ABB Service Manual

V18345-1010421001

1. Description

V18345-1010421001

3. Product Information

V18345-1010421001 | ABB | TZIDC Electro-Pneumatic Positioner

Manufacturer : ABB

Product No. : V18345-1010421001

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) : 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

ATEX Ex II 2G EEx ib IIC T6

Examination certificate TÜV 98 ATEX 1370 X

Type: Intrinsically safe

Device class: II 2G (EEx ib IIC)

Temperature class: T4, T5, T6

Perm. ambient temperature: T4: -40 °C < Tamb < 85 °C

T5: -40 °C < Tamb < 50 °C

T6: -40 °C < Tamb < 35 °C

ATEX II 3G EEx n A II T6

Examination certificate TÜV 02 ATEX 1943 X

Type: Explosion-proof (Zone 2)

Device class: II 3G (EEx n A II)

Temperature class: T4, T5, T6

Perm. ambient temperature: T4:-40 °C < Tamb < 85 °C

T5: -40 °C < Tamb < 65 °C

T6: -40 °C < Tamb < 50 °C

IECEx Ex ib IIC T6

Examination certificate IECEx TUN 04.0015X, Issue No.: 0

Type: Intrinsically safe

Temperature class: T4, T5, T6

Perm. ambient temperature: T4: -40 °C < Tamb < 85 °C

T5: -40 °C < Tamb < 50 °C

T6: -40 °C < Tamb < 35 °C