

## Standard ControlLogix Chassis Specifications

The chassis backplane provides a high-speed communication path between modules and distributes power to each of the modules installed within the chassis.

### Technical Specifications - ControlLogix Standard Chassis

| Attribute                                     | 1756-A4, 1756-A4K                                                                                                                                                                                                                                 | 1756-A7, 1756-A7K                          | 1756-A10, 1756-A10K                        | 1756-A13, 1756-A13K                        | 1756-A17, 1756-A17K                        |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|
| Backplane current, chassis/slot max @ 1.2V DC | 1.5 A/-                                                                                                                                                                                                                                           |                                            |                                            |                                            |                                            |
| Backplane current, chassis/slot max @ 3.3V DC | 4 A/4 A                                                                                                                                                                                                                                           |                                            |                                            |                                            |                                            |
| Backplane current, chassis/slot max @ 5.1V DC | 15 A/6 A                                                                                                                                                                                                                                          |                                            |                                            |                                            |                                            |
| Backplane current, chassis/slot max @ 24V DC  | 2.8 A/2.8 A                                                                                                                                                                                                                                       |                                            |                                            |                                            |                                            |
| Power dissipation, max                        | 4 W                                                                                                                                                                                                                                               | 4.5 W                                      | 5 W                                        | 5.4 W                                      | 6 W                                        |
| Isolation voltage                             | Determined by installed power supply and modules                                                                                                                                                                                                  |                                            |                                            |                                            |                                            |
| Slots                                         | 4                                                                                                                                                                                                                                                 | 7                                          | 10                                         | 13                                         | 17                                         |
| Mounting method                               | Only horizontal                                                                                                                                                                                                                                   |                                            |                                            |                                            |                                            |
| Cabinet size (HxWxD), min                     | 50.8 x 50.8 x 20.3 cm<br>(20 x 20 x 8 in.)                                                                                                                                                                                                        | 50.8 x 61.0 x 20.3 cm<br>(20 x 24 x 8 in.) | 50.8 x 71.1 x 20.3 cm<br>(20 x 28 x 8 in.) | 50.8 x 81.3 x 20.3 cm<br>(20 x 32 x 8 in.) | 50.8 x 96.5 x 20.3 cm<br>(20 x 38 x 8 in.) |
| Weight, approx                                | 0.75 kg (1.7 lb)                                                                                                                                                                                                                                  | 1.10 kg (2.4 lb)                           | 1.45 kg (3.2 lb)                           | 1.90 kg (4.2 lb)                           | 2.20 kg (4.8 lb)                           |
| Location                                      | Panel                                                                                                                                                                                                                                             |                                            |                                            |                                            |                                            |
| Wire size                                     | Functional earth ground - 8.3 mm <sup>2</sup> (8 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater<br>Protective earth ground - 2.1 mm <sup>2</sup> (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater |                                            |                                            |                                            |                                            |
| North American temperature code               | T5 (Series B)<br>T4 (Series C)                                                                                                                                                                                                                    |                                            |                                            |                                            |                                            |
| IEC temperature code                          | T4                                                                                                                                                                                                                                                | T5 (Series B)<br>T4 (Series C)             |                                            |                                            |                                            |
| Enclosure type rating                         | None (open-style)                                                                                                                                                                                                                                 |                                            |                                            |                                            |                                            |

### Environmental Specifications - ControlLogix Standard Chassis

| Attribute                                                                                                                                                                                                            | Series B                                                                                                                                                                                                         |                                                           | Series C                                             |                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------|
|                                                                                                                                                                                                                      | 1756-A4, 1756-A7,<br>1756-A10, 1756-A13,<br>1756-A17                                                                                                                                                             | 1756-A4K, 1756-A7K,<br>1756-A10K, 1756-A13K,<br>1756-A17K | 1756-A4, 1756-A7,<br>1756-A10, 1756-A13,<br>1756-A17 | 1756-A4K, 1756-A7K,<br>1756-A10K, 1756-A13K,<br>1756-A17K |
| Temperature, operating<br>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)                                              | 0...60 °C (32...140 °F)                                                                                                                                                                                          |                                                           | -25...+60 °C (-13...+140 °F)                         |                                                           |
| Temperature, surrounding air max                                                                                                                                                                                     | 60 °C (140 °F)                                                                                                                                                                                                   |                                                           |                                                      |                                                           |
| Temperature, nonoperating<br>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) | -40...+85 °C (-40...+185 °F)                                                                                                                                                                                     |                                                           |                                                      |                                                           |
| Relative humidity<br>IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)                                                                                                                                                  | 5...95% noncondensing                                                                                                                                                                                            |                                                           |                                                      |                                                           |
| Conformal Coated                                                                                                                                                                                                     | —                                                                                                                                                                                                                | Yes                                                       | —                                                    | Yes                                                       |
| Vibration<br>IEC 60068-2-6 (Test Fc, Operating)                                                                                                                                                                      | 2 g @ 10...500 Hz                                                                                                                                                                                                |                                                           |                                                      |                                                           |
| Shock, operating<br>IEC 60068-2-27 (Test Ea, Unpackaged Shock)                                                                                                                                                       | 30 g                                                                                                                                                                                                             |                                                           |                                                      |                                                           |
| Shock, nonoperating<br>IEC 60068-2-27 (Test Ea, Unpackaged Shock)                                                                                                                                                    | 50 g                                                                                                                                                                                                             |                                                           | 30 g                                                 |                                                           |
| Emissions                                                                                                                                                                                                            | IEC 61000-6-4                                                                                                                                                                                                    |                                                           |                                                      |                                                           |
| ESD immunity<br>IEC 61000-4-2                                                                                                                                                                                        | 6 kV contact discharges<br>8 kV air discharges                                                                                                                                                                   |                                                           |                                                      |                                                           |
| Radiated RF immunity<br>IEC 61000-4-3                                                                                                                                                                                | 10V/m with 1 kHz sine-wave 80% AM from 80...2000 MHz<br>10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz<br>10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz<br>3V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz |                                                           |                                                      |                                                           |