

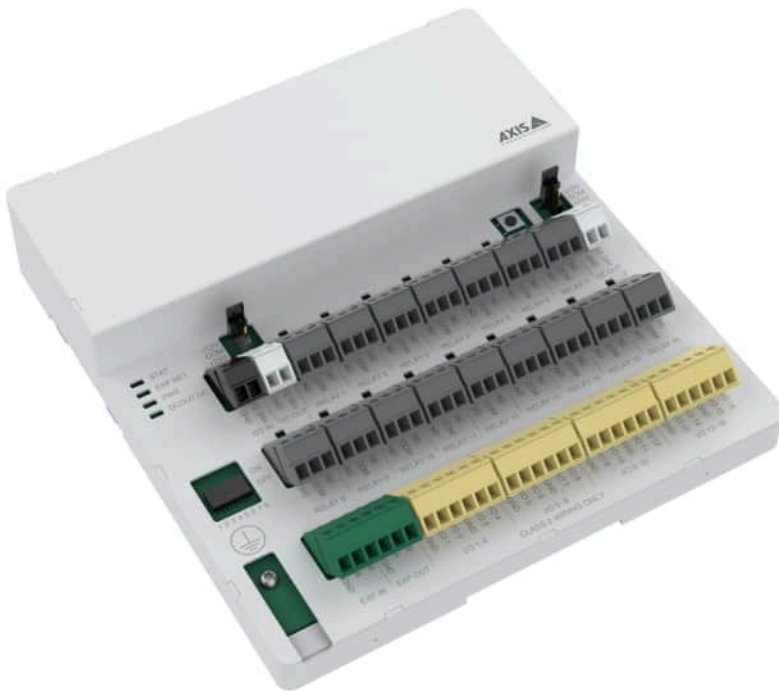


AXIS A9920 I/O Relay Expansion Module

High-density I/Os with great scalability

Designed for high-density applications, this indoor expansion module works with Axis door controllers to support elevator access control, or in combination with AXIS A9210 Network I/O Relay Module and AXIS A9910 I/O Relay Expansion Module. Built on open standards, it enables easy expansion of physical access control capabilities and seamless integration with third-party systems such as VMSs, security, tamper detection, alarm, and intrusion systems. Each module provides 16 I/O ports, supporting 16 supervised inputs and 16 form C relay outputs.

- > 16 I/O ports with supervised inputs and outputs
- > 16x form C relay, dry application
- > Supports up to 128 I/Os and 64 relays with one IP connection
- > Designed to use with AXIS A9210 or Axis door controllers



AXIS A9920 I/O Relay Expansion Module

I/O interface

Configurable I/Os

I/O: 16x I/O, configurable inputs and outputs

Digital input: 0 to max 30 V DC, possible to supervise between 0–12 V (4 states)¹

Programmable end-of-line resistors, 1 K, 2.2 K, 4.7 K and 10 K, 1%, ¼ watt standard

Digital output: Open drain, 0 to max 30 V DC, max 100 mA

Relays

16x form C relay, dry only, NO/NC, max 4 A at 12 V DC, or 2 A at 30 V DC

Expansion interface

Expansion IN and Expansion Out interface, multi-drop
Qualified to have 128 I/Os and 64 relays or 16 expansion modules²

Power

DC in: 12–24 V DC, max 30 W

DC out: 12/24 V DC, jumper configurable, max 25 W², when powered from AXIS A9210, max 6 W²

Power through relay: Dry: max 4 A at 12 V DC, or 2 A at 30 V DC

Cable requirements

Wire size for connectors: CSA: AWG 28–16, CUL/UL: AWG 30–14

DC power: AWG 18–16, qualified for up to 3 m (10 ft)

AUX power: AWG 18–16, qualified for up to 200 m (656 ft)

I/Os as inputs: AWG 24–16, qualified for up to 200 m (656 ft)

EXP In/Out: 1 twisted pair with shield connected to the protected ground, 120 ohm impedance, AWG 24–16, qualified for up to 1000 m (3281 ft)

System integration

Video management systems

Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at axis.com/vms.³

Tamper detection

Tilting, vibration

Approvals

Product markings

CE, RCM, UKCA, UL/cUL, VCCI, WEEE

Supply chain

TAA compliant

EMC

CISPR 35, CISPR 32 Class A, EN 55032 Class A, EN 55035, EN 50130-4, EN 61000-6-1, EN 61000-6-2
Australia/New Zealand: RCM AS/NZS CISPR 32 Class A
Canada: ICES-3(A)/NMB-3(A)
Japan: VCCI Class A
Korea: KS C 9835, KS C 9832 Class A
USA: FCC Part 15 Subpart B Class A

Safety

CAN/CSA C22.2 No. 62368-1 ed. 3
IEC/EN/UL 62368-1 ed. 3, RCM AS/NZS 62368.1:2022, UL 2043, UL 294

Environment

IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78

Cybersecurity

Edge security

Software: Signed firmware

Hardware: Secure element (CC EAL 6+), secure keystore, secure boot

Communication

AES-128

1. For more information, go to help.axis.com/axis-a9920

2. For more information, see the installation guide.

3. Only through Axis door controllers or AXIS A9210

Documentation

Axis Vulnerability Management Policy

Axis Security Development Model

To download documents, go to axis.com/support/cybersecurity/resources

To read more about Axis cybersecurity support, go to axis.com/cybersecurity

General

Casing

Steel

Color: white NCS S 1002-B

Mounting

Wall mount

DIN rail mount

Connectors

I/O: Terminal blocks for DC power, inputs/outputs, relay. Detachable and color coded connectors for ease of installation.

Wire size for connectors: CSA: AWG 28–16, CUL/UL: AWG 30–14

Operating conditions

Temperature: –40 °C to 55 °C (–40 °F to 131 °F)

Conditional maximum temperature⁴: 70 °C (158 °F)

Humidity: 10–85% RH (non-condensing)

Storage conditions

Temperature: –40 °C to 70 °C (–40 °F to 158 °F)

Humidity: 5–95% RH (non-condensing)

Dimensions

For the overall product dimensions, see the dimension drawing in this datasheet.

Weight

715 g (1.6 lb)

Box content

Expansion module, installation guide, connector kit (mounted), grounding kit

Optional accessories

AXIS TA1901 DIN Rail Clip

AXIS TA1902 Mk II Access Control Connector Kit⁵

AXIS T98A15-VE Surveillance Cabinet⁵

AXIS TQ1808-VE Surveillance Cabinet⁵

AXIS TA9001 Wall Mount Bracket

AXIS TA9901 Cable Strain Relief

For more accessories, go to axis.com/products/axis-a9920

System tools

AXIS Site Designer, AXIS Device Manager, product selector, accessory selector

Available at axis.com

Languages

English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

Warranty

5-year warranty, see axis.com/warranty

Part numbers

Available at axis.com/products/axis-a9920#part-numbers

Sustainability

Substance control

PVC free

RoHS in accordance with EU RoHS Directive 2011/65/EU/ and EN 63000:2018

REACH in accordance with (EC) No 1907/2006. For SCIP UUID, see echa.europa.eu

Materials

Screened for conflict minerals in accordance with OECD guidelines

To read more about sustainability at Axis, go to axis.com/about-axis/sustainability

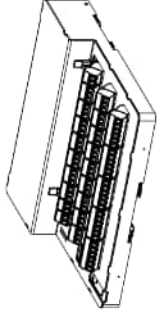
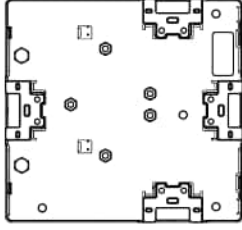
Environmental responsibility

axis.com/environmental-responsibility

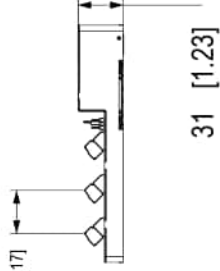
Axis Communications is a signatory of the UN Global Compact, read more at unglobalcompact.org

4. Current through relays with max 2 A

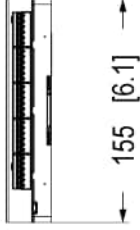
5. For UL 294-certified installations, see the installation guide.



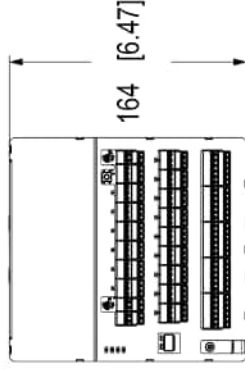
29,8 [1.17]



31 [1.23]



155 [6.1]



164 [6.47]

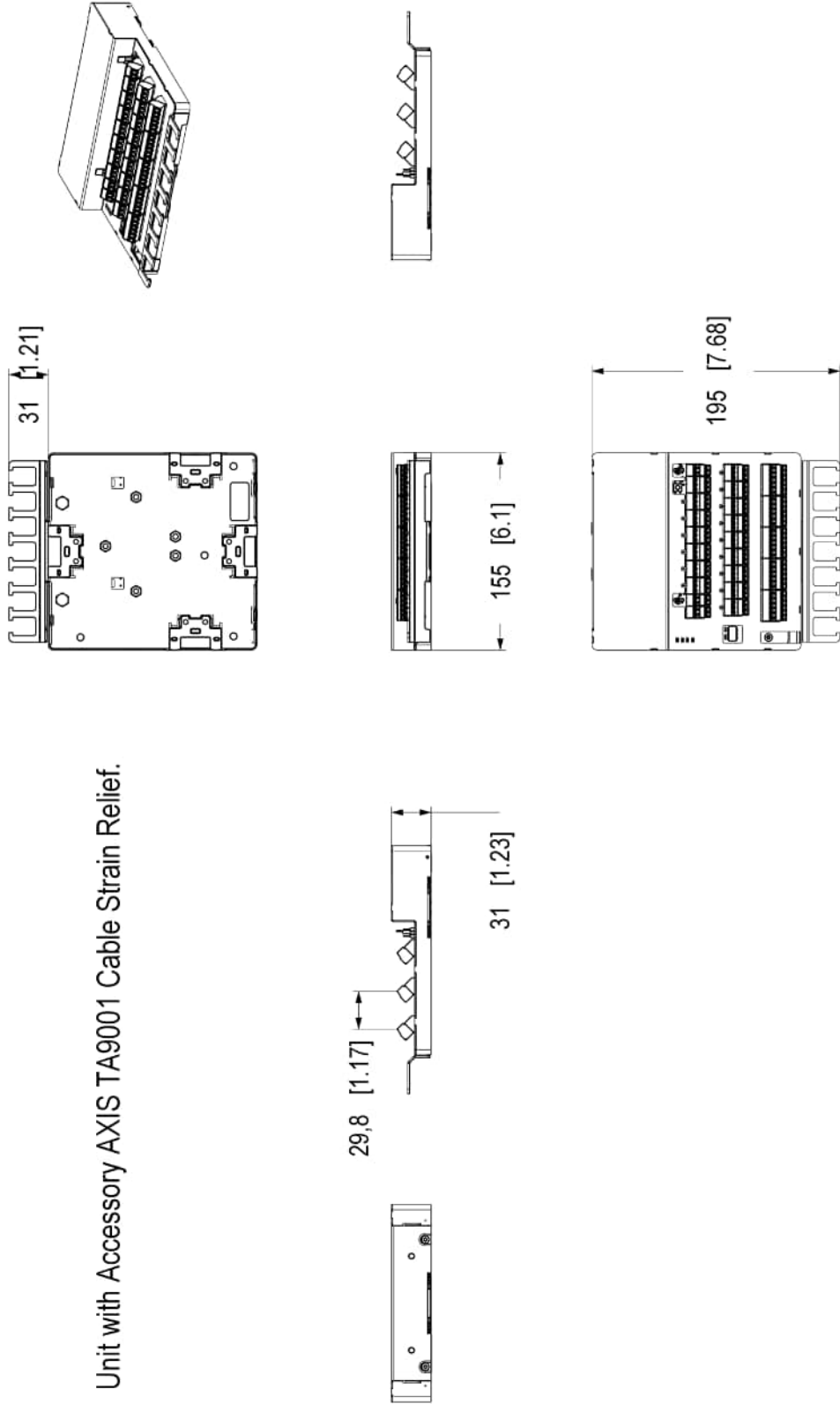


© 2005 Axis Communications AB. All rights reserved.

AXIS A9920 I/O Relay Expansion Module

Dimensions in mm [inch]			
Size	Version	Size	
2026 Jun-08	M1.4	T3	
Drawing Number	Size	Sheet	
3824101	A3	1(3)	

Unit with Accessory AXIS TA9001 Cable Strain Relief.



Dimensions in mm [inch]

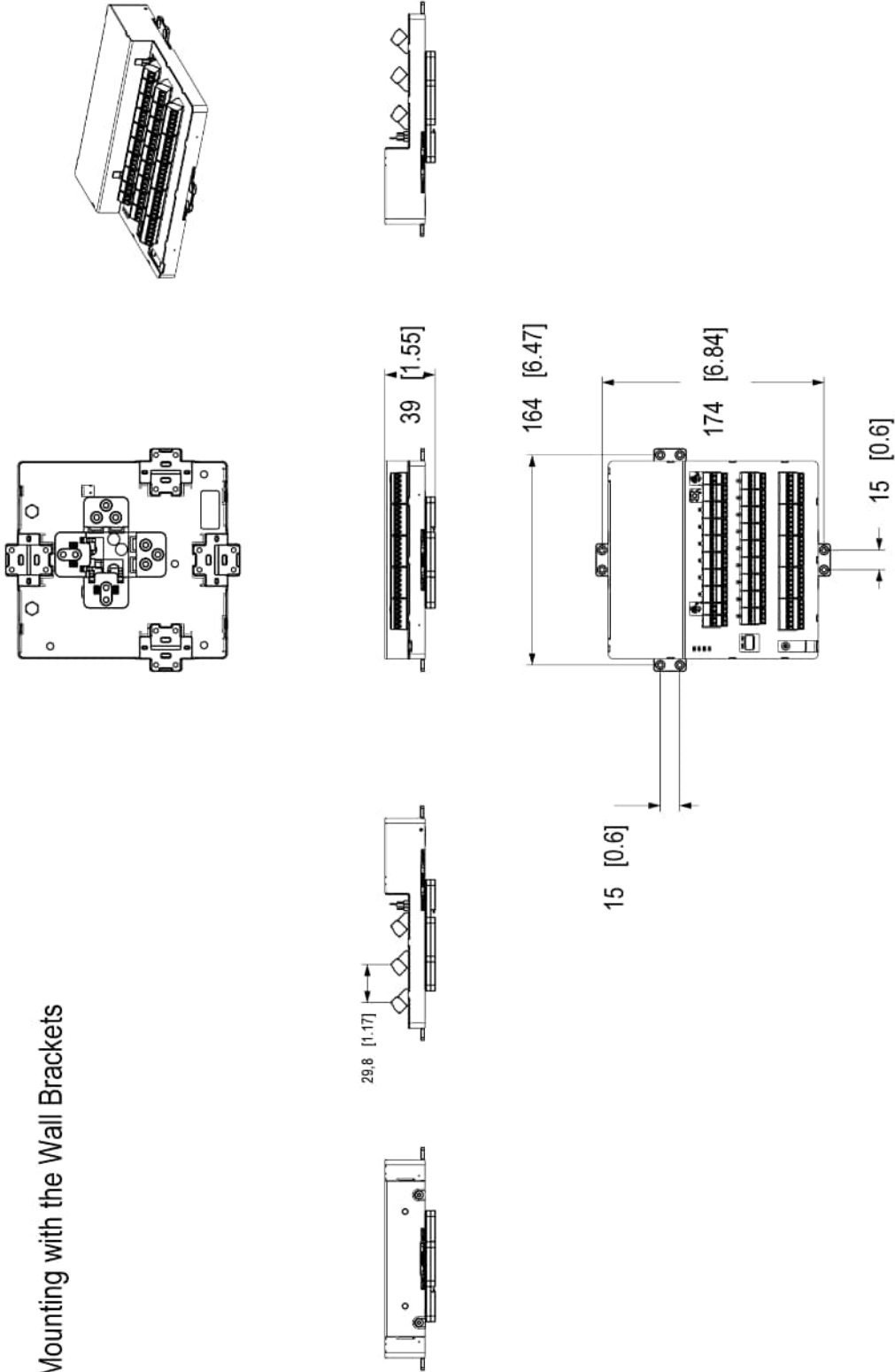
Size	Version	Size
2026 Jun-09	M1.4	T3
Drawing Number	Size	Sheet
3824101	A3	2/3



AXIS A9920 I/O Relay Expansion Module

© 2005 Axis Communications AB. All rights reserved.

Mounting with the Wall Brackets



Dimensions in mm [inch]			
Size	Version	Scale	Sheet
2026 Jun-09	M1.4	T3	3 of 3
Drawing Number	Size	Sheet	
3824101	A3	3(3)	

AXIS A9920 I/O Relay Expansion Module



© 2025 Axis Communications AB. All rights reserved.