

ILME CTF 24 L

ILME CTF 24 L Industrial Connector User Manual

MODEL: CTF 24 L

Manufacturer: ILME

1. INTRODUCTION

This user manual provides essential information for the safe and effective use of the **ILME CTF 24 L Industrial Connector 24 Pin**. It covers product overview, installation, operation, maintenance, troubleshooting, and technical specifications. Please read this manual thoroughly before installing or operating the connector to ensure proper functionality and safety.

2. PRODUCT OVERVIEW

The ILME CTF 24 L is a robust 24-pin industrial connector designed for reliable electrical connections in demanding environments. It is engineered to facilitate secure and efficient power and signal transmission within industrial electrical systems.

- **Product Type:** Industrial Connector
- **Pin Configuration:** 24 Pin
- **Model Number:** CTF 24 L
- **Dimensions:** Approximately 5.00 x 4.00 x 2.00 inches (12.7 x 10.16 x 5.08 cm)
- **Weight:** Approximately 1.00 lb (0.45 kg)



Figure 2.1: Front view of the ILME CTF 24 L Industrial Connector, showing the 24 pin receptacles.



Figure 2.2: Side view of the ILME CTF 24 L Industrial Connector, highlighting its compact design.

3. SETUP AND INSTALLATION

Proper installation is crucial for the safe and reliable operation of the ILME CTF 24 L connector. Always ensure power is disconnected before beginning any installation work.

3.1 Safety Precautions

- **Disconnect Power:** Always ensure that all power sources are disconnected and locked out before installing or servicing the connector.
- **Qualified Personnel:** Installation should only be performed by qualified electricians or technicians familiar

with industrial electrical systems and safety standards.

- **Proper Tools:** Use appropriate insulated tools for wiring and tightening connections.
- **Environmental Conditions:** Ensure the installation environment is suitable for industrial electrical components, free from excessive moisture, dust, or corrosive substances.

3.2 Wiring Instructions

The ILME CTF 24 L connector is designed for specific wire types and torque settings. Refer to the product label for critical wiring specifications.



Figure 3.1: Close-up of the product label, showing wiring specifications and certifications.

- **Wire Compatibility:** This connector is suitable for **18 to 14 AWG wires** (equivalent to 0.75 to 2.5 mm²).
- **Conductor Material:** Use only **copper conductors**. Do not use with aluminum wires.
- **Terminal Screw Torque:** Tighten terminal screws to a torque of **0.4 Nm (3.54 lb.in)**. Over-tightening or under-tightening can lead to connection issues or damage.
- **Voltage Rating:** The connector is rated for up to **600V**. Ensure the application voltage does not exceed this rating.
- **Pin Assignment:** Carefully follow the pin assignment diagram relevant to your application to ensure correct circuit connections.

After wiring, ensure all connections are secure and that no bare wires are exposed.

4. OPERATING INSTRUCTIONS

Once installed, the ILME CTF 24 L connector functions as a passive electrical interface. Its operation primarily involves maintaining a secure and stable connection.

- **Connection Verification:** Before applying power, visually inspect the connection to ensure the mating halves are fully engaged and secured (if applicable, e.g., with a housing).
- **Secure Fit:** Ensure the connector is firmly seated and any locking mechanisms are engaged to prevent accidental disconnection.
- **Environmental Protection:** If the connector is exposed to harsh environments, ensure it is properly housed or

protected according to its IP rating (if applicable, not specified in input).

5. MAINTENANCE

Regular maintenance helps prolong the lifespan and ensures the continued reliability of your ILME CTF 24 L connector.

- **Periodic Inspection:** Periodically inspect the connector for signs of wear, corrosion, physical damage, or loose connections.
- **Cleaning:** If necessary, clean the exterior of the connector using a dry, lint-free cloth. Avoid using abrasive cleaners or solvents that could damage the material. Ensure power is disconnected before cleaning.
- **Re-tighten Connections:** Over time, vibrations or thermal cycling can cause screws to loosen. Periodically check and re-tighten terminal screws to the specified torque (0.4 Nm / 3.54 lb.in).
- **Environmental Check:** Ensure the operating environment remains within acceptable parameters for the connector.

6. TROUBLESHOOTING

This section provides guidance for common issues that may arise with the ILME CTF 24 L connector.

| Problem | Possible Cause | Solution |
|-------------------------|--|---|
| Intermittent Connection | Loose terminal screws; damaged wire insulation; corrosion on contacts. | <ol style="list-style-type: none">1. Disconnect power.2. Check and re-tighten all terminal screws to 0.4 Nm.3. Inspect wires for damage; replace if necessary.4. Clean contacts if corrosion is present (ensure power is off). |
| No Connection | Incorrect wiring; completely loose connection; damaged connector. | <ol style="list-style-type: none">1. Disconnect power.2. Verify wiring against circuit diagrams.3. Ensure connector halves are fully engaged.4. Inspect connector for physical damage; replace if severely damaged. |
| Overheating | Loose connections; overloaded circuit; incorrect wire gauge. | <ol style="list-style-type: none">1. Immediately disconnect power.2. Check and re-tighten all terminal screws.3. Verify that the circuit load does not exceed the connector's rating.4. Ensure correct wire gauge (18-14 AWG) is used. |

If troubleshooting steps do not resolve the issue, contact ILME technical support or a qualified professional.

7. SPECIFICATIONS

Detailed technical specifications for the ILME CTF 24 L Industrial Connector:

| Attribute | Value |
|--------------------------|---|
| Model Number | CTF 24 L |
| Manufacturer | ILME |
| Product Dimensions | 5 x 4 x 2 inches (12.7 x 10.16 x 5.08 cm) |
| Weight | 15.87 ounces (0.45 kg) |
| Pin Count | 24 Pin |
| Voltage Rating | 600V |
| Wire Gauge Compatibility | 18 to 14 AWG (0.75 to 2.5 mm ²) |
| Terminal Screw Torque | 0.4 Nm (3.54 lb.in) |
| Conductor Type | Copper only |
| ASIN | B01130MK2Q |
| UPC/Part Number | 8015747040860 |
| Date First Available | July 6, 2015 |

8. WARRANTY AND SUPPORT

For information regarding warranty coverage, technical support, or replacement parts for your ILME CTF 24 L Industrial Connector, please contact the manufacturer directly.

Manufacturer: ILME

Please refer to ILME's official website or your point of purchase for the most current contact information and warranty details.

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Documents - ILME – CTF 24 L

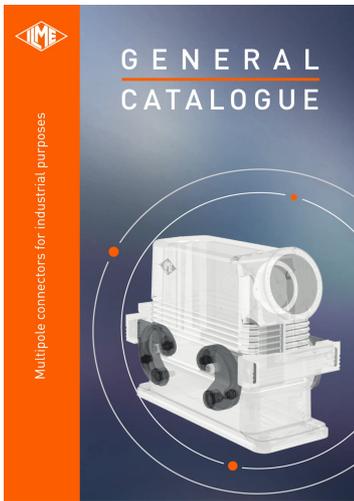


[pdf] Specifications

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Part number **CTF 24 L** Female insert, CT series, screw terminal connection, 24 poles PE, 16 A 230/400 V 4 kV 2, size 104.27 , with incorporated terminal block, left side mounting Product description Product type Series Connection type Gender Insert CT Screw terminal connection Female N. of pole...

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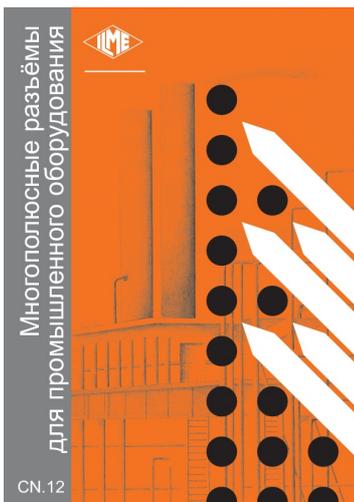
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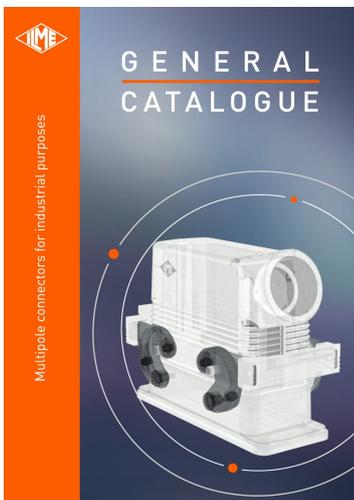
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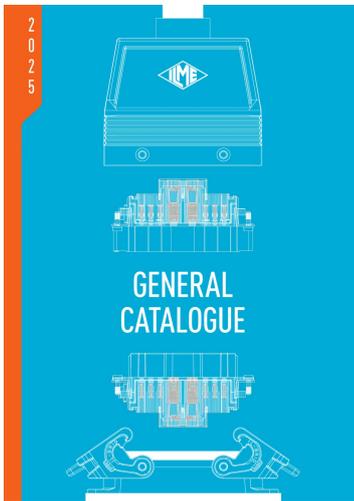
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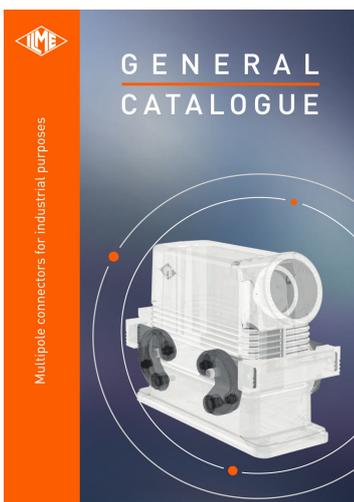
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