

# Product datasheet

Specifications



Logic controller. Modicon M258.  
compact base 66 + 4 I/O. 24 V DC

TM258LF66DT4L

Price: 71,504.70 ZAR

## 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<br>4 fast output |

## Complementary

|                                               |                                                                                                                                                                                                                     |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Discrete Input Number                         | 10 for fast input<br>4 for regular input<br>24 for input                                                                                                                                                            |
| Discrete Input Logic                          | Sink for fast input<br>Sink for regular input<br>Source for input                                                                                                                                                   |
| Discrete Input Voltage                        | 24 V                                                                                                                                                                                                                |
| Discrete Input Voltage Type                   | DC                                                                                                                                                                                                                  |
| Analogue Input Type                           | Current: 0...20 mA<br>Current: 4...20 mA<br>Voltage: +/- 10 V                                                                                                                                                       |
| Analogue Input Resolution                     | 12 bits                                                                                                                                                                                                             |
| Voltage State 1 Guaranteed                    | >= 15 V for fast input<br>>= 15 V for fast output<br>>= 15 V for regular input                                                                                                                                      |
| Voltage State 0 Guaranteed                    | <= 5 V for fast input<br><= 5 V for fast output<br><= 5 V for regular input                                                                                                                                         |
| Discrete Input Current                        | 4 mA for fast input<br>4 mA for regular input                                                                                                                                                                       |
| Input Impedance                               | 6 kOhm for fast input<br>6 kOhm for regular input                                                                                                                                                                   |
| Configurable Filtering Time                   | 0 ms for fast input/regular input and fast output<br>1.5 ms for fast input/regular input and fast output<br>12 ms for fast input/regular input and fast output<br>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<br><30 m for fast output<br><30 m for regular input                                                                                                                                            |
| Isolation Between Channels And Internal Logic | 500 Vrms AC                                                                                                                                                                                                         |

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

Disclaimer: 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

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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<br>24 V DC for I/O power segment<br>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<br>10 A for I/O power segment<br>0.31 A for main supply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Peak Current                   | 100 kA (duration = <= 70 s) for main supply<br>25 kA (duration = <= 500 s) for I/O power segment<br>50 kA (duration = <= 150 s) for embedded expert modules power<br>1.2 kA (duration = > 70 s) for main supply                                                                                                                                                                                                                                                                                                                                                                  |
| Maximum Power Consumption In W | 18.11 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Memory Description             | Flash 128 MB<br>Internal RAM 64 MB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Realtime Clock                 | Without any user calibration clock, clock drift < 30 s/month at 25 °C<br>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/<br>ASCII or character mode ASCII, physical interface: RS232/RS485, transmission rate:<br>300...115200 bps<br>1 isolated serial link with female RJ45 connectorEthernet Modbus TCP/IP with slave,<br>physical interface: 10BASE-T/100BASE-TX<br>1 isolated serial link with mini B USB connector, transmission rate: 480 Mbit/s<br>1 isolated serial link with USB type A connector, transmission rate: 480 Mbit/s<br>2 free slots PCI<br>1 CANopen with male SUB-D 9 connectorCANopen with master |
| Transmission Rate              | 125 kbit/s for bus length of 500 m for CANopen<br>250 kbit/s for bus length of 250 m for CANopen<br>50 kbit/s for bus length of 1000 m for CANopen<br>500 kbit/s for bus length of 100 m for CANopen<br>10 kbit/s for bus length of 5000 m for CANopen<br>1000 kbit/s for bus length of 4 m for CANopen<br>20 kbit/s for bus length of 2500 m for CANopen<br>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<br>1 LED for CAN0 STS<br>1 LED for MBS COM<br>1 LED green/red for APP0<br>1 LED green/red for APP1<br>1 LED green/red for Eth NS (Ethernet network status)<br>1 LED green/red for Eth ST (Ethernet status)<br>1 LED green/red for RUN/MS (module status)<br>1 LED green/red for USB host<br>1 LED green/yellow for Eth LA (Ethernet activity)<br>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<br>CSA C22.2 No 142<br>CSA C22.2 No 213<br>IEC 61131-2                                                                                         |
| Product Certifications                | CSA<br>cULus<br>GOST-R<br>C-Tick                                                                                                                      |
| Ambient Air Temperature For Operation | 0...55 °C without derating (horizontal installation)<br>0...60 °C with derating factor (horizontal installation)<br>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<br>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 IEC 61000-4-2<br>8 kV in air conforming to IEC 61000-4-2                                                                |
| Resistance To Electromagnetic Fields  | 1 V/m 2...2.7 GHz conforming to IEC 61000-4-3<br>10 V/m 80...2000 MHz conforming to IEC 61000-4-3                                                     |
| Resistance To Fast Transients         | 1 kV (I/O) conforming to IEC 61000-4-4<br>1 kV (shielded cable) conforming to IEC 61000-4-4<br>2 kV (power lines) conforming to IEC 61000-4-4         |
| Surge Withstand                       | 0.5 kV differential mode conforming to IEC 61000-4-5<br>1 kV common mode conforming to IEC 61000-4-5                                                  |
| Disturbance Radiated/Conducted        | CISPR 11                                                                                                                                              |

# Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type Of Package 1       | PCE       |
| Number Of Units In Package 1 | 1         |
| Package 1 Height             | 13.600 cm |
| Package 1 Width              | 15.500 cm |
| Package 1 Length             | 37.500 cm |
| Package 1 Weight             | 1.019 kg  |
| Unit Type Of Package 2       | S04       |
| Number Of Units In Package 2 | 6         |
| Package 2 Height             | 30.000 cm |
| Package 2 Width              | 40.000 cm |
| Package 2 Length             | 60.000 cm |
| Package 2 Weight             | 7.050 kg  |

# Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

# Sustainability

**Green Premium™ label** is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

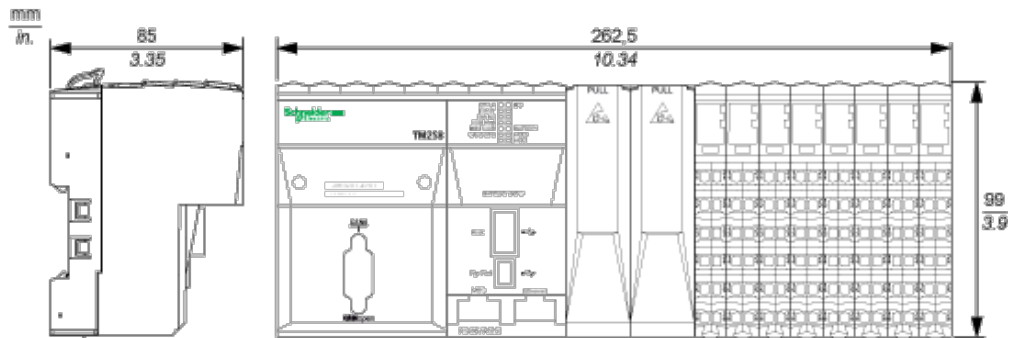
[Learn more about Green Premium >](#)

[Guide to assess a product’s sustainability >](#)

## Well-being performance

|                                                                                                              |                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|  Toxic Heavy Metal Free     |                                                                                                                             |
|  Mercury Free               |                                                                                                                             |
|  Rohs Exemption Information | Yes                                                                                                                         |
|  Pvc Free                   |                                                                                                                             |
| Reach Regulation                                                                                             | <a href="#">REACH Declaration</a>                                                                                           |
| Eu Rohs Directive                                                                                            | Pro-active compliance (Product out of EU RoHS legal scope)                                                                  |
| China Rohs Regulation                                                                                        | <a href="#">China RoHS declaration</a>                                                                                      |
| Weee                                                                                                         | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Dimensions



Connections and Schema

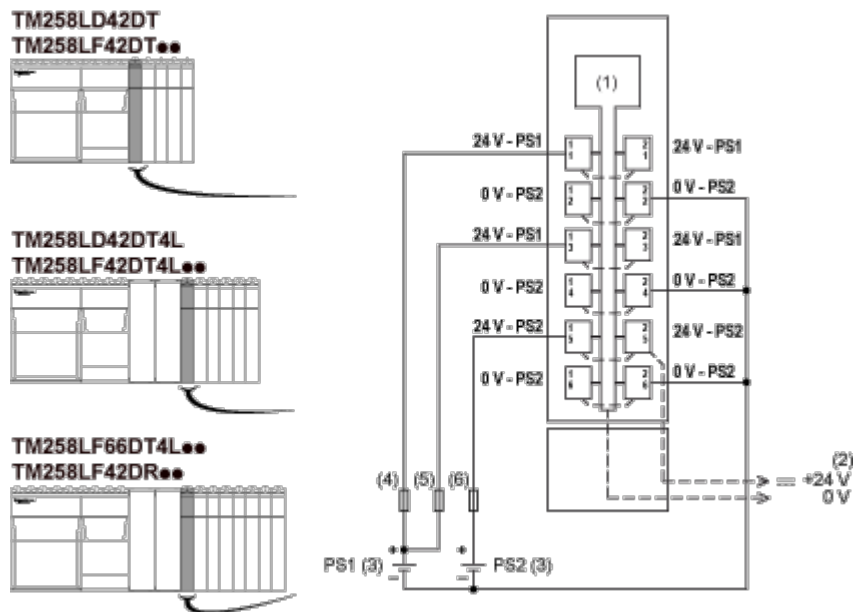
TM5 System Wiring Recommendations

Wire Sizes to Use with Removable Spring Terminal Blocks

| <div><div><div>mm</div><div>in</div></div><div><div><div><div></div><div>0.35</div><div></div></div><div></div></div></div></div> |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 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 18                                                                   |

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