Product data sheet

Specifications

Discontinued

Compact base controller, Twido, 100 to 240VAC supply, extendable, 6 inputs with 24VDC, 4 output relays

TWDLCAA10DRF

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
Discrete I/O number	10
Discrete input number	6
Discrete input voltage	24 V
Discrete input voltage type	DC
Discrete output number	4 relay
[Us] rated supply voltage	100...240 V AC
Use of slot	Memory cartridge or realtime clock 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

Complementary

Discrete input logic	Sink or source
Input voltage limits	20.4...28.8 V
Discrete input current	11 mA I0.0 to I0.1 7 mA I0.2 to I0.5
Input impedance	2100 Ohm I0.0 to I0.1 3400 Ohm I0.2 to I0.5
Filter time	35 µs + programmed filter time for I0.0 to I0.5 at state 1 45 µs + programmed filter time for I0.0 to I0.5 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	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

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

Current consumption	24 mA 5 V DC at state 1 26 mA 24 V DC at state 1 5 mA 5 V DC at state 0
I/O connection	Non-removable screw terminal block
Network Frequency	50/60 Hz
Supply voltage limits	85…264 V
Network frequency limits	47…63 Hz
Power supply output current	0.25 A 24 V DC sensors
Input current	250 mA
Inrush current	35 A
Protection type	Power protection internal fuse
Power consumption in VA	20 VA 100 V 30 VA 264 V
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	700 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 internal bits, no floating, no trigonometrical Internal RAM, 3000 internal words, no floating, no trigonometrical Internal RAM, 64 timers, no floating, no trigonometrical
Free slots	1
Realtime clock	Without
Counting input number	1 20000 Hz 32 bits 3 5000 Hz 16 bits
Analogue adjustment 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	2.8 in (70 mm)
Height	3.1 in (80 mm)
Width	3.5 in (90 mm)
Terminals description PLC n°1	ALT COM_NEG#0-5 (2)IN_DIS#2 (+)PW_OUT_POS (-)PW_OUT_NEG (5)IN_DIS#5 (3)IN_DIS#3 (0)IN_DIS#0 (4)IN_DIS#4 TB_TOP (1)IN_DIS#1

Terminals description PLC n°2	COM_POS#0-5 (0)IN_DIS#0 (-)PW_OUT_NEG (3)IN_DIS#3 (1)IN_DIS#1 (4)IN_DIS#4 ALT_1 TB_TOP (5)IN_DIS#5 (+)PW_OUT_POS (2)IN_DIS#2
Terminals description PLC n°3	(GND)GROUND (0)OUT_DIS#0 (2)OUT_DIS#2 (3)OUT_DIS#3 (L)PW TB_BOTTOM (N)PW (1)OUT_DIS#1 (COM1)COM#3 (COM0)COM#0-2
Net Weight	0.51 lb(US) (0.23 kg)

Environment

Immunity to microbreaks	10 ms
Dielectric strength	1500 V for 1 minute, between I/O and earth terminals 1500 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…9842.5 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	US1BMS180230
Discount Schedule	BMS1
GTIN	3595862044202
Returnability	Yes

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	4.3 in (11.0 cm)

Package 1 Length	4.9 in (12.5 cm)
Package weight(Lbs)	12.7 oz (359.0 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 >

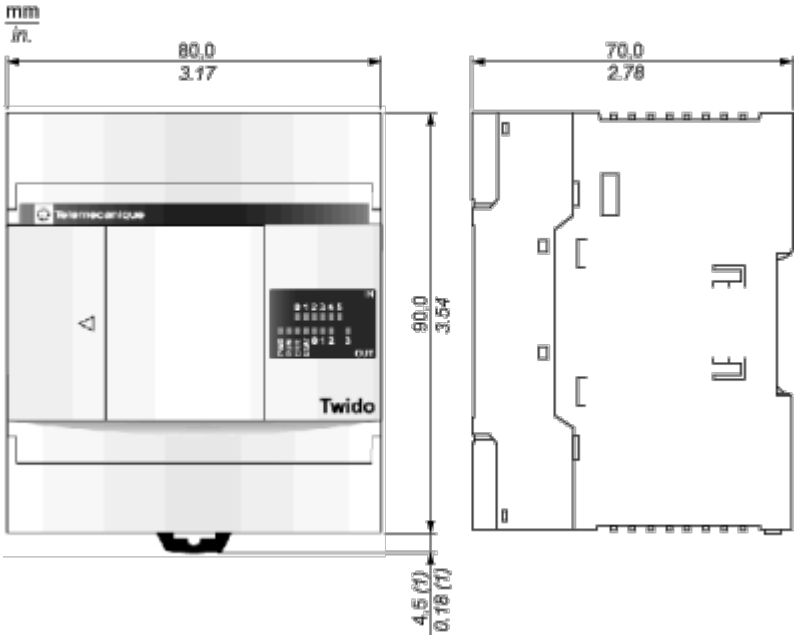
Use Longer

Lifetime extension

Repair	No

Dimensions Drawings

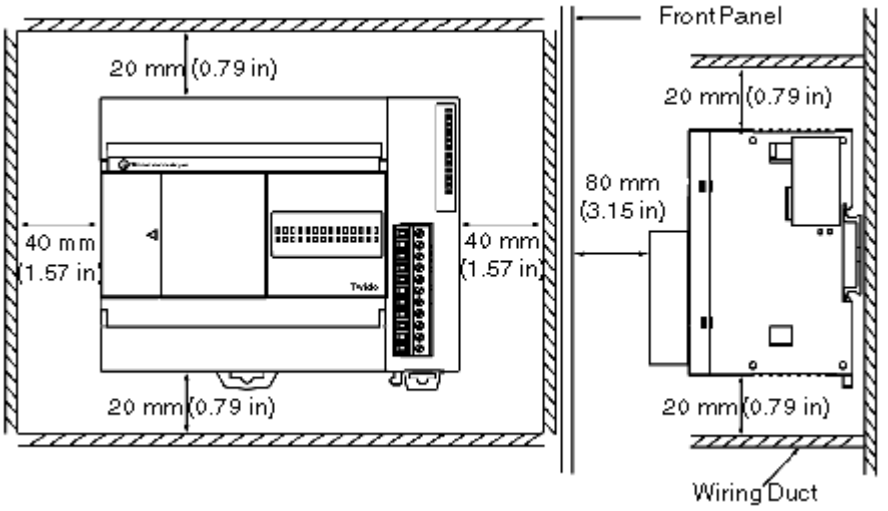
Dimensions



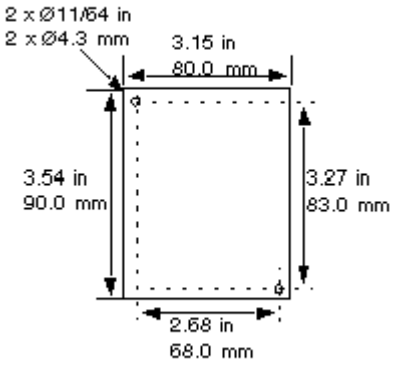
(1) 8.5 mm (0.33 in) when the clamp is pulled out.

Mounting and Clearance

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

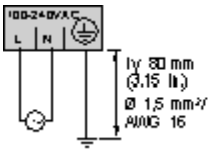


Mounting Hole Layout



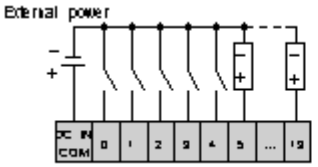
Connections and Schema

AC Power Supply Wiring Diagram

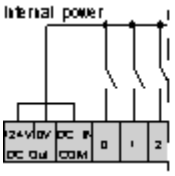


DC Source Inputs Wiring Diagrams

External Power



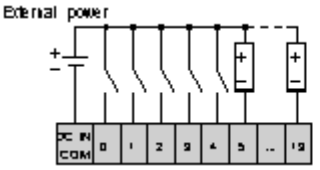
Internal Power



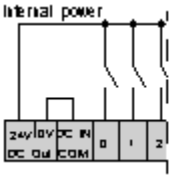
Max current: 250mA.

DC Sink Inputs Wiring Diagrams

External Power

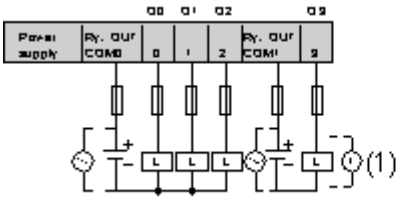


Internal Power



Max current: 250mA.

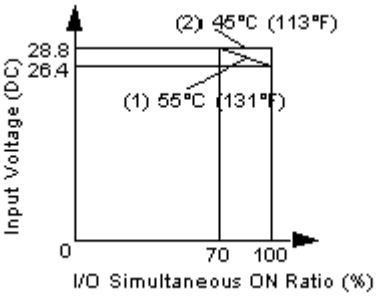
Relay and Transistor Outputs Wiring Diagram



Performance Curves

Performance Curves

I/O Usage Limits



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

(2) All compact bases