Product data sheet
Characteristics

TM258LF42DRS0
compact base M258 - 42 I/O - 24 V DC - Relay - CANopen - solution

Main

Range of product	Modicon M258
Product or component type	Logic controller
Product specific application	For solutions
Software function	Applicatives functions blocks
Electrical circuit type	12 relay output 4 fast output

Complementary

Electrical circuit type	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
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	<98.43 Ft (30 m) fast input <98.43 Ft (30 m) fast output <98.43 ft (30 m) 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	19.2...28.8 V
Discrete output current	4 mA 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
Maximum power consumption in W	17.22 W
Execution time per instruction	22 ns Boolean
Memory description	Flash 128 MB Internal RAM 64 MB
Realtime clock	Without any user calibration < 30 s/month 77 °F (25 °C) With user calibration <= 6 s/month

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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.
It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof.
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Data backed up	Variables of type retain and retain persistent CR2477M Renata, 1.5 years
Integrated connection type	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
Transmission rate	125 kbit/s 1640.42 ft (500 m) CANopen 250 kbit/s 820.21 ft (250 m) CANopen 50 kbit/s 3280.84 ft (1000 m) CANopen 500 kbit/s 328.08 ft (100 m) CANopen 10 kbit/s 16404.20 ft (5000 m) CANopen 1000 kbit/s 13.12 ft (4 m) CANopen 20 kbit/s 8202.10 ft (2500 m) CANopen 800 kbit/s 82.02 ft (25 m) CANopen
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

Environment

Standards	UL 508 CSA C22.2 No 142 CSA C22.2 No 213 IEC 61131-2
Product certifications	CULus C-tick GOST-R CSA
Condition of use	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)
Condition of tests	5…95 % without condensation
IP degree of protection	IP20IEC 61131-2
Pollution degree	2 IEC 60664
Operating altitude	0...6561.68 ft (0...2000 m)
Vibration resistance	1 gn 8.4…150 Hz DIN rail 3.5 mm 5…8.4 Hz DIN rail
Shock resistance	15 gn 11 ms
Disturbance radiated/conducted	CISPR 11

Ordering and shipping details

Category	22532 - M258 PLC
Discount Schedule	PC12
GTIN	00785901855194
Nbr. of units in pkg.	1
Package weight(Lbs)	2.27 lb(US) (1.03 kg)
Returnability	No
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	5.12 in (13 cm)
Package 1 width	5.91 in (15 cm)
Package 1 Length	14.57 in (37 cm)

Offer Sustainability

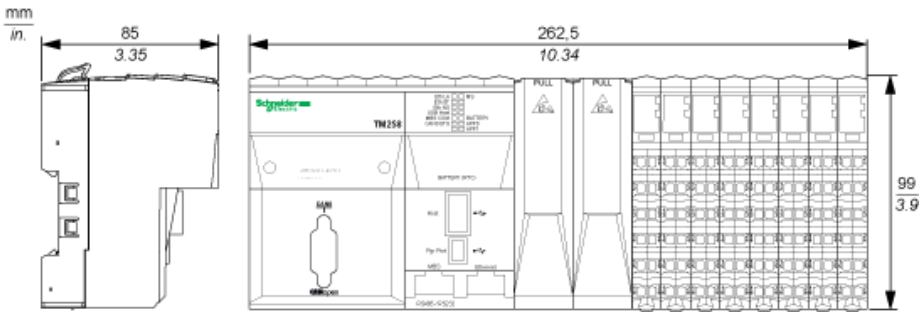
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds which is known to the State of California to cause Carcinogen & Reproductive harm. For more information go to www.p65warnings.ca.gov
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

Contractual warranty

Warranty	18 months

Controller

Dimensions



TM5 System Wiring Recommendations

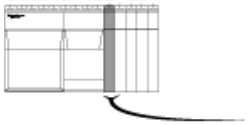
Wire Sizes to Use with Removable Spring Terminal Blocks

mm / in. (9 / 0.35)				
mm²	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 18

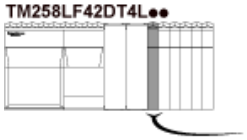
External Power Supplies

Wiring Diagram of the Controller Power Distribution Module

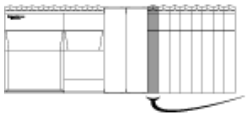
TM258LD42DT
TM258LF42DT●●

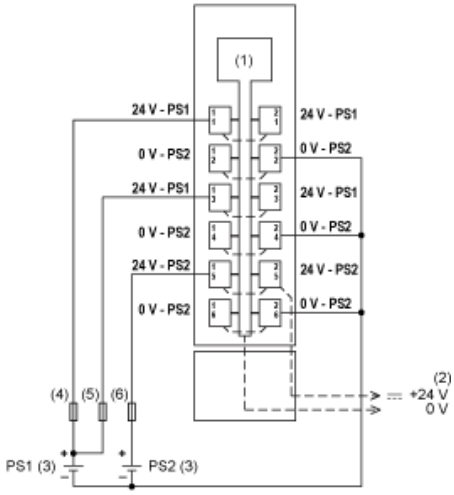


TM258LD42DT4L
TM258LF42DT4L●●



TM258LF66DT4L●●
TM258LF42DR●●





(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