

Allen-Bradley 1756 Series Service Manual

1756-L65

1. Description

The Allen-Bradley 1756-L65 belongs to Series B of the ControlLogix controllers. Manufactured by Rockwell Automation/Allen-Bradley, the controller has an inbuilt RS-232 serial port. It also has a 32 MB user memory for both data and logic as well as 478 KB of I/O memory. If users like, they can install a non-compulsory nonvolatile memory storage with the 1756-L65 controller. On the other hand, there is only a 128 MB CompactFlash memory card that can be installed on the 1756-CF128 model. It comes w

2. Specifications

Specification	Value
Manufacturer	Rockwell Automation
Brand	Allen-Bradley
Part	Number/Catalog No. 1756-L65
Series	ControlLogix
Module	Type Processor Module
I-O	Memory 478 Kilobytes
User	Memory 32 MB
Maximum	I-O 128,000
Maximum	Analog I-O 4,000
Maximum	Digital I-O 128,000
Current	Draw (5.1 Volts DC) 1200 milliamps
Current	Draw (24 Volts DC) 14 milliamps
Power	Dissipation 3.5 Watts
Thermal	Dissipation 11.9 BTU per hour
Isolation	Voltage 30 Volts Continuous
Enclosure	None
UPC	10612598340726 Description
The	Allen-Bradley 1756-L65 is a Series B ControlLogix controller. It has a built-in RS-232 serial port available, as well as a user memory for data and logic of 32 MB and an I/O memory of 478 kb. You can also install an optional nonvolatile memory storage with this controller. However, what can be installed is only the 128 MB CompactFlash 1756-CF128 memory card. It also has a battery that can be replaced but only when needed. The battery compatible with this controller is only the 1756-BA2 lithium battery. The

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3. Product Information

The Allen-Bradley 1756-L65 belongs to Series B of the ControlLogix controllers. Manufactured by Rockwell Automation/Allen-Bradley, the controller has an inbuilt RS-232 serial port. It also has a 32 MB user memory for both data and logic as well as 478 KB of I/O memory. If users like, they can install a non-compulsory nonvolatile memory storage with the 1756-L65 controller. On the other hand, there is only a 128 MB CompactFlash memory card that can be installed on the 1756-CF128 model. It comes with a battery which is replaceable but only when required. The only battery which is compatible with the 1756-L65 controller is a 1756-BA2 lithium battery. Some of the ControlLogix chassis that are compatible with the 1756-L65 controller include the 1756-A7, 1756-A4, 1756-A17, 1756-A13, and the 1756-A10. The Allen-Bradley 1756-L65 has 4000 maximum analog I/O and 128,000 maximum total I/O. The 1756-L65 controller has a current draw of 14 mA at 24 Volts DC and 1200 mA at 5.1 Volts DC. The controller has a power dissipation of 3.5 Watts and 11.9 BTU/hour thermal dissipation. Additionally, it has 30 Volts DC constant isolation voltage. This Allen-Bradley controller has been type-tested for 60 seconds at 720 Volts DC.

The 1756-L65 controller features an operating temperature ranging between 0 and 60 degrees Celsius, along with a storage temperature of between -40 and 85 degrees Celsius. It comes with a 60 degrees Celsius maximum contiguous air temperature as well as a non-condensing relative humidity ranging from 5 to 95%. The 1756-L65 controller also has an operating shock of 30 g, a vibration of about 2 g at 10 to 500 Hertz, along with a 50 g non-operating shock. Like the other ControlLogix 5560 controllers, the 1756-L65 comes with three main controller tasks, which are the 32 tasks, 100 programs/task, and the event task with all event triggers. The communication choices available for the 1756-L65 controller comprise the ControlNet, DeviceNet, Data Highway Plus, EtherNet/IP, SynchLink, Remote I/O, and the third-party process and device networks. There is also serial ports for communication in this controller, which are the DF1 radio modem, ASCII, DF1 full/half-duplex, DH-485 and the Modbus port. The 1756-L65 can support up to 250 controller connections. Allen Bradley ControlLogix Processor Module with 478 Kilobytes I-O Memory and 32 MB User Memory Technical specifications for 1756-L65

Manufacturer Rockwell Automation

Brand Allen-Bradley

Part Number/Catalog No. 1756-L65

Series ControlLogix

Module Type Processor Module

I-O Memory 478 Kilobytes

User Memory 32 MB

Maximum I-O 128,000

Maximum Analog I-O 4,000

Maximum Digital I-O 128,000

Current Draw (5.1 Volts DC) 1200 milliamps

Current Draw (24 Volts DC) 14 milliamps

Power Dissipation 3.5 Watts

Thermal Dissipation 11.9 BTU per hour

Isolation Voltage 30 Volts Continuous

Enclosure None

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The Allen-Bradley 1756-L65 is a Series B ControlLogix controller. It has a built-in RS-232 serial port available, as well as a user memory for data and logic of 32 MB and an I/O memory of 478 kb. You can also install an optional nonvolatile memory storage with this controller. However, what can be installed is only the 128 MB CompactFlash 1756-CF128 memory card. It also has a battery that can be replaced but only when needed. The battery compatible with this controller is only the 1756-BA2 lithium battery. The compatible ControlLogix chassis with this controller are 1756-A4, 1756-A7, 1756-A10, 1756-A13, and 1756-A17.

It has a maximum analog I/O of 4000 and a maximum digital I/O, as well as a maximum total I/O, of 128,000. It has a current draw of 1200 mA at 5.1V DC and 14 mA at 24V DC. Its power dissipation is 3.5 W and thermal dissipation is at 11.9 BTU/hr. It also has a continuous isolation voltage of 30V. This controller has also been type tested for 60 s at 720 V DC. The 1756-L65 controller has an operating temperature that ranges from 0 to 60 Degrees Celsius, as well as a storage temperature ranging from -40 to 85 Degrees Celsius. It also has a maximum surrounding air temperature of 60 Degrees Celsius and a noncondensing relative humidity range of 5% to 95%. The controller has a vibration of 2 g at 10 to 500 Hz, an operating shock of 30 g, and a non-operating shock of 50 g.

Same with other ControlLogix 5560, the 1756-L65 also has three main controller tasks, namely 100 programs/task, 32 tasks, and event task: all event triggers. Communication options available for this controller are DeviceNet, ControlNet, EtherNet/IP, Remote I/O, Data Highway Plus, SynchLink, and Third-party process and device networks. Serial port communication is also present with this controller, and these are ASCII, DF1 radio modem, DF1 full/half-duplex, Modbus via logic, and DH-485. It has the ability to support as much as 250 controller connections.

It should be noted that the scanning time of this controller may be slower than other ControlLogix 1756-L6x controllers, given that the same project has been loaded to these controllers.