MicroLogix 1200 Controllers

Specifications

General Specifications

Cat. No.	1762-L24AWA 1762-L24AWAR	1762-L24BWA 1762-L24BWAR	1762-L24BXB 1762-L24BXBR	1762-L40AWA 1762-L40AWAR	1762-L40BWA 1762-L40BWAR	1762-L40BXB 1762-L40BXBR
Dimensions (HxWxD), Approx.	90 x 110 x 87 mm (3.54 x 4.33 x 3.43 in.)⋆			90 x 160 x 87 mm (3.54 x 6.30 x 3.43 in.)⋆		
Weight	0.9 kg (2.0 lb)			1.1 kg (2.4 lb)		
Input Voltage Range	85…265V AC at 47…63 Hz		20.4…26.4V DC	85…265V AC at 47…63 Hz		20.4…26.4V DC
Input Voltage, Nom.	100/120V AC, 200/240V AC		24V DC	100/120V AC, 200/240V AC		24V DC
Apparent Input Power, Max.	68 VA	70 VA	N/A	80 VA	82 VA	N/A
Real Input Power, Max.	29 W	31 W	27 W	37 W	38 W	37 W
Power Supply Maximum Inrush	25 A for 8 ms at 120V AC 40 A for 4 ms at 240V AC		15 A for 20 ms at 24V DC	25 A for 8 ms at 120V AC 40 A for 4 ms at 240V AC		15 A for 20 ms at 24V DC
Power Supply Output	400 mA at 5V DC 350 mA at 24V DC	400 mA at 5V DC 350 mA at 24V DC‡	400 mA at 5V DC 350 mA at 24V DC	600 mA at 5V DC 500 mA at 24V DC	600 mA at 5V DC 500 mA at 24V DC§	600 mA at 5V DC 500 mA at 24V DC
User Output Power	—	24V DC at 250 mA, 400 µF max.‡	—	—	24V DC at 400 mA, 400 µF max.§	—
Operating Temperature	0…55 °C (32…131 °F)					
Nonoperating Temperature	-40…85 °C (-40…185 °F)					
Operating Humidity	5…95% noncondensing					
Vibration						
Operating	10…500 Hz, 5 g, 0.030 in max. peak-to-peak					
Relay Operation	1.5 g					
Shock						
Operating Shock	30 g					
Shock, Relay Operation	7 g					
Nonoperating Shock	50 g panel mounted, 40 g DIN rail mounted					
Agency Certification	• UL 508 • C-UL under CSA C22.2 no. 142 • Class I, Div. 2, Groups A, B, D, B (UL 1604, C-UL under CSA C22.2 no. 213) • CE/C-Tick compliant for all applicable directives/acts.					
Electrical/EMC	The controller has passed testing at the following levels: • IEC1000-4-2: 4 kV contact, 8 kV air, 4 kV indirect • IEC1000-4-3: 10V/m • IEC1000-4-4: 2 kV, 5 kHz; communication cable: 1 kV, 5 kHz • IEC1000-4-5: communication cable 1 kV DM (differential mode) • I/O: 2 kV CM (common mode), 2 kV DM (differential mode) • Power Supply: 4 kV CM (common mode), 2 kV DM (differential mode) • IEC1000-4-6: 10V, communication cable 3V♣					

⋆ Height = 104 mm (4.09 in) with DIN latch open.
‡ Total load of the 5V, 24V, and user power output shall not exceed 12 W.
§ Total load of the 5V, 24V, and user power output shall not exceed 16 W.
♣ Conducted immunity frequency range may be 150 kHz to 30 MHz if the radiated immunity frequency range is 30 MHz to 1000 MHz.

MicroLogix 1200 Controllers

The MicroLogix 1200 controller is available with 24 or 40 built-in I/O. Controllers with 24V DC inputs that also have AC -input power supplies include a built-in power supply for user output power.

Cat. No.	Number of I/O	Input Type	Input Signal Delay	Output Type	Continuous Output Current, Max.	User Output Power
1762-L24BWA 1762-L24BWAR	14 inputs 10 outputs	24V DC sink/source	Selectable: 0.025, 0.075, 0.1, 0.25, 0.5, 1, 2, 4, 8, or 16 ms	Relay Contact	(See relay contact output specs.) • 8 A/common • 30 A total at 150V AC • 20 A total at 240V AC	24V DC at 250 mA, 400 µF max.
1762-L40BWA 1762-L40BWAR	24 inputs 16 outputs					24V DC at 400 mA, 400 µF max.
1762-L24BXB 1762-L24BXBR	14 inputs 10 outputs			5 Relay 5 FET (24V DC)	(See FET and relay contact output specs.) • 7.5 A/common • 30 A total at 150V AC • 20 A total at 240V AC	–
1762-L40BXB 1762-L40BXBR	24 inputs 16 outputs			8 Relay 8 FET (24V DC)	(See FET and relay contact output specs.) • 8 A/common • 30 A total at 150V AC • 20 A total at 240V AC	
1762-L24AWA 1762-L24AWAR	14 inputs 10 outputs	120V AC	On: 2...20 ms	Relay Contact		
1762-L40AWA 1762-L40AWAR	24 inputs 16 outputs					

Input Specifications

Cat. No.	1762-L24AWA, 1762-L40AWA 1762-L24AWAR, 1762-L40AWAR	1762-L24BWA, 1762-L24BXB, 1762-L40BWA, 1762-L40BXB 1762-L24BWAR, 1762-L24BXBR, 1762-L40BWAR, 1762-L40BXBR	
		Inputs 0 to 3	Inputs 4 and up
On-State Voltage Range	79...132V AC	14...26.4V DC @ 55 °C (131 °F) 14...30.0V DC @ 30 °C (86 °F)	10...26V DC @ 55 °C (131 °F) 10...30.0V DC @ 30 °C (86 °F)
Off-State Voltage Range	0...20V AC	0...5V DC	
Operating Frequency	47...63 Hz	0...20 kHz	0...1 kHz (depends on scan time)
On-State Current			
Minimum	5.0 mA @ 79V AC	2.5 mA @ 14V DC	2.0 mA @ 10V DC
Nominal	12 mA @ 120V AC	7.3 mA @ 24V DC	8.9 mA @ 24V DC
Maximum	16.0 mA @ 132V AC	12.0 mA @ 30V DC	12.0 mA @ 30V DC
Off-State Leakage Current, Max.	2.5 mA	1.5 mA	
Impedance, Nom.	12 kΩ @ 50 Hz 10 kΩ @ 60 Hz	3.3 kΩ	2.7 kΩ
Inrush Current	250 mA	–	–

Relay Contact Output Specifications

Maximum Voltage	Current			Apparent Power	
	Make	Break	Continuous	Make	Break
240V AC	7.5A	0.75A	2.5A	1800 VA	180 VA
120V AC	15A	1.5A	2.5A		
125V DC	0.22A		1.0A	28 VA	
24V DC	1.2A		2.0A		

FET Output Specifications

Cat. No.	1762-L24BXB, 1762-L24BXBR, 1762-L40BXB, 1762-L40BXBR	
	General Operation	High-Speed Operation⋆ (Output 2 Only)
On-State Voltage Drop		
at maximum load current	1V DC	–
at maximum surge current	2.5V DC	
Current Rating per Output		
maximum load	1.5A @ 30 °C (86 °F), 1.0A @ 55 °C (131 °F)	100 mA
minimum load	1.0 mA	10 mA
maximum leakage	1.0 mA	1.0 mA
Turn-On Time, Max.	0.1 ms	6 ms
Turn-Off Time, Max.	1.0 ms	18 ms
Repeatability, Max.	–	2 ms
Drift, Max.	–	1s per 5 °C (9 °F)

⋆ Output 2 has increased functionality over the other FET outputs. Output 2 can be used as the other FET outputs. But, in addition, within a limited current range, it may be operated at a higher speed. Output 2 also provides a pulse train output (PTO) or pulse width modulation output (PWM) function.