

# ABB V18345-2021421001 Manual

Brand	ABB
Product Series	Sheet27
Product Type	TZIDC Electro-Pneumatic Positioner

## Description

V18345-2021421001 | ABB | TZIDC Electro-Pneumatic Positioner

Manufacturer : ABB

Product No. : V18345-2021421001

Product type : TZIDC Electro-Pneumatic Positioner

V18345 : TZIDC = intelligent, configurable with indicator and operator panel

Case / Mounting : 2 = Case made of aluminium, varnished, protection IP 65 (NEMA 4X) for mounting to linear actuators acc. to DIN/IEC 534 / NAMUR or to rotary actuators acc. to VDI/VDE 3845 as above, but with mechanical position indicator

Input / communication port : 2 = Input 4...20 mA, two-wire 1 = with connector plug for LKS adapter and FSK module for HART communication

Explosion protection : 1 = ATEX Ex II 2 G EEx ib II CT6

Output / safe position (in case of an electrical power failure): 4 = Double acting, fail safe

Connections : 2 = Cable: Thread 1/2-14 NPT, Air pipe: Thread 1/4-18 NPT

Option modules for analog or digital position feedback : 1 = Plug-in module analog position feedback (sign. range 4 ... 20 mA)

Optional mechanical kit for digital position feedback : 0 = without

Design (varnish / coding) : 1 = Standard

Output signal (two-wire technology) Nominal range : 4 ... 20 mA

Digital input : Control voltage 0 ... 5 V DC logical switching state "0" 11 ... 30 V DC logical switching state "1"

Digital output (control circuit to DIN 19234/NAMUR) Supply voltage : 5 ... 11 V DC

Supply pressure : 1.4 ... 6 bar (20 ... 90 psi)

Air consumption : < 0.03 kg/h / 0.015 scfm (independent of supply pressure)

Housing Material/Protections : Aluminum, protection class IP 65 / NEMA 4X

Surface/color : Electrostatic dipping varnish with epoxy resin, stove-hardened. Case varnished black, RAL 9005, matte, housing cover Pantone 420.

Pneumatic connections : Threads G 1/4 or 1/4-18 NPT

Weight : 1.7 Kg

### Operating parameters

#### Signal range

Minimum signal 4 mA, maximum signal 20 mA (0...100 %)

freely selectable for split\_x0001\_range operation

minimum range 20 % (3.2 mA),

recommended range > 50% (8.0 mA)

#### Action (signal)

Direct: Signal 4...20 mA = position 0...100 %

Reverse: Signal 20...4 mA = position 0...100 %

Characteristic curve (travel = f {signal})

linear,

equal percentage 1:25 or 1:50 or 25:1 or 50:1,

or user\_x0001\_configurable with 20 reference points

#### Digital input

One of the following protective functions can be selected for the digital input, either via the local operator panel or remotely via the configuration program:

- \_x0001\_ no function (default setting)
- \_x0001\_ move to 0% position
- \_x0001\_ move to 100 % position
- \_x0001\_ hold last position
- \_x0001\_ disable local configuration
- \_x0001\_ disable local configuration and operation
- \_x0001\_ disable any access (no local or remote access (via a PC))

The selected function is activated once the 24 V DC signal is no longer applied (< 10 V DC).

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