Emerson 8623-FT-IS

Complete Product Information

01 Product dashboard

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.

Identity	Position	Evidence
Emerson 8623-FT-IS	PAC8000 / 8220-DI-IS digital input	Emerson PAC8000 Remote I/O, 00813-0100-0108, February 2022; MTL Field terminals, January 2007; IECEx BAS 12.0023U

System context

This PAC8000 terminal connects discrete hazardous-area field signals to a matched intrinsically safe digital-input module.

The 8623-FT-IS is the 16-channel DI terminal in the PAC8000 field-terminal list. Emerson identifies 8220-DI-IS as the 16-channel intrinsically safe digital-input module, and the terminal sheet assigns connection diagram 6 to 8623-FT-IS. Each input must be checked against its own field device and channel position before the module scan is accepted.

02 Technical capability map

Product role	Intrinsically safe digital-input field terminal
Matched I/O module	8220-DI-IS, 16-channel DI
Field channels	16 digital-input terminations
Field-terminal key	B / 1 with 8220-DI-IS
Wiring diagram	Diagram 6 for 8623-FT-IS
Connector arrangement	Two multipin module connectors
Terminal voltage limit	30 V maximum, certificate condition
Field termination	Screw-clamp terminal rows
Field wiring location	Zone 0 IIC or Class I Div 1 when approved as an assembly
Terminal body	Blue moulding for IS field wiring
Tagging strip	Present on screw-clamp terminal

03 Applications and compatibility

Application	Engineering relationship
Switch contacts	Bring approved dry-contact field signals to designated 8220-DI-IS input channels.
Proximity detection	Terminate compatible intrinsically safe proximity-detector circuits in their assigned DI positions.
Channel identification	Use the terminal tagging strip to preserve the field-device-to-channel map during maintenance.
System replacement	Keep the 16-channel 8623 terminal distinct from the eight-channel 8624-FT-IS loop-disconnect variant.

Compatibility boundary

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.

The approved 8220-DI-IS pairing uses field-terminal key position B/1. The terminal uses module-side multipin connectors and screw-clamp field wiring with a tagging strip. The blue terminal body identifies intrinsically safe field connections, while the separate I/O module and carrier remain necessary parts of the assembly.

04 Engineering decisions and precautions

Decision	Required check
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.

Question	Answer
Which module is specified with Emerson 8623-FT-IS?	Emerson lists 8220-DI-IS as the matched 16-channel intrinsically safe digital-input module.
How many field channels does Emerson 8623-FT-IS provide?	The terminal is identified as the 16-channel DI field-terminal variant.
Which connection diagram applies to Emerson 8623-FT-IS?	The field-terminal wiring sheet assigns diagram 6 to this terminal.

05 Lifecycle and offered unit

8623-FT-IS	A current manufacturing and support phase for this complete terminal reference is unconfirmed.
Support and replacement	Confirm the 8220-DI-IS pairing, 16-channel field wiring, key position and IS approvals when selecting a replacement terminal.
Availability	Apter Power quoted availability is separate from the manufacturer lifecycle phase.

Condition	New, original product
Exact identity	Check the 8623-FT-IS marking and 16-channel terminal arrangement; 8624-FT-IS is the separate eight-channel DI variant.
Included items	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

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