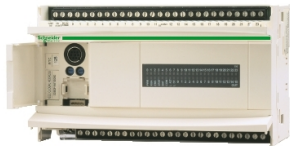


# Product data sheet

Specifications



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

TWDLCE40DRF

! Discontinued

! Discontinued on: Sep 27, 2024

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<br>2 transistor                                                                                                                                                                                                                                               |
| [Us] rated supply voltage                 | 24 V DC                                                                                                                                                                                                                                                                |
| Maximum Number of I/O<br>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<br>Non isolated serial link mini DIN, Modbus/character mode master/slave RTU/ASCII<br>RS485) half duplex, 38.4 kbit/s<br>Serial link interface adaptor RS232C/RS485)<br>Ethernet TCP/IP RJ45, , 10/100 Mbit/s, 1 twisted pair transparent ready class A10 |
| Complementary function                    | Event processing<br>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<br>11 mA I0.6 to I0.7<br>7 mA I0.2 to I0.5<br>7 mA I0.8 to I0.23               |
| Input impedance        | 2100 Ohm I0.0 to I0.1<br>2100 Ohm I0.6 to I0.7<br>3400 Ohm I0.2 to I0.5<br>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.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                               |                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Filter time                                   | 150 µs + programmed filter time for I0.6 to I0.23 at state 0<br>35 µs + programmed filter time for I0.0 to I0.5 at state 1<br>40 µs + programmed filter time for I0.0 to I0.5 at state 0<br>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<br>2 A 240 V AC resistive 30 cyc/mn relay output<br>2 A 30 V DC inductive 30 cyc/mn relay output<br>2 A 30 V DC resistive 30 cyc/mn relay output                                                                                                                                                                               |
| Mechanical durability                         | 2000000 cycles relay output                                                                                                                                                                                                                                                                                                                                                  |
| Electrical durability                         | 100000 cycles relay output                                                                                                                                                                                                                                                                                                                                                   |
| Current consumption                           | 128 mA 24 V DC at state 1<br>128 mA 24 V DC state 1 + input ON<br>170 mA 5 V DC at state 0<br>240 mA 5 V DC state 1 + input ON<br>5 mA 24 V DC at state 0<br>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<br>208 spring terminal block with I/O expansion module<br>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<br>> 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<br>Internal RAM, 128 timers, no floating, no trigonometrical<br>Internal RAM, 256 internal bits, no floating, no trigonometrical<br>Internal RAM, 3000 internal words, no floating, no trigonometrical<br>Internal RAM, double words, no floating, no trigonometrical<br>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<br>Modbus messaging, Ethernet TCP/IP                                                                                                                                                                                                                                                                                                           |
| Positioning functions                         | PWM/PLS 2 7 kHz                                                                                                                                                                                                                                                                                                                                                              |
| Counting input number                         | 2 20000 Hz 32 bits<br>4 5000 Hz 16 bits                                                                                                                                                                                                                                                                                                                                      |
| Analogue adjustment points                    | 1 point adjustable from 0 to 511 points<br>1 point adjustable from 0...1023                                                                                                                                                                                                                                                                                                  |

|            |                                                                                                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Status LED | 1 LED (Green) PWR<br>1 LED (Green) RUN<br>1 LED per channel (Green) I/O status<br>1 LED (Red) module error (ERR)<br>1 LED user pilot light (STAT)<br>1 LED 10 or 100 Mbit/s rate (LACT)<br>1 LED Ethernet status (LAN ST) |
| Depth      | 2.8 in (70 mm)                                                                                                                                                                                                            |
| Height     | 3.7 in (95 mm)                                                                                                                                                                                                            |
| Width      | 3.5 in (90 mm)                                                                                                                                                                                                            |
| Net Weight | 1.157 lb(US) (0.525 kg)                                                                                                                                                                                                   |

## Environment

|                                       |                                                                                                                                                                                                     |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Immunity to microbreaks               | 10 ms                                                                                                                                                                                               |
| Dielectric strength                   | 1500 V for 1 minute, between I/O and earth terminals<br>500 V for 1 minute, between supply and earth terminals                                                                                      |
| Product Certifications                | UL<br>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...9842.5 ft (0...3000 m)                                                                                                                                                                          |
| Vibration resistance                  | 0.075 mm 10...57 Hz 35 mm symmetrical DIN rail<br>1 gn 57...150 Hz 35 mm symmetrical DIN rail<br>1.6 mm 2...25 Hz plate or panel with fixing kit<br>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            |

## Packing Units

|                        |                   |
|------------------------|-------------------|
| Unit Type of Package 1 | PCE               |
| Nbr. of units in pkg.  | 1                 |
| Package 1 Height       | 4.1 in (10.5 cm)  |
| Package 1 Width        | 4.7 in (12.0 cm)  |
| Package 1 Length       | 7.09 in (18.0 cm) |
| Package weight(Lbs)    | 25.1 oz (712.0 g) |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

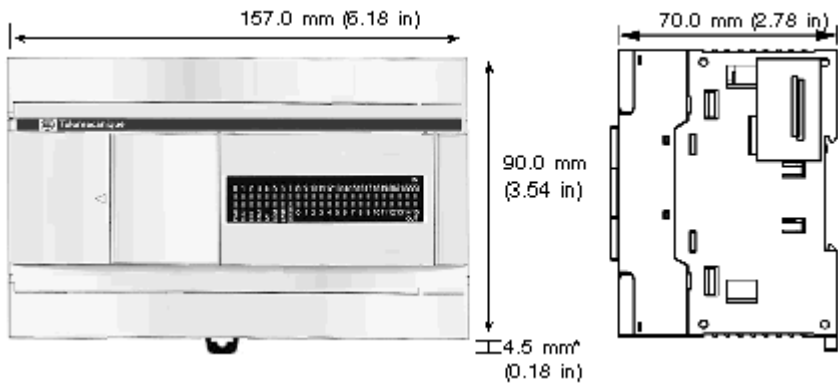
[How we assess product sustainability >](#)

### Use Longer

| Lifetime extension |    |
|--------------------|----|
| Repair             | No |

Dimensions Drawings

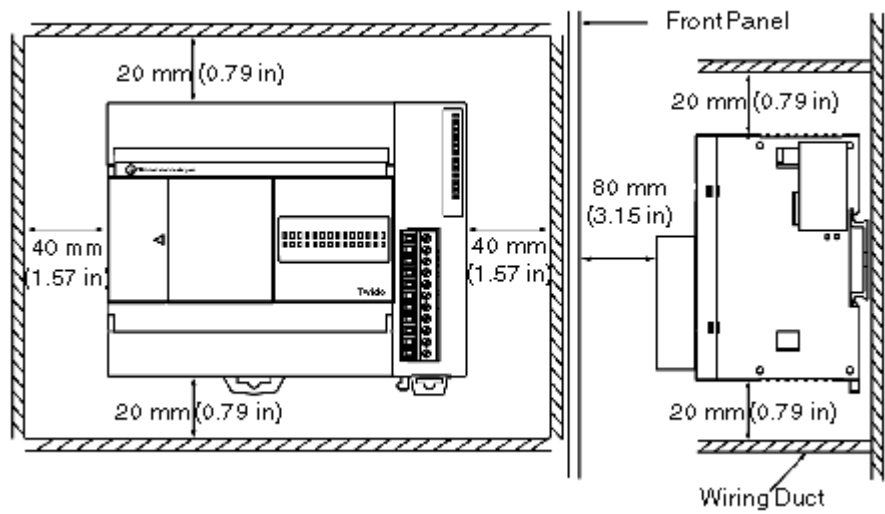
Dimensions



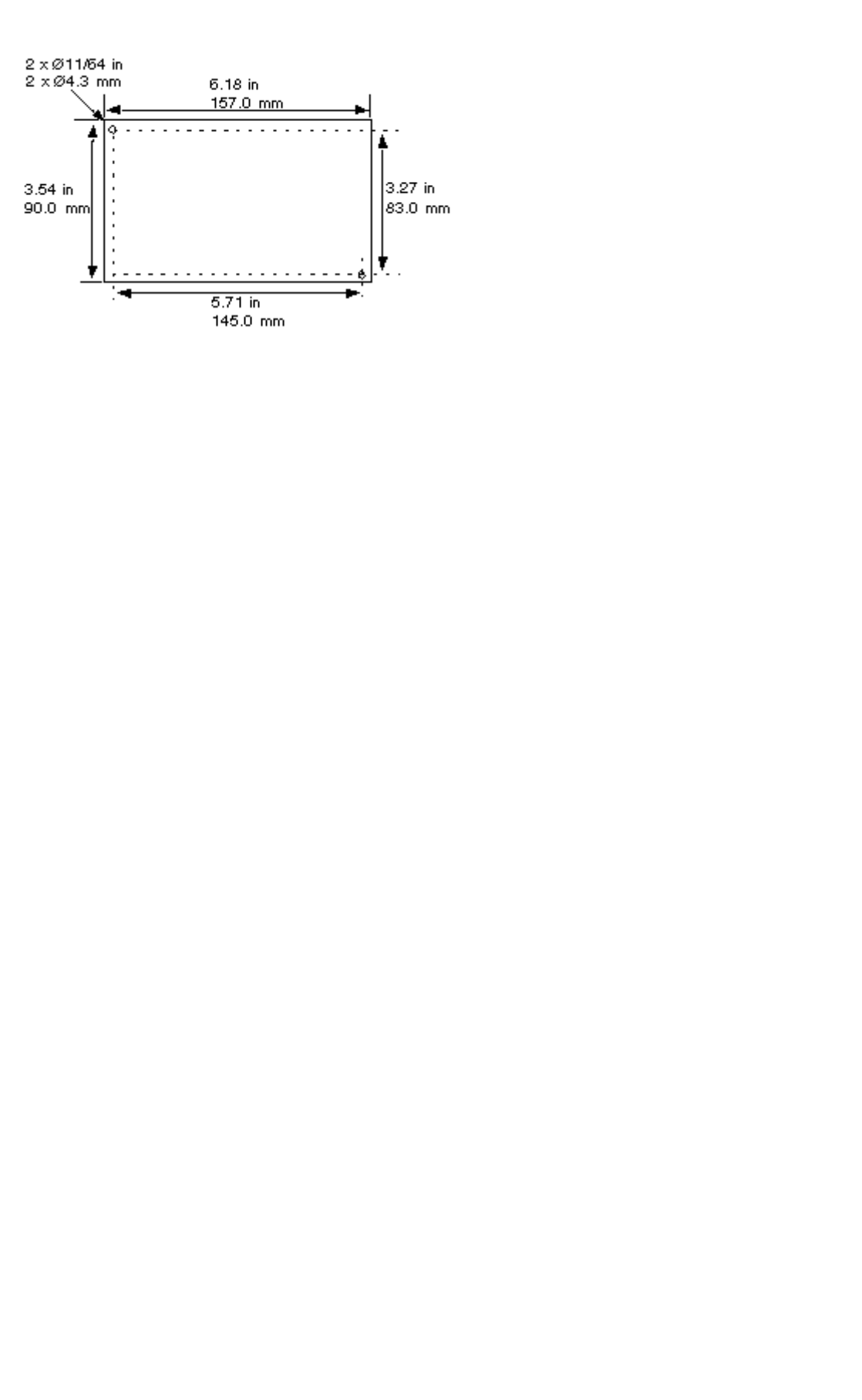
\* 8.5 mm (0.33 in) when the clamp is pulled out.

Mounting and Clearance

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



Mounting Hole Layout



Connections and Schema

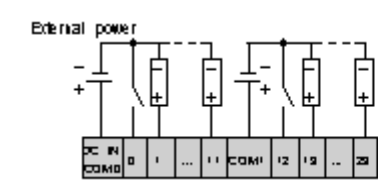
DC Power Supply Wiring Diagram



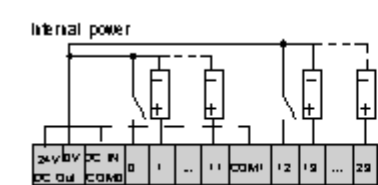


DC Source Inputs Wiring Diagrams

External Power



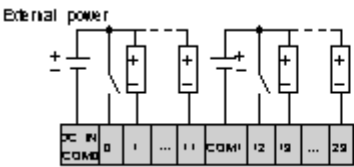
Internal Power



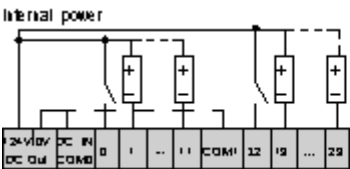
Max current: 400mA.

DC Sink Inputs Wiring Diagrams

External Power

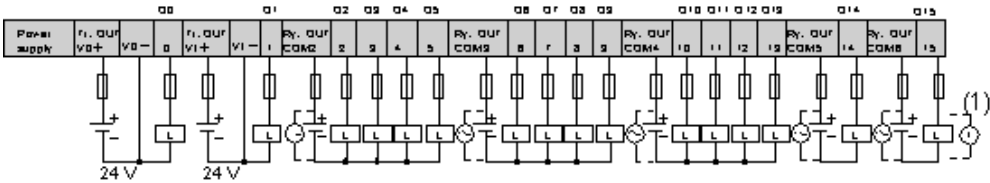


Internal Power



Max current: 400mA.

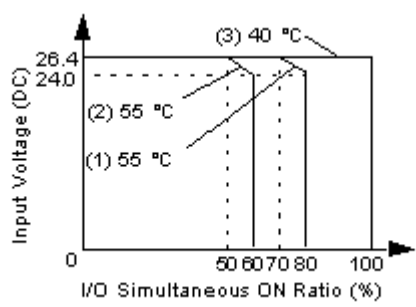
Relay and Transistor Outputs Wiring Diagram



Performance Curves

Performance Curves

I/O Usage Limits



- (1) Limit for TWDLMDA20DUK and TWDLMDA20DTK
- (2) Limit for TWDLMDA40DUK and TWDLMDA40DTK
- (3) All modular bases