Product data sheet Characteristics

TWDLCDA16DRF

compact PLC base Twido - 24 V DC supply - 9 I 24 V DC - 7 O relay

Product availability: Stock - Normally stocked in distribution facility



Main

Range of product	Twido	
Product or component type	Compact base controller	
Discrete I/O number	16	
Discrete input number	9	
Discrete input voltage	24 V	
Discrete input voltage type	DC	
Discrete output number	7 relay	
[Us] rated supply voltage	24 V DC	
Use of slot	Memory cartridge or realtime clock cartridge	
Data backed up	Internal RAM (lithium) 30 days, charging time = 10 h, battery life = 10 yr	
Integrated connection type	Non isolated serial link mini DIN, Modbus/character mode master/slave RTU/ASCII (RS485) hal duplex, 38.4 kbit/s Power supply Serial link interface adaptor (RS232C/RS485)	

Complementary

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Discrete input voltage	24 V	
Discrete input voltage type	DC	
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Integrated connection type	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		
Discrete input logic	Sink or source	
Input voltage limits	20.428.8 V	
Discrete input current	11 mA for I0.0 to I0.1 7 mA for I0.2 to I0.8	
Input impedance	2100 Ohm for I0.2 to I0.8 3400 Ohm for I0.0 to I0.1	
Filter time	150 μs + programmed filter time for I0.6 to I0.8 at state 0 35 μs + programmed filter time for I0.0 to I0.5 at state 1 40 μs + programmed filter time for I0.6 to I0.8 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 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 relay output		
Electrical durability	>= 100000 cycles for relay output		
Current consumption	30 mA at 5 V DC at state 1 40 mA at 24 V DC at state 1 5 mA at 5 V DC at state 0		
I/O connection	Non-removable screw terminal block		
Supply voltage limits	20.428.8 V		
Inrush current	<= 35 A		
Protection type	Power protection with internal fuse		
Power consumption in W	<= 4.6 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	2000 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 Internal RAM, double words, no floating, no trigonometrical		
Free slots	1		
Realtime clock	Without		
Counting input number	1 channel(s) at 20000 Hz 32 bits 3 channel(s) at 5000 Hz 16 bits		
Analogue adjustment points	1 point adjustable from 01023		
Status LED	1 LED user pilot light (STAT) 1 LED green PWR 1 LED green RUN 1 LED per channel green I/O status 1 LED red module error (ERR)		
Depth	2.76 in (70 mm)		
Height	3.74 in (95 mm)		
Width	3.54 in (90 mm)		
Product weight	0.55 lb(US) (0.25 kg)		

Environment Immunity to microbreaks

10 ms	
1500 V for 1 minute, between I/O and earth terminals 500 V for 1 minute, between supply and earth terminals	
CSA UL	
CE	
32131 °F (055 °C)	
-13158 °F (-2570 °C)	
3095 % without condensation	
IP20	
06561.68 ft (02000 m)	
09842.52 ft (03000 m)	
resistance 0.075 mm, 1057 Hz mounting on: 35 mm symmetrical DIN rail 1 gn, 57150 Hz mounting on: 35 mm symmetrical DIN rail 1.6 mm, 225 Hz mounting on: plate or panel with fixing kit 4 gn, 25100 Hz mounting on: plate or panel with fixing kit	

Shock resistance 15 gn 11 ms	
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Ordering and shipping details

Category	22531 - PLCS, TWIDO, TWD	
Discount Schedule	PC12	
GTIN	00785901498308	
Nbr. of units in pkg.	1	
Package weight(Lbs)	0.8200000000000006	
Returnability	N	
Country of origin	TW	

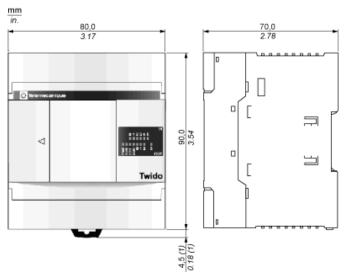
Contractual warranty

Warranty period	18 months	

Product data sheet Dimensions Drawings

TWDLCDA16DRF

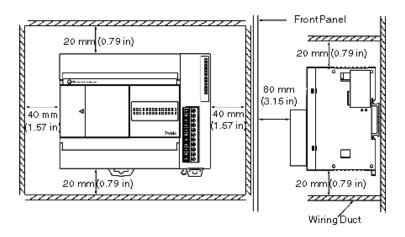
Dimensions



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

TWDLCDA16DRF

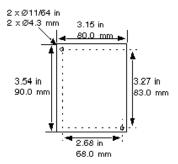
Minimum Clearances for a Compact Base and Expansion I/O Modules



Product data sheet Mounting and Clearance

TWDLCDA16DRF

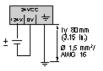
Mounting Hole Layout



Product data sheet Connections and Schema

TWDLCDA16DRF

DC Power Supply Wiring Diagram

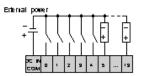


Product data sheet Connections and Schema

TWDLCDA16DRF

DC Source Inputs Wiring Diagrams

External Power



Internal Power



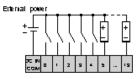
Max current: 250mA.

Product data sheet Connections and Schema

TWDLCDA16DRF

DC Sink Inputs Wiring Diagrams

External Power



Internal Power

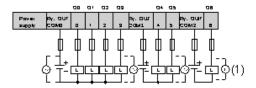


Max current: 250mA.

Product data sheet Connections and Schema

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Relay and Transistor Outputs Wiring Diagram

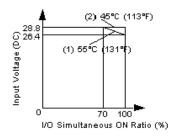


Product data sheet Performance Curves

TWDLCDA16DRF

Performance Curves

I/O Usage Limits



- (1) Limit for TWDLC•AA16DRF, TWDLC•A24DRF, TWDLCA•40DRF and TWDLD•40DRF
- (2) All compact bases

Product Life Status END OF COMMERCIALIZATION