

Schneider Series Service Manual

TM3DI32K

1. Description

Schneider Electric TM3DI32K

3. Product Information

Schneider Electric TM3DI32K

discrete input module, Modicon TM3, 32 inputs,

HE10, 24V DC

Main

Range of product Modicon TM3

Product or component

type

Discrete input module

Range compatibility Modicon M241

Modicon M251

Modicon M221

Modicon M262

Discrete input number 32 for input conforming to IEC 61131-2 Type 1

Discrete input logic Sink or source (positive/negative)

Discrete input voltage 24 V

Discrete input current 5 mA for input

Complementary

Discrete I/O number 32

Current consumption 5 mA at 5 V DC via bus connector (at state off)

0 mA at 24 V DC via bus connector (at state on)

0 mA at 24 V DC via bus connector (at state off)

65 mA at 5 V DC via bus connector (at state on)

Discrete input voltage type DC

Voltage state 1 guaranteed 15...28.8 V for input

Current state 1 guaranteed ≥ 2.5 mA (input)

Voltage state 0 guaranteed 0...5 V for input

Current state 0 guaranteed ≤ 1 mA (input)

Input impedance 4.4 kOhm

Response time 4 ms (turn-on)

4 ms (turn-off)

Local signalling 1 LED per channel (green) for input status

Electrical connection HE-10 connector for inputs

Maximum cable distance between devices Unshielded cable: <30 m for regular input

Insulation Between input and internal logic at 500 V AC

Non-insulated between inputs

Marking CE

Mounting support Top hat type TH35-15 rail conforming to IEC 60715

Top hat type TH35-7.5 rail conforming to IEC 60715

Plate or panel with fixing kit

Height 90 mm

Depth 81.3 mm

Width 33.5 mm

Product weight 0.1 kg

Environment

Standards EN/IEC 61010-2-201

EN/IEC 61131-2

Product certifications CULus

CE

UKCA

RCM

EAC

Resistance to electrostatic discharge 8 kV in air conforming to EN/IEC 61000-4-2

4 kV on contact conforming to EN/IEC 61000-4-2

Resistance to electromagnetic fields 10 V/m 80 MHz...1 GHz conforming to EN/IEC 61000-4-3

3 V/m 1.4 GHz...2 GHz conforming to EN/IEC 61000-4-3

1 V/m 2 GHz...3 GHz conforming to EN/IEC 61000-4-3

Resistance to magnetic fields 30 A/m 50/60 Hz conforming to EN/IEC 61000-4-8

Resistance to fast transients 1 kV for I/O conforming to EN/IEC 61000-4-4

Surge withstand 1 kV I/O common mode conforming to EN/IEC 61000-4-5 DC

Resistance to conducted disturbances 10 V 0.15...80 MHz conforming to EN/IEC 61000-4-6

3 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) conforming to Marine specification (LR, ABS, DNV, GL)

Electromagnetic emission Radiated emissions - test level: 40 dB μ V/m QP class A (10 m) at 30...230 MHz conforming to EN/IEC 55011

Radiated emissions - test level: 47 dB μ V/m QP class A (10 m) at 230...1000 MHz conforming to EN/IEC 55011

Ambient air temperature for operation -10...35 °C vertical installation

-10...55 °C horizontal installation

Ambient air temperature for storage -25...70 °C

Relative humidity 10...95 %, without condensation (in operation)

10...95 %, without condensation (in storage)

IP degree of protection IP20 with protective cover in place

Pollution degree 2

Operating altitude 0...2000 m

Storage altitude 0...3000 m

Vibration resistance 3.5 mm at 5...8.4 Hz on DIN rail

3 gn at 8.4...150 Hz on DIN rail

3.5 mm at 5...8.4 Hz on panel

3 gn at 8.4...150 Hz on panel

Shock resistance 15 gn for 11 ms