ABB Service Manual

V18345-1011121001

1. Description

V18345-1011121001

3. Product Information

V18345-1011121001 | ABB | TZIDC Electro-Pneumatic Positioner

Manufacturer : ABB

V18345-1011121001

V18345-Electro-Pneumatic Positioner TZIDC intelligent, configurable with indicator and operator panel

10 - Case : Aluminum Case IP 65 (NEMA 4X) No Mechanical Indicator

1 - Input/Communication : 4-20ma with LKS Adapter

1 - Explosion protection : ATEX Ex II 2 G EEx ib II C T6

1 - Action : Single acting, fail safe

2 - Connections : Electrical: 1/2-14 NPT; Air: 1/4-18 NPT

1 - Analog Feedback : Plug-in module for analog position feedback, signal range 4...20mA, two-wire

00 - Mech Feedback : None

1 - Design : Standard

Weight : 1.7 kg (3.75 lb)

Air supply

Instrument air

free of oil, water and dust to DIN/ISO 8573_x0001_1

pollution and oil content according to Class 3

(purity: max. particle size 5 µm, max. particle density 5 mg/m3

oil content: max. concentration 1 mg/m3

pressure dew point: 10 K below operating temperature

Supply pressure

1.4...6 bar (20...90 psi)

NOTICE: Do not exceed the max. operating pressure of the actuator!

Air consumption

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

Transmission data and influences

Output 1

Increasing: increasing signal 0...100 %

increasing output pressure OUT 1

Decreasing: increasing signal 0...100 %

decreasing output pressure OUT 1

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

and freely configurable with 20 reference points

Characteristic deviation

≤ 0.5 %

Tolerance band

0.3...10 %, adjustable

Dead band

0.1...10 %, adjustable

Resolution (A/D conversion)

> 4000 steps

Sample rate

20 msec

Influence of ambient temperature

≤ 0.5 % for every 10 °C change in temperature

Influence of vibration

≤ ± 1 % up to 10 g and 80 Hz

Seismic requirements

Meets requirements of DIN/IEC 68_x0001_3_x0001_3 Class III for strong and

strongest earthquakes

Influence of mounting orientation

No effect