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*Installation Instructions*

# ControlLogix Controller and Memory Board

Catalog Numbers 1756-L1, 1756-L1M1, 1756-L1M2, 1756-L1M3, 1756-L55, 1756-L55M12, 1756-L55M13, 1756-L55M14, 1756-L55M16, 1756-L55M22, 1756-L55M23, 1756-L55M24, 1756-L61, 1756-L62, 1756-L63, 1756-L64, 1756-L65, 1756-M1, 1756-M2, 1756-M3, 1756-M12, 1756-M13, 1756-M14, 1756-M16, 1756-M22, 1756-M23, 1756-M24, 1784-CF64, 1784-CF128


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## Before You Begin

Read this section for important information about using these products, noting that this publication covers the products shown in the table.

| Product | Cat. No. | Series |
|---|---|---|
| ControlLogix5550 controller | 1756-L1, 1756-L1M1, 1756-L1M2, 1756-L1M3 | A |
| ControlLogix5555 controller | 1756-L55, 1756-L55M12, 1756-L55M13, 1756-L55M14, 1756-L55M16, 1756-L55M22, 1756-L55M23, 1756-L55M24 | A |
| ControlLogix5561 controller | 1756-L61 | A, B |
| ControlLogix5562 controller | 1756-L62 | A, B |
| ControlLogix5563 controller | 1756-L63 | A, B |
| ControllLogix5564 controller | 1756-L64 | B |
| ControlLogix5565 controller | 1756-L65 | B |
| ControlLogix5550 memory board | 1756-M1, 1756-M2, 1756-M3 | A |
| ControlLogix5555 memory board | 1756-M12, 1756-M13, 1756-M14, 1756-M16, 1756-M22, 1756-M23, 1756-M24 | A |
| Industrial CompactFlash card | 1784-CF64, 1784-CF128 | A |

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Use the following table to determine which firmware revisions to use with your controller and memory board combination.

## Controller and Memory Board Combinations

| Controller and Memory Board | Series | Use this revision or later | |
|---|---|---|---|
| 1756-L1 | None | Any. | |
| 1756-L1M1 | | | |
| 1756-L1M2 | | | |
| 1756-L1M3 | | | |
| 1756-L55M12 | | 10.*x* or later. | |
| 1756-L55M13 | | 6.*x* or later. | |
| 1756-L55M14 | | | |
| 1756-L55M16 | | | |
| 1756-L55M22 | | 10.*x* or later. | |
| 1756-L55M23 | | 8.*x* or later. | |
| 1756-L55M24 | | | |
| 1756-L61 | A | 12.*x* or later. | |
| | B | 13.40 or later. | |
| 1756-L62 | A | 12.*x* or later. | |
| | B | 13.40 or later. | |
| 1756-L63 | A | **No** CompactFlash card | 10.*x* or later. |
| | | CompactFlash card | 11.*x* or later. |
| | B | 13.40 or later. | |
| 1756-L64 | B | 16 or later. | |
| 1756-L65 | B | 17 or later. | |

Make sure that the firmware revision is compatible with your version of RSLogix 5000 software.

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## ControlLogix Controller Common Specifications - 1756-L1, 1756-L1M1, 1756-L1M2, 1756-L1M3, 1756-L55, 1756-L55M12, 1756-L55M13, 1756-L55M14, 1756-L55M16, 1756-L55M22, 1756-L55M23, 1756-L55M24, 1756-L61, 1756-L62, 1756-L63, 1756-L64, and 1756-L65

| Attribute | Value |
|---|---|
| Temperature, operating | IEC 60068-2-1 (Test Ad, Operating Cold),<br>IEC 60068-2-2 (Test Bd, Operating Dry Heat),<br>IEC 60068-2-14 (Test Nb, Operating Thermal Shock):<br>• 0 … 60 °C (32…140 °F) |
| Temperature, storage | IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold),<br>IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat),<br>IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock):<br>• -40… 85 °C (-40…185 °F) |
| Relative humidity | IEC 60068-2-30 (Test Db, Unpackaged Damp Heat):<br>• 5…95% noncondensing |
| Vibration | IEC60068-2-6 (Test Fc, Operating):<br>• 2 g @ 10…500 Hz |
| Shock, operating | IEC60068-2-27 (Test Ea, Unpackaged Shock):<br>• 30 g |
| Shock, nonoperating | IEC60068-2-27 (Test Ea, Unpackaged Shock):<br>• 50 g |
| Emissions | CISPR 11:<br>• Group 1, Class A |
| ESD immunity | IEC 61000-4-2:<br>• 6 kV contact discharges<br>• 8 kV air discharges |
| Radiated RF immunity | IEC 61000-4-3:<br>• 10V/M with 1 kHz sine-wave 80% AM from 80…2000 MHz<br>• 10V/M with 200 Hz 50% Pulse 100% AM at 900 Mhz<br>• 10V/M with 200 Hz 50% Pulse 100% AM at 1890 Mhz<br>• 1V/m with 1 kHz line-wave 80% AM from 2.0…2.7 GHz |
| EFT/B immunity | IEC 61000-4-4:<br>• ±4 kV at 5 kHz on communications ports |
| Surge transient immunity | IEC 61000-4-5:<br>• ±2 kV line earth (CM) on communications ports |

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## ControlLogix Controller Common Specifications - 1756-L1, 1756-L1M1, 1756-L1M2, 1756-L1M3, 1756-L55, 1756-L55M12, 1756-L55M13, 1756-L55M14, 1756-L55M16, 1756-L55M22, 1756-L55M23, 1756-L55M24, 1756-L61, 1756-L62, 1756-L63, 1756-L64, and 1756-L65

| Attribute | Value |
|---|---|
| Conducted RF immunity | IEC 61000-4-6:<br>• 10V rms with 1 kHz sine-wave 80% AM from 150 kHz…80 MHz |
| Enclosure type rating | None, open style |
| Isolation voltage | 30V (continuous), Basic Insulation Type, RS232 to system<br>• Controllers type tested to withstand 707V DC for 60 s |
| Wiring category[1] | 2 - on communications ports |
| Programming cable | 1756-CP3 or 1747-CP3 serial cable |
| North American temperature code | T4A |
| IEC temperature code | T4 |
| Intrinsically safe | No |
| Replacement battery | 1756-L1, 1756-L1M1, 1756-L1M2, 1756-L1M3:<br>1756-BA1 (0.59 g lithium)<br><br>1756-L55, 1756-L55M12, 1756-L55M13, 1756-L55M14, 1756-L55M16, 1756-L55M22, 1756-L55M23, 1756-L55M24:<br>1756-BA1 (0.59 g lithium)<br><br>1756-L61/A, 1756-L62/A, 1756-L63/A:<br>1756-BA1 (0.59 g lithium)<br><br>1756-L61/B, 1756-L62/B, 1756-L63/B, 1756-L64/B, 1756-L65/B:<br>1756-BA2(0.50 g lithium)<br><br>1756-BATM battery module:<br>1756-BATA (10 g lithium) |

[1] Use this Conductor Category information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1.