

1395 Dimensions and Mounting Requirements

IMPORTANT: The end user is responsible for completing the installation, Wiring and grounding of the 1395 drive and for complying with all National and Local Electrical Codes.

WARNING: The following information is merely a guide for proper installation. The National Electrical Code and any other governing regional or local code will overrule this information. The Allen-Bradley Company cannot assume responsibility for the compliance or the noncompliance to any code, national, local or otherwise for the proper installation of this drive or associated equipment. A hazard of personal injury and/or equipment damage exists if codes are ignored during installation.

Environment

The drive must be mounted in a clean, dry, location. Contamination from oils, corrosive vapors and abrasive debris must be kept out of the enclosure. Temperatures around the drive must be kept between 0°C and 55°C (32°F and 131°F). Humidity must remain between 5% to 95% non-condensing. The drive can be applied at elevations of 3300 feet (1,000 meters) without derating. The drive current rating must be derated by 3% for each additional 1,000 feet (300 meters). Above 10,000 feet (3,000 meters), consult the local Allen-Bradley Sales Office.

Mounting

The 1395 drive is of the open type construction and is designed to be installed in a suitable enclosure. The selection of enclosure type is the responsibility of the user. The heat sink is electrically isolated and is used as a mounting surface. Refer to the following figures for dimensions.

WARNING: Shock hazard exists at motor armature terminals if gravity drop out contactor does not open. The drive must be mounted in the vertical position. Failure to observe this mounting practice can result in personal injury or death.

CAUTION: The installation of the drive must be planned such that all cutting, drilling, tapping and welding can be accomplished with the drive removed from the enclosure. The drive is of the open type construction and any metal debris must be kept from falling into the drive. Metal debris or other foreign matter may become lodged in the drive circuitry resulting in component damage.

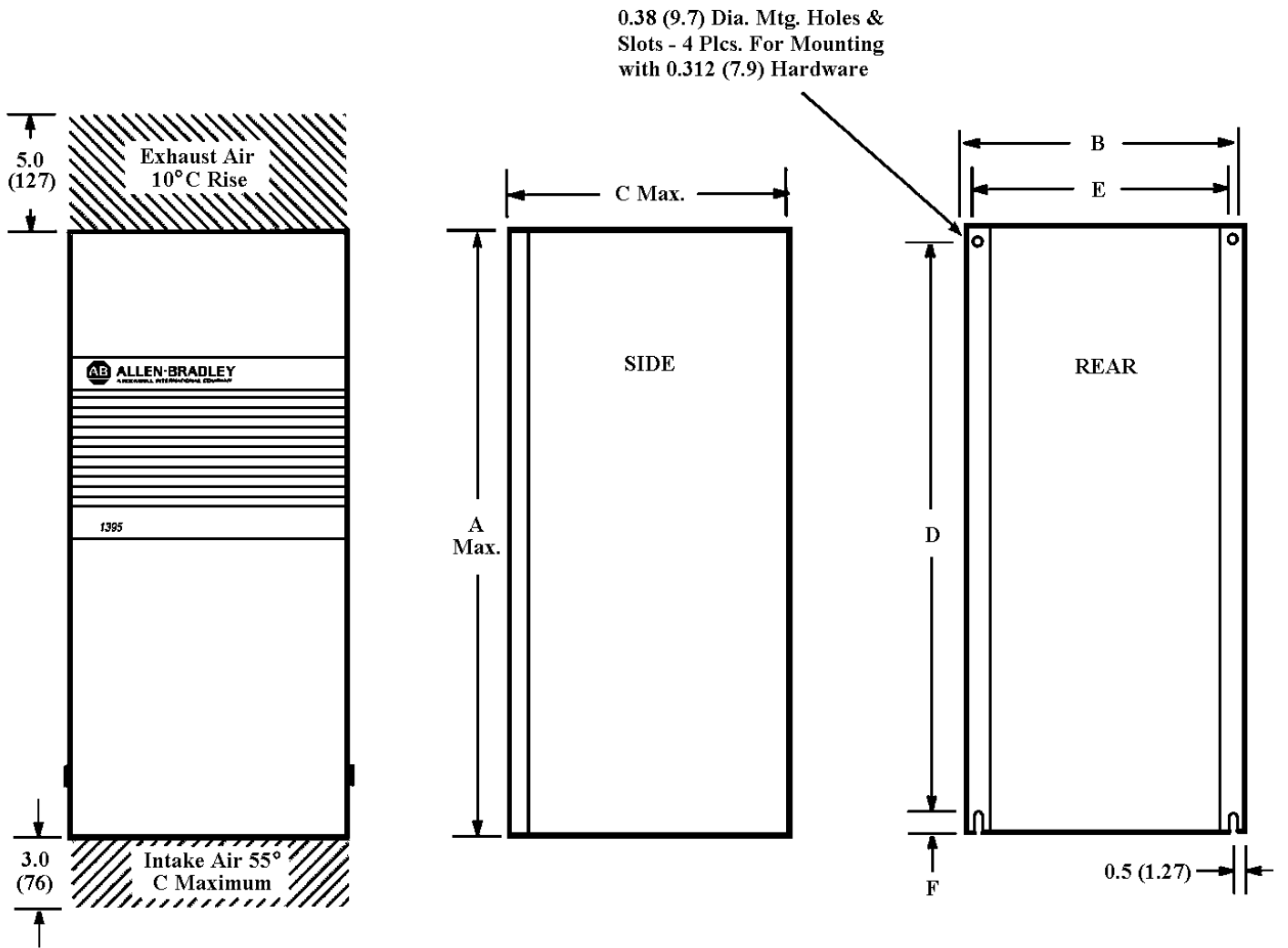
Figure 1

Nominal Dimensions

1 - 30 HP 230V

2 - 60 HP 460V

Dimensions are in inches and (mm)



230V Drive	460V Drive	A	B	C	D	E	F
1 - 30 HP	2 - 60 HP	23.9 (597)	11.9 (311)	10.75 (307)	22.50 (571)	11.00 (279)	1.00 (25)

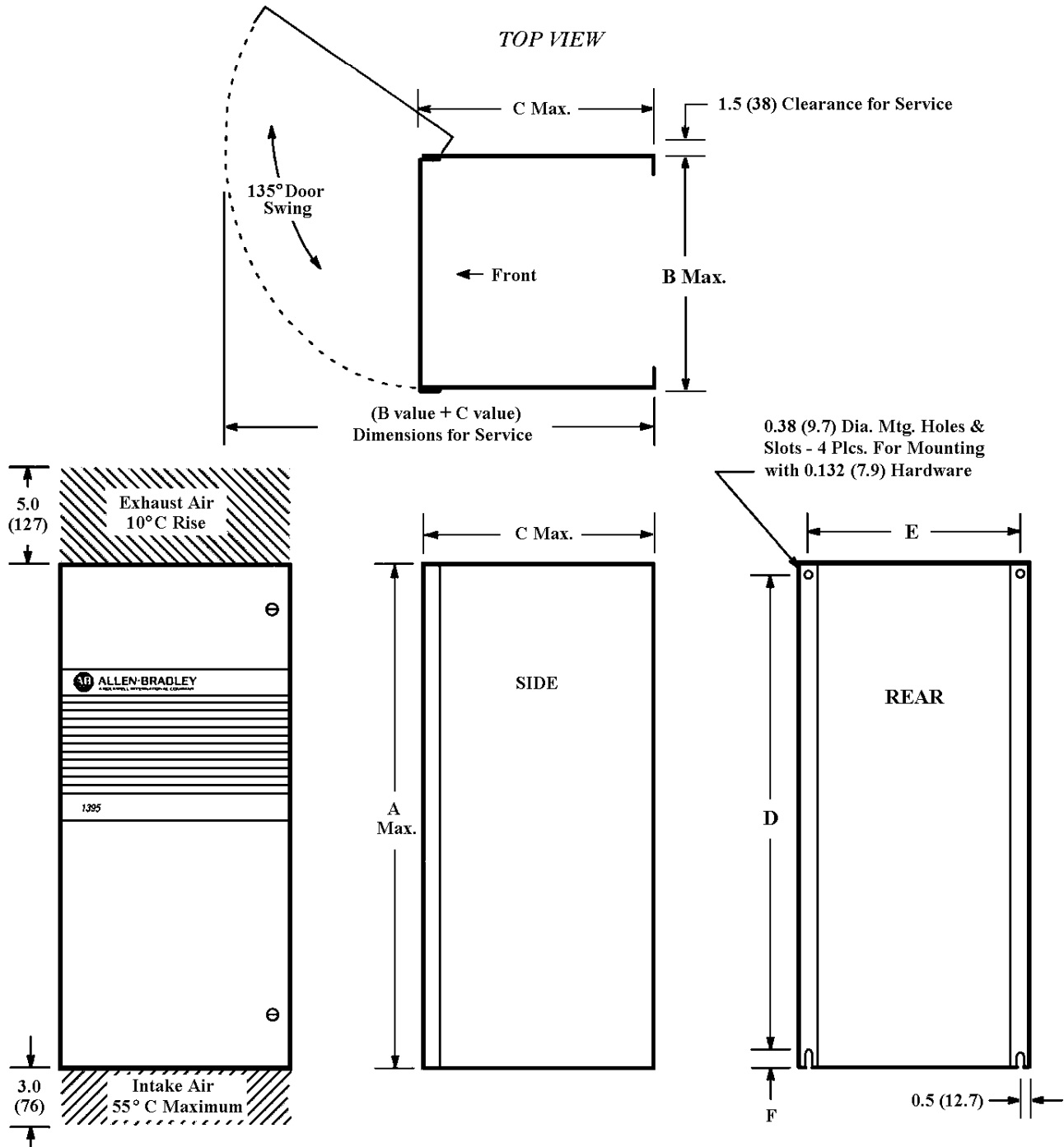
Figure 2

Nominal Dimensions

40 - 100 HP 230V

75 - 200 HP 460V

Dimensions are in inches and (mm)



230V Drive	460V Drive	A	B	C	D	E	F
40 - 50 HP	75 - 100 HP	29.00 (737)	12.25 (311)	12.10 (307)	27.50 (699)	11.00 (279)	1.00 (25)
60 - 100 HP	125 - 200 HP	34.00 (864)	15.50 (394)	12.70 (323)	33.00 (838)	14.25 (362)	0.50 (13)

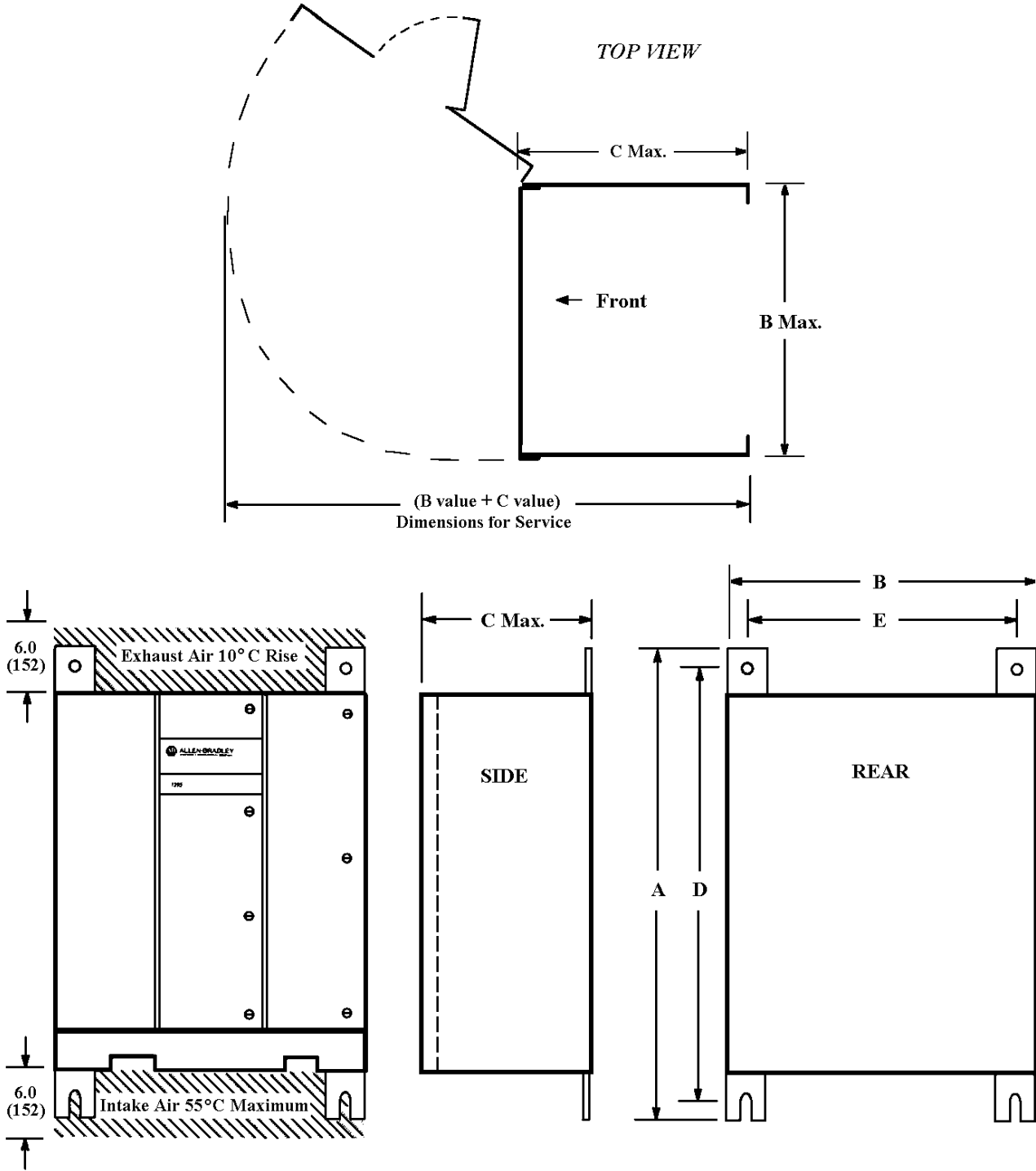
Figure 3

Nominal Dimensions

125 - 300 HP 230V

250 - 600 HP 460V

Dimensions are in inches and (mm)



230V Drive	460V Drive	A	B	C	D	E	Weight
125 - 300 HP	250 - 600 HP	51.19 (1300)	32.00 (813)	18.50 (470)	44.00 (1118)	28.00 (711)	515 (234)

Cooling Airflow

In order to maintain proper cooling, the drive must be mounted in a vertical position (fuses in the upper right hand corner). Refer to figures 1 - 3 for the recommended minimum clearance of each drive.

The drive design produces up to a 10°C or 18°F air temperature rise when the drive is operated at full capacity. Precautions should be taken not to exceed the maximum inlet ambient air temperature of 55°C (131°F). If the drive is in a enclosed cabinet, air circulation fans or a closed circuit heat exchanger may be required.

NEMA Type 12 Enclosures

When the drive is mounted in a NEMA Type 12 nonventilated sheet metal enclosure, the enclosure must be sized properly to allow adequate convection cooling. The drive will dissipate a heat loss that is proportional to the amount of armature current being delivered.

The following table lists the approximate wattage dissipation of each drive based on its current rating.

Table A
Drive Wattage Dissipation

Drive HP Rating		Watts Dissipated
230V AC	460V AC	
1 - 5	2 - 10	100
7.5 - 15	15 - 30	225
20	40	295
25 - 30	50 - 60	485
40 - 30	75 - 100	675
60 - 75	125 - 150	905
100	200	1265
125 - 200	250 - 400	2722
250 - 300	500 - 600	3456

The NEMA Type 12 enclosure should be sized such that 10 watts of power are dissipated for each 1 square foot of enclosure surface. This area should not include the enclosure bottom or surfaces of the enclosure mounted against a wall.

The heat loss for additional equipment that is mounted in the enclosure should be added to the heat loss of the drive.