# Product data sheet Characteristics

# TM258LD42DT

# compact base M258 - 42 I/O - 24 V DC



Product availability: Stock - Normally stocked in distribution facility



Main	
Range of product	Modicon M258
Product or component type	Logic controller
Product specific application	-
Discrete I/O number	42
Discrete output number	12 output 4 fast output

#### Complementary

Discrete input number	10 fast input 12 input			
	4 regular input			
Discrete input logic	Sink fast input Sink regular input Source input			
Discrete input voltage	24 V			
Discrete input voltage type	DC			
Voltage state 1 guaranteed	>= 15 Vfor fast input >= 15 Vfor fast output >= 15 Vfor regular input			
Voltage state 0 guaranteed	<= 5 Vfor fast input <= 5 Vfor fast output <= 5 Vfor regular input			
Discrete input current	4 mAfor fast input 4 mAfor regular input			
Input impedance	6 kOhm fast input 6 kOhm regular input			
Configurable filtering time	0 ms fast input/regular input and fast output 1.5 ms fast input/regular input and fast output 12 ms fast input/regular input and fast output 4 ms fast input/regular input and fast output			
Anti bounce filtering	2 μs4 ms (configurable) fast input/regular input and fast output			
Cable distance between devices	30 m for fast input 30 m for fast output 30 m for regular input			
Isolation between channels and internal logic	500 Vrms AC			
Isolation between channels	None			
Discrete output logic	Source			
Discrete output voltage	24 V DC			
Output voltage limits	19.228.8 V			
Discrete output current	4 mAfor fast output			
[Us] rated supply voltage	24 V DC embedded expert modules power 24 V DC I/O power segment 24 V DC main supply			
Supply voltage limits	20.428.8 V			
[In] rated current	0.04 Afor embedded expert modules power 0.25 Afor main supply 10 Afor I/O power segment			

Peak current	<= 100 kA during <= 70 s main supply <= 25 kA during <= 500 s I/O power segment <= 50 kA during <= 150 s embedded expert modules power 1.2 A during > 70 s main supply		
Power consumption in W	<= 13.03 W		
Execution time per instruction	22 ns : Boolean		
Memory description	Flash 128 MB Internal RAM 64 MB		
Realtime clock	With user calibration realtime clock, drift: <= 6 s/month Without any user calibration realtime clock, drift: < 30 s/monthat 77 °F (25 °C)		
Data backed up	Variables of type retain and retain persistent CR2477M Renata, 1.5 years autonomy		
Integrated connection type	1 isolated serial link female RJ45, Ethernet Modbus TCP/IP slave (10BASE-T/100BASE-TX) 1 isolated serial link female RJ45, Modbus master/slave RTU/ASCII or character mode ASCII (RS232/RS485), 300115200 bps 1 isolated serial link mini B USB, 480 Mbit/s 1 isolated serial link USB type A, 480 Mbit/s		
Counting input number	8 counting input(s) 200 kHz		
Local signalling	1 LED per channel I/O state 1 LED CAN0 STS 1 LED MBS COM 1 LED green/red APP0 1 LED green/red APP1 1 LED green/red Eth NS (Ethernet network status) 1 LED green/red Eth ST (Ethernet status) 1 LED green/red RUN/MS (module status) 1 LED green/red USB host 1 LED green/yellow Eth LA (Ethernet activity) 1 LED red BATT (battery status)		
Marking	CE		
Mounting support	Symmetrical DIN rail		
Width	6.89 in (175 mm)		
Height	3.9 in (99 mm)		
Depth	3.35 in (85 mm)		
Product weight  Environment	1.1 lb(US) (0.5 kg)		
Standards	CSA C22.2 No 142 UL 508 CSA C22.2 No 213 IEC 61131-2		
Product certifications	GOST-R C-Tick CSA cULus		
Ambient air temperature for operation	32131 °F (055 °C) without derating factor horizontal installation 32140 °F (060 °C) with derating factor horizontal installation 32122 °F (050 °C) vertical installation		
Ambient air temperature for storage	-13158 °F (-2570 °C)		
Relative humidity	595 % without condensation		
IP degree of protection	IP20 conforming to IEC 61131-2		
Pollution degree	2 conforming to IEC 60664		
Operating altitude	06561.68 ft (02000 m)		
Storage altitude	09842.52 ft (03000 m)		
Vibration resistance	1 gn 8.4150 Hz DIN rail 3.5 mm 58.4 Hz DIN rail		
Shock resistance	15 gn 11 ms		
Resistance to electrostatic discharge	4 kV on contact conforming to EN/IEC 61000-4-2 8 kV in air conforming to EN/IEC 61000-4-2		
Resistance to electromagnetic fields	0.91 V/yd (1 V/m) 22.7 GHz conforming to EN/IEC 61000-4-3 9.14 V/yd (10 V/m) 802000 MHz conforming to EN/IEC 61000-4-3		
Resistance to fast transients	1 kV I/O conforming to EN/IEC 61000-4-4 1 kV shielded cable conforming to EN/IEC 61000-4-4 2 kV power lines conforming to EN/IEC 61000-4-4		

Surge withstand	0.5 kV differential mode conforming to EN/IEC 61000-4-5 1 kV common mode conforming to EN/IEC 61000-4-5
Disturbance radiated/conducted	CISPR 11

#### Ordering and shipping details

Category	22532 - M258 PLC
Discount Schedule	PC12
GTIN	00785901684633
Nbr. of units in pkg.	1
Package weight(Lbs)	1.72
Returnability	Υ
Country of origin	AT

## Offer Sustainability

Sustainable offer status	Green Premium product			
RoHS (date code: YYWW)	Compliant - since 1039 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity			
REACh	Reference not containing SVHC above the threshold			
Product environmental profile	Available			
Product end of life instructions	Available			
California proposition 65	WARNING: This product can expose you to chemicals including:			
Substance 1	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.			
More information	For more information go to www.p65warnings.ca.gov			

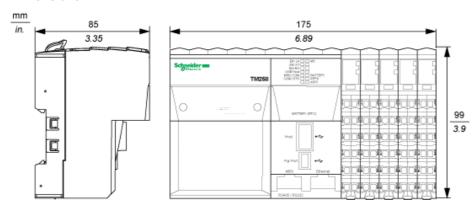
## Contractual warranty

# Product data sheet Dimensions Drawings

# TM258LD42DT

#### Controller

#### **Dimensions**



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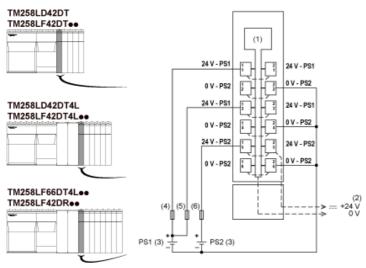
#### TM5 System Wiring Recommendations

#### Wire Sizes to Use with Removable Spring Terminal Blocks

mm in.	0.35		1		
	mm²	0,082,5	0,252,5	0,251,5	2 x 0,252 x 0,75
	AWG	2814	2414	2416	2 x 242 x 18

#### **External Power Supplies**

#### Wiring Diagram of the Controller Power Distribution Module



- Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- PS1/PS2: External isolated SELV power supply 24 Vdc (3)
- (4) External fuse, Type T slow-blow, 3 A 250 V
- (5)
- External fuse, Type T slow-blow, 2 A 250 V
  External fuse, Type T slow-blow, 10 A max., 250 V

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**Authorized Distributor** 

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Schneider Electric: TM258LD42DT