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 battery

Complementary

Discrete Input Number	10 for fast input 12 for input 4 for regular input
Discrete Input Logic	Sink for fast input Sink for regular input Source for 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 for fast input >= 15 V for fast output >= 15 V for regular input
Voltage State 0 Guaranteed	<= 5 V for fast input <= 5 V for fast output <= 5 V for regular input
Discrete Input Current	4 mA for fast input 4 mA for regular input
Input Impedance	6 kOhm for fast input 6 kOhm for regular input
Configurable Filtering Time	0 ms for fast input/regular input and fast output 1.5 ms for fast input/regular input and fast output 12 ms for fast input/regular input and fast output 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
Insulation	Between channels and internal logic at 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 for fast output
[Us] Rated Supply Voltage	24 V DC for embedded expert modules power
Supply Voltage Limits	20.4…28.8 V
[In] Rated Current	0.04 A for embedded expert modules power 10 A for I/O power segment 0.3 A for main supply
Peak Current	100 kA (duration = <= 70 s) for main supply 25 kA (duration = <= 500 s) for I/O power segment 50 kA (duration = <= 150 s) for embedded expert modules power 1.2 A (duration = > 70 s) for 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 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 with female RJ45 connectorModbus with master/slave RTU/ ASCII or character mode ASCII, physical interface: RS232/RS485, transmission rate: 300...115200 bps 1 CAN port with male SUB-D 9 connectorCANmotion bus or CANopen with master 1 CAN port with male SUB-D 9 connectorCANopen with master 1 encoder with female SUB-D 15 connector 1 isolated serial link with female RJ45 connectorEthernet Modbus TCP/IP with slave, physical interface: 10BASE-T/100BASE-TX 1 isolated serial link with mini B USB connector, transmission rate: 480 Mbit/s 1 isolated serial link with USB type A connector, transmission rate: 480 Mbit/s 2 free slots PCI
Transmission Rate	10 kbit/s for bus length of 5000 m for CANopen 1000 kbit/s for bus length of 4 m for CANopen 125 kbit/s for bus length of 500 m for CANopen 20 kbit/s for bus length of 2500 m for CANopen 250 kbit/s for bus length of 250 m for CANopen 50 kbit/s for bus length of 1000 m for CANopen 500 kbit/s for bus length of 100 m for CANopen 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 for CAN0 STS 1 LED green/red for CAN1 STS 1 LED green/yellow for MBS COM 1 LED per channel for APP0 1 LED red for APP1
Marking	CE
Mounting Support	Symmetrical DIN rail
Width	237.5 mm
Height	99 mm
Depth	85 mm
Net Weight	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	0…55 °C without derating (horizontal installation) 0…60 °C with derating factor (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 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 3.5 mm at 5…8.4 Hz on DIN rail
Shock Resistance	15 gn for 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	13.200 cm
Package 1 Width	15.800 cm
Package 1 Length	37.000 cm
Package 1 Weight	944.000 g
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	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

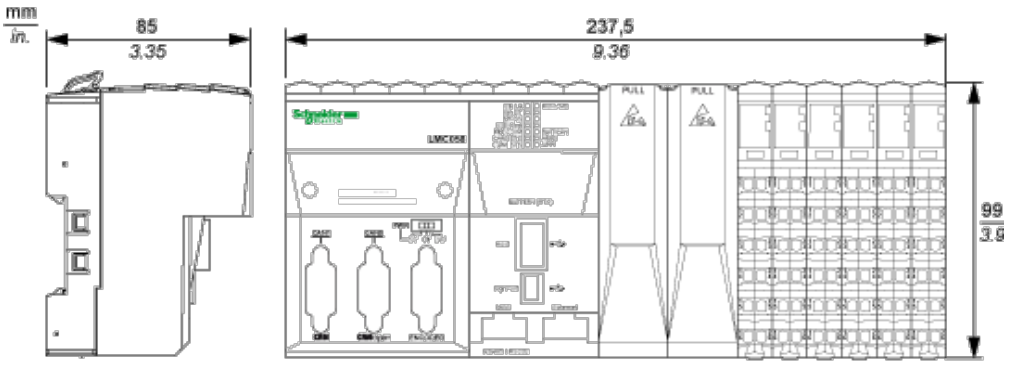
Reach Free Of Svhc	
Toxic Heavy Metal Free	
Mercury Free	
Rohs Exemption Information	Yes
Pvc Free	

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
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Dimensions Drawings

Controller

Dimensions



Connections and Schema

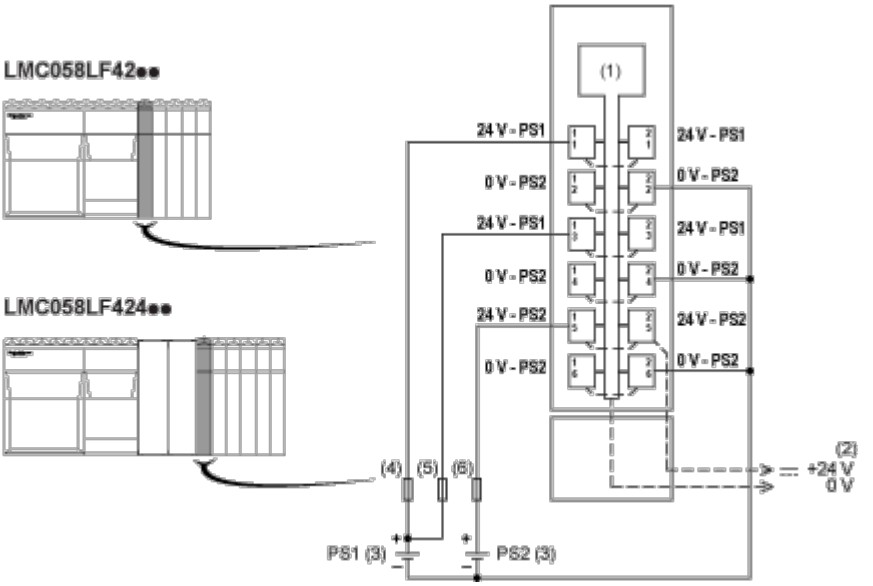
TM5 System Wiring Recommendations

Wire Sizes to Use with Removable Spring Terminal Blocks

mm / in.				
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