

V18345-2010421001

TZIDC Digital Electro-Pneumatic Positioner

ABB V18345-2010421001 is a TZIDC positioner that converts a 4-20 mA setpoint into double-acting fail-safe pneumatic actuator movement.

BRAND	ABB	FAMILY	ABB TZIDC digital valve-positioning system
PART	V18345-2010421001	SYSTEM ROLE	Converts a 4-20 mA two-wire setpoint into controlled pneumatic actuator movement

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V18345-2010421001

MANUFACTURER SOURCE RECORD

TZIDC Digital Positioner Data Sheet
ABB Measurement & Analytics DS/TZIDC-EN Rev. I

Product Overview

SYSTEM FUNCTION

ABB V18345-2010421001 is a TZIDC positioner that converts a 4-20 mA setpoint into double-acting fail-safe pneumatic actuator movement.

FUNCTION 1

Converts a 4-20 mA two-wire setpoint into controlled pneumatic actuator movement

FUNCTION 2

Supports linear and rotary actuator mounting with a mechanical position indicator

FUNCTION 3

Provides double-acting fail-safe output behavior when electrical power is lost

FUNCTION 4

Returns actuator position through a separate 4-20 mA two-wire analog-feedback module

System Components

COMPONENT	DOCUMENTED ROLE
Host / carrier	ABB TZIDC digital valve-positioning system
Primary interface	Converts a 4-20 mA two-wire setpoint into controlled pneumatic actuator movement
Engineering context	Installed on the documented linear or rotary actuator with clean instrument air, 4-20 mA input and a separate analog-feedback loop.
Commissioning duty	Prove signal tracking, feedback and fail-safe travel.

TECHNICAL NOTE

Match the NAMUR or VDI/VDE 3845 mounting, 4-20 mA polarity, NPT air connections and analog feedback loop. Run Auto Adjust and prove controlled fail-safe travel.

Technical Data

PARAMETER	VALUE	PARAMETER	VALUE
Base model	TZIDC / V18345	Input signal	4 to 20 mA, two-wire
Case and mounting	Aluminium case with mechanical position indicator	Local communication	Connector for ABB LCI adapter
Linear-actuator mounting	DIN / IEC 534 / NAMUR	Explosion protection	Without
Rotary-actuator mounting	VDI / VDE 3845	Pneumatic output	Double acting, fail safe

Related Products on Apter Power

MODEL	SYSTEM ROLE	APTER POWER PAGE
SPA-ZC-400	Apter Power product page	View SPA-ZC-400 page
SDCS-PIN-H51	Apter Power product page	View SDCS-PIN-H51 page
NTAC-02	Apter Power product page	View NTAC-02 page
NISA-03	Apter Power product page	View NISA-03 page
NAOM01	Apter Power product page	View NAOM01 page
MZ03	Apter Power product page	View MZ03 page
MPRC-086349-002	Apter Power product page	View MPRC-086349-002 page
MM21	Apter Power product page	View MM21 page

ENGINEERING BOUNDARY

Confirm the complete order code, actuator mounting, 4-20 mA input and feedback, double-acting fail-safe air routing, NPT connections, supply pressure and Auto Adjust result.

Applications and Precautions

Common Applications

Linear valve positioning

Positions a NAMUR-mounted linear actuator.

Rotary actuator modulation

Controls a VDI/VDE 3845 rotary actuator.

Double-acting fail-safe duty

Applies the documented safe-position response.

Analog position feedback

Returns actuator position through 4-20 mA.

Product Precautions

- 1

Confirm the complete order code and actuator duty.
- 2

Secure the valve and process in the maintenance state.
- 3

Isolate both signal loops and the air supply.
- 4

Record polarity, feedback and pneumatic connections.
- 5

Inspect mounting, linkage, tubing and grounding.
- 6

Restore travel direction, limits and Auto Adjust.
- 7

Review LCD position, deviation and diagnostics.
- 8

Prove signal tracking, feedback and fail-safe travel.

IMPORTANT NOTICE

Confirm the complete order code, actuator mounting, 4-20 mA input and feedback, double-acting fail-safe air routing, NPT connections, supply pressure and Auto Adjust result.

ACCEPTANCE CHECK	REQUIRED EVIDENCE
Identity	V18345-2010421001
Configuration	Review LCD position, deviation and diagnostics.
Functional release	Prove signal tracking, feedback and fail-safe travel.

Engineer FAQ

Q1 How should the complete V18345-2010421001 identity be verified before installation?

Confirm the complete order code, actuator mounting, 4-20 mA input and feedback, double-acting fail-safe air routing, NPT connections, supply pressure and Auto Adjust result.

Q3 Which host, carrier or actuator arrangement must be checked for V18345-2010421001?

Installed on the documented linear or rotary actuator with clean instrument air, 4-20 mA input and a separate analog-feedback loop.

Q5 What configuration must be restored after fitting V18345-2010421001?

Restore travel direction, limits and Auto Adjust.

Q7 What controlled test is required before V18345-2010421001 returns to service?

Prove signal tracking, feedback and fail-safe travel.

Q2 What system function does V18345-2010421001 perform?

ABB V18345-2010421001 is a TZIDC positioner that converts a 4-20 mA setpoint into double-acting fail-safe pneumatic actuator movement.

Q4 What wiring and connector evidence should be retained before removing V18345-2010421001?

Isolate both signal loops and the air supply. Record polarity, feedback and pneumatic connections.

Q6 Which diagnostics should be reviewed after powering V18345-2010421001?

Review LCD position, deviation and diagnostics.

Q8 Which official document supports the published data for V18345-2010421001?

Use TZIDC Digital Positioner Data Sheet, ABB Measurement & Analytics DS/TZIDC-EN Rev. I, and confirm that the installed identity matches V18345-2010421001 before applying its data.

MANUFACTURER SOURCE RECORD

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