ABB Service Manual

V18345-1010121001

1. Description

V18345-1010121001

3. Product Information

V18345-1010121001 | ABB | TZIDC Electro-Pneumatic Positioner

Manufacturer : ABB

Product No. : V18345-1010121001

Product type : TZIDC Electro-Pneumatic Positioner

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

Case / Mounting : 1 = 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 also ready for integral mounting

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

Explosion protection : 0 = without

Output / safe position (in case of an electrical power failure) : 1 =Single 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

Environmental capabilities

Ambient temperature

-40 °C to +85 °C for operation, storage and transport

-25 °C to +85 °C with proximity switches SJ2-S1N (NO)

Relative humidity

Operational (with closed housing and air supply switched on):

95 %(annual average), condensation permissible

Transport and storage:

75 % (annual average), non-condensing

Case

Material/Protections

Aluminum, protection class IP 65 / NEMA 4X

Surface/color

Electrostatic dipping varnish with epoxy resin, stove-hardened

Case varnished black, RAL 9005, matt,

Cap Pantone 420

Electrical connections

Screw terminals:

max. 1.0 mm2 for options, max. 2.5 mm2 for analog signal

NOTICE: Do not expose the terminals to strain!

Cable entry:

2 threads 1/2-14 NPT or M20x1.5

(1 with cable gland and 1 with pipe plug)

Pneumatic connections

Threads G 1/4 or 1/4-18 NPT