

AMIKON TECHNICAL DOCUMENTATION

# Installation Instructions

## ICS Triplex TC-301-02-4M5

Trusted Local Expansion Cable

|              |                     |        |          |
|--------------|---------------------|--------|----------|
| CABLE LENGTH | CONSTRUCTION        | SHEATH | PLATFORM |
| 4.5 meters   | Screened Cat 6 Plus | LSZH   | Trusted  |

For qualified personnel only. This installation summary is not a substitute for the controlled manufacturer procedure, system safety plan or approved site isolation requirements.

01

## BEFORE INSTALLATION

|                    |                                                                   |
|--------------------|-------------------------------------------------------------------|
| Exact identity     | Confirm TC-301-02-4M5 and the 4.5-meter length.                   |
| Endpoints          | Identify the T8312 adapter position and T8310 expander processor. |
| Cable routing      | Allow the required bend radius and straight connector entry.      |
| Physical condition | Inspect connectors, screen, sheath and earth braid.               |
| Work controls      | Use qualified personnel and the approved isolation plan.          |

02

## PREPARATION AND BOUNDARIES

- Use Figure 1 and the complete host expansion instructions to establish the correct endpoints; no pin map is inferred.
- The manufacturer warns against lateral LEMO strain, excessively tight bends and undue pulling force during cable routing.

03  
INSTALLATION AND COMMISSIONING

|    |                                                                                                                                         |
|----|-----------------------------------------------------------------------------------------------------------------------------------------|
| 01 | Confirm the complete TC-301-02-4M5 label, 4.5-meter length and approved local expansion topology.                                       |
| 02 | Apply the required site isolation and hazardous-area controls before disturbing any connection.                                         |
| 03 | Identify the 12-way LEMO adapter end and the 96-way type C processor end using the original drawing.                                    |
| 04 | Route the cable with a bend radius of at least four cable diameters and at least 100 mm straight entry before each bend at a connector. |
| 05 | Verify correctly seated connectors, absence of lateral strain and the documented screen and earth-braid arrangement.                    |
| 06 | Complete controlled communication, I/O and required process-function tests before operational release.                                  |

04  
SAFETY AND FINAL CHECKS

- Review connector seating, earth continuity and cable routing against the original installation when investigating expansion communication faults.
- Verify the configured expander and affected I/O using the manufacturer diagnostics; the cable rating does not establish the complete installation safety level.

05  
OFFICIAL PROCEDURE

ICSTT-RM312N-EN-P | Trusted Communications Cables | Issue 17, May 2019

Communications manual PDF p. 13: cable routing; p. 15: Figure 1 and TC-301 construction; pp. 2-3: suffix convention. Product Information PDF p. 5: electrical limit.

ICSTT-PC002G | Trusted Product Information | December 2025

Independent Amikon reference, not an OEM manual. Use the complete manufacturer instructions matching the actual hardware and firmware. No manufacturer pages are reproduced.

AMIKON PRODUCT SUPPORT

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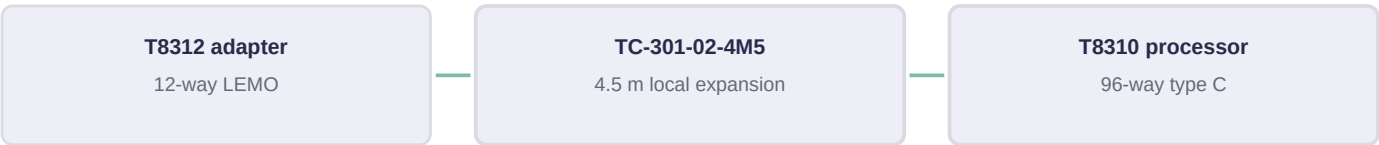
06

ORIGINAL REFERENCE SCHEMATICS

ICS Triplex TC-301-02-4M5 | Documented installation context

Original Amikon illustration based on the linked OEM pages. Logical arrangement only; not to scale and not an electrical wiring or manufacturer installation drawing.

A | EQUIPMENT ARRANGEMENT



Logical endpoint relationship only; use the complete OEM drawing for actual connector orientation.

Routing requires at least four cable diameters bend radius and 100 mm straight entry before a connector-side bend.

B | CONFIGURATION BOUNDARY

Use TC-301-02-4M5 for the documented T8312-to-T8310 local expansion connection. Confirm the full 4.5-meter route, correct endpoints, bend limits and site work controls.

07

ORIGINAL MANUFACTURER DRAWING AND PROCEDURE LINKS

[Local expansion cable - Figure 1 - PDF page 15](#)

[Original cable-routing diagram - PDF page 13](#)

[Original safety warnings - PDF page 8](#)

If the viewer ignores the page target, enter the stated PDF page manually. Retain the full manufacturer warnings and approved maintenance plan; this reference does not authorize live work.