



Main

Range of product	Modicon LMC058
Product or component type	Motion controller
Product specific application	-
Discrete I/O number	42

Complementary

Discrete input number	4 regular input 12 input 10 fast input
Discrete input logic	Source input Sink regular input Sink fast input
Discrete input voltage	24 V
Discrete input voltage type	DC
Analogue input number	4
Analogue input type	Voltage +/- 10 V Current 4...20 mA Current 0...20 mA
Analogue input resolution	12 bits
Voltage state1 guaranteed	>= 15 V regular input >= 15 V fast output >= 15 V fast input
Current state 1 guaranteed	>= 2 mA regular input >= 2 mA fast output >= 2 mA fast input
Voltage state 0 guaranteed	<= 5 V regular input <= 5 V fast output <= 5 V fast input
Current state 0 guaranteed	<= 1.5 mA regular input <= 1.5 mA fast output <= 1.5 mA fast input
Discrete input current	4 mA regular input 4 mA fast input
Input impedance	6 kOhm regular input 6 kOhm fast input
Configurable filtering time	4 ms fast input/regular input and fast output 12 ms fast input/regular input and fast output 1.5 ms fast input/regular input and fast output 0 ms fast input/regular input and fast output
Anti bounce filtering	2 µs...4 ms configurable fast input/regular input and fast output
Cable length	<= 30 m fast input
Isolation between channels and internal logic	500 Vrms AC
Isolation between channels	None
Discrete output number	4 fast output 12 output
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
Supply voltage limits	20.4...28.8 V
[In] rated current	10 A I/O power segment 0.3 A main supply 0.04 A embedded expert modules power
Peak current	1.2 A > 70 s main supply <= 50 kA <= 150 s embedded expert modules power <= 25 kA <= 500 s I/O power segment < 100 kA <= 70 s main supply
Power consumption	<= 14.14 W
Execution time per instruction	22 ns Boolean
Memory description	Internal RAM 64 MB Flash 128 MB
Realtime clock	Without any user calibration < 30 s/month 25 °C With user calibration <= 6 s/month
Data backed up	Variables of type retain and retain persistent CR2477M Renata 1.5 years
Integrated connection type	2 free slots PCI 1 isolated serial link USB type A 480 Mbit/s 1 isolated serial link mini B USB 480 Mbit/s 1 isolated serial link female RJ45 RTU/ASCII or character mode ASCII Modbus master/slave RS232/RS485 300...115200 bps 1 isolated serial link female RJ45 Ethernet Modbus TCP/IP slave 10BASE-T/100BASE-TX 1 encoder female SUB-D 15 1 CAN port male SUB-D 9 CANopen master 1 CAN port male SUB-D 9 CANmotion bus or CANopen master
Transmission rate	800 kbit/s 25 m CANopen 500 kbit/s 100 m CANopen 50 kbit/s 1000 m CANopen 250 kbit/s 250 m CANopen 20 kbit/s 2500 m CANopen 125 kbit/s 500 m CANopen 1000 kbit/s 4 m CANopen 10 kbit/s 5000 m CANopen
Counting input number	8 200 kHz
Local signalling	1 LED red APP1 1 LED per channel APP0 1 LED green/yellow MBS COM 1 LED green/red CAN1 STS 1 LED CAN0 STS
Marking	CE
Mounting support	Symmetrical DIN rail
Width	237.5 mm
Height	99 mm
Depth	85 mm
Product weight	0.77 kg

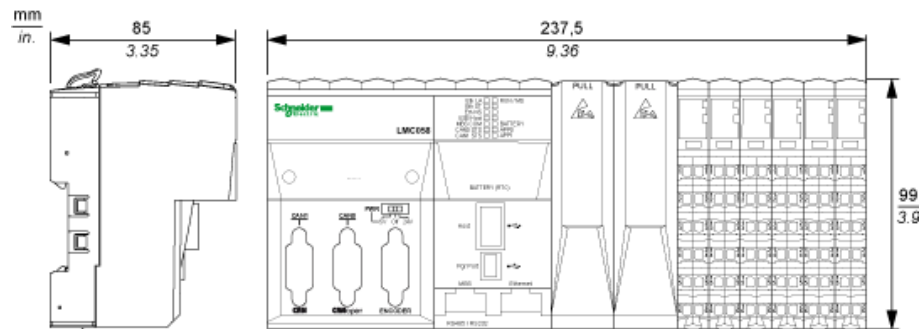
Environment

Standards	CSA 22-2 No 142 IEC 61131-2 UL 508 CSA 22-2 No 213
Product certifications	CSA C-Tick CULus GOST-R
Ambient air temperature for operation	0...60 °C with horizontal installation 0...55 °C without 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 IEC 61131-2
Pollution degree	2 IEC 60664
Operating altitude	0...2000 m

Storage altitude	0...3000 m
Vibration resistance	DIN rail DIN rail
Shock resistance	15 gn 11 ms
Resistance to electrostatic discharge	EN/IEC 61000-4-2 EN/IEC 61000-4-2
Resistance to electromagnetic fields	EN/IEC 61000-4-3 EN/IEC 61000-4-3
Resistance to fast transients	EN/IEC 61000-4-4 EN/IEC 61000-4-4 EN/IEC 61000-4-4
Surge withstand	EN/IEC 61000-4-5 EN/IEC 61000-4-5
Electromagnetic compatibility	EN/IEC 61000-4-6
Disturbance radiated/conducted	CISPR11





Controller

Dimensions



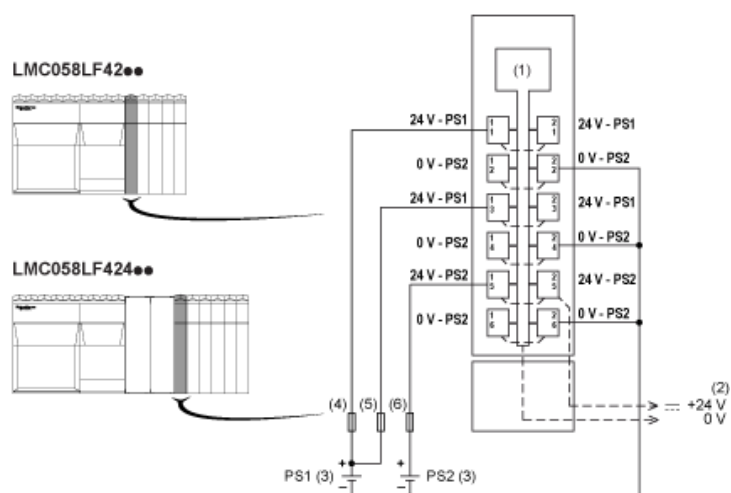
TM5 System Wiring Recommendations

Wire Sizes to Use with Removable Spring Terminal Blocks

mm in.				
mm ²	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