



## SCHNEIDER AUTOMAT PROGRAMABIL M200 CU 40 IO PE TRANZISTOR PNP, CU ETHERNET

<b>range of product</b>	Easy Modicon M200
<b>product or component type</b>	Logic controller
<b>[Us] rated supply voltage</b>	24 V DC
<b>discrete I/O number</b>	40
<b>discrete input number</b>	I2...I5: 4 fast input I0, I1, I6, I7: 4 high speed input I8...I23: 16 regular input
<b>discrete output number</b>	Q0...Q1: 2 fast output (PLS/PWM/PTO mode) Q2...Q15: 14 transistor output
<b>discrete input voltage</b>	24 V
<b>discrete input voltage type</b>	DC
<b>discrete input current</b>	7 mA for input
<b>discrete input logic</b>	Sink or source (positive/negative) type 1 conforming to EN/IEC 61131-2
<b>discrete output voltage</b>	24 V DC
<b>discrete output current</b>	0.5 A
<b>discrete output type</b>	Transistor
<b>discrete output logic</b>	Positive logic (source)
<b>power consumption in W</b>	18 W at 24 V DC (with max I/O)
<b>maximum number of I/O expansion module</b>	Complementary 4 with 64 discrete output(s) for relay output 4 with 144 discrete output(s) for transistor output
<b>supply voltage limits</b>	20.4...28.8 V
<b>inrush current</b>	35 A

<b>voltage state 1 guaranteed</b>	$\geq 15$ V for input
<b>voltage state 0 guaranteed</b>	$\leq 5$ V for input
<b>input impedance</b>	3.3 kOhm for discrete input
<b>response time</b>	1 ms turn-on, Q0...Q15 terminal(s) for output 1 ms turn-off, Q0...Q15 terminal(s) for output 5 $\mu$ s turn-off, I0, I1, I6, I7 terminal(s) for high speed input 5 $\mu$ s turn-on, I0, I1, I6, I7 terminal(s) for high speed input 100 $\mu$ s turn-off, I2...I5 terminal(s) for fast input 35 $\mu$ s turn-on, I2...I5 terminal(s) for fast input 100 $\mu$ s turn-off, I8...I13 terminal(s) for regular input 35 $\mu$ s turn-on, I8...I13 terminal(s) for regular input 125 $\mu$ s turn-off, I14...I23 terminal(s) for regular input 55 $\mu$ s turn-on, I14...I23 terminal(s) for regular input 0 ms for input
<b>configurable filtering time</b>	3 ms for input 12 ms for input
<b>maximum current per output</b>	2 A
<b>common</b>	4 A
<b>output frequency</b>	100 kHz for fast output (PWM/PLS mode) at Q0...Q1
<b>maximum leakage current</b>	0.1 mA for transistor output
<b>maximum voltage drop</b>	
<b>maximum tungsten load</b>	
<b>protection type</b>	Overload and short-circuit protection at 2 A
<b>reset time</b>	1 s automatic reset
<b>memory capacity</b>	512 byte internal flash for backup of programs
<b>data storage equipment</b>	32 GB micro SD card (optional)
<b>battery type</b>	BR2032 Li-CFx (Lithium-Carbon Monofluoride), battery life: 5 year(s)
<b>backup time</b>	3 years at 25 °C (by interruption of power supply)
<b>execution time for 1 KInstruction</b>	0.3 ms for event and periodic task
<b>execution time per instruction</b>	0.2 $\mu$ s Boolean
<b>exct time for event task</b>	60 $\mu$ s response time
<b>clock drift</b>	$\leq 90$ s/month at 25 °C
<b>regulation loop</b>	Adjustable PID regulator up to 14 simultaneous loops
<b>positioning functions</b>	PWM/PLS 2 channel(s) at 100 kHz Quadrature (x1, x2, x4) at 100 kHz for fast input (HSC mode)
<b>control signal type</b>	Pulse/direction at 100 kHz for fast input (HSC mode) Single phase at 100 kHz for fast input (HSC mode) CW/CCW at 100 kHz for fast input (HSC mode)
<b>counting input number</b>	4 fast input (HSC mode) at 100 kHz 32 bits USB port with mini B USB 2.0 connector Non isolated serial link serial 1 with terminal block connector and RS485 interface
<b>integrated connection type</b>	Non isolated serial link serial 2 with terminal block connector and RS232/RS485 interface Ethernet Modbus TCP/IP Ethernet with RJ45 connector and 1 Ethernet port 10/100BASE-T interface Isolated serial link serial 2 with terminal block connector and RS485 interface

<b>transmission rate</b>	1.2...115.2 kbit/s (115.2 kbit/s by default) for bus length of 15 m for RS485 1.2...115.2 kbit/s (115.2 kbit/s by default) for bus length of 3 m for RS232 12 Mbit/s for USB
<b>communication port protocol</b>	USB port: USB - SoMachine-Network Non isolated serial link: Modbus master/slave - RTU/ASCII or SoMachine-Network Ethernet Modbus TCP/IP: Modbus TCP/IP client/server
<b>local signalling</b>	1 LED (green) for PWR 1 LED (green) for RUN 1 LED (red) for module error (ERR) 1 LED (green) for SD card access (SD) 1 LED (red) for BAT 1 LED (green) for SL1 1 LED per channel (green) for I/O state 2 LEDs (green) for communication (LK/ACT 10/100)
<b>electrical connection</b>	Mini B USB 2.0 connector for a programming terminal RJ45 connector for connecting Ethernet network removable screw terminal block for inputs removable screw terminal block for outputs removable screw terminal block, 3 terminal(s) for connecting the 24 V DC power supply removable screw terminal block, 4 terminal(s) for connecting the serial link1
<b>maximum cable distance between devices</b>	Unshielded cable: Shielded cable: Shielded cable: Unshielded cable:
<b>insulation</b>	Non-insulated between inputs Between input and internal logic at 500 V AC Between fast input and internal logic at 500 V AC Between input groups at 500 V AC Between output and internal logic at 500 V AC Between output groups at 500 V AC Between supply and internal logic at 500 V DC
<b>marking</b>	CE
<b>mounting support</b>	Top hat type TH35-15 rail conforming to IEC 60715 Top hat type TH35-7.5 plate or panel with fixing kit conforming to IEC 60715

Pret: 1.994,45 LEI (TVA inclus)

Detalii online: <https://www.materialelectrice.ro/automat-programabil-m221-cu-40-io-pe-tranzistor-pnp-cu-ethernet-97823>