Performance for your Applications...

Modicon M258
Just incomparable
The M258 Logic Controller is the new compact, performant and totally expandable PLC. The expandability is based on the concept «Flexible Machine Control» by Schneider Electric. The M258 Logic Controllers are destined to the Machine Builders (OEMs), who design Packaging Machines, Conveying and/or Storage Machines, Textile Machines, Wood-Working Machines, ... by offering them Performant Solutions in terms of Speed Control, High Speed Counting, Motion and Communication Networks. Because Schneider Electric is permanently focusing on Customers requests and Machines Evolution needs, M258 Logic Controller has been designed in order to satisfy the OEM market requirements in terms of performance, simplicity of installation and Evolution.

> Improve your machine performance

- Basic Processing Time: 22 ns/inst
- Program Size: 128 Kinstructions
- RAM Size: 64 Mbytes
- Flash Memory Size: 128 Mbytes
- 8 High Speed Counters embedded (200kHz each)

> Speed up machine design

- SoMachine Software:
  - 6 Programming Languages (IEC 1131-3)
  - Function Blocks
  - Tested, Validated, Documented Architectures
  - Maximise Operation and Reduce Maintenance
  - Diagnose through transparency and remote access

- CANopen Master Embedded
- Travel time for Distributed Architectures: Up to 63 Slaves
- Through Built-in CANopen Software
- Through CANopen Configurator Integrated in SoMachine Software
- Through Built-in Modbus Serial Line

> Integrated Machine Flexibility

- Integrated High Speed Counters at 200 kHz Each
- A complete range of Counting Expansion Modules
- Temperature Control
- Through a wide range of Temperature Modules and Integrated Regulation Function Blocks

> Compact IO Modules
- From 20 to 42 I/O digital and / or analog
- From 2 to 12 I/O
- 64,5 mm larger for 42 I/O
- 12,5 mm larger for 12 I/O

> Slice IO Modules
- Up to 250 I/O's modules
- Up to 25 stations
- Up to 2500 meters
- Up to 2500 I/Os

> Openess through Modbus Serial Network
- Openess thanks to 2 Standards Protocols
- CANopen Master/Slave
- RS232 or RS485
- Through Built-in CANopen Master
- Through Built-in CANopen Master and PLCopen Function Blocks
- Through Built-in Modbus Serial Line
- Through a wide range of Temperature Modules and Integrated Regulation Function Blocks

> Local flexibility

- Compact IO Modules:
  - Low Cost
  - High Density
- Slice IO Modules:
  - Fine Tuning
- Hot Swap
- Modularity from 2 to 12 Channels
- Removable Terminal Blocks
- Spring Terminals

> Remote flexibility

- Ethernet, CanOpen
  - For Simplicity, efficiency, integration
  - Up to 25 stations
  - Up to 2500 meters

> Ethernet Embedded: Performance and Openess

- 10/100 Mbits/s Ethernet Network
- Ethernet Embedded
  - Through a wide range of Temperature Modules and Integrated Regulation Function Blocks
  - Through 8 High Speed Counters at 200 kHz Each
- Through Built-in Modbus Serial Line
  - High Speed Counting:
    - Up to 63 Slaves
    - Through CANopen Master
    - Through Built-in CANopen Master

> Save time in Programming and Commissioning

- Through a wide range of Temperature Modules and Integrated Regulation Function Blocks
- Through 8 High Speed Counters at 200 kHz Each

> Commissioning

- 8 High Speed Counters embedded (200kHz each)
- Up to 1 Mbits/s
- Up to 63 Slaves
- Through a wide range of Temperature Modules and Integrated Regulation Function Blocks

30% Saving time in assembly, wiring and commissioning
### Logic controller compact bases

<table>
<thead>
<tr>
<th>Power supply</th>
<th>24 VDC</th>
<th>24 VDC</th>
<th>24 VDC</th>
<th>24 VDC</th>
<th>24 VDC</th>
<th>24 VDC</th>
</tr>
</thead>
</table>

#### Compact I/O expansion modules

<table>
<thead>
<tr>
<th>Power supply</th>
<th>24 VDC</th>
<th>24 VDC</th>
<th>24 VDC</th>
<th>24 VDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Inputs</td>
<td>12 Inputs - 24 VDC</td>
<td>24 Inputs - 24 VDC</td>
<td>24 Inputs - 24 VDC</td>
<td>12 Inputs - 24 VDC</td>
</tr>
<tr>
<td>Digital Outputs</td>
<td>BS Trans 0.5A</td>
<td>18S Trans 0.5A</td>
<td>BS Trans 0.5A</td>
<td>BS Trans 0.5A</td>
</tr>
<tr>
<td>Analog Inputs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Analog Outputs</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Digital I/O expansion modules

<table>
<thead>
<tr>
<th>Connections</th>
<th>2 Channels</th>
<th>4 Channels</th>
<th>6 Channels</th>
<th>8 Channels</th>
<th>8 Inputs / 4 Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 VDC Sink/Source Inputs</td>
<td>Removable spring terminal block</td>
<td>Removable spring terminal block</td>
<td>Removable spring terminal block</td>
<td>Removable spring terminal block</td>
<td>Removable spring terminal block</td>
</tr>
<tr>
<td>100-240 VAC Inputs</td>
<td>TM5SDI2D</td>
<td>TM5SDI4D</td>
<td>TM5SDI6D</td>
<td>TM5SDI2D</td>
<td></td>
</tr>
<tr>
<td>100-120 VAC Inputs</td>
<td>TM5SDI2A</td>
<td>TM5SDI4A</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.5A Source Transistor Outputs</td>
<td>-</td>
<td>-</td>
<td>TM5SDI6U</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2A Source Transistor Outputs</td>
<td>-</td>
<td>TM5SDI4TA</td>
<td>TM5SDI6TA</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>24 VDC sink/source Inputs + 0.5A Relay Outputs</td>
<td>TM5SDI2R</td>
<td>TM5SDI4R</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

#### Analog expansion modules

<table>
<thead>
<tr>
<th>Connections</th>
<th>2 Inputs</th>
<th>4 Inputs</th>
<th>6 Inputs</th>
<th>2 Outputs</th>
<th>4 Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>±10V/0-20mA/4-20mA Inputs - 12 Bits</td>
<td>Removable spring terminal block</td>
<td>Removable spring terminal block</td>
<td>Removable spring terminal block</td>
<td>Removable spring terminal block</td>
<td>Removable spring terminal block</td>
</tr>
<tr>
<td>TM5SAI2L</td>
<td>TM5SAI4L</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>±10V/0-20mA/4-20mA Outputs - 16 Bits</td>
<td>-</td>
<td>-</td>
<td>TM5SAI4H</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>±10V/0-20mA Outputs - 16 Bits</td>
<td>TM5SAI2H</td>
<td>TM5SAI4H</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>J/K/S/N Thermo-couple Inputs-16 bits</td>
<td>TM5SAI2TH</td>
<td>TM5SAI4TH</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PT100/1000 Inputs - 16 bits</td>
<td>TM5SAI2PH</td>
<td>TM5SAI4PH</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Communication PCI modules

<table>
<thead>
<tr>
<th>Serial link</th>
<th>1 (RS232)</th>
<th>1 (RS485)</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profibus DP</td>
<td>-</td>
<td>-</td>
<td>1 (Slave)</td>
</tr>
</tbody>
</table>

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