Product data sheet

Specifications

compact base - 42 + 4 I/O - 24 V DC supply - 2 slots for PCI

LMC058LF424

Main

Range Of Product	Modicon LMC058
Product Or Component Type	Motion controller
Product Specific Application	-
Discrete I/O Number	42
Battery Type	3 V CR2477M lithium

Complementary

Discrete Input Number	10 fast input 12 input 4 regular input
Discrete Input Logic	Sink fast input Sink regular input Source input
Discrete Input Voltage	24 V
Discrete Input Voltage Type	DC
Analogue Input Number	4
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 fast input >= 15 V fast output >= 15 V regular input
Voltage State 0 Guaranteed	<= 5 V fast input <= 5 V fast output <= 5 V regular input
Discrete Input Current	4 mA fast input 4 mA regular input
Input Impedance	6 kOhm fast input 6 kOhm regular input
Configurable Filtering Time	0 ms fast input/regular input and fast output 1.5 ms fast input/regular input and fast output 12 ms fast input/regular input and fast output 4 ms 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	<98.43 ft (30 m) fast input
Insulation	Between channels and internal logic 500 V AC Non-insulated between channels

Discrete Output Number	12 output 4 fast 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	0.04 A embedded expert modules power 10 A I/O power segment 0.3 A main supply
Peak Current	100 kA <= 70 s)main supply 25 kA <= 500 s)I/O power segment 50 kA <= 150 s)embedded expert modules power 1.2 A > 70 s)main supply
Power Consumption In W	14.14 W
Memory Type	128 MB flash 64 MB RAM
Realtime Clock	Without any user calibration clock, clock drift < 30 s/month at 77 °F (25 °C) With user calibration clock, clock drift <= 6 s/month
Data Backed Up	Battery variables of type retain and retain persistent
Battery Life	1.5 year(s)
Integrated Connection Type	1 isolated serial link female RJ45 Modbus master/slave RTU/ASCII or character mode ASCII RS232/RS485 300...115200 bps 1 CAN port male SUB-D 9 CANmotion bus or CANopen master 1 CAN port male SUB-D 9 CANopen master 1 encoder female SUB-D 15 1 isolated serial link female RJ45 Ethernet Modbus TCP/IP slave 10BASE-T/100BASE-TX 1 isolated serial link mini B USB 480 Mbit/s 1 isolated serial link USB type A 480 Mbit/s 2 free slots PCI
Transmission Rate	10 kbit/s 16404.20 ft (5000 m) CANopen 1000 kbit/s 13.12 ft (4 m) CANopen 125 kbit/s 1640.42 ft (500 m) CANopen 20 kbit/s 8202.10 ft (2500 m) CANopen 250 kbit/s 820.21 ft (250 m) CANopen 50 kbit/s 3280.84 ft (1000 m) CANopen 500 kbit/s 328.08 ft (100 m) CANopen 800 kbit/s 82.02 ft (25 m) CANopen
Counting Input Number	8 200 kHz
Local Signalling	1 LED CAN0 STS 1 LED green/red CAN1 STS 1 LED green/yellow MBS COM 1 LED per channel APP0 1 LED red APP1
Marking	CE
Mounting Support	Symmetrical DIN rail
Width	9.35 in (237.5 mm)
Height	3.90 in (99 mm)
Depth	3.35 in (85 mm)
Net Weight	1.70 lb(US) (0.77 kg)

Environment

Standards	UL 508 IEC 61131-2 CSA C22.2 No 213 CSA C22.2 No 142
Product Certifications	cULus CSA C-Tick GOST-R
Ambient Air Temperature For Operation	32…131 °F (0…55 °C) without derating horizontal installation) 32…140 °F (0…60 °C) with derating factor horizontal installation) 32…122 °F (0…50 °C) vertical installation)
Ambient Air Temperature For Storage	-13…158 °F (-25…70 °C)
Relative Humidity	5…95 % without condensation
Ip Degree Of Protection	IP20IEC 61131-2
Pollution Degree	2 IEC 60664
Operating Altitude	0...2000 m
Storage Altitude	0.00…9842.52 ft (0…3000 m)
Vibration Resistance	1 gn 8.4…150 Hz DIN rail 3.5 mm 5…8.4 Hz DIN rail
Shock Resistance	15 gn 11 ms
Electromagnetic Compatibility	Electrostatic discharge immunity test - test level: 8 kV (on contact) conforming to IEC 61000-4-2 Electrostatic discharge immunity test - test level: 4 kV (on air) conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields - test level: 1 V/m (2...2.7 GHz) conforming to IEC 61000-4-3 Susceptibility to electromagnetic fields - test level: 10 V/m (80...2000 MHz) conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test - test level: 1 kV (I/O) conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 1 kV (shielded cable) conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 2 kV (power lines) conforming to IEC 61000-4-4 Surge immunity test - test level: 0.5 kV (differential mode) conforming to IEC 61000-4-5 Surge immunity test - test level: 1 kV (common mode) conforming to IEC 61000-4-5 Conducted RF disturbances conforming to IEC 61000-4-6 Conducted and radiated emissions conforming to CISPR 11
Disturbance Radiated/Conducted	CISPR 11

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.20 in (13.200 cm)
Package 1 Width	6.22 in (15.800 cm)
Package 1 Length	14.57 in (37.000 cm)
Package 1 Weight	33.30 oz (944.000 g)
Unit Type Of Package 2	S04
Number Of Units In Package 2	6
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	15.75 in (40.000 cm)
Package 2 Length	23.62 in (60.000 cm)
Package 2 Weight	14.06 lb(US) (6.376 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_2 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

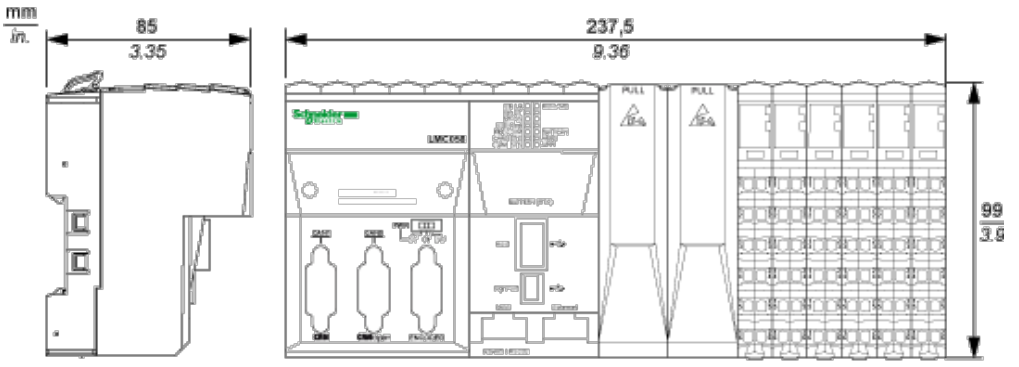
Reach Free Of Svhc	
Toxic Heavy Metal Free	
Mercury Free	
Rohs Exemption Information	Yes
Pvc Free	

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Controller

Dimensions



Connections and Schema

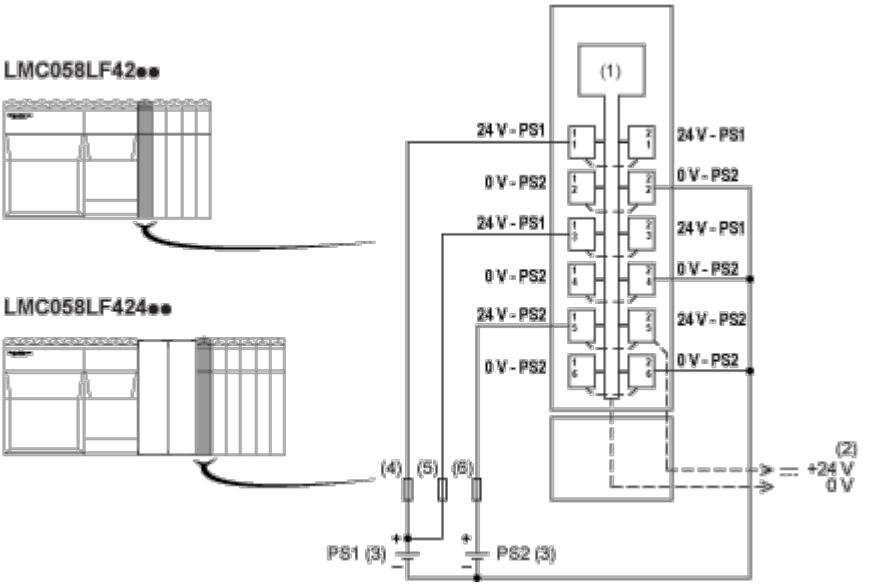
TM5 System Wiring Recommendations

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



(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