

ML50 Compact Logic Controller



AUTOMATION
MADE EASY & COMPACT

Honeywell Solutions for Machine Automation



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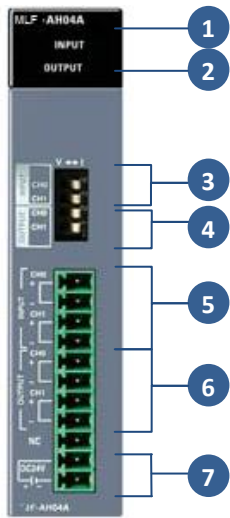
Expansion

Analog Input and Output I

Model		MLF-AH04A				Remark	
Specification		Voltage	Current	Voltage	Current		
Analog Range	Item	DC Voltage	DC Current	DC Voltage	DC Current		
	Range	DC 1~5V, DC 0~5V DC 0~10V, DC-10~10V (Input resistance : 1MΩ min.)	DC 4~20mA, DC 0~20 mA (Input resistance : 250Ω)	DC 1~5V, DC 0~5V DC 0~10V, DC-10~10V (Input resistance : 2kΩ min.)	DC 4~20mA, DC 0~20 mA (Input resistance : 510Ω)		
Digital Data	Type	12bit binary data(Output)		12bit binary data(Input)			
	Range	Unsigned value	0~4000	0~4000			
		Signed value	-2000 ~ 2000				
		Precise value	1~5V : 100~500 0~5V : 0~500 0~10V : 0~1000	4~20mA : 400~2000 0~20mA : 0~2000	1~5V : 100~500 0~5V : 0~500 0~10V : 0~1000	4~20mA : 400~2000 0~20mA : 0~2000	
		Percentile value	0~1000		0~1000		
Resolution		1/4000		1/4000			
		1.25mV (DV 1~5V, 0~5V) 2.5mV (DC 0~10V)	5μA (DC4~20mA, 0~20mA)	1.25mV (DV 1~5V, 0~5V) 2.5mV (DC 0~10V)	5μA (DC4~20mA, 0~20mA)		
Accuracy		±0.5% less					
Max. Conversion Speed		1msec / channel					
Max. Absolute input		±15V	±25mA	±15V	±25mA		
Analog channels		4 channel / module for Analog input		4 channel / module for Analog output			
Insulation		Photo-coupler insulation between I/O terminal and power supply		Photo-coupler insulation between I/O terminal and power supply			
Connection Terminal		11-point terminal block		11-point terminal block			
Occupied I/O points		Fixed type : 64 points					
Consumption Current	DC5V(Internal)	120mA					
	DC24V(External)	130mA					
Additional Function	Filtering	Digital Filter(4~64,000)		-			
	Average	Time average(4~16,000ms)		-			
		Count average(2~64,000counts)		-			
		-		Movement(2~100 sets)			
	Alarm	-		Burn-out detection(DC 1~5V, DC 4~20mA)			
Max. Connectable modules		7sets (MLM series, “S” type), 10sets(MLC series, “H” type)					
Weight		80g					
Supplying Voltage		20.4~28.8Vdc					

For analog IO(4channel), it's needed to connect the following version info.

Basic unit	Required Version
MLM-D_S / MLI-D_SU	V2.6 or later / V1.0 or later
MLC-D_H / MLI-D_H	V1.9 or later / V1.0 or later



No	Name	Descriptions
1	INPUT LED	► Indicates working condition of inputs • LED ON : Normal Condition • LED ON and OFF : Flickering • LED Off : Power Off or Module malfunction
2	OUTPUT LED	► Indicates working condition of outputs • LED ON : Normal Condition • LED ON and OFF : Flickering • LED Off : Power Off or Module malfunction
3,4	Input(3) / output(4) selection S/W	► Voltage / Current selection switch • V : Voltage input selection • I : Current input selection
5	Terminals for INPUT	► External device connection with Inputs
6	Terminals for OUTPUT	► External device connection with Outputs
7	External power supply terminal	► External DC24V input

► in wiring between input module and external device, please use 22AWG and 2-core, twisted-shielded wire.



Product List

Item	Model	Descriptions
Expansion I/O module	MLE-DC08A	8-point DC24V input
	MLE-DC16A	16-point DC24V input
	MLE-DC32A	32-point DC24V input
	MLE-RY08A	8-point Relay output
	MLE-RY16A	16-point Relay output
	MLE-TN08A	8-point TR(SINK) output
	MLE-TN16A	16-point TR(SINK) output
	MLE-TN32A	32-point TR(SINK) output
	MLE-DR16A	8-point DC24V input, 8-point Relay output
	MLE-TP08A	8-point Transistor (source) output
	MLE-TP16A	16-point Transistor (source) output
	MLE-TP32A	32-point Transistor (source) output
Special module (Analog IO)	MLF-AD04A	4-channel Analog input (Current/Voltage)
	MLF-AD04C	4-channel Analog input (Current/Voltage, resolution : 1/16000)
	MLF-AH04A	2-ch Analog input (Current/Voltage), 2-ch Analog output (Current/Voltage)
	MLF-DV04A	4-channel Analog output (Voltage)
	MLF-DC04A	4-channel Analog output (Current)
	MLF-RD04A	4-channel RTD input
	MLF-TC04S	4-channel Thermo-couple input(Isolation)
	MLF-AD08A	8-channel Analog input (Current/Voltage)
Communication module	MLL-C41A	Snet(RS422/485), 1channel
	MLL-C21A	Snet(RS232C), 1channel
	MLL-EMTA	Fast Ethernet (100Mbps), 1ch
	MLL-EIPT	Ethernet/IP, 2channel
	MLL-CMEA	CANopen(max 1000kbps , Num of PDO : 32)
	MLL-CSEA	CANopen(max 1000kbps , Num of PDO : 64)
	PMC-310S	Configuring Cable serial, PC(9pin)-PLC(6pin)
	USB-301A	Configuring Cable, USB
	TG7-1H40S	Smart Link Terminal Board 40P
Option Boards for "SU", "E"	MLO-AD02A	2-channel Analog input (Current/Voltage)
	MLO-DA02A	2-channel Analog output
	MLO-AH02A	1-ch Analog input(I/V), 1ch Analog output(I/V)
	MLO-TC02A	2-channel Thermo-couple input(non-isolation)
	MLO-RD01A	1-channel RTD input
	MLL-RTCA	RTC, BAT for back-up