Product data sheet
Characteristics

LMC058LF424S0
compact base - 42 + 4 I/O - 24 V DC supply - 2 slots for PCI - for solutions



Main

Range of product	Modicon LMC058
Product or component type	Motion controller
Product specific application	For solutions
Software function	Applicatives functions blocks
Battery type	3 V CR2477M lithium

Complementary

Electrical circuit type	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 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
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 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
Duration	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
Maximum power consumption in W	14.14 W
Execution time per instruction	22 ns Boolean

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Memory type	128 MB flash 64 MB RAM
Realtime clock	Without any user calibration < 30 s/month 77 °F (25 °C) With user calibration <= 6 s/month
Data backed up	Battery variables of type retain and retain persistent
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
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

Environment

Standards	UL 508 CSA C22.2 No 213 CSA C22.2 No 142 IEC 61131-2
Product certifications	GOST-R C-tick CSA CULus
Derating factor	32…131 °F (0…55 °C) without derating horizontal installation) 32…140 °F (0…60 °C) with derating factor horizontal installation)
Condition of tests	5…95 % without condensation
IP degree of protection	IP20IEC 61131-2
Pollution degree	2 IEC 60664
Operating altitude	0...6561.68 ft (0...2000 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 8 kV on contact) EN/IEC 61000-4-2 Electrostatic discharge immunity test 4 kV on air) EN/IEC 61000-4-2 Susceptibility to electromagnetic fields 1 V/m 2...2.7 GHz) EN/IEC 61000-4-3 Susceptibility to electromagnetic fields 10 V/m 80...2000 MHz) EN/IEC 61000-4-3 Electrical fast transient/burst immunity test 1 kV I/O) EN/IEC 61000-4-4 Electrical fast transient/burst immunity test 1 kV shielded cable) EN/IEC 61000-4-4 Electrical fast transient/burst immunity test 2 kV power lines) EN/IEC 61000-4-4 Surge immunity test 0.5 kV differential mode) EN/IEC 61000-4-5 Surge immunity test 1 kV common mode) EN/IEC 61000-4-5 Conducted RF disturbances EN/IEC 61000-4-6 Conducted and radiated emissions CISPR 11
Disturbance radiated/conducted	CISPR 11

Ordering and shipping details

Category	18306 - MOTION CONTROLLERS
Discount Schedule	PC51
GTIN	00785901685593
Nbr. of units in pkg.	1
Package weight(Lbs)	2.21 lb(US) (1.00 kg)
Returnability	No
Country of origin	AT

Packing Units

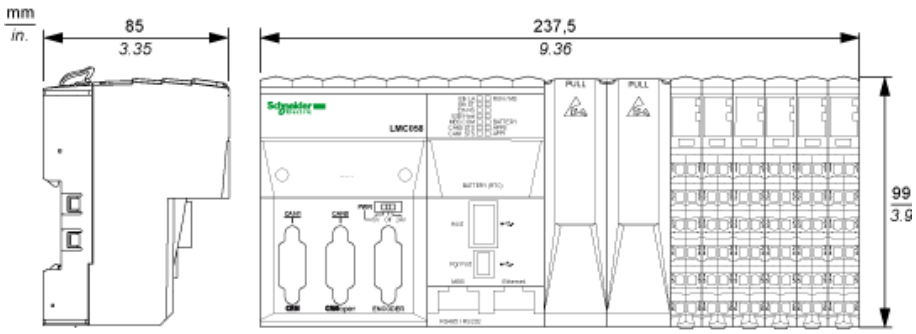
Package 1 Height	5.12 in (130.000 mm)
Package 1 width	6.10 in (155.000 mm)
Package 1 Length	14.57 in (370.000 mm)

Contractual warranty

Warranty	18 months

Controller

Dimensions



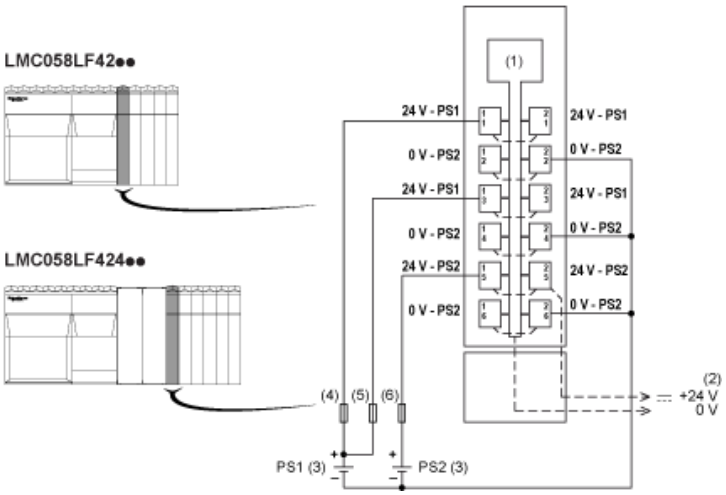
TM5 System Wiring Recommendations

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