Product data sheet
Characteristics

TM258LF66DT4L
compact base M258 - 66 + 4 I/O - 24 V DC

Main

Range of product	Modicon M258
Product or component type	Logic controller
Product specific application	-
Discrete I/O number	66
Analogue input number	4
Discrete output number	24 output 4 fast output

Complementary

Discrete input number	10 for fast input 4 for regular input 24 for input
Discrete input logic	Sink for fast input Sink for regular input Source for input
Discrete input voltage	24 V
Discrete input voltage type	DC
Analogue input type	Current: 0...20 mA Current: 4...20 mA Voltage: +/- 10 V
Analogue input resolution	12 bits
Voltage state 1 guaranteed	>= 15 V for fast input >= 15 V for fast output >= 15 V for regular input
Voltage state 0 guaranteed	<= 5 V for fast input <= 5 V for fast output <= 5 V for regular input
Discrete input current	4 MA for fast input 4 mA for regular input
Input impedance	6 kOhm for fast input 6 kOhm for regular input
Configurable filtering time	0 ms for fast input/regular input and fast output 1.5 ms for fast input/regular input and fast output 12 ms for fast input/regular input and fast output 4 ms for 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	<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	19.2...28.8 V
Discrete output current	4 mA for fast output
[Us] rated supply voltage	24 V DC for embedded expert modules power 24 V DC for I/O power segment 24 V DC for main supply
Supply voltage limits	20.4…28.8 V

[In] rated current	0.04 A for embedded expert modules power 10 A for I/O power segment 0.31 A for main supply
Peak current	100 KA (duration = <= 70 s) for main supply 25 KA (duration = <= 500 s) for I/O power segment 50 KA (duration = <= 150 s) for embedded expert modules power 1.2 kA (duration = > 70 s) for main supply
Maximum power consumption in W	18.11 W
Execution time per instruction	22 ns Boolean
Memory description	Flash 128 MB Internal RAM 64 MB
Realtime clock	Without any user calibration clock, clock drift < 30 s/month at 25 °C With user calibration clock, clock drift <= 6 s/month
Data backed up	Variables of type retain and retain persistent CR2477M Renata, 1.5 years autonomy
Integrated connection type	1 isolated serial link with female RJ45 connectorModbus with master/slave RTU/ASCII or character mode ASCII, physical interface: RS232/RS485, transmission rate: 300...115200 bps 1 isolated serial link with female RJ45 connectorEthernet Modbus TCP/IP with slave, physical interface: 10BASE-T/100BASE-TX 1 isolated serial link with mini B USB connector, transmission rate: 480 Mbit/s 1 isolated serial link with USB type A connector, transmission rate: 480 Mbit/s 2 free slots PCI 1 CANopen with male SUB-D 9 connectorCANopen with master
Transmission rate	125 kbit/s for bus length of 500 m for CANopen 250 kbit/s for bus length of 250 m for CANopen 50 kbit/s for bus length of 1000 m for CANopen 500 kbit/s for bus length of 100 m for CANopen 10 kbit/s for bus length of 5000 m for CANopen 1000 kbit/s for bus length of 4 m for CANopen 20 kbit/s for bus length of 2500 m for CANopen 800 kbit/s for bus length of 25 m for CANopen
Counting input number	8 counting input(s) at 200 kHz
Local signalling	1 LED per channel for I/O state 1 LED for CAN0 STS 1 LED for MBS COM 1 LED green/red for APP0 1 LED green/red for APP1 1 LED green/red for Eth NS (Ethernet network status) 1 LED green/red for Eth ST (Ethernet status) 1 LED green/red for RUN/MS (module status) 1 LED green/red for USB host 1 LED green/yellow for Eth LA (Ethernet activity) 1 LED red for BATT (battery status)
Marking	CE
Mounting support	Symmetrical DIN rail
Width	262.5 mm
Height	99 mm
Depth	85 mm
Net weight	0.8 kg

Environment

Standards	UL 508 CSA C22.2 No 142 CSA C22.2 No 213 IEC 61131-2
Product certifications	CSA CULus GOST-R C-Tick
Ambient air temperature for operation	0…55 °C without derating (horizontal installation) 0…60 °C with derating factor (horizontal installation) 0…50 °C (vertical installation)
Ambient air temperature for storage	-25…70 °C
Relative humidity	5…95 % without condensation
IP degree of protection	IP20 conforming to IEC 61131-2
Pollution degree	2 conforming to IEC 60664
Operating altitude	0...2000 m

Storage altitude	0…3000 m
Vibration resistance	1 gn at 8.4…150 Hz on DIN rail 3.5 mm at 5…8.4 Hz on DIN rail
Shock resistance	15 gn for 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	1 V/M 2...2.7 GHz conforming to EN/IEC 61000-4-3 10 V/m 80...2000 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

Packing Units

Package 1 Weight	1.027 kg
Package 1 Height	130.000 mm
Package 1 width	150.000 mm
Package 1 Length	370.000 mm

Offer Sustainability

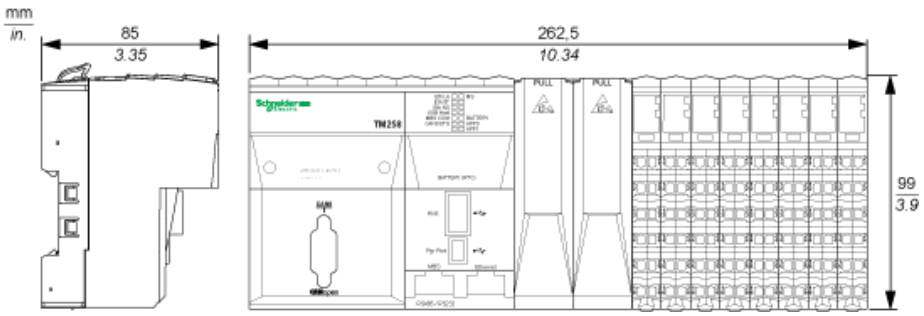
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China 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

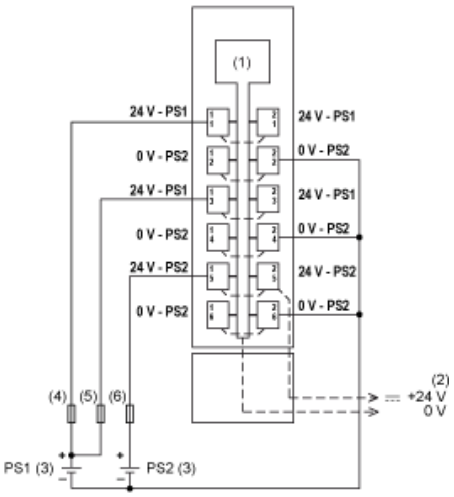
External Power Supplies

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