

SOR Service Manual

TWDLCAE40DRF

1. Description

TWDLCAE40DRF compact PLC base Twido - 100..240 V AC

3. Product Information

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TWDLCAE40DRF compact PLC base Twido - 100..240 V AC

supply - 24 I 24 V DC - 16 O

Main

Range of product Twido

Product or component

type

Compact base controller

Discrete I/O number 40

Discrete input number 24

Discrete input voltage 24 V

Discrete input voltage

type

DC

Discrete output number 2 transistor

14 relay

Number of I/O expansion module

7

[Us] rated supply voltage

100...240 V AC

Use of slot Memory cartridge

Data backed up Internal RAM external battery TSXPLP01 3 years

Integrated connection

type

Ethernet TCP/IP RJ45 10/100 Mbit/s 1 twisted pair

transparent ready class A10

Non isolated serial link mini DIN Modbus/character

mode master/slave RTU/ASCII RS485 half duplex

38,4 kbit/s

Power supply

Serial link interface adaptor RS232C/RS485

Complementary function

PID

Event processing

Complementary

Concept Transparent Ready

Discrete input logic Sink or source

Input voltage limits 20.4...26.4 V

Discrete input current 7 mA I0.2 to I0.5

7 mA I0.8 to I0.23

11 mA I0.0 to I0.1

11 mA I0.6 to I0.7

Input impedance 2100 Ohm I0.0 to I0.1

2100 Ohm I0.6 to I0.7

3400 Ohm I0.2 to I0.5

3400 Ohm I0.8 to I0.23

Filter time 35 μ s + programmed filter time for I0.0 to I0.5 at state 1

40 μ s + programmed filter time for I0.0 to I0.5 at state 0

40 μ s + programmed filter time for I0.6 to I0.23 at state 1

150 μ s + programmed filter time for I0.6 to I0.23 at state 0

Insulation between channel and internal logic 1500 Vrms for 1 minute

Insulation resistance between channel None

Minimum load 0.1 mA

Contact resistance $\leq$ 30000 μ Ohm

Load current 2 A 240 V AC resistive 30 cyc/mn relay outputs

2 A 30 V DC resistive 30 cyc/mn relay outputs

2 A 240 V AC inductive 30 cyc/mn relay outputs

2 A 30 V DC inductive 30 cyc/mn relay outputs

Mechanical durability $\geq$ 20000000 cycles relay outputs

Electrical durability $\geq$ 100000 cycles relay outputs

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Current consumption 5 mA 24 V DC at state 0
90 mA 5 V DC at state 1
128 mA 24 V DC at state 1
128 mA 24 V DC state 1 + input ON
170 mA 5 V DC at state 0
240 mA 5 V DC state 1 + input ON
I/O connection Non-removable screw terminal block
Input/Output number ≤ 152 removable screw terminal block with I/O expansion module
 ≤ 208 spring terminal block with I/O expansion module
 ≤ 264 HE-10 connector with I/O expansion module
Network frequency 50/60 Hz
Supply voltage limits 85...264 V
Network frequency limits 47...63 Hz
Power supply output current 0.4 A 24 V DC sensors
Power supply input current 790 mA
Inrush current ≤ 35 A
Protection type Power protection internal fuse
Power consumption in VA 65 VA 100 V
77 VA 264 V
Insulation resistance > 10 MOhm at 500 V, between supply and earth terminals
 > 10 MOhm at 500 V, between I/O and earth terminals
Program memory 3000 instructions
Exact time for 1 K instruction 1 ms
System overhead 0.5 ms
Memory description Internal RAM 256 internal bits, no floating, no trigonometrical
Internal RAM 3000 internal words, no floating, no trigonometrical
Internal RAM 128 timers, no floating, no trigonometrical
Internal RAM 128 counters, no floating, no trigonometrical
Internal RAM double words, no floating, no trigonometrical
Internal RAM floating, trigonometrical
Free slots 1
Realtime clock With ≤ 30 s/month 30 days
Port Ethernet 10BASE-T/100BASE-TX
Communication service BOOTP client Ethernet TCP/IP
Modbus messaging Ethernet TCP/IP
Positioning functions PWM/PLS 2 7 kHz
Counting input number 2 20000 Hz 32 bits
4 5000 Hz 16 bits
Analogue adjustment points 1 point adjustable from 0...1023
1 point adjustable from 0 to 511 points
Marking CE
Status LED 1 LED green PWR
1 LED green RUN
1 LED red module error (ERR)
1 LED user pilot light (STAT)
1 LED Ethernet status (LAN ST)
1 LED 10 or 100 Mbit/s rate (LACT)
1 LED per channel green I/O status
Product weight 0.525 kg
Environment
Immunity to microbreaks 10 ms
Dielectric strength 1500 V for 1 minute, between supply and earth terminals
1500 V for 1 minute, between I/O and earth terminals
Product certifications CSA
UL
Ambient air temperature for operation 0...55 °C
Ambient air temperature for storage -25...70 °C
Relative humidity 30...95 % without condensation
IP degree of protection IP20

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Operating altitude 0...2000 m

Storage altitude 0...3000 m

Vibration resistance 0.075 mm 10...57 Hz 35 mm symmetrical DIN rail

1 gn 57...150 Hz 35 mm symmetrical DIN rail

1.6 mm 2...25 Hz plate or panel with fixing kit

4 gn 25...100 Hz plate or panel with fixing kit

Shock resistance 15 gn 11 ms

RoHS EUR conformity date 0932

RoHS EUR status Compliant

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