

Schneider Service Manual

TM3DQ16T

1. Description

TM3DQ16T Modicon TM3 - 16 outputs transistor

3. Product Information

TM3DQ16T Modicon TM3 - 16 outputs transistor
PNP (screw)
Main
Range of product Modicon TM3
Product or component type Discrete output module
Range compatibility Modicon M241
Modicon M251
Modicon M221
Modicon M262
Discrete output type Transistor
Discrete output number 16
Discrete output logic Positive logic (source)
Discrete output voltage 24 V DC for transistor output
Discrete output current 500 mA for transistor output
Complementary
Discrete I/O number 16
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 off)
15 mA at 5 V DC via bus connector (at state on)
20 mA at 24 V DC via bus connector (at state on)
Response time 450 µs (turn-on)
450 µs (turn-off)
Maximum leakage current 0.1 mA for transistor output
Maximum voltage drop <0.4 V
Maximum tungsten load <3 W for transistor output
Local signalling 1 LED per channel (green) for output status
Electrical connection 10 x 1.5 mm² removable screw terminal block with pitch 3.81 mm adjustment for outputs
Maximum cable distance between devices
Unshielded cable: <30 m for transistor output
Insulation Non-insulated between outputs
Between output and internal logic AC
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 84.6 mm
Width 27.4 mm
Net weight 0.11 kg
Environment
Standards IEC 61131-2
Product certifications cULus
CE
UKCA
RCM
EAC
cULus HazLoc
Resistance to electrostatic discharge
8 kV in air conforming to IEC 61000-4-2
4 kV on contact conforming to IEC 61000-4-2
Resistance to electromagnetic fields
10 V/m 80 MHz...1 GHz conforming to IEC 61000-4-3
3 V/m 1.4 GHz...2 GHz conforming to IEC 61000-4-3
1 V/m 2 GHz...3 GHz conforming to IEC 61000-4-3
Resistance to magnetic fields 30 A/m 50/60 Hz conforming to IEC 61000-4-8

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

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

Resistance to conducted disturbances

10 V 0.15...80 MHz conforming to 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 IEC 55011

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

Packing Units

Unit Type of Package 1 PCE

Number of Units in Package 1 1

Package 1 Height 7.561 cm

Package 1 Width 10.624 cm

Package 1 Length 12.982 cm

Package 1 Weight 220.0 g