

# Product data sheet

Specifications



## Logic controller, Modicon M258, compact base 42 I/O, 24 V DC, Relay, CANopen, solution

TM258LF42DRS0

⚠ Discontinued on: Oct 12, 2021

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### Main

Range of Product	Modicon M258
Product or Component Type	Logic controller
Product Specific Application	For solutions
Software Function	Applicative functions blocks
Discrete I/O number	42
Discrete output number	12 relay 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 V fast input >= 15 V fast output >= 15 V regular input
Voltage state 0 guaranteed	<= 5 V fast input <= 5 V fast output <= 5 V regular input
Discrete input current	4 mA fast input 4 mA 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 μs...4 ms configurable fast input/regular input and fast output
Maximum cable distance between devices	<98.4 ft (30 m) fast input <98.4 ft (30 m) fast output <98.4 ft (30 m) regular input
Isolation between channels and internal logic	500 Vrms AC
Isolation between channels	None
Discrete output logic	Source

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

<b>Discrete output voltage</b>	24 V DC
<b>Output voltage limits</b>	19.2...28.8 V
<b>Discrete output current</b>	4 mA fast output
<b>[Us] rated supply voltage</b>	24 V DC embedded expert modules power 24 V DC I/O power segment 24 V DC main supply
<b>Supply voltage limits</b>	20.4...28.8 V
<b>Line Rated Current</b>	0.04 A embedded expert modules power 10 A I/O power segment 0.33 A main supply
<b>Peak current</b>	100 kA <= 70 s)main supply 25 kA <= 500 s)I/O power segment 50 kA <= 150 s)embedded expert modules power 1.2 A > 70 s)main supply
<b>Power Consumption in W</b>	17.22 W
<b>Execution time per instruction</b>	22 ns Boolean
<b>Memory description</b>	Flash 128 MB Internal RAM 64 MB
<b>Realtime clock</b>	Without any user calibration clock, clock drift < 30 s/month at 77 °F (25 °C) With user calibration clock, clock drift <= 6 s/month
<b>Data backed up</b>	Variables of type retain and retain persistent CR2477M Renata, 1.5 years
<b>Integrated connection type</b>	1 isolated serial link female RJ45 Modbus master/slave RTU/ASCII or character mode ASCII RS232/RS485 300...115200 bps 1 isolated serial link female RJ45 Ethernet Modbus TCP/IP slave 10BASE-T/100BASE-TX 1 isolated serial link mini B USB 480 Mbit/s 1 isolated serial link USB type A 480 Mbit/s 2 free slots PCI 1 CANopen male SUB-D 9 CANopen master
<b>Transmission rate</b>	125 kbit/s 1640.4 ft (500 m) CANopen 250 kbit/s 820.2 ft (250 m) CANopen 50 kbit/s 3280.8 ft (1000 m) CANopen 500 kbit/s 328.08 ft (100 m) CANopen 10 kbit/s 16404.2 ft (5000 m) CANopen 1000 kbit/s 13.1 ft (4 m) CANopen 20 kbit/s 8202.10 ft (2500 m) CANopen 800 kbit/s 82.02 ft (25 m) CANopen
<b>Counting input number</b>	8 200 kHz
<b>Local signalling</b>	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)
<b>Marking</b>	CE
<b>Mounting Support</b>	Symmetrical DIN rail
<b>Width</b>	10.3 in (262.5 mm)
<b>Height</b>	3.9 in (99 mm)
<b>Depth</b>	3.3 in (85 mm)
<b>Net Weight</b>	1.8 lb(US) (0.8 kg)

## Environment

<b>Standards</b>	UL 508 CSA C22.2 No 142 CSA C22.2 No 213 IEC 61131-2
<b>Product Certifications</b>	cULus C-tick GOST-R CSA
<b>Ambient air temperature for operation</b>	32...131 °F (0...55 °C) without derating horizontal installation) 32...140 °F (0...60 °C) with derating factor horizontal installation) 32...122 °F (0...50 °C) vertical installation)
<b>Ambient Air Temperature for Storage</b>	-13...158 °F (-25...70 °C)
<b>Relative humidity</b>	5...95 % without condensation
<b>IP degree of protection</b>	IP20IEC 61131-2
<b>Pollution degree</b>	2 IEC 60664
<b>Operating altitude</b>	0...6561.68 ft (0...2000 m)
<b>Storage altitude</b>	0...9842.5 ft (0...3000 m)
<b>Vibration resistance</b>	1 gn 8.4...150 Hz DIN rail 3.5 mm 5...8.4 Hz DIN rail
<b>Shock resistance</b>	15 gn 11 ms
<b>Resistance to electrostatic discharge</b>	4 kV on contact EN/IEC 61000-4-2 8 kV in air EN/IEC 61000-4-2
<b>Resistance to electromagnetic fields</b>	0.9 V/m (1 V/m) 2...2.7 GHz EN/IEC 61000-4-3 9.1 V/m (10 V/m) 80...2000 MHz EN/IEC 61000-4-3
<b>Resistance to fast transients</b>	1 kV EN/IEC 61000-4-4 I/O) 1 kV EN/IEC 61000-4-4 shielded cable) 2 kV EN/IEC 61000-4-4 power lines)
<b>Surge withstand</b>	0.5 kV differential mode EN/IEC 61000-4-5 1 kV common mode EN/IEC 61000-4-5
<b>Disturbance radiated/conducted</b>	CISPR 11

## Ordering and shipping details

<b>Category</b>	22532-M258 PLC
<b>Discount Schedule</b>	PC12
<b>GTIN</b>	3595864074153
<b>Returnability</b>	No
<b>Country of origin</b>	AT

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	5.1 in (13 cm)
<b>Package 1 Width</b>	5.9 in (15 cm)
<b>Package 1 Length</b>	14.6 in (37 cm)
<b>Package weight(Lbs)</b>	2.29 lb(US) (1.04 kg)

## Contractual warranty

<b>Warranty (in months)</b>	18
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## 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 Better



#### Materials and Substances

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

California proposition 65

WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

PVC free

Yes

### Use Longer



#### Lifetime extension

Repair

No








Connections and Schema

TM5 System Wiring Recommendations

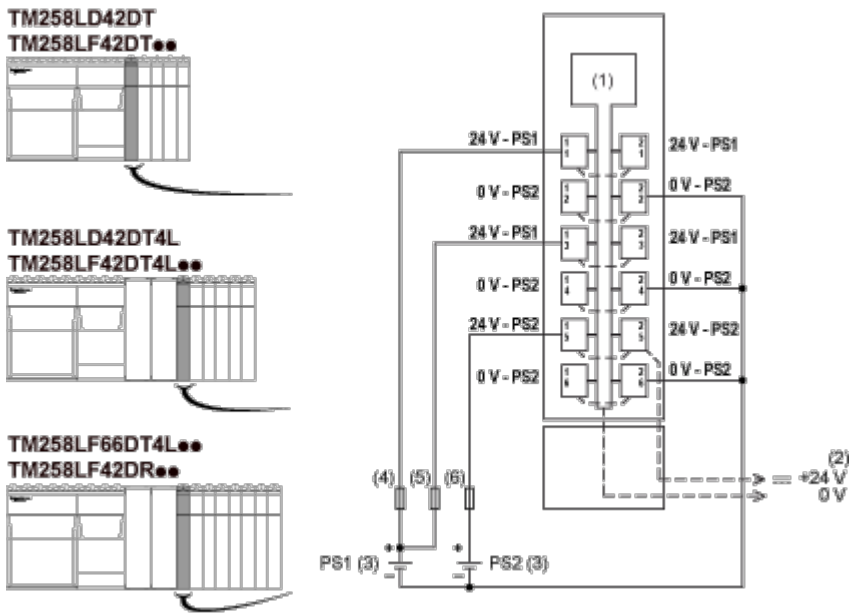
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Wire Sizes to Use with Removable Spring Terminal Blocks

 mm in.					
mm <sup>2</sup>	0,08...2,5	0,25...2,5	0,25...1,5	2 x 0,25...2 x 0,75	
AWG	28...14	24...14	24...16	2 x 24...2 x 16	

External Power Supplies

Wiring Diagram of the Controller Power Distribution Module



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