

ML50 Compact Logic Controller



AUTOMATION
MADE EASY & COMPACT

Honeywell Solutions for Machine Automation



Honeywell



Expansion

Digital Input | DC24V

Model		DC24V			
		Expansion module			
Specification	MLE-DC08A		MLE-DC16A	MLE-DC32A	MLE-DR16A
Input points	8points		16points	32points	8points
Insulation method	Photo-coupler insulation				
Rated input voltage/current	DC24V / 4mA				
Operation voltage range	DC20.4~28.8V (Ripple rate < 5%)				
On voltage/On current	DC19V or more / 3mA or more				
Off voltage/Off current	DC6V or less / 1mA or less				
Input resistance	5.6kΩ				
Response time	Off→On	1 / 3 / 5 / 10 / 20 / 70 / 100ms (setting by CPU parameter) Initial value : 3ms			
	On→Off				
Insulation pressure	AC560Vrms / 3 Cycle (altitude 2000m)				
Insulation resistance	10MΩ or more by megger				
COMMON method	8 points/COM		16 points/COM	32 points/COM	
Proper cable size	Twisted wire 0.3~0.75mm ² (external diameter ≤2.8mm)				
Operation indication	Input On LED On				
External connection method	9-pin terminal block		8-pin + 10-pin terminal block	40-pin connector	9-pin terminal block

Digital Output | Relay

Specification Model		Relay		
		MLE-RY08A	MLE-RY16A	MLE-DR16A
Output point		8points	16points	8points
Insulation method		Relay insulation		
Rated load voltage/current		DC24V 2A(resistive load)/AC220V 2A(COSΨ = 1), 5A/COM		
Min. load voltage/current		DC5V/1mA		
Max. load voltage/current		AC250V, DC125V		
Off leakage current		0.1mA (AC220V, 60Hz)		
Max. on/off frequency		3,600 times/hr		
Surge absorber		None		
Service life	Mechanical	20 million times or more		
	Electrical	Rated load voltage/current 100,000 times or more		
AC200V/1.5A, AC240V/1A (COSΨ = 0.7) 100,000 times or more				
AC200V/1A, AC240V/0.5A (COSΨ = 0.35) 100,000 times or more				
DC24V/1A, DC100V/0.1A (L / R = 7ms) 100,000 times or more				
Response time	Off→On	10 ms or less		
	On→Off	12 ms or less		
COMMON method		8 points/1COM		
Operation indicator		Output On, LED On		
External connection method		9-pin terminal block connector	9-pin terminal block connector x 2	9-pin terminal block connector

Digital Output | Open Collector

Specification		Model	Digital output		
			MLE-TN08A	MLE-TN16A	MLE-TN32A
Output point		8points	16points	32points	
Insulation method		Photo-coupler insulation			
Rated load voltage		DC12/24V			
Load Voltage range		DC10.2 ~ 26.4V			
Max. Load Current		0.5A / 1 point	0.2A / 1 point, 2A / COM		
Off leakage current		0.1mA or less			
Max. voltage drop(On)		DC0.4V			
Surge absorber		Zener diode			
Response time	Off → On	1ms or less			
	On → Off	1 ms or less(Rated load, Resistive load)			
Common method		8 points/COM	16 points/COM	32 points/COM	
External power supply	Voltage	DC12/24V ± 10% (Ripple voltage ≤ 4 Vp-p)			
	Current	10mA or less (DC 24V connection)		20mA or less (DC 24V connection)	
Operation Indication		Output On, LED On			
External Connection Method		10-pin terminal block	8-pin + 10-pin terminal block	40-pin connector	



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