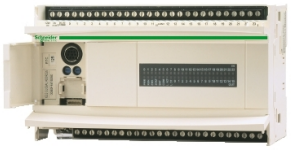
Product datasheet

Specifications



Compact base controller, Twido, 24VDC supply, compact, 24 inputs with 24VDC, 16 output relays

TWDLCDA40DRF

Discontinued

Discontinued on: 31 Dec 2016

End-of-service on: 31 Dec 2018

EAN Code: 3595863951004

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	14 for relay 2 for transistor
[Us] Rated Supply Voltage	24 V DC
Maximum Number Of I/O Expansion Module	7
Use Of Slot	Memory cartridge
Data Backed Up	Internal RAM lithium, 30 days autonomy, charging time: 10 h, battery life: 10 year(s)
Integrated Connection Type	Power supply Non isolated serial link mini DIN, Modbus/character mode master/slave RTU/ASCII (RS485) half duplex, 38.4 kbit/s Serial link interface adaptor (RS232C/RS485)
Complementary Function	PID Event processing
Range Compatibility	Twido

Complementary

Discrete Input Logic	Sink or source
Input Voltage Limits	20.4...26.4 V
Discrete Input Current	11 mA for I0.0 to I0.1 11 mA for I0.6 to I0.7 7 mA for I0.2 to I0.5 7 mA for I0.8 to I0.23
Input Impedance	2100 Ohm for I0.0 to I0.1 2100 Ohm for I0.6 to I0.7 3400 Ohm for I0.2 to I0.5 3400 Ohm for I0.8 to I0.23
Filter Time	150 µs + programmed filter time for I0.6 to I0.23 at state 0 35 µs + programmed filter time for I0.0 to I0.5 at state 1 40 µs + programmed filter time for I0.0 to I0.5 at state 0 40 µs + programmed filter time for I0.6 to I0.23 at state 1
Insulation Between Channel And Internal Logic	1500 Vrms for 1 minute

Insulation Resistance Between Channel	None
Minimum Load	0.1 mA
Contact Resistance	30000 µOhm
Load Current	2 A at 240 V AC inductive load, operating rate <30 cyc/mn for relay output 2 A at 240 V AC resistive load, operating rate <30 cyc/mn for relay output 2 A at 30 V DC inductive load, operating rate <30 cyc/mn for relay output 2 A at 30 V DC resistive load, operating rate <30 cyc/mn for relay output
Mechanical Durability	20000000 cycles for relay output
Electrical Durability	100000 cycles for relay output
Current Consumption	128 mA at 24 V DC at state 1 128 mA at 24 V DC state 1 + input ON 140 mA at 5 V DC state 1 + input ON 5 mA at 24 V DC at state 0 70 mA at 5 V DC at state 0 90 mA at 5 V DC at state 1
I/O Connection	Non-removable screw terminal block
Maximum 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
Supply Voltage Limits	20.4…28.8 V
Inrush Current	35 A
Protection Type	Power protection by internal fuse
Power Consumption In W	17.2 W
Insulation Resistance	> 10 MOhm at 500 V, between I/O and earth terminals > 10 MOhm at 500 V, between supply and earth terminals
Program Memory	3000 instructions
Exact Time For 1 Kinstruction	1 ms
System Overhead	0.5 ms
Memory Description	Internal RAM, 128 counters, no floating, no trigonometrical Internal RAM, 128 timers, no floating, no trigonometrical Internal RAM, 256 internal bits, no floating, no trigonometrical Internal RAM, 3000 internal words, no floating, no trigonometrical Internal RAM, double words, no floating, no trigonometrical Internal RAM, floating, trigonometrical
Free Slots	1
Realtime Clock	With clock, clock drift <= 30 s/month, operating time: 30 days
Positioning Functions	PWM/PLS 2 channel(s) at 7 kHz
Counting Input Number	2 counting input(s) at 20000 Hz 32 bits 4 counting input(s) at 5000 Hz 16 bits
Analogue Adjustment Points	1 point adjustable from 0 to 511 points 1 point adjustable from 0...1023
Status Led	1 LED (green) PWR 1 LED (green) RUN 1 LED per channel (green) I/O status 1 LED (red) module error (ERR) 1 LED user pilot light (STAT)
Depth	70 mm
Height	95 mm
Width	90 mm
Net Weight	0.525 kg

Environment

Immunity To Microbreaks	10 ms
Dielectric Strength	1500 V for 1 minute, between I/O and earth terminals 500 V for 1 minute, between supply and earth terminals
Product Certifications	CSA UL
Marking	CE
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
Operating Altitude	0...2000 m
Storage Altitude	0…3000 m
Vibration Resistance	0.075 mm at 10…57 Hz on 35 mm symmetrical DIN rail 1 gn at 57…150 Hz on 35 mm symmetrical DIN rail 1.6 mm at 2…25 Hz on plate or panel with fixing kit 4 gn at 25…100 Hz on plate or panel with fixing kit
Shock Resistance	15 gn for 11 ms

Packing Units

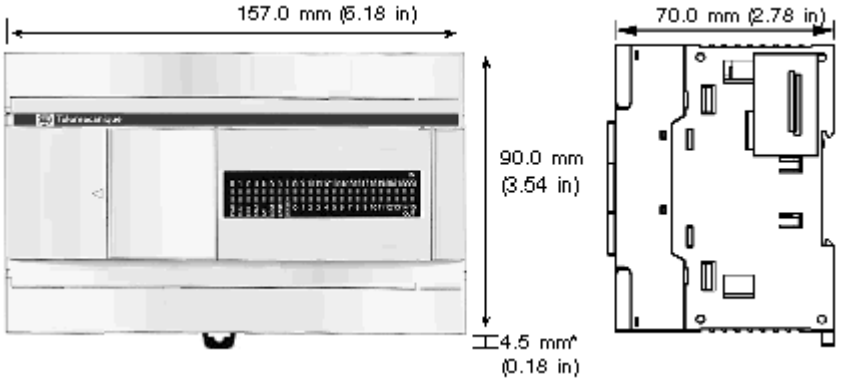
Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	10.5 cm
Package 1 Width	12.0 cm
Package 1 Length	18.5 cm
Package 1 Weight	699.0 g
Unit Type Of Package 2	S04
Number Of Units In Package 2	18
Package 2 Height	30.0 cm
Package 2 Width	40.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	13.529 kg

Contractual warranty

Warranty	18 months

Dimensions Drawings

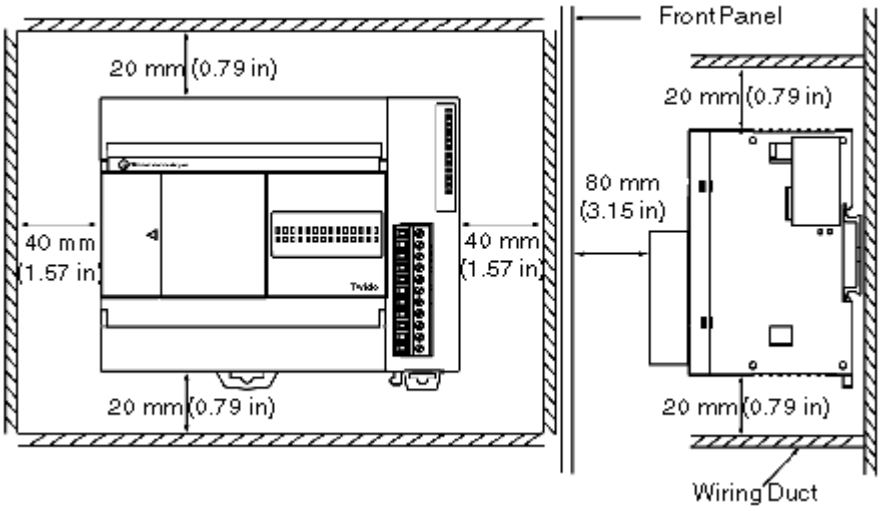
Dimensions



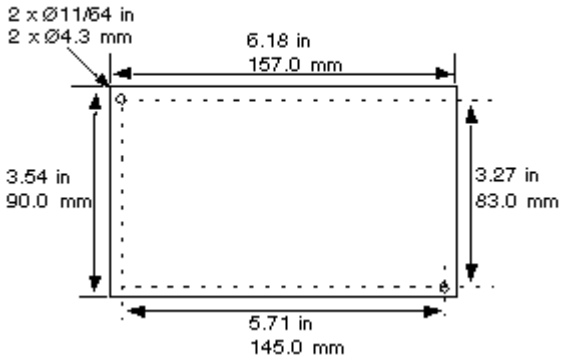
* 8.5 mm (0.33 in) when the clamp is pulled out.

Mounting and Clearance

Minimum Clearances for a Compact Base and Expansion I/O Modules

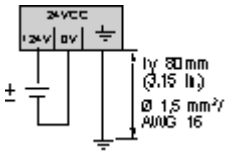


Mounting Hole Layout



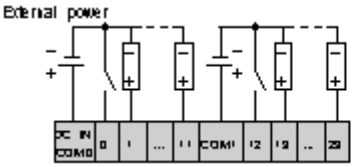
Connections and Schema

DC Power Supply Wiring Diagram

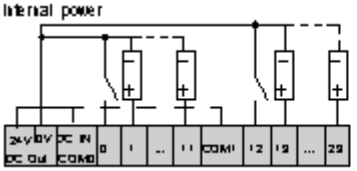


DC Source Inputs Wiring Diagrams

External Power



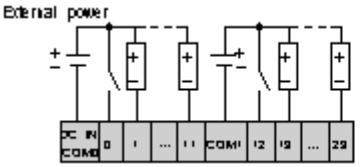
Internal Power



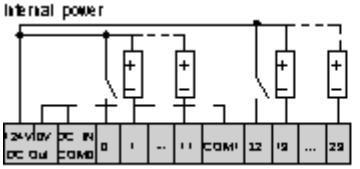
Max current: 400mA.

DC Sink Inputs Wiring Diagrams

External Power

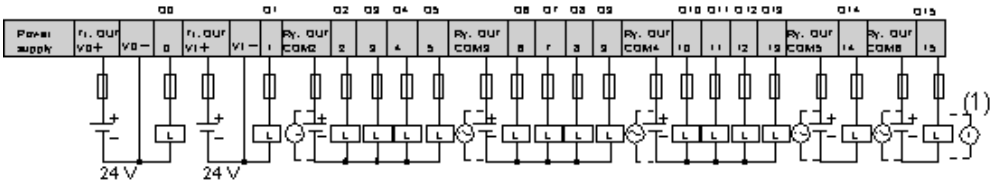


Internal Power



Max current: 400mA.

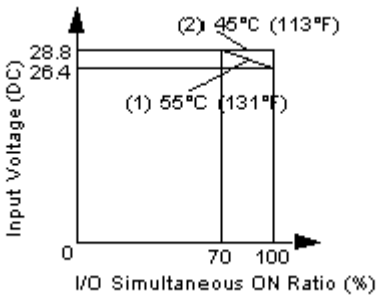
Relay and Transistor Outputs Wiring Diagram



Performance Curves

Performance Curves

I/O Usage Limits



(1) Limit for TWDLC•AA16DRF, TWDLC•A24DRF, TWDLCA•40DRF and TWDLD•40DRF

(2) All compact bases