ABB ABB Series Service Manual

AI563

1. Description

AI563

3. Product Information

AI563 | ABB | Analog Input Module

Process supply voltage UP

Connections Terminal 19 for UP (+24 V DC) and terminal 20 for

ZP (0 V)

Rated value 24 V DC

Current consumption 0.10 A

Inrush current (at power-up) 0.07 A²s

Max. ripple 5 %

Protection against reversed voltage Yes

Rated protection fuse for UP Not necessary

Current consumption from 24 V DC power

supply at the terminals UP/L+ and ZP/M of the

CPU/communication interface module

Ca. 5 mA

Galvanic isolation Yes, between the channels and the rest of the

module

Isolated groups 1 (4 channels per group)

Surge-voltage (max.) 35 V DC for 0.5 s

Max. power dissipation within the module 2.6 W

Weight Ca. 120 g

Mounting position Horizontal or vertical

Cooling The natural convection cooling must not be hindered by cable ducts or other parts in the control

cabinet.

Number of channels per module 4 configurable thermocouple (TC) inputs

Distribution of channels into groups 1 (4 channels per group)

Resolution

Temperature 0.1 °C

Voltage 16 bits including sign

Connection of the signals I0+ to I3+ Terminals 1, 3, 5 and 7

Connection of the signals I0- to I3- Terminals 2, 4, 6 and 8

Input type Floating thermocouple

Galvanic isolation Against internal power supply and other modules

Common mode rejection > 120 dB at 120 V AC

Indication of the input signals No

Module update time All channels: < 1.6 s

Channel input resistance On request

Input filter attenuation -3 dB at 15 kHz

Cold junction error ± 1.5 °C

Analog to digital conversion time 400 ms per channel

Unused inputs Can be left open and should be configured as "unused"

Input data length 8 bytes

Overvoltage protection Yes, up to 30 V DC

Repeatability On request

Wire loop resistance < 100 W

Mounting Rail Top Hat according to IEC 60715 35 mm, depth 7.5 mm or 15 mm

Mounting with screws M4

Fastening torque 1.2 Nm