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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Specifications

Specifications - ControlLogix Controllers

Cat. No.	Memory		Non-volatile Memory	Backplane Current		Power Dissipation	Thermal Dissipation	Weight, approx.
	Data and Logic[1]	Yes[2]		@ 5.1V DC	@ 24V DC			
1756-L55M22	750 KB	208 KB	Yes	1.23 A	0.014 A	5.6 W	19.1 BTU/hr	0.35 kg (12.5 oz)
1756-L55M23	1.5 MB							0.35 kg (12.5 oz)
1756-L55M24	3.5 MB			1.25 A		5.7 W	19.4 BTU/hr	0.36 kg (12.8 oz)
1756-L61/A	2 MB	478 KB	Yes[3]	1.20 A	14 mA	3.5 W	11.9 BTU/hr	0.32 kg (11.3 oz)
1756-L62/A	4 MB							
1756-L63/A	8 MB							
1756-L61/B	2 MB							0.35 kg (12.4 oz)
1756-L62/B	4 MB							
1756-L63/B	8 MB							
1756-L64/B	16 MB							
1756-L65/B	32MB							

(1) Data and logic memory stores: tags other than I/O, produced, or consumed tags; logic routines; and communication with OPC/DDE tags that use RSLinx software (also uses I/O memory).

(2) I/O memory stores: I/O tags, produced tags, consumed tags, communication via Message (MSG) instructions, communication with workstations, and communication with OPC/DDE tags that use RSLinx software (also uses data and logic memory).

(3) Requires a 1784-CF64 Industrial CompactFlash card.

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

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Attribute	Value
Conducted RF immunity	IEC 61000-4-6: • 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 • 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: 1756-BA1 (0.59 g lithium) 1756-L55, 1756-L55M12, 1756-L55M13, 1756-L55M14, 1756-L55M16, 1756-L55M22, 1756-L55M23, 1756-L55M24: 1756-BA1 (0.59 g lithium) 1756-L61/A, 1756-L62/A, 1756-L63/A: 1756-BA1 (0.59 g lithium) 1756-L61/B, 1756-L62/B, 1756-L63/B, 1756-L64/B, 1756-L65/B: 1756-BA2(0.50 g lithium) 1756-BATM battery module: 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.