

# Dimensions and Installation

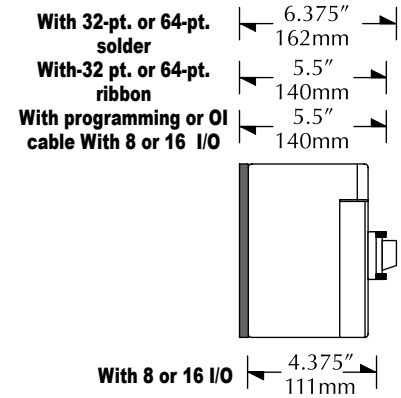
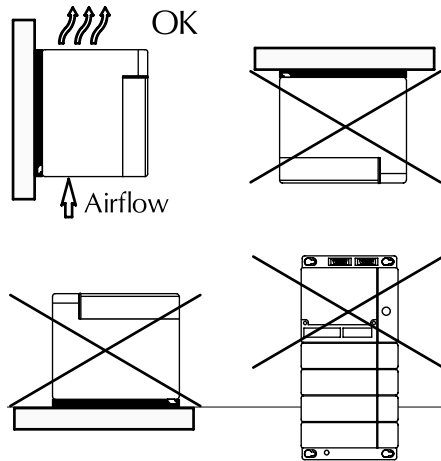
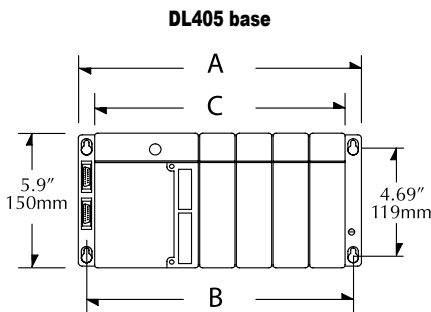
Local base expansion unit, includes 110/220 VAC power supply, requires local I/O expansion cable [D4-EXCBL-1](#) or [D4-EXCBL-2](#). It is important to understand the installation requirements for your DL405 system. This will help ensure that the DL405 products operate within their environmental and electrical limits.

## Plan for safety

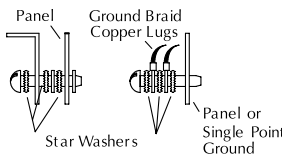
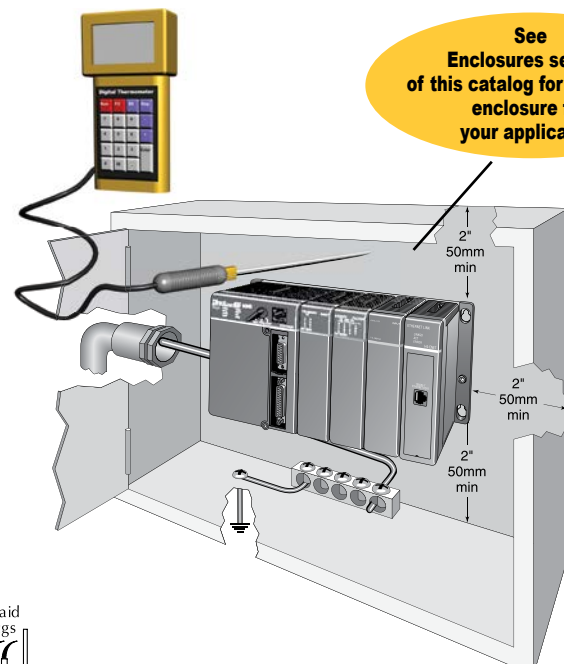
This catalog should never be used as a replacement for the user manual. The user manuals, D4-USER-M and D4-454-M, contain important safety information that must be followed. The system installation should comply with all appropriate electrical codes and standards.

## Base dimensions and mounting orientation

Use the diagrams to the right as a guide to make sure the DL405 system can be installed in your application. To ensure proper airflow for cooling purposes, DL405 bases must be mounted horizontally. It is important to check these dimensions against the conditions required for your application. For example, it is recommended that you leave 2" depth for ease of access and cable clearance. However, your distance may be greater or less. Also, check the installation guidelines for the recommended cabinet clearances.



Specification	Rating
Storage Temperature	-4°F - 158°F (-20°C to 70°C)
Ambient Operating Temperature	32°F - 140°F (0° to 60°C)
Ambient Humidity	30% - 95% relative humidity (non-condensing)
Vibration Resistance	MIL STD 810C, Method 514.2
Shock Resistance	MIL STD810C, Method 516.2
Noise Immunity	NEMA(ICS3-304)
Atmosphere	No corrosive gases



Note: there is a minimum of 2" (50mm) clearance required between the panel door or any devices mounted in the panel door and the nearest DL405 component.

Base	Price	A	B	C
<a href="#">D4-04B-1</a>	\$202.00	11.53"	293mm	10.82" 275mm
<a href="#">D4-06B-1</a>	\$241.00	14.44"	367mm	13.74" 349mm
<a href="#">D4-08B-1</a>	\$282.00	17.36"	441mm	16.65" 423mm

# Base Configurations

## Four, six, and eight-slot bases

The DL405 product family offers four, six, and eight-slot I/O bases.

## Expansion units

The expansion units are only necessary when you want to use local expansion. They are installed in the CPU slot of the expansion bases. They appear very similar to CPUs, but they only contain a power supply. One of the most often asked questions for the DL405 family is, "Does the CPU consume an I/O slot?" The answer is no. The CPU has a special slot in the base and does not consume any of the available I/O slots. The same is true for Expansion Units.

- [D4-EX](#) 110/220 VAC power supply
- [D4-EXDC](#) 24 VDC power supply

and the Remote Server Units

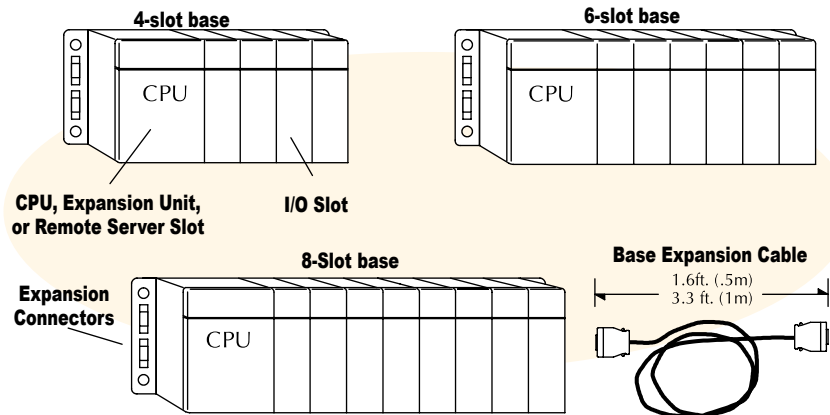
- [D4-RS](#) 110/220 VAC power supply

An expansion cable is required to connect each of the expansion bases to the CPU base

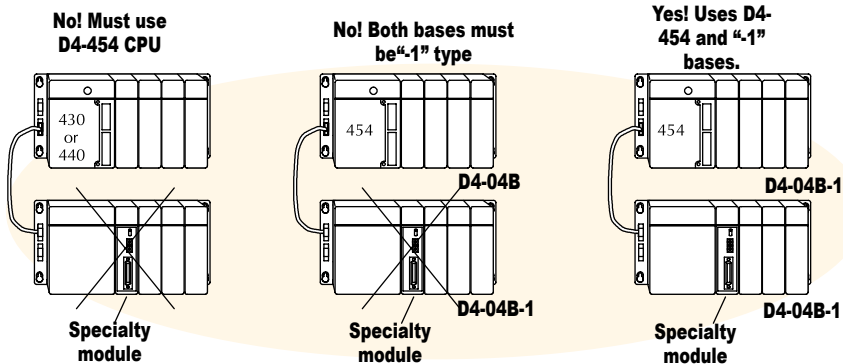
- [D4-EXCBL-1](#) 3.08 ft (1m) cable
- [D4-EXCBL-2](#) 1.54 ft (0.5m) cable

## D4-454 and -1 bases

In the past, a DL405 system has been limited to only accepting specialty modules in the local CPU base. The -1 bases must be used with the D4-454 CPU to remove this limitation. The part numbers for the bases are [D4-04B-1](#), [D4-06B-1](#), and [D4-08B-1](#). (NOTE: You cannot simply add a -1 base to an existing system to gain specialty modules in expansion bases. Instead, you must replace the CPU base and all other expansion bases as well.) You can add the -1 bases in an older system, but they are subject to the limitations of the regular bases.

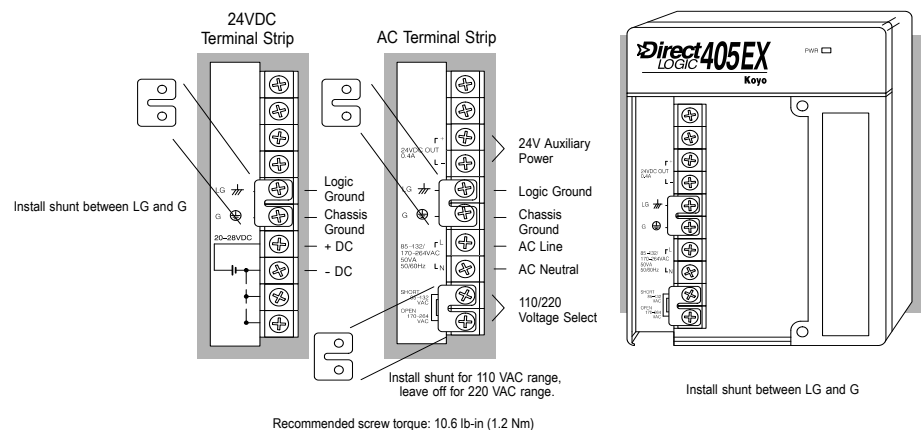


## Specialty modules in expansion bases



Part	Description	Price
<a href="#">D4-EX</a>	Local base expansion unit, includes 110/220 VAC power supply, requires local I/O expansion cable D4-EXCBL-1 or D4-EXCBL-2	\$271.00
<a href="#">D4-EXDC</a>	Local base expansion unit, includes 24 VDC power supply, requires local I/O expansion cable D4-EXCBL-1 or D4-EXCBL-2	\$256.00
<a href="#">D4-RS</a>	Serial remote I/O Server unit (used with D4-RM), includes 110/220 VAC power supply, uses shielded twisted pair (24 AWG minimum)	\$710.00
<a href="#">D4-EXCBL-1</a>	Base expansion cable, 3.08 ft. (1m)	\$97.00
<a href="#">D4-EXCBL-2</a>	Base expansion cable, 1.54 ft. (0.5m)	\$93.00

## Expansion Unit Wiring



Recommended screw torque: 10.6 lb-in (1.2 Nm)