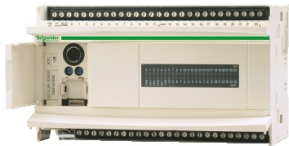# Product data sheet

Specifications

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

TWDLCDE40DRF

⚠ **Discontinued - Service only**

⚠ Discontinued on: Dec 31, 2016

⚠ End-of-service on: Jun 29, 2023

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range Of Product	Twido
Product Or Component Type	Compact base controller
Concept	Transparent Ready
Discrete I/O Number	40
Discrete Input Number	24
Discrete Input Voltage	24 V
Discrete Input Voltage Type	DC
Discrete Output Number	14 relay 2 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 10 h 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) Ethernet TCP/IP RJ45, , 10/100 Mbit/s, 1 twisted pair transparent ready class A10
Complementary Function	Event processing PID
Range Compatibility	Twido

Complementary

Discrete Input Logic	Sink or source
Input Voltage Limits	20.4...26.4 V
Discrete Input Current	11 mA I0.0 to I0.1 11 mA I0.6 to I0.7 7 mA I0.2 to I0.5 7 mA I0.8 to I0.23
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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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 240 V AC inductive 30 cyc/mn relay output 2 A 240 V AC resistive 30 cyc/mn relay output 2 A 30 V DC inductive 30 cyc/mn relay output 2 A 30 V DC resistive 30 cyc/mn relay output
Mechanical Durability	20000000 cycles relay output
Electrical Durability	100000 cycles relay output
Current Consumption	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 5 mA 24 V DC at state 0 90 mA 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 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 <= 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 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)
	1 LED 10 or 100 Mbit/s rate (LACT)
	1 LED Ethernet status (LAN ST)
Depth	2.76 in (70 mm)
Height	3.74 in (95 mm)
Width	3.54 in (90 mm)
Net Weight	1.16 lb(US) (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	UL
	CSA
Marking	CE
Ambient Air Temperature For Operation	32…131 °F (0…55 °C)
Ambient Air Temperature For Storage	-13…158 °F (-25…70 °C)
Relative Humidity	30…95 % without condensation
Ip Degree Of Protection	IP20
Operating Altitude	0...6561.68 ft (0...2000 m)
Storage Altitude	0.00…9842.52 ft (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

Ordering and shipping details

Category	US1PC1222531
Discount Schedule	PC12
Gtin	3595863951011
Returnability	No
Country Of Origin	US

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	4.13 in (10.5 cm)
Package 1 Width	4.72 in (12.0 cm)
Package 1 Length	7.09 in (18.0 cm)
Package 1 Weight	25.11 oz (712.0 g)

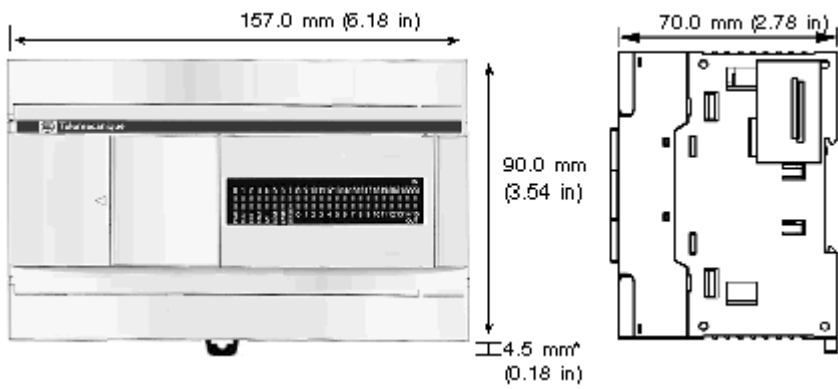## Contractual warranty

Warranty   18 months
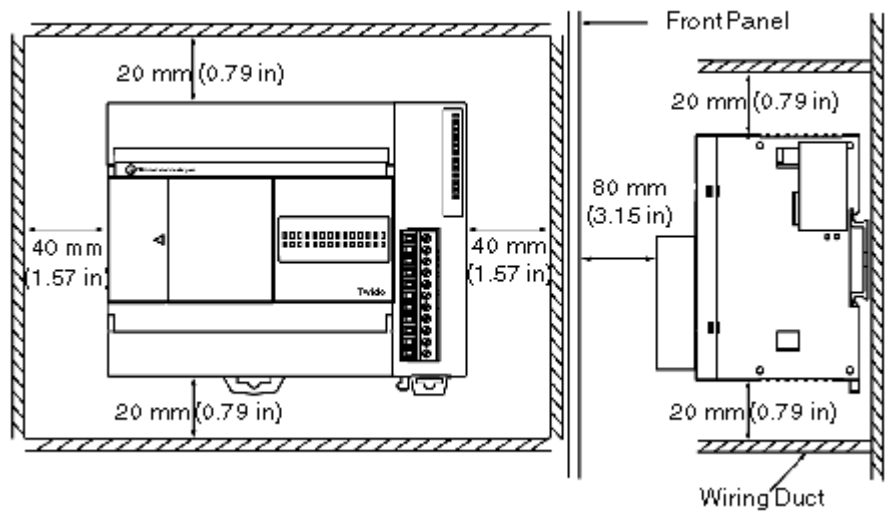
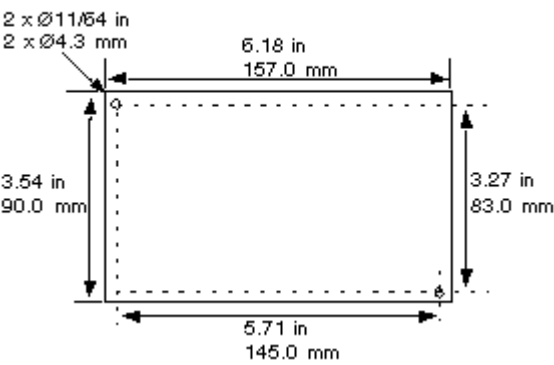Dimensions Drawings

Dimensions

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

Mounting and Clearance

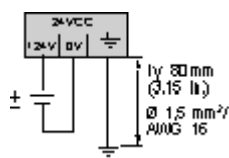**Minimum Clearances for a Compact Base and Expansion I/O Modules**
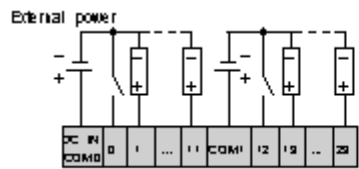
Mounting Hole Layout

2 x Ø11/64 in
2 x Ø4.3 mm

6.18 in
157.0 mm

3.54 in
90.0 mm

3.27 in
83.0 mm

5.71 in
145.0 mm

Connections and Schema

DC Power Supply Wiring Diagram

DC Source Inputs Wiring Diagrams

External Power
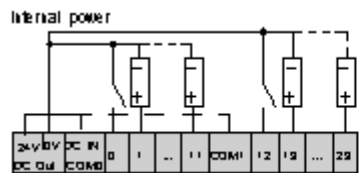
Internal Power

Max current: 400mA.

DC Sink Inputs Wiring Diagrams
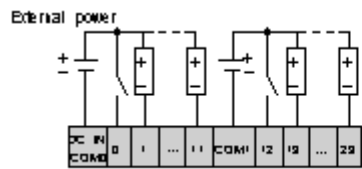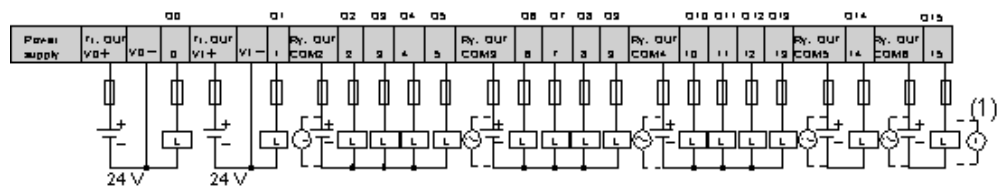
External Power

Internal Power
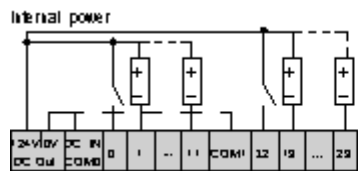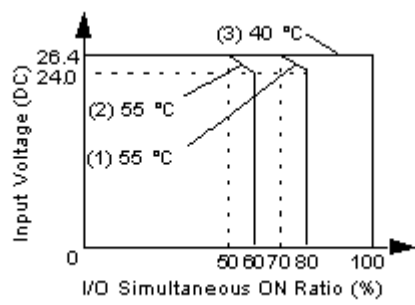

Max current: 400mA.

Relay and Transistor Outputs Wiring Diagram

Performance Curves

Performance Curves

I/O Usage Limits

(1)   Limit for TWDLMDA20DUK and TWDLMDA20DTK

(2)   Limit for TWDLMDA40DUK and TWDLMDA40DTK

(3)   All modular bases