Emerson 8623-FT-IS

Installation & Commissioning Guide

01 Job scope and safe-work boundary

Emerson 8623-FT-IS is a 16-channel intrinsically safe field terminal for the PAC8000 8220-DI-IS digital-input module. It brings discrete field circuits to the module through the keyed terminal interface.

Offered marking	Emerson 8623-FT-IS
Installed host or system	PAC8000 / 8220-DI-IS digital input
Included-item check	Confirm the field terminal and tagging strip; the 8220-DI-IS module, carrier and field devices are separate unless quoted.
Pre-work identity	Check the 8623-FT-IS marking and 16-channel terminal arrangement; 8624-FT-IS is the separate eight-channel DI variant.

Work boundary

Apply the area and site isolation procedure before removing the terminal.

02 Readiness checks

Check	Required evidence
Isolate field circuits	Apply the area and site isolation procedure before removing the terminal.
Match the pairing	Verify the 8220-DI-IS module and B/1 key before fitting the terminal.
Use diagram 6	Trace each assigned input conductor against the 8623-FT-IS terminal diagram.
Assess IS voltage	Keep the approved assembly within the certificate's 30 V terminal limit.
Secure conductors	Inspect terminal screw engagement and channel tagging before service.
Test inputs	Prove each restored input state and the corresponding controller indication.

Configuration hold point

Pair the full terminal reference with 8220-DI-IS and its B/1 key position, then follow diagram 6 and the approved IS loop design.

03 Fit and reconnect

Stage	Action	Record / hold point
01 Confirm	Check the 8623-FT-IS marking and 16-channel terminal arrangement; 8624-FT-IS is the separate eight-channel DI variant.	Full label and installed-system reference recorded
02 Isolate	Apply the area and site isolation procedure before removing the terminal.	Site isolation confirmed before handling
03 Match	Verify the 8220-DI-IS module and B/1 key before fitting the terminal.	Interface and configuration match confirmed
04 Connect	Trace each assigned input conductor against the 8623-FT-IS terminal diagram.	Conductor or connector map checked
05 Restore	Keep the approved assembly within the certificate's 30 V terminal limit.	System limits and protection reviewed

Variant boundary

The order table and certificate identify 8623-FT-IS as the 16-channel IS DI terminal; the paired module is 8220-DI-IS.

04 Commissioning acceptance

Verification	Expected observation	If different
Identity	8623-FT-IS remains the complete installed reference	Stop and reconcile the marking
Physical fit	Inspect terminal screw engagement and channel tagging before service.	Recheck connector, terminal or panel
Functional proof	Prove each restored input state and the corresponding controller indication.	Trace the affected circuit or status
System record	PAC8000 / 8220-DI-IS digital input configuration matches the installation	Restore the recorded configuration

Recorded evidence

Retain the full marking, applicable system configuration, field check and observed result with the maintenance record.

05 Fault response and handover

Question	Review path
Is Emerson 8623-FT-IS the same as 8624-FT-IS?	No. 8623-FT-IS is the 16-channel DI terminal; 8624-FT-IS is the eight-channel loop-disconnect DI variant.
How are channels identified on Emerson 8623-FT-IS?	Use the screw-clamp terminal positions and the tagging strip to map each field circuit to its DI channel.
What should be tested after Emerson 8623-FT-IS is replaced?	Verify each restored field input state at the 8220-DI-IS module and in the controller against the approved loop design.

Handover

Confirm the field terminal and tagging strip; the 8220-DI-IS module, carrier and field devices are separate unless quoted.

Technical source

Emerson PAC8000 Remote I/O, 00813-0100-0108, February 2022; MTL Field terminals, January 2007; IECEx BAS 12.0023U

Discuss the complete reference

Emerson 8623-FT-IS

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