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 that are 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.
  - This equipment must be used only with UKEX/ATEX/IECEx 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.
  - Earthing is accomplished through mounting of modules on rail.
  - Enclosure must be marked with the following: "Warning - Do not open when energized" After installation of equipment into the enclosure, access to termination compartments shall be dimensioned so that conductors can be readily connected.
  - For Class I Division 2 applications, use only Class I Division 2 listed or recognized accessories and modules that are approved for use within the FLEX™ I/O platform.
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North American Hazardous Location Approval

The Following Information Applies When Operating This Equipment In Hazardous Locations.	Informations sur l'utilisation de cet équipement en environnements dangereux.
<p>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.</p>	<p>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.</p>
<div style="display: flex; align-items: center;">  <div> <p><b>WARNING:</b> <b>Explosion Hazard -</b></p> <ul style="list-style-type: none"> <li>Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.</li> <li>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.</li> <li>Substitution of components may impair suitability for Class I Division 2.</li> </ul> </div> </div>	<div style="display: flex; align-items: center;">  <div> <p><b>AVERTISSEMENT:</b> <b>Risque d'Explosion -</b></p> <ul style="list-style-type: none"> <li>Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher l'équipement.</li> <li>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.</li> <li>La substitution de composants peut rendre cet équipement inadapté à une utilisation en environnement de Classe I Division 2.</li> </ul> </div> </div>

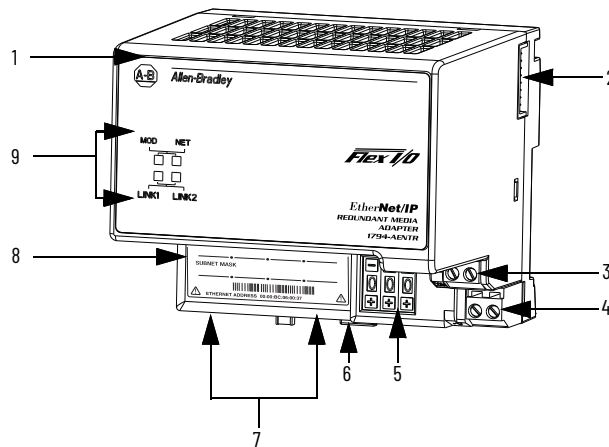


**ATTENTION:** This product is grounded through the DIN rail to chassis ground. Use zinc-plated chromate-passivated steel DIN rail to assure proper grounding. The use of other DIN rail materials (for example, aluminum or plastic) that can corrode, oxidize, or are poor conductors, can result in improper or intermittent grounding. Secure DIN rail to the mounting surface approximately every 200 mm (7.8 in.) and use end-anchors appropriately. Be sure to ground the DIN rail properly. See the Industrial Automation Wiring and Grounding Guidelines, Rockwell Automation publication [1770-4.1](#), for more information.

Overview

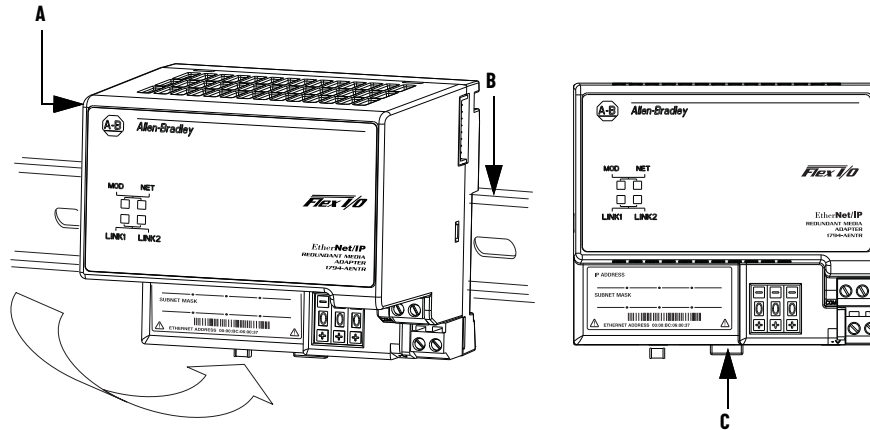
Read this publication for installation information on the series A, FLEX I/O dual-port EtherNet/IP™ adapters.

Figure 1 - FLEX I/O Dual-port EtherNet/IP Adapter



	Description		Description
1	Dual-port EtherNet/IP adapter	6	Module locking tab
2	Flexbus connector	7	Network cable RJ45 connectors (underside)
3	24V common connections	8	MAC ID label
4	24V DC connections	9	Status indicators
5	IP address switches		

## Install Your Adapter

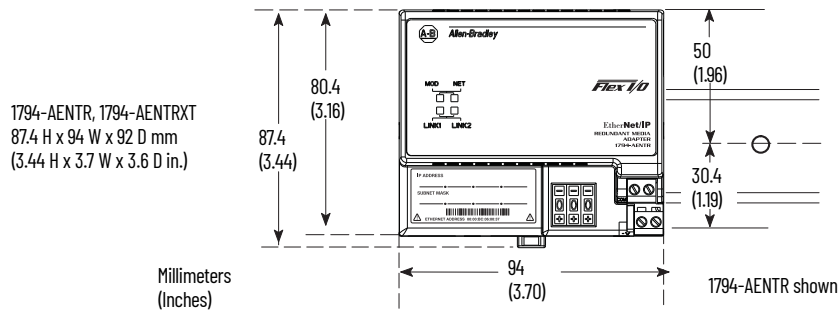


**ATTENTION:** During mounting of all devices, be sure that all debris (for example, metal chips, wire strands) is kept from falling into the module. Debris that falls into the module could cause damage on power-up.



**ATTENTION:** Do not remove or replace an adapter while power is applied. Interruption of the backplane can result in unintentional operation or machine motion.

### Mounting Dimensions



### Mount the Adapter on a DIN Rail

1. Position the adapter (A) on an IEC standard (35 x 7.5 x 1 mm) top-hat DIN rail (B) at a slight angle (DIN rail: Allen-Bradley® part number 199-DR1; 46277-3; EN50022).
2. Hook the lip on the rear of the adapter onto the top of the DIN rail, and rotate the adapter onto the rail.
3. Press the adapter down onto the DIN rail until flush. The locking tab (C) snaps the adapter into position and locks it onto the DIN rail.
4. If the adapter does not lock in place, use a screwdriver or similar device to move the locking tab down while pressing the adapter flush onto the DIN rail, and release the locking tab to lock the adapter in place. If necessary, push up on the locking tab to lock.
5. Connect the adapter wiring as shown in [Connect Wiring on page 7](#).

## Mount the Adapter on a Panel or Wall

To mount this adapter on a panel or wall, see the Panel Mounting Kit Cat. No. 1794-NM1/B Installation Instructions, publication [1794-IN135](#).



**WARNING:** If you insert or remove the module while backplane power is on, an electric arc can occur. This could cause an explosion in hazardous location installations. Be sure that power is removed or the area is nonhazardous before proceeding.



**WARNING:** When used in a Class I Division 2, hazardous location, this equipment must be mounted in a suitable enclosure with proper wiring method that complies with the governing electrical codes.

## Mount or Replace the Adapter on an Existing System

1. Disconnect any wiring jumpered to the adjacent terminal base.
2. Remove the Ethernet connectors from the bottom of the adapter.



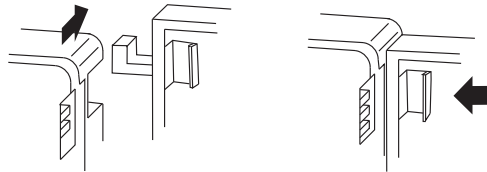
**WARNING:** If you connect or disconnect the communication cable with power applied to the adapter or any device on the network, an electric arc can occur. This could cause an explosion in hazardous location installations. Be sure that power is removed or the area is nonhazardous before proceeding.

3. Disconnect any user power wiring connections to the adapter.
4. Open the module latching mechanism and remove the module from the base unit to which the adapter is attached.
5. Push the Flexbus connector toward the right side of the terminal base to unplug the backplane connection.

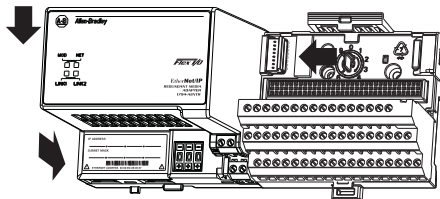


**ATTENTION:** Verify that the Flexbus connector is clear of the adapter. The slide must be to the right and the raised spot on the slide must be visible.

6. Release the locking tab and remove the adapter.  
Before installing the new adapter, notice the notch on the right rear of the adapter. This notch accepts the hook on the terminal base unit. The notch is open at the bottom. The hook and adjacent connection point keep the terminal base and the adapter tight together, reducing the possibility of a break in communication over the backplane.

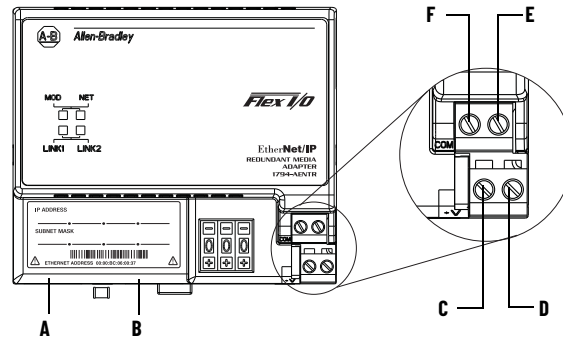


7. Complete the adapter mounting as shown below.  
Push down and in simultaneously to lock the adapter to the DIN rail. If the adapter does not lock in place, use a screwdriver or similar device to move the locking tab down while pressing the adapter flush onto the DIN rail, and release the locking tab to lock the adapter in place. If necessary, push up on the locking tab to lock.



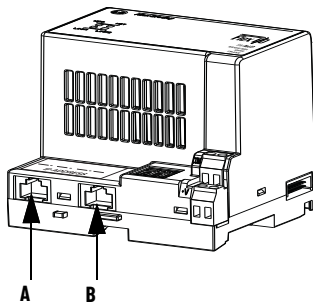
- When the adapter is locked onto the DIN rail, gently push the Flexbus connector into the adapter to complete the backplane.
8. Reinstall the module in the adjacent terminal base unit.

## Connect Wiring



**WARNING:** If you connect or disconnect wiring while the field-side power is on, an electric arc can occur. This could cause an explosion in hazardous location installations. Be sure that power is removed or the area is nonhazardous before proceeding.

1. Connect an Ethernet network cable to the RJ45 connector (A).
2. Connect the redundant Ethernet network cable to the RJ45 connector (B).



### ATTENTION:

- When connecting wiring, torque terminal screws C, D, E, and F to 0.8 N•m (7 lb•in).
- If you are using multiple power sources, do not exceed the specified isolation voltage.
- Power wiring must be less than 10 m (32.8 ft.) in length.
- Do not wire more than two conductors on any single terminal.

3. Connect 24V DC common to the left side of the upper connector, terminal F.
4. Connect +24V DC input power to the left side of the lower connector, terminal C.
5. Connections D and E are used to pass +24V DC common (E) and 24V DC power (D) to the next module in the series (if necessary).

## Set the Network Address

The adapter ships with the thumbwheel switches set to 999 and Dynamic Host Configuration Protocol (DHCP) enabled. You can set the network Internet Protocol (IP) address in these ways:

- Use the thumbwheel switches on the module.
- Use a DHCP server, such as Rockwell Automation® DHCP.
- Retrieve the IP address (if previously set) from nonvolatile memory.

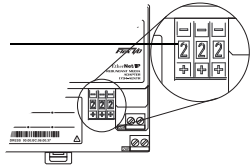
The adapter reads the thumbwheel switches first to determine if the switches are set to a valid number. You set the node address by using the three-position thumbwheel switch. Press the + or - buttons to change the number. Valid settings are 001...254.

When the switches are set to a valid number, the adapter's IP address is 192.168.1.xxx (where xxx represents the number set on the switches). The adapter subnet mask is set to 255.255.255.0. The adapter gateway address is set differently depending on the firmware revision:

- For firmware revision 1.013 and earlier, when the address switches are set to 001...254, the adapter gateway address is set to 0.0.0.0.
- For firmware revision 1.014, when the address switches are set to 001, the adapter gateway address is set to 0.0.0.0. When the address switches are set to 002...254, the adapter gateway address is set to 192.168.1.1.

The adapter does not have a host name assigned, or use any Domain Name System when using the thumbwheel settings.

Press the + or - buttons to change the numbers.



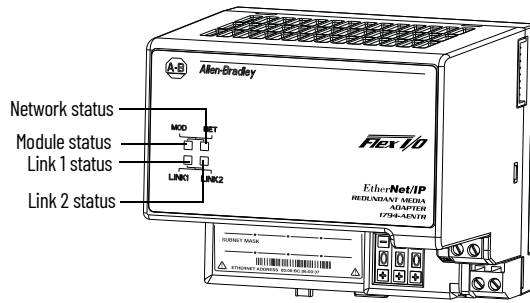
If you set the switches to an invalid number (such as 000, or a value greater than 254), the adapter verifies that you have enabled DHCP.

**DHCP Enabled and Not Enabled**

DHCP State	Adapter Action
Enabled	Asks for an address from a DHCP server. The DHCP server also assigns other Transport Control Protocol (TCP) parameters.
Not enabled	Uses the IP address (along with other TCP configurable parameters) stored in nonvolatile memory.

**Status Indicators**

The module has LED status indicators to specify its status and aid the user in troubleshooting.



**Status Indicators**

Indicator	Status
<b>Link 1 or Link 2 Status Indicator (individually)</b>	
Off	No link exists. Verify the network cabling and correct as necessary.
Solid green	Link exists @ 100 Mbps
Flashing green	I/O is being transmitted or received @ 100 Mbps.
Flashing yellow	I/O is being transmitted or received @ 10 Mbps.
Solid yellow	Link exists @ 10 Mbps
<b>Module Status Indicator</b>	
Off	No power. The adapter does not have 24V DC power. Verify that power is supplied to the adapter.
Flashing green	Standby. The adapter is not configured. Configure the adapter.
Green	Operational. The adapter is operating correctly. No action is required.
Flashing red	Minor fault. A recoverable fault is detected. This could be caused by an incorrect or inconsistent configuration. Verify the configuration and reconfigure as needed.
Solid red	Major fault. An unrecoverable fault is detected. Recycle power to the adapter. If this does not clear the fault, replace the adapter.
Flashing red/green	Self-test. The adapter is performing a power-up self-test. Wait until the test is completed.
<b>Network Status Indicator</b>	
Off	Not powered. No IP address. The adapter is not powered or does not have an IP address. <ul style="list-style-type: none"> <li>Verify that there is power and the adapter is correctly wired to the power supply.</li> <li>Verify that the adapter is configured.</li> </ul>
Flashing green	No connection. The adapter has obtained an IP address but has no established connections.
Green	CIP™ connections. The adapter has an IP address and has at least one established connection.
Flashing red	Connection timeout. One or more of the connections in which the adapter is the target has timed out.
Red	Duplicate IP address. The adapter has detected that its IP address is already in use. Configure the adapter with a unique IP address.
Flashing red/green	Self-test. The adapter is performing a power-up self-test.

# Specifications

## General Specifications

Attribute	1794-AENTR	1794-AENTRXT <sup>(1)</sup>
I/O module capacity	8	
Communication rate	10/100 Mbps	
Indicators	Module status - Red/green Network status - Red/green Link 1 status - Yellow/green Link 2 status - Yellow/green	
Enclosure type rating	None (open-style)	
Input voltage range	19.2...31.2V DC (includes 5% AC ripple)	
Input voltage, nom	24V DC	
Inrush current	18 A for 2 ms	
Flexbus output, max	640 mA @ 5V DC	
Isolation voltage	50V continuous, Basic Insulation Type Tested @ 1000V AC for 60 s, power to Flexbus to EtherNet/IP	
Power consumption, max	500 mA 400 mA @ 24V DC	
Power dissipation, max	71 W @ 19.2V DC	6.1 W @ 19.2V DC
Thermal dissipation	24.2 BTU/hr @ 24V DC	20.8 BTU/hr @ 24V DC
Wire size, power conductors	0.33...3.31 mm <sup>2</sup> (22...12 AWG) stranded copper wire rated at 75 °C (167 °F) or greater, 1.2 mm (3/64 in.) insulation max	
Wire category <sup>(2)</sup>	1 - on power ports 1 - on communications ports	
Ethernet connector	2 Ethernet RJ45 Category 5	
North American temp code	T5	T4A
UKEX/ATEX temp code	T5	T4
IECEx temp code	T5	T4
Terminal screw torque	0.8 N•m (7 lb•in)	
Dimensions, approx. (H x W x D)	87 x 94 x 92 mm 3.4 x 3.7 x 3.6 in.	
Weight, approx.	227 g (8.01 oz)	

(1) The 1794-AENTRXT module is conformally coated to meet noxious gas requirements of ISA/ANSI-71.040 1985 Class G3 Environment.

(2) Use this conductor category information for planning conductor routing as described in the system-level installation manual. See the Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

## Environmental Specifications

Attribute	1794-AENTR	1794-AENTRXT
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...55 °C (32...131 °F)	-25...+70 °C (-13...+158 °F)
Temperature, surrounding air, max	55 °C (131 °F)	70 °C (158 °F)
Temperature, nonoperating	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	IEC 61000-6-4	
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...6000 MHz	

Environmental Specifications (Continued)

Attribute	1794-AENTR	1794-AENTRXT
EFT/B immunity	IEC 61000-4-4: ±4 kV @ 5 kHz on power ports ±4 kV @ 5 kHz on communication ports	
Surge transient immunity	IEC 61000-4-5: ±1 kV line-line (DM) and ±2 kV line-earth (CM) on power ports ±2 kV line-earth (CM) on communication ports	
Conducted RF immunity	IEC 61000-4-6: 10V rms with 1 Hz sine wave 80% AM from 150 kHz...80 MHz	

Certifications

Certification <sup>(1)</sup> (when product is marked)	Value
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.
UK and CE	UK Statutory Instrument 2016 No. 1091 and European Union 2014/30/EU EMC Directive, compliant with: EN 61326-1; Meas./Control/Lab., Industrial Requirements EN 61000-6-2; Industrial Immunity EN 61131-2; Programmable Controllers EN 61000-6-4; Industrial Emissions  UK Statutory Instrument 2012 No. 3032 and European Union 2011/65/EU RoHS, compliant with: EN 63000; Technical documentation
RCM	Australian Radiocommunications Act, compliant with: EN 61000-6-4; Industrial Emissions
EtherNet/IP	ODVA conformance tested to EtherNet/IP specifications
Ex	UK Statutory Instrument 2016 No. 1107 and European Union 2014/34/EU ATEX Directive, compliant with: EN IEC 60079-0; General Requirements EN IEC 60079-7; Explosive Atmospheres, Protection "e" II 3 G Ex ec IIC T5 Gc ( <b>for 1794-AENTR</b> ) II 3 G Ex ec IIC T4 Gc ( <b>for 1794-AENTRXT</b> ) DEMKO 14 ATEX 1342501X UL22UKEK2378X
IECEx	IECEx System, compliant with: IEC 60079-0; General Requirements IEC 60079-7; Explosive Atmospheres, Protection "e" Ex ec IIC T5 Gc ( <b>for 1794-AENTR</b> ) Ex ec IIC T4 Gc ( <b>for 1794-AENTRXT</b> ) IECEx UL 14.0066X
TÜV	TÜV Certified for Functional Safety: Capable of SIL 2
KC	Korean Registration of Broadcasting and Communications Equipment, compliant with: Article 58-2 of Radio Waves Act, Clause 3
CCC	CNCA-C23-01 强制性产品认证实施规则 防爆电气 CNCA-C23-01 CCC Implementation Rule Explosion-Proof Electrical Products
Morocco	Arrêté ministériel n° 6404-15 du 29 ramadan 1436

(1) See the Product Certification link at [rok.auto/certifications](http://rok.auto/certifications) for Declarations of Conformity, Certificates, and other certification details.

Additional Resources

For more information on the products that are described in this publication, use these resources. You can view or download publications at [rok.auto/literature](http://rok.auto/literature).

Resource	Description
FLEX I/O and FLEX I/O-XT Selection Guide, publication <a href="#">1794-S6002</a>	Provides information on how to select FLEX I/O and FLEX I/O-XT™ adapters, terminal bases, I/O modules, and accessories.
FLEX I/O Dual-port EtherNet/IP Adapters User Manual, publication <a href="#">1794-UM066</a>	Describes how to configure and troubleshoot your EtherNet/IP adapter.
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="http://rok.auto/certifications">rok.auto/certifications</a>	Provides declarations of conformity, certificates, and other certification details.

**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>

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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).

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

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

EUROPE/MIDDLE EAST/AFRICA: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2663 0600

ASIA PACIFIC: Rockwell Automation SEA Pte Ltd, 2 Corporation Road, #04-05, Main Lobby, Corporation Place, Singapore 618494, Tel: (65) 6510 6608

UNITED KINGDOM: Rockwell Automation Ltd., Pitfield, Kiln Farm, Milton Keynes, MK11 3DR, United Kingdom, Tel: (44)(1908) 838-800

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