

Installation Instructions

MicroLogix 1100 Programmable Controllers

Catalog Numbers 1763-L16AWA, 1763-L16BWA,
1763-L16BBB, 1763-L16DWD

Topic	Page
Important User Information	4
Additional Resources	5
Overview	6
Controller Description	7
Hazardous Location Considerations	8
Mounting the Controller	9
Connecting 1762 I/O Expansion Modules	15
Wiring the Controller	16
Specifications	22

Catalog Number	Description					
Input Power	Digital Inputs	Analog Inputs	Digital Outputs	Comm. Ports		
1763-L16AWA	120/240V ac	(10) 120V ac 0...10V dc	(2) voltage input 0...10V dc	(6) relay All individually isolated	(1) RS-232/485 combo (isolated) (1) Ethernet	
1763-L16BWA	120/240V ac	(6) 24V dc (4) high-speed 24V dc ⁽¹⁾	(2) voltage input 0...10V dc	(6) relay All individually isolated	(1) RS-232/485 combo (isolated) (1) Ethernet	
1763-L16BBB	24V dc	(6) 24V dc (4) high-speed 24V dc ⁽¹⁾	(2) voltage input 0...10V dc	(2) relay (isolated) (2) 24V dc FET (2) high-speed 24V dc FET	(1) RS-232/485 combo (isolated) (1) Ethernet	
1763-L16DWD	12/24V dc	(6) 12/24V dc (4) high-speed 12/24V dc ⁽¹⁾	(2) voltage input 0...10V dc	(6) relay All individually isolated	(1) RS-232/485 combo (isolated) (1) Ethernet	

⁽¹⁾ The 4 high-speed inputs (inputs 0 through 3) can be used for pulse latching or higher speed counting. Refer to Input Specifications on page 24 and the MicroLogix 1100 Instruction Set Reference Manual, publication 1763-RM001, for more information.

Hazardous Location Considerations

This equipment is suitable for use in Class I, Division 2, Groups A, B, C, D or non-hazardous locations only. The following WARNING statement applies to use in hazardous locations.

WARNING

EXPLOSION HAZARD



- Substitution of components may impair suitability for Class I, Division 2.
- Do not replace components or disconnect equipment unless power has been switched off.
- Do not connect or disconnect components unless power has been switched off.
- This product must be installed in an enclosure. All cables connected to the product must remain in the enclosure or be protected by conduit or other means.
- All wiring must comply with N.E.C. article 501-10(b).

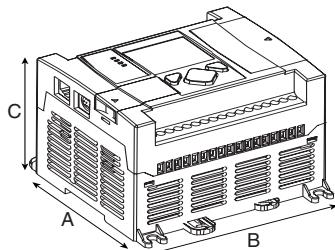
ATTENTION

Vertical mounting is not supported due to thermal considerations.

ATTENTION

Be careful of metal chips when drilling mounting holes for your controller or other equipment within the enclosure or panel. Drilled fragments that fall into the controller could cause damage. Do not drill holes above a mounted controller if the protective debris strips have been removed.

Mounting Dimensions



1763-L16AWA, 1763-L16BWA, 1763-L16BBB, 1763-L16DWD

Dimension	1763-			
	L16AWA	L16BWA	L16BBB	L16DWD
A	90 mm (3.5 in.)			
B	110 mm (4.33 in.)			
C	87 mm (3.43 in.)			

Working Voltage (1763-L16BWA)

Description	1763-L16BWA
Power Supply Input to Backplane Isolation	Verified by one of the following dielectric tests: 1836V ac for 1 second or 2596V dc for 1 second
	265V ac Working Voltage (IEC Class 2 reinforced insulation)
Input Group to Backplane Isolation and Input Group to Input Group Isolation	Verified by one of the following dielectric tests: 1100V ac for 1 second or 1697V dc for 1 second
	75V dc Working Voltage (IEC Class 2 reinforced insulation)
Output Group to Backplane Isolation	Verified by one of the following dielectric tests: 1836V ac for 1 second or 2596V dc for 1 second
	265V ac Working Voltage (IEC Class 2 reinforced insulation).
Output Group to Output Group Isolation	Verified by one of the following dielectric tests: 1836V ac for 1 second or 2596V dc for 1 second
	265V ac Working Voltage (basic insulation) 150V Working Voltage (IEC Class 2 reinforced insulation)

Working Voltage (1763-L16BBB)

Description	1763-L16BBB
Input Group to Backplane Isolation and Input Group to Input Group Isolation	Verified by one of the following dielectric tests: 1100V ac for 1 second or 1697V dc for 1 second
	75V dc Working Voltage (IEC Class 2 reinforced insulation)
FET Output Group to Backplane Isolation	Verified by one of the following dielectric tests: 1100V ac for 1 second or 1697V dc for 1 second
	75V dc Working Voltage (IEC Class 2 reinforced insulation)
Relay Output Group to Backplane Isolation	Verified by one of the following dielectric tests: 1836V ac for 1 second or 2596V dc for 1 second
	265V ac Working Voltage (IEC Class 2 reinforced insulation)
Relay Output Group to Relay Output Group and FET Output Group Isolation	Verified by one of the following dielectric tests: 1836V ac for 1 second or 2596V dc for 1 second
	265V ac Working Voltage (basic insulation), 150V Working Voltage (IEC Class 2 reinforced insulation)

Working Voltage (1763-L16DWD)

Description	1763-L16DWD
Input Group to Backplane Isolation and Input Group to Input Group Isolation	Verified by one of the following dielectric tests: 1200V ac for 1 second or 1697V dc for 1 second 75V dc Working Voltage (IEC Class 2 reinforced insulation)
Output Group to Backplane Isolation	Verified by one of the following dielectric tests: 1836V ac for 1 second or 2596V dc for 1 second 265V ac Working Voltage (IEC Class 2 reinforced insulation).
Output Group to Output Group Isolation	Verified by one of the following dielectric tests: 1836V ac for 1 second or 2596V dc for 1 second 265V ac Working Voltage (basic insulation) 150V Working Voltage (IEC Class 2 reinforced insulation)