

# Allen-Bradley 1756 Series Service Manual

1756-L85EP

## 1. Description

Mfr. Part Number:

## 2. Specifications

| Specification | Value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Brand         | Allen-Bradley / Rockwell Automation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Series        | ControlLogix                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Part          | Number 1756-L85EP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Product       | Type Controller                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Compatibility | ControlLogix 5580                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Ethernet      | Speeds 10/100/1000 Mbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| USB           | Speed 12 Mbps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| User          | Memory 40 Megabytes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Maximum       | Total I/O 128,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Maximum       | Digital I/O 128,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Maximum       | Analog I/O 4000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Power         | Dissipation 6.2 Watts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Thermal       | Dissipation 21.2 BTU per hour Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| The           | Allen-Bradley 1756-L85EP controller module is a ControlLogix 5580 family controller module. It needs to be installed in a ControlLogix Series C chassis. It can be used in a Series B chassis too, but only with a derated temperature range. The 1756-L85EP module draws power from a ControlLogix chassis power supply. The controller supports direct connection to the Ethernet network without an intermediate bridge module. The Ethernet interface on the 1756-L85EP module supports 10 Mbps, 100 Mbps, and 1000 Mbps link speeds. Up to 300 Ethernet nodes are supported by the 1756-L85EP module . The controller supports 40 Megabyte |

## 3. Product Information

Mfr. Part Number:

1756-L85EP

Manufacturer: Allen-Bradley / Rockwell Automation

Description: Allen-Bradley 1756-L85EP ControlLogix 5580E Process Controller, 40MB

Full Description: Allen Bradley 1756-L85EP ControlLogix 5580E Process Controller, 40MB User Memory, USB 2.0 Port (12Mbps), 1GB Ethernet Port, 300 EtherNet/IP Devices, 4 Character Alpha/Numeric Display, Supported in Studio 5000 Automation Engineering and Design Environment The 1756-L85EP module is an Allen Bradley controller module. It is compatible with the ControlLogix 5580 systems. Technical specifications for 1756-L85EP

Brand Allen-Bradley / Rockwell Automation

Series ControlLogix

Part Number 1756-L85EP

Product Type Controller

Compatibility ControlLogix 5580

Ethernet Speeds 10/100/1000 Mbps

USB Speed 12 Mbps

User Memory 40 Megabytes

Maximum Total I/O 128,000

Maximum Digital I/O 128,000

Maximum Analog I/O 4000

Power Dissipation 6.2 Watts

Thermal Dissipation 21.2 BTU per hour Description

The Allen-Bradley 1756-L85EP controller module is a ControlLogix 5580 family controller module. It needs to be installed in a ControlLogix Series C chassis. It can be used in a Series B chassis too, but only with a derated temperature range. The 1756-L85EP module draws power from a ControlLogix chassis power supply. The controller supports direct connection to the Ethernet network without an intermediate bridge module. The Ethernet interface on the 1756-L85EP module supports 10 Mbps, 100 Mbps, and 1000 Mbps link speeds. Up to 300 Ethernet nodes are supported by the 1756-L85EP module . The controller supports 40 Megabytes of user memory.

The working temperature range for the 1756-L85EP controller module is from 32 to 140 degrees Fahrenheit. The non-operating temperature range is from 32 to 122 degrees Fahrenheit. For the Series C chassis, the maximum temperature of surrounding air should not exceed 140 degrees Fahrenheit. The relative humidity should be kept between 5 and 95%. The vibration rating for the controller is 2 g at 10 to 500 Hertz. The operating and non-operating shock ratings are 30 g and 30 g, respectively. During operation, the 1756-L85EP module dissipates 6.2 Watts of power and 21.2 BTU of heat per hour. The current requirement of the module is 1.2 Amps at 5 Volts DC and 5 milliamps at 1.2 Volts DC. The 1756-L85EP module is designed for vertical installation in any slot of a compatible chassis. The enclosure of the module is open and it complies with the T4 ATEX temperature code rating.