



Quick Topics

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- Standard Enclosures
- Landing Systems
- Load Weighers
- TLS Switches



Physical Specifications

General

This section is intended to be used as a reference for physical specification of products described in this specification book. This section describes dimensions, weight, and special features of the enclosures and accessory products. The specifications given in this section are primarily for reference and may be changed or modified at any time without notice.



Note

Where space restrictions apply, multiple enclosures may be needed. Consult your MCE Sales Representative for special enclosure information.

16

In This Section

- Standard Controller Enclosures
- Landing System Physical Specifications
- Load Weighers
- TLS Terminal Limit Switches

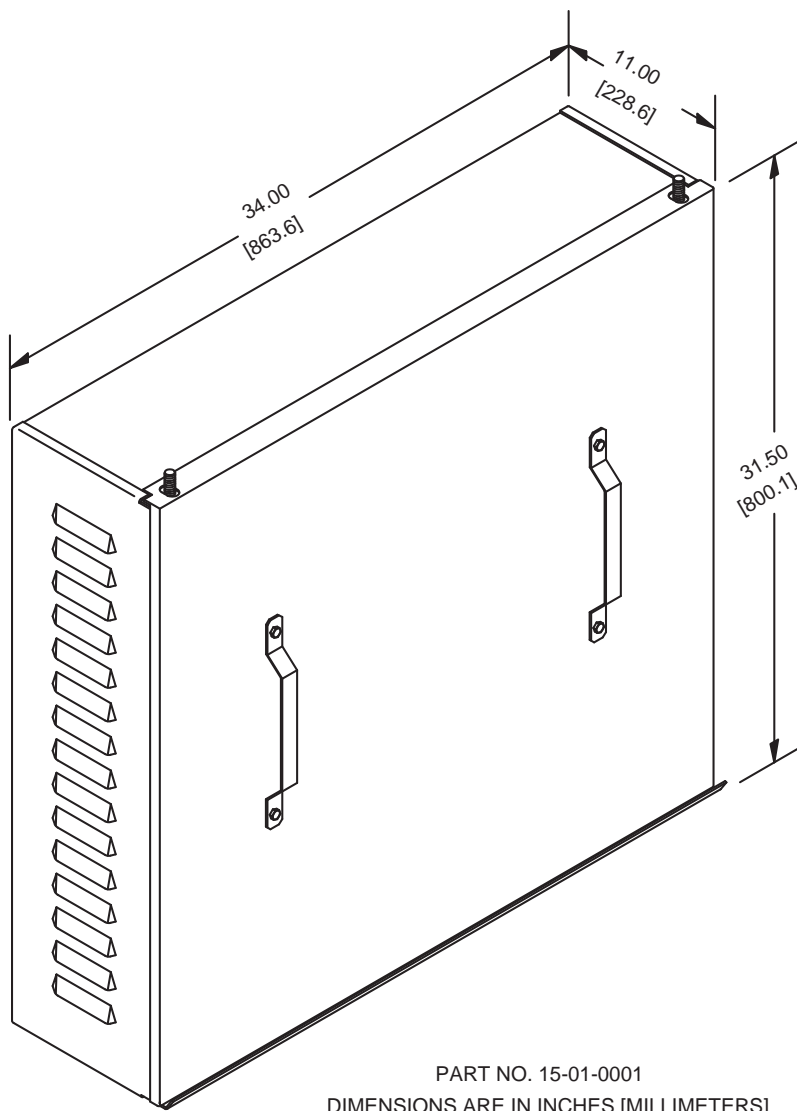
Standard Controller Enclosures

MCE provides NEMA 1 type enclosures for its standard elevator controller products unless otherwise specified. NEMA 1 enclosures are intended for indoor use primarily to provide a degree of protection against contact with the enclosed equipment and against a limited amount of falling dirt. Following is a list of product types and typical enclosures used with each. The enclosures may be used interchangeably, depending upon application.

Hydraulic Enclosures

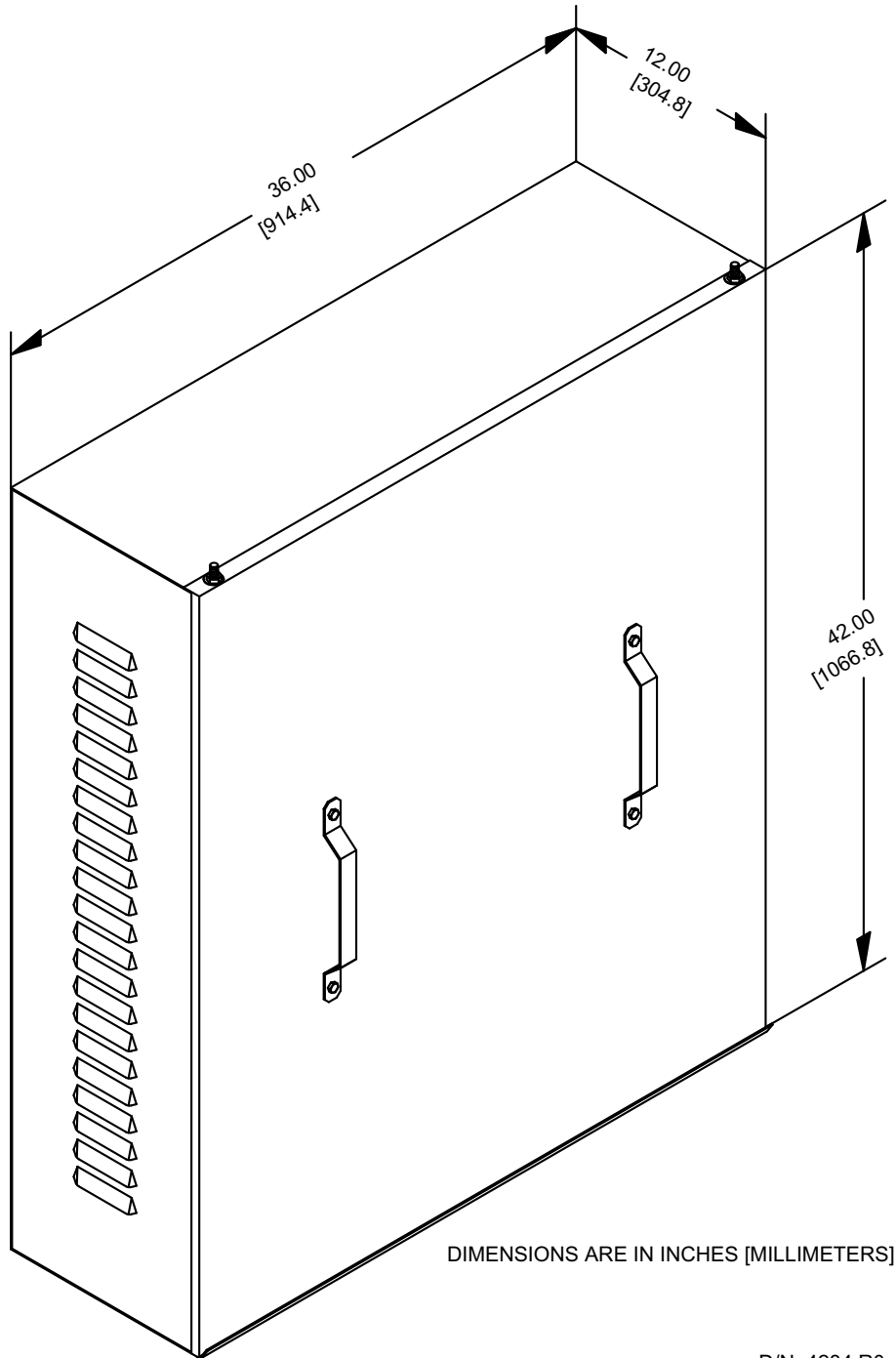
This enclosure is primarily used for PHC, HS and IOS control products. It is a steel enclosure with an aluminum or steel sub-plate, louvered sides, removable door and is wall mounted with front access only.

Figure 16.1 Hydraulic Enclosure



- Part Number: 15-01-0001 (See figure 16.1)
- Dimensions (inch [mm]): 31.5 [800.1] H X 34 [863.6] W X 11 [279.4] D
- Weight full (lbs. [kg]): 135 to 200 [61.29 to 90.8] approximate (depends on product)

Figure 16.2 Hydraulic Enclosure



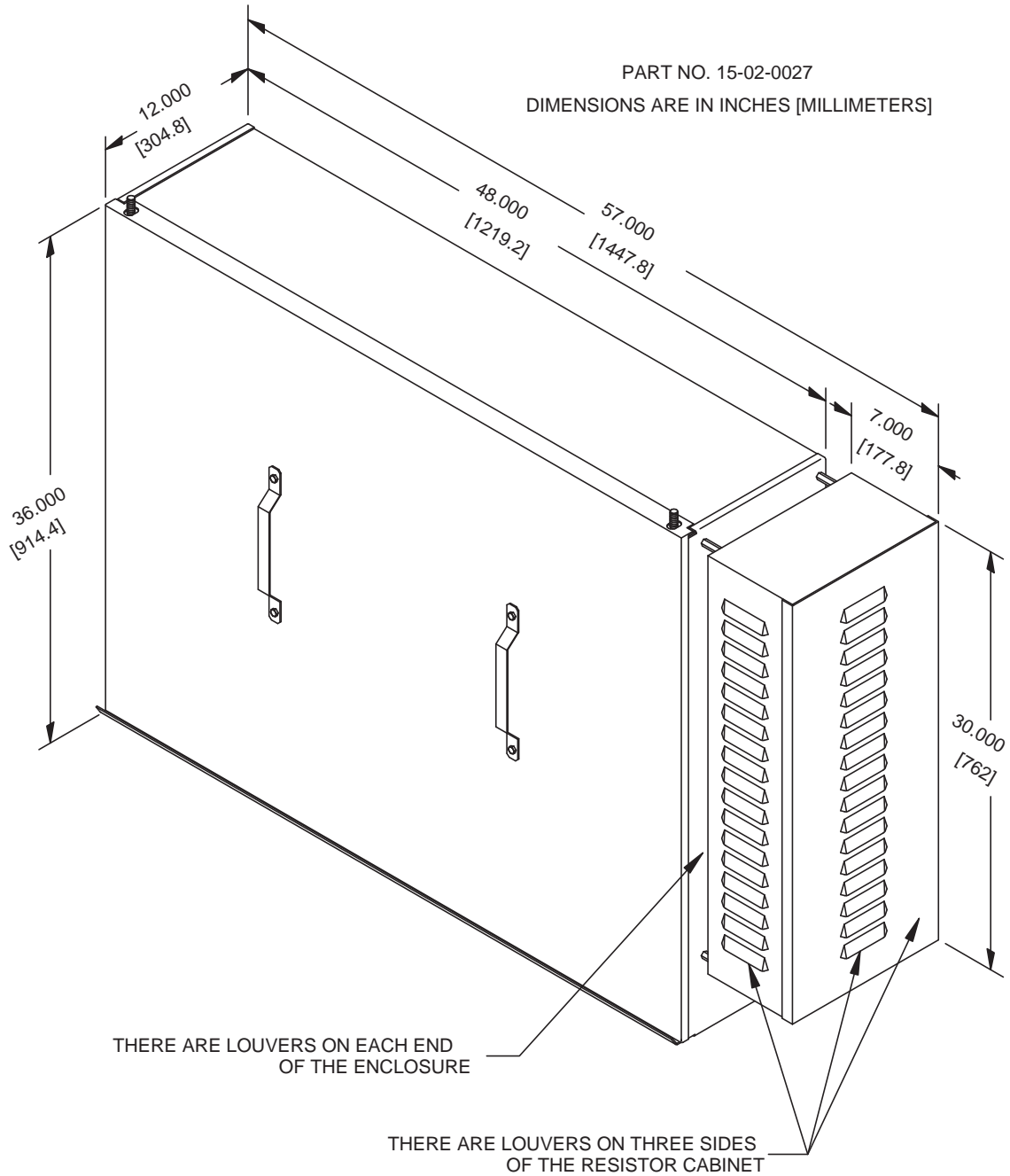
D/N: 4284 R0

- Part Number: 15-09-0019 (Figure 16.2.)
- Dimensions (inch [mm]): 42 [1066.8] H X 36 [914.4] W X 12 [304.8] D
- Weight full (lbs. [kg]): 200-300 [90.7 - 136] approximate (depends on product)

Traction Enclosure (Series M)

This enclosure is used for PTC and VFMC Series M control products. It is a steel enclosure with an aluminum or steel sub-plate, louvered sides, removable vented resistor box (when required), removable door, and is wall mounted with front access only.

Figure 16.3 Traction Enclosure, Series M

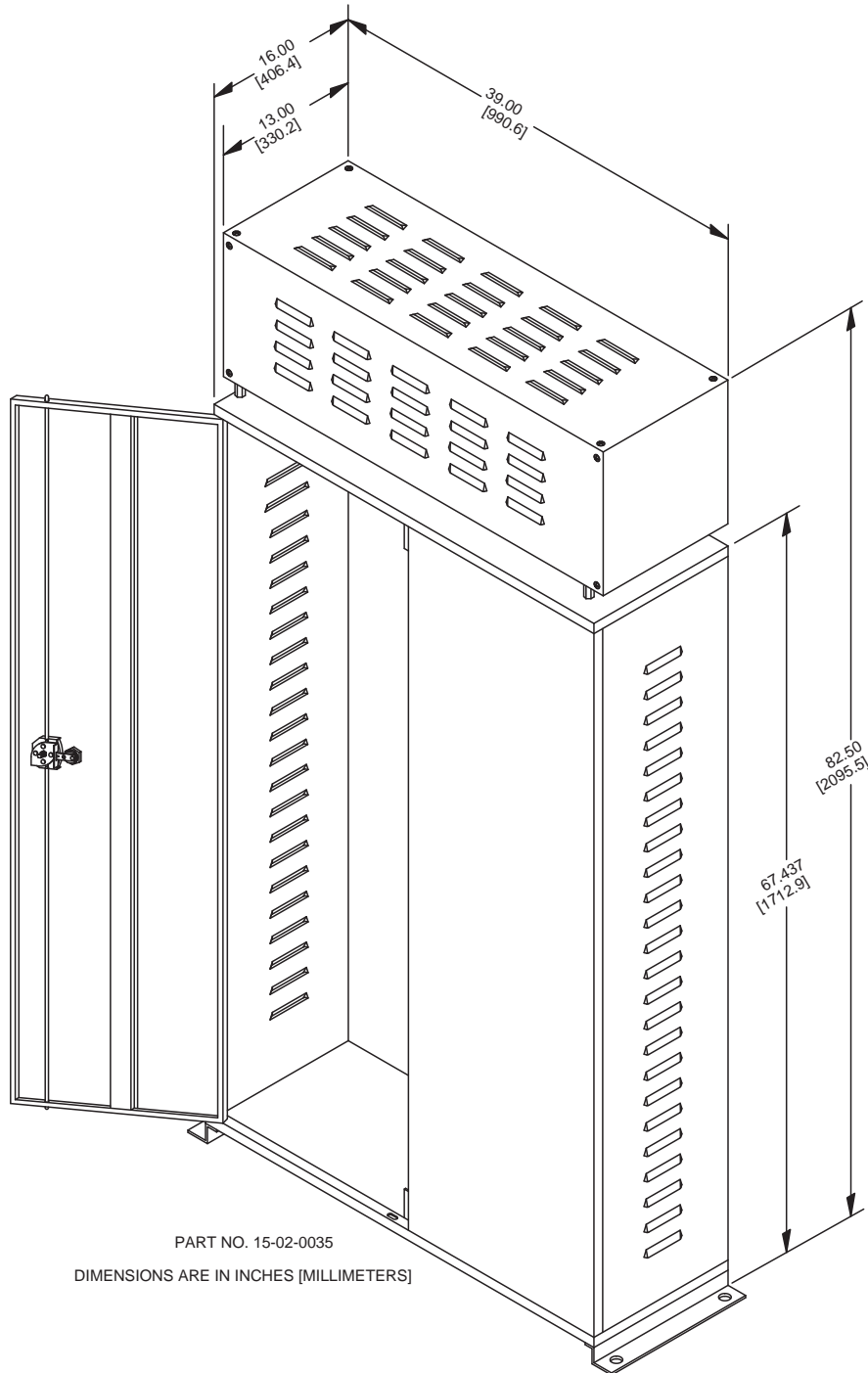


- Part Number: 15-02-0027 (See figure 16.3)
- Dimensions (inch [mm]): 30 [762] H X 57 [1447.8] W X 12 [304.8] D
- Weight full (lbs. [kg]): 300-400 [136 - 181.4] approximate (depends on product)

Traction Enclosures (Double Door)

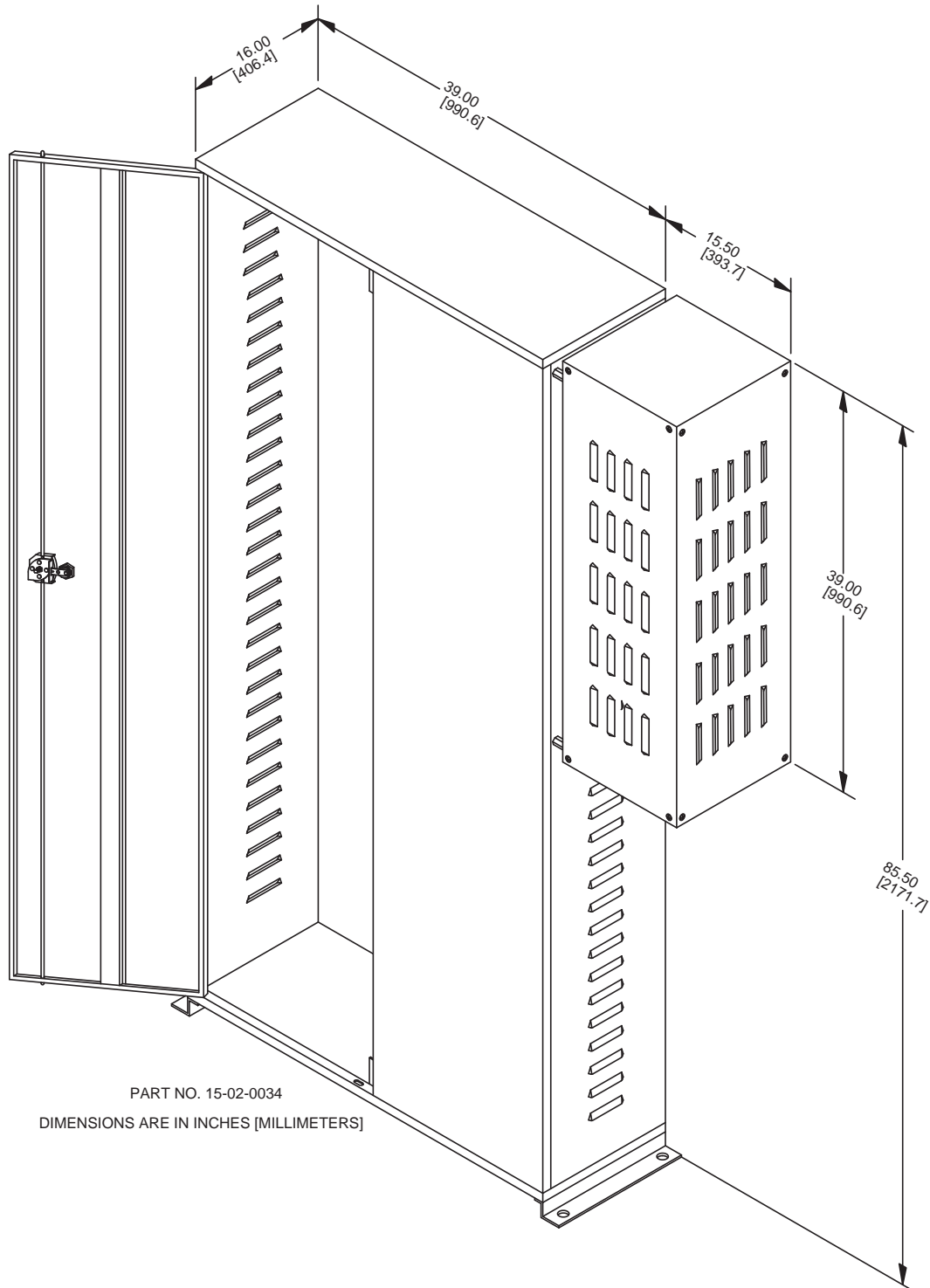
This enclosure is used for IMC and PTC control products. It is a steel enclosure with an aluminum or steel sub-plate, louvered sides, removable vented resistor box (when required), removable hinged double doors with keyed lock, and is floor mounted with front access only.

Figure 16.4 Traction Enclosure, Double Door



- Part Number: 15-02-0035 (Figure 16.5)
- Dimensions (inch [mm]): 82.5 [2095.5] H X 39 [990.6] W X 16 [406.4] D
- Weight full (lbs. [kg]): 395 to 600 [179.3 to 272.4] approximate (depends on product)

Figure 16.5 Traction Enclosure, Double Door

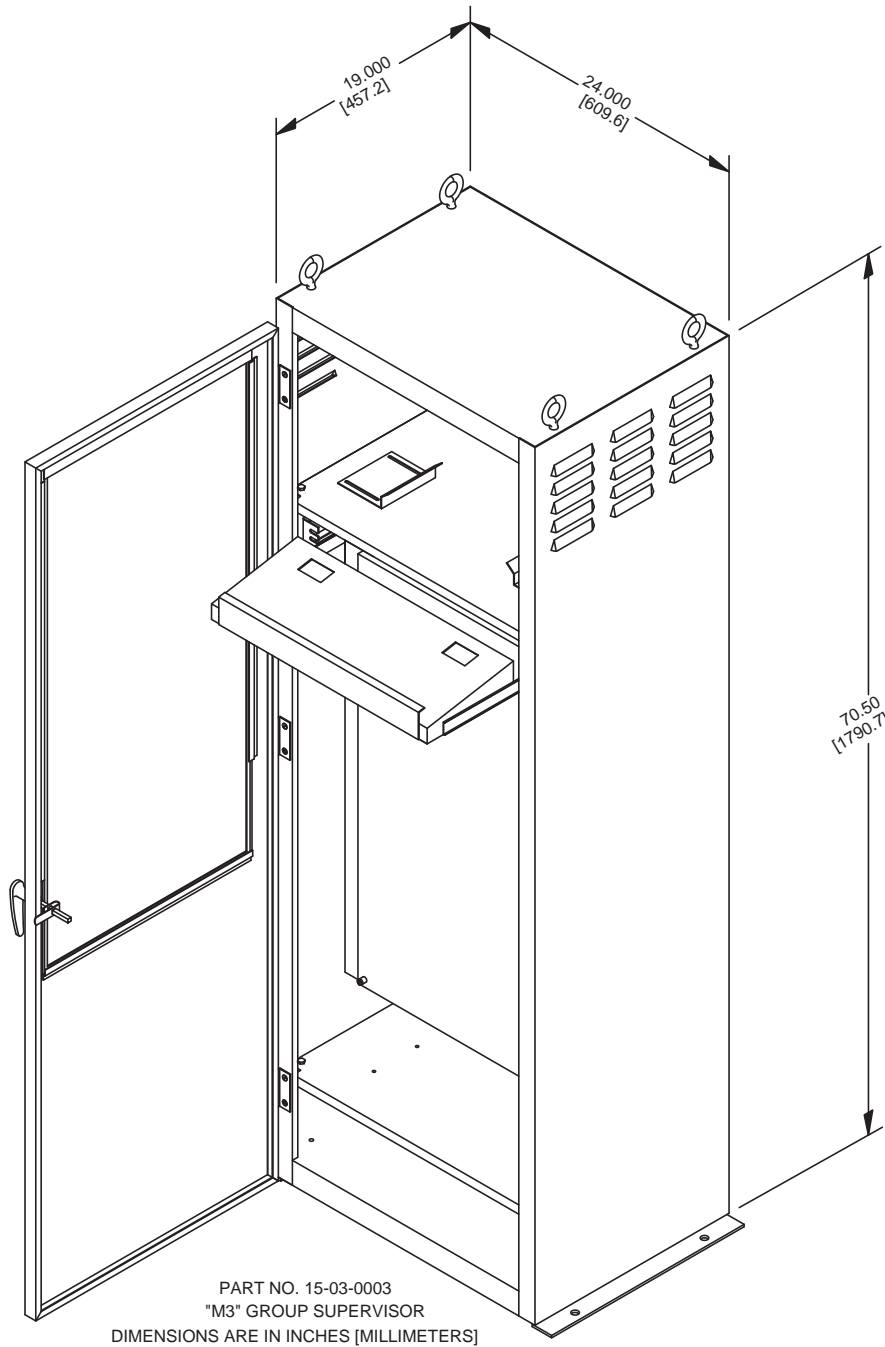


- Part Number: 15-02-0034 (Figure 16.6)
- Dimensions (inch [mm]): 85.5 [2171.7] H X 54.5 [1384.3] W X 16 [406.4] D
- Weight full (lbs.[kg]): 800 - 900 [362.8 - 408.2] approximate (depends on product)

Group Enclosure

This enclosure is used for the M3 Group System. It is a steel enclosure with a steel swing out sub-plate, louvered top, hinged door with keyed lock, slide out keyboard tray and CRT rack, and is floor mounted with front access only.

Figure 16.6 Group Enclosure



- Part Number: 15-03-0003 (See figure 16.7)
- Dimensions (inch [mm]): 70.5 [1790.7] H X 24 [609.6] W X 19 [482.6] D
- Weight full (lbs. [kg]): 200 to 300 [90.8 to 136.2] approximate (depends on product)

Off-the-Shelf Enclosures

For applications where MCE's standard enclosures are not appropriate, a wide range of off-the-shelf NEMA rated enclosures are available from various manufacturers. For physical dimensions and pricing on these enclosures, consult your MCE Sales Representative. Below is a list of the more commonly used NEMA rated enclosures for elevator applications:

NEMA 1

For special applications or space restrictions in which MCE standard enclosures cannot be used.

Note



In some cases, multiple enclosures may be needed where space restrictions apply.

NEMA 4

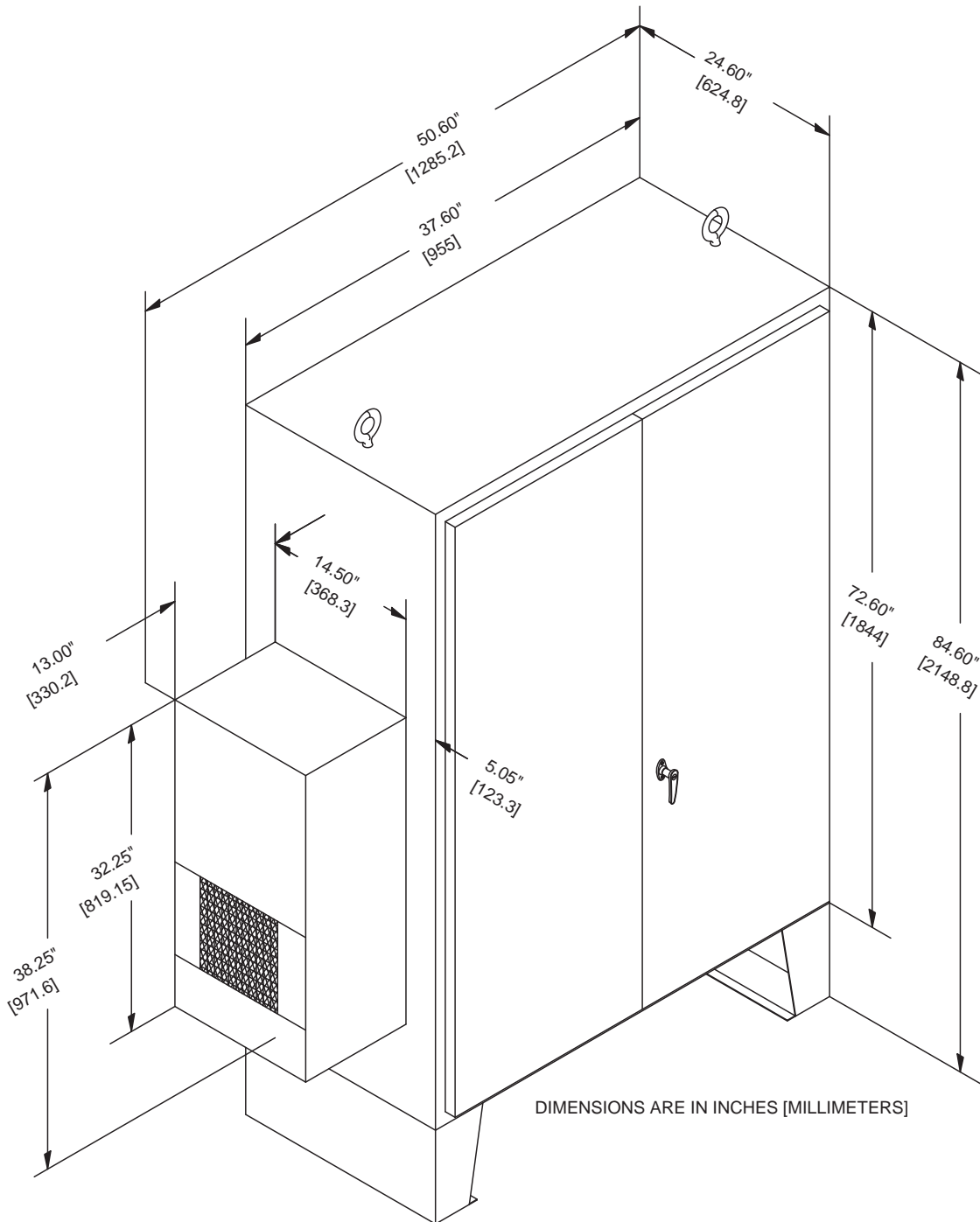
Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, splashing water and hose directed water; undamaged by the formation of ice on the enclosure.

Note



A cooling system may be required for some types of controllers (see dimensions below).

Figure 16.7 NEMA 4 Enclosure

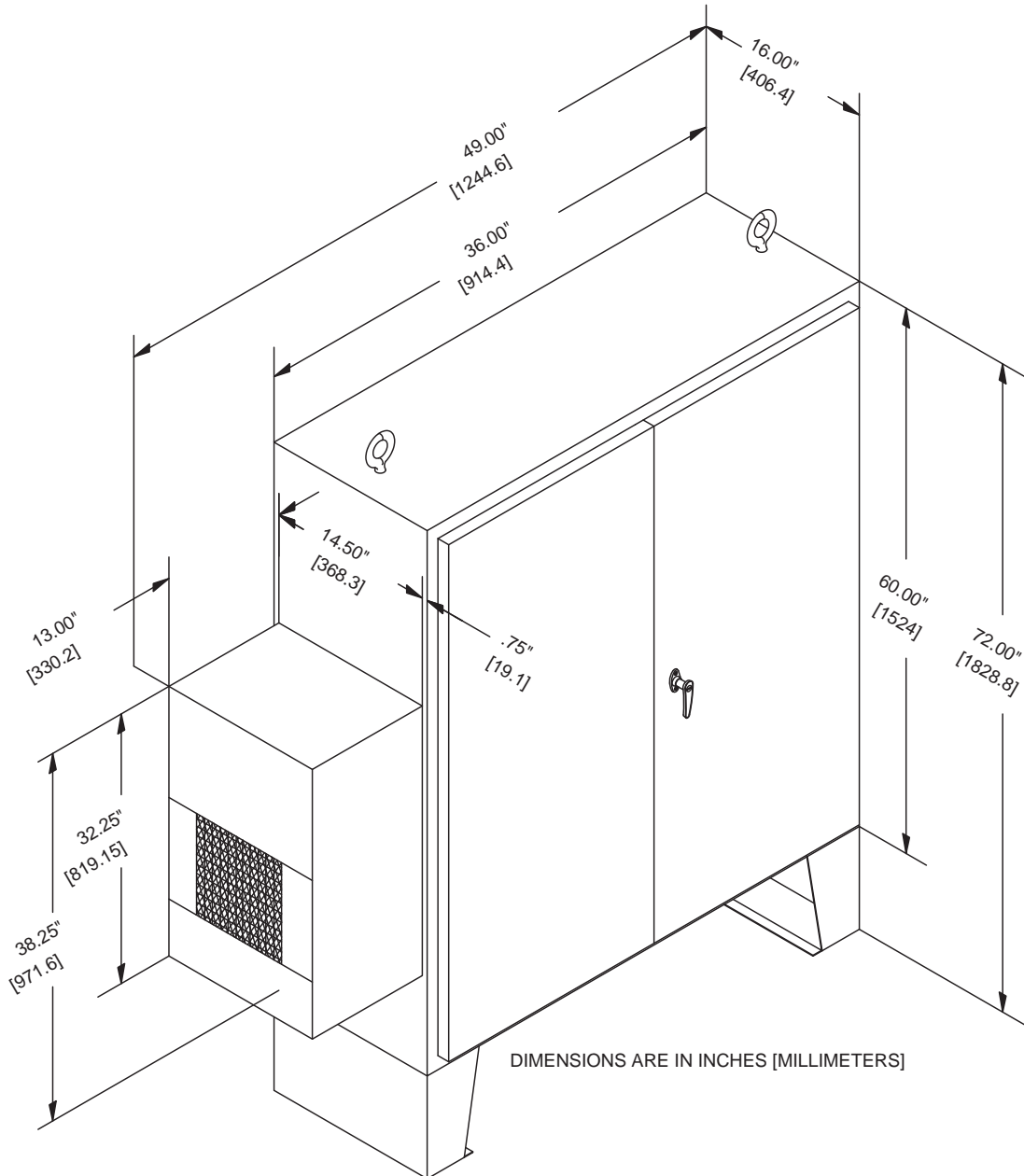


- Part Number: 15-09-0136 (See figure 16.8)
- Enclosure Dimensions (inch [mm]): 84.6 [2148.8] H X 37.6 [955] W X 24.6 [624.8] D
- AC Dimensions (1000 to 4000 BTU) 32.25 [819.15] H X 14.5 [368.3] W X 13 [330.2] D
- AC Dimensions (4000 to 8000 BTU) 37.75 [958.85] H X 18.56 [471.43] W X 18 [457.2] D
- Weight full (lbs. [kg]): 900 - 1000 [408.2 - 453.6] approximate (depends on product)

NEMA 4X

Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust, rain, splashing water and hose-directed water; undamaged by the formation of ice on the enclosure. NOTE: A cooling system may be required for some types of controllers (see dimensions below).

Figure 16.8 NEMA 4X Enclosure



- Part Number: 15-09-0145 (See figure 16.9)
- Enclosure Dimensions (inch [mm]): 72 [1828.8] H X 36 [914.4] W X 16 [4.6.4] D
- AC Dimensions (1000 to 4000 BTU) 32.25 [819.15] H X 14.5 [368.3] W X 13 [330.2] D
- AC Dimensions (5000 BTU) 32.875 [832.03] H X 12.5 [317.5] W X 9.5 [241.3] D
- Weight full (lbs. [kg]): 800 - 900 [362.8 - 408.2] approximate (depends on product)

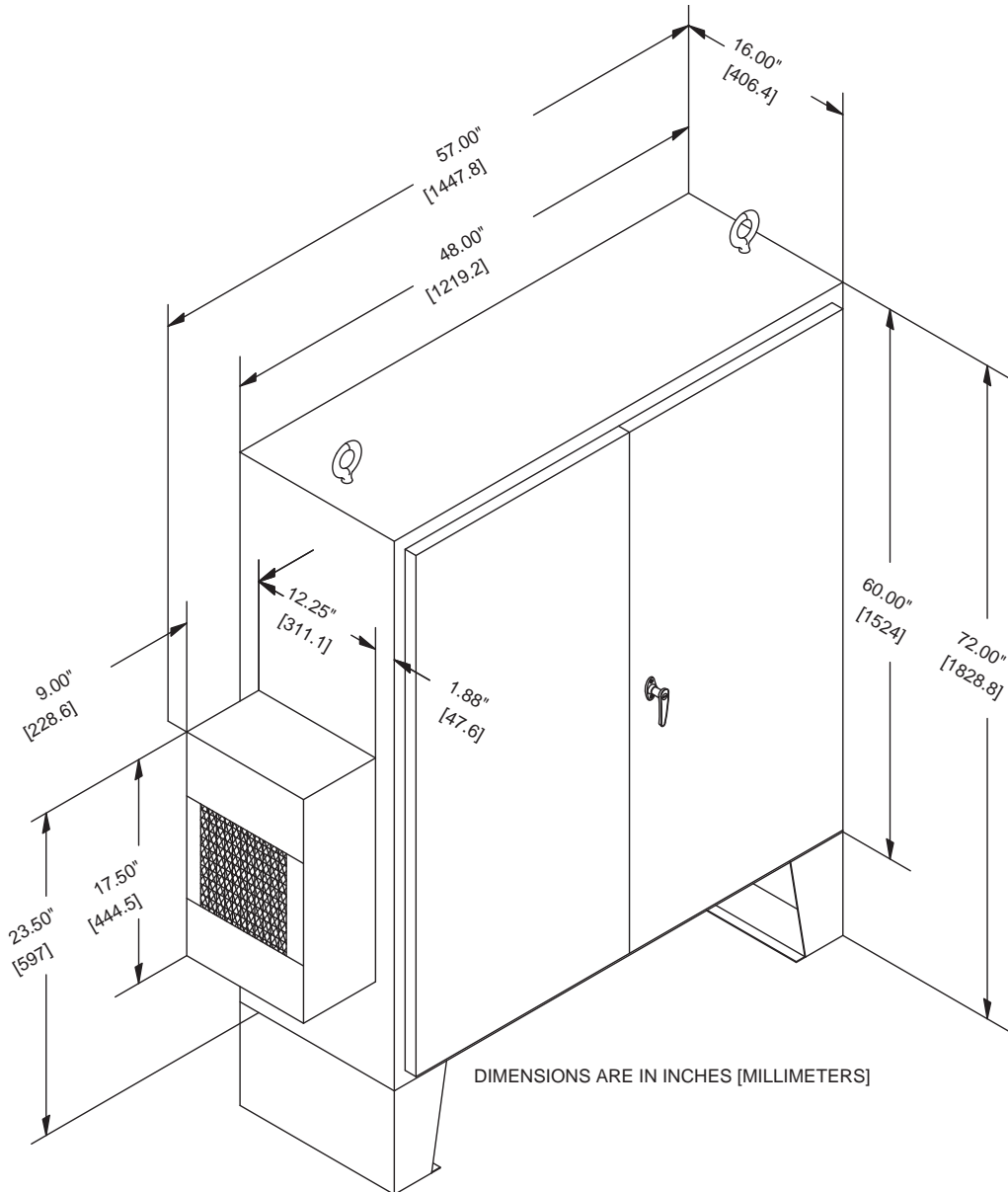
NEMA 12

Enclosures are intended for indoor use primarily to provide a degree of protection against dust, falling dirt and dripping noncorrosive liquids.

Note

A cooling system may be required for some types of controllers (see dimensions below).

Figure 16.9 NEMA 12 Enclosure



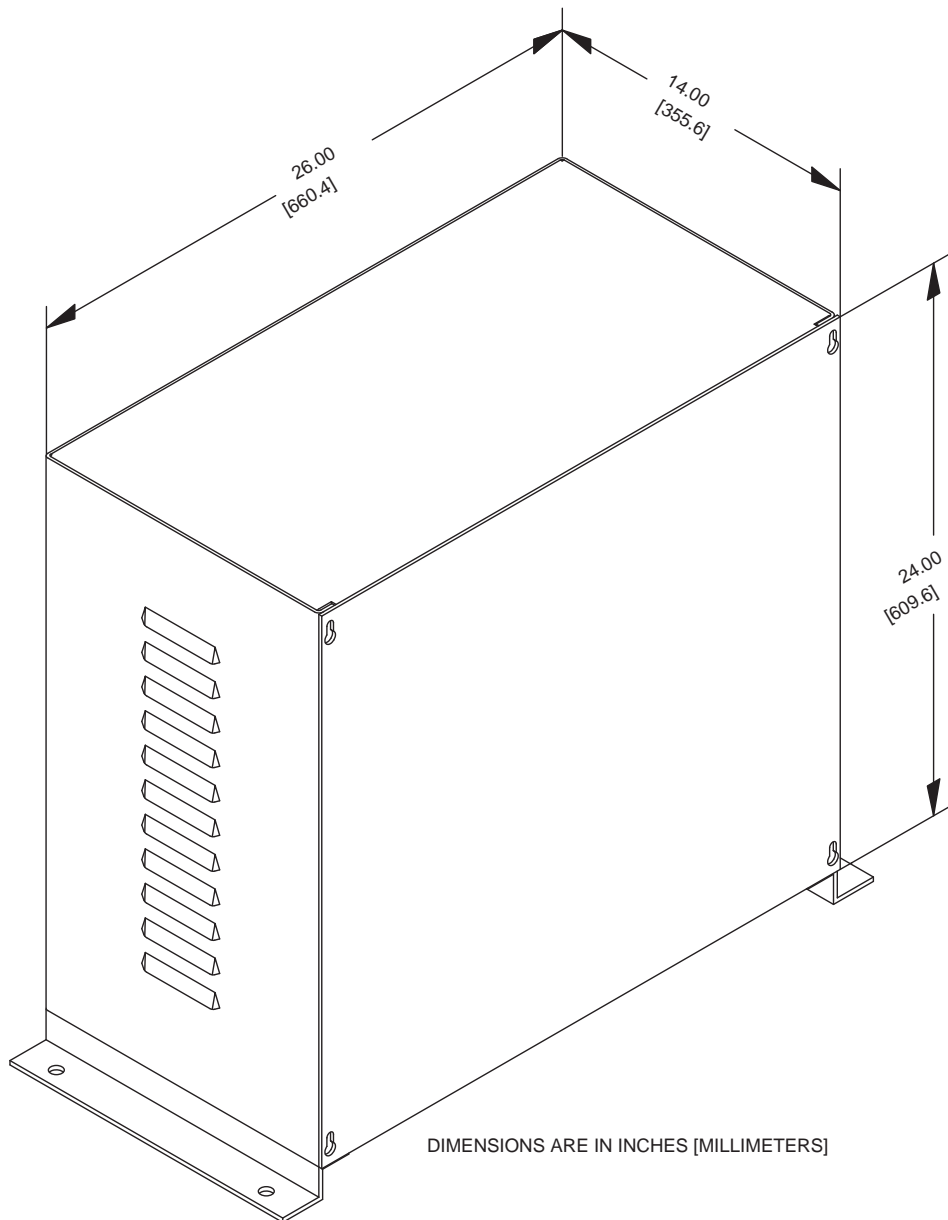
- Part Number: 15-09-0056-W (See figure 16.10)
- Enclosure Dimensions (inch [mm]): 72 [1828.8] H X 48 [1219.2] W X 16 [406.4] D
- AC Dimensions (1000 to 2000 BTU) 17.5 [444.5] H X 12.25 [311.1] W X 9 [228.6] D
- AC Dimensions (2000 to 5000 BTU) 32.875 [832.03] H X 12.5 [317.5] W X 9.5 [241.3] D
- Weight full (lbs. [kg]): 800 - 900 [362.8 - 408.2] approximate (depends on product)

Group Dispatcher (IOS) Overlay Enclosure
 (see Hydraulic Enclosure)

Filter Enclosures

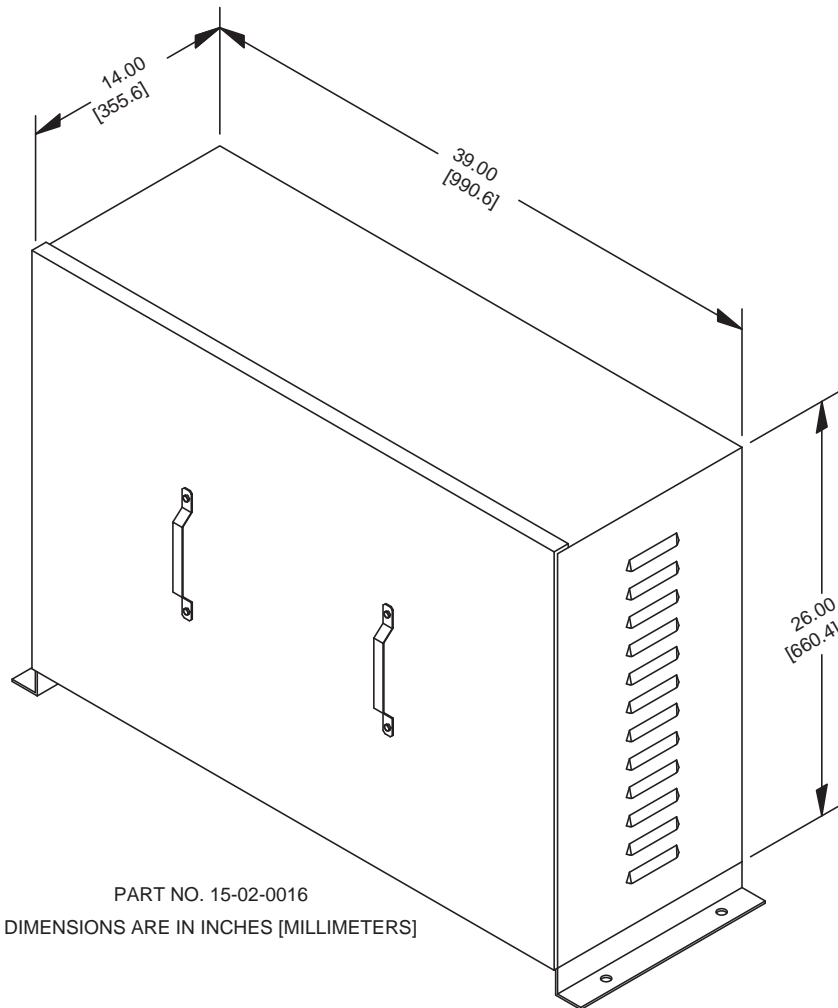
Primarily used for 6-pulse and 12-pulse filters, these are steel enclosures with an aluminum or steel sub-plate, louvered sides, and a removable door with front access only.

Figure 16.10 Filter Enclosure



- Part Number: 15-09-0050 (See figure 16.11)
- Enclosure Dimensions (inch [mm]): 24 [609.6] H X 26 [660.4] W X 14 [355.6] D
- Weight full (lbs. [kg]): 100 - 200 [45.3 - 90.7] approximate (depends on product)

Figure 16.11 Filter Enclosure



- Part Number: 15-02-0016 (See figure 16.12)
- Enclosure Dimensions (inch [mm]): 26 [660.4] H X 39 [990.4] W X 14 [355.6] D
- Weight full (lbs. [kg]): 200 - 300 [90.7 - 136] approximate (depends on product)

Landing System Physical Specifications

LS-STAN Specifications

Refer to Figure 16-13 for LS-STAN.

Sensor

A vane operated infrared proximity switch manufactured by MCE.

- Part Number: VS-1
- Dimensions (inch [mm]): 1.92 [48.77] H X 1.93 [49.02] W X 1.95 [49.53] D
- Opening Dim. (inch [mm]): 0.75 [19.05] W X 1.12 [28.45] D

Power Supply

- Part Number: PS-5A or PS-7A
- Dimensions (inch [mm]): 1.032 [26.21] H X 4.5 [114] W X 3 [76.2] D

Enclosure

The LS-STAN has a steel enclosure with a rear access screw cover for sensor adjustment; it has five separately adjustable sensor lanes and slots for adjustability in mounting on the car top.

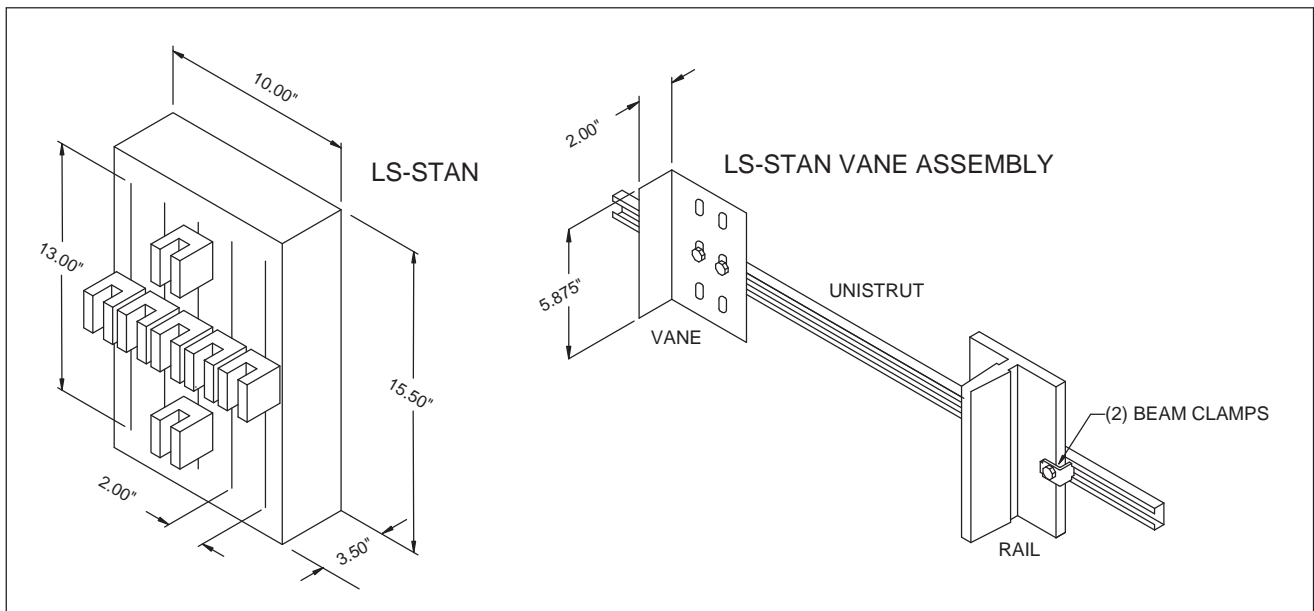
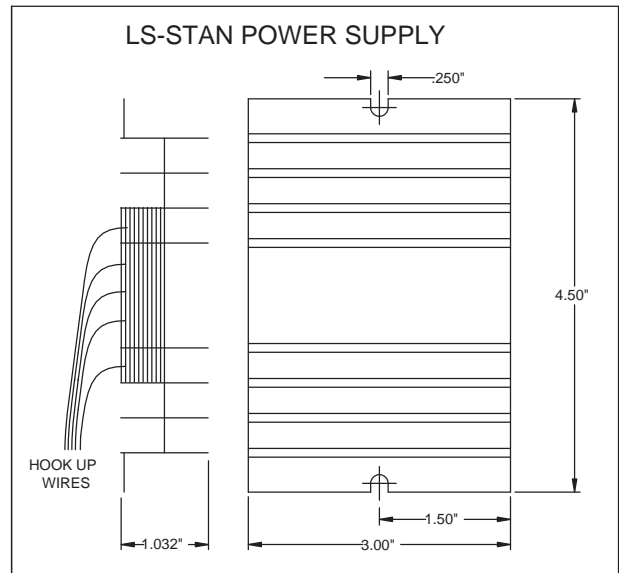
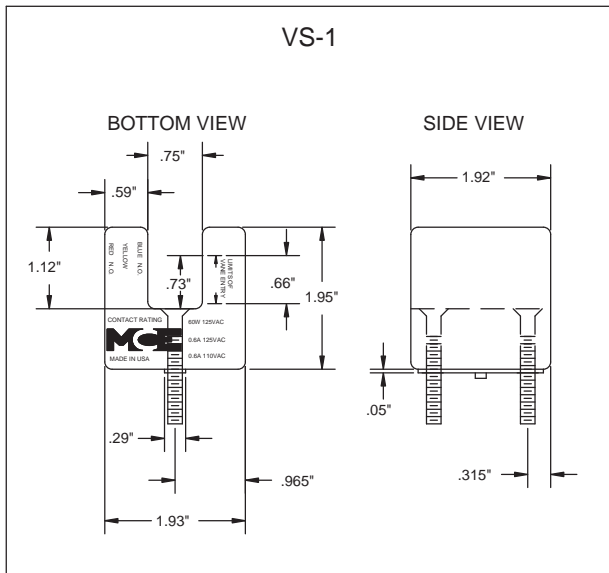
- Part Number: 15-07-0001
- Dimensions (inch [mm]): 16.5 [393.7] H X 10 [254] W X 3.5 [88.9] D
- Weight (lbs. [kg]): 11 [5.0] approximately (assembled)

Vane Assembly

The P4-VANE-12# is used for 12 lb. rails or smaller, the P4-VANE-15# is used for 15 lb. or 18 lb. rails and P4-VANE-30# is used for 22 or 30 lb. rails; they include the mounting hardware and Unistrut. The vanes are mounted on a P6000 or P7000 Unistrut, are 24" in length, and include rail clips and mounting hardware.

- Part Number: P4-VANE-12#, P4-VANE-15# or P4-VANE-30#
- Vane Dim. (inch [mm]): 5.875 [149.23] H X 2 [50.8] W X 3.80 [96.52] D

Figure 16.12 LS-STAN



LS-QUAD-2 Specifications

Magnetic Sensor

A magnetically operated switch manufactured by MCE.

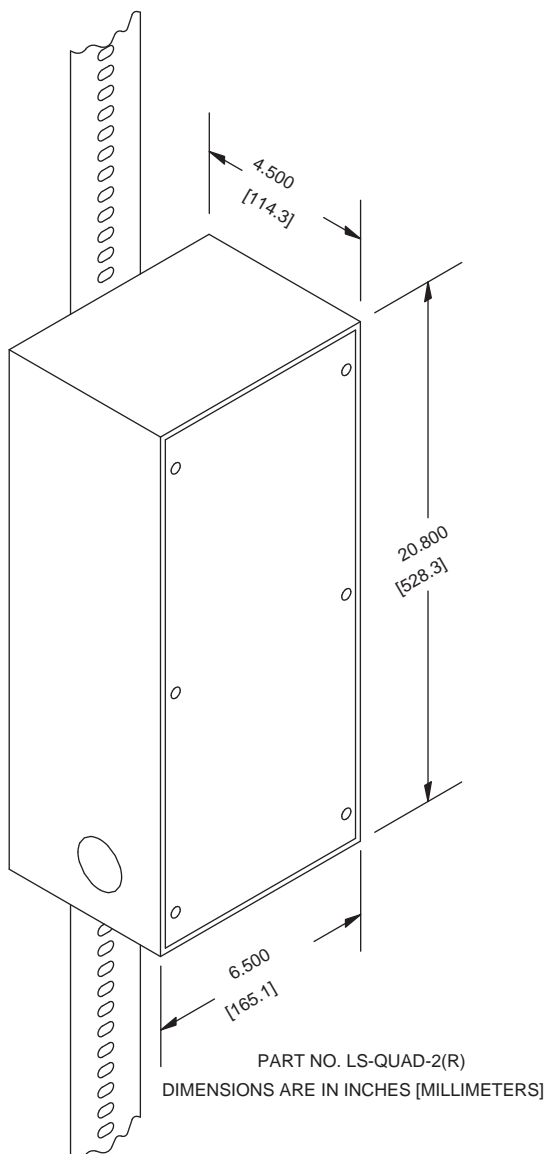
- Part Number: LS-PS1
- Dimensions (inch [mm]): 0.75 [19.05] bushing and 42 [1066.8] wire

Enclosure

The LS-QUAD-2 has a steel enclosure with a rear access screw cover for sensor adjustment and has an aluminum front plate for sensor mounting.

- Part Number: 15-07-0007
- Dimension (inch [mm]): 20.8 [528.3] H X 6.5 [165.1] W X 4.5 [114.3] D
- Weight (lbs. [kg]): 14 [6.36] approximately (assembled)

Figure 16.13 LS-QUAD-2 Enclosure (Rear View)



Encoder

The encoders are mounted on the face plate of the LS-QUAD-2. The passage of the steel tape in front of the encoder optics interrupts beams of light to provide position and speed information for the pattern generator.

Tape

The tape is perforated with slotted holes.

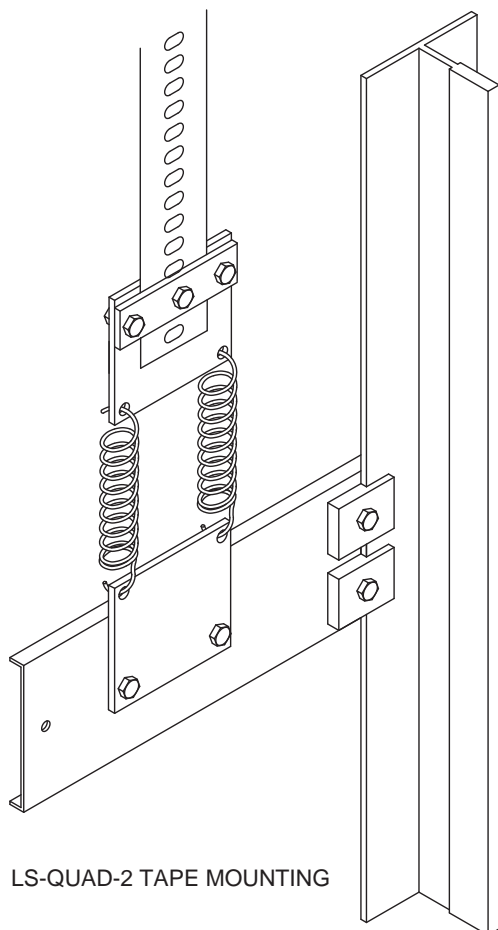
- Part Number: 40-10-0003
- Dimensions (inch [mm]): 3.11 [78.99] W X. 12 [3.05] thick
- Hole Dim. (inch [mm]): 0.375 [9.53] H X.625 [16.88] W with 0.75 [19.05] center to center
- Weight (lbs./ft. [kg/m]): 0.1875 [.280]

Tape Mounting

Top and bottom bracket assemblies and mounting hardware are included

- Part Number: TAPE-MT-QUAD

Figure 16.14 LS-QUAD-2 Bottom Tape Mounting



LS-QUTE Specifications

Magnetic Sensor

A magnetically operated switch manufactured by MCE.

- Part Number: LS-PS1
- Dimensions (inch [mm]): 0.75 [19.05] bushing and 42 [1066.8] wire

Enclosure

The LS-QUTE has a steel enclosure with a rear access screw cover for sensor adjustment and has an aluminum plate for sensor mounting.

- Part Number: 15-07-0005
- Dimensions (inch [mm]): 12 [304.8] H X 5 [127] W X 3 [76.2] D
- Weight (lbs. [kg]): 2.0 [.908] approximately (assembled)

Tape

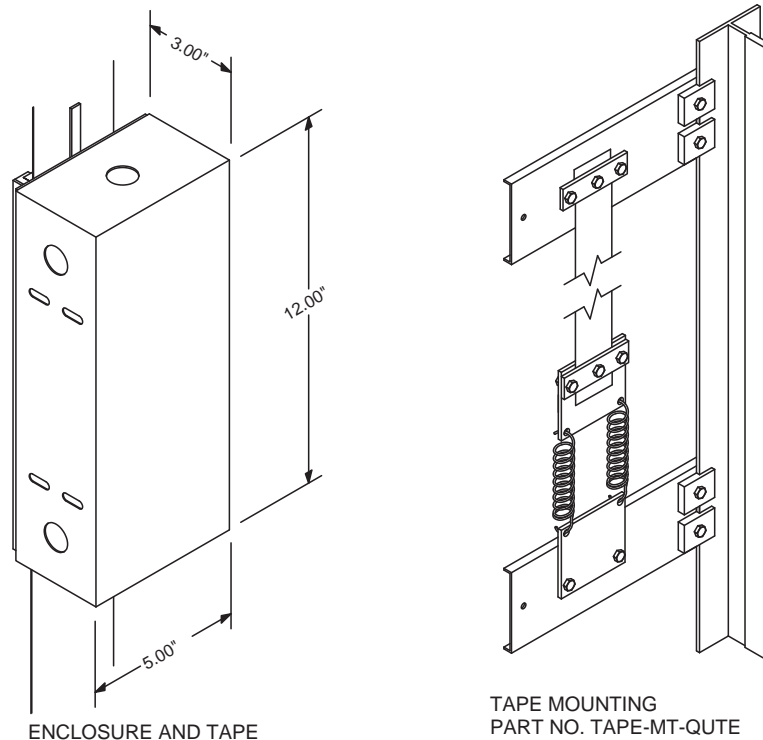
- Part Number: 40-10-0002-B
- Dimensions (inch [mm]): 3.11 [78.99] W X 12 [3.05] thick
- Weight (lbs/ft. [kg/m]): 0.1875 [.280]

Tape Mounting

Top and bottom bracket assemblies and mounting hardware are included

- Part Number: TAPE-MT-QUTE

Figure 16.15 LS-QUTE Components



LS-QUIK Specifications

Sensor

A vane operated infrared proximity switch manufactured by MCE.

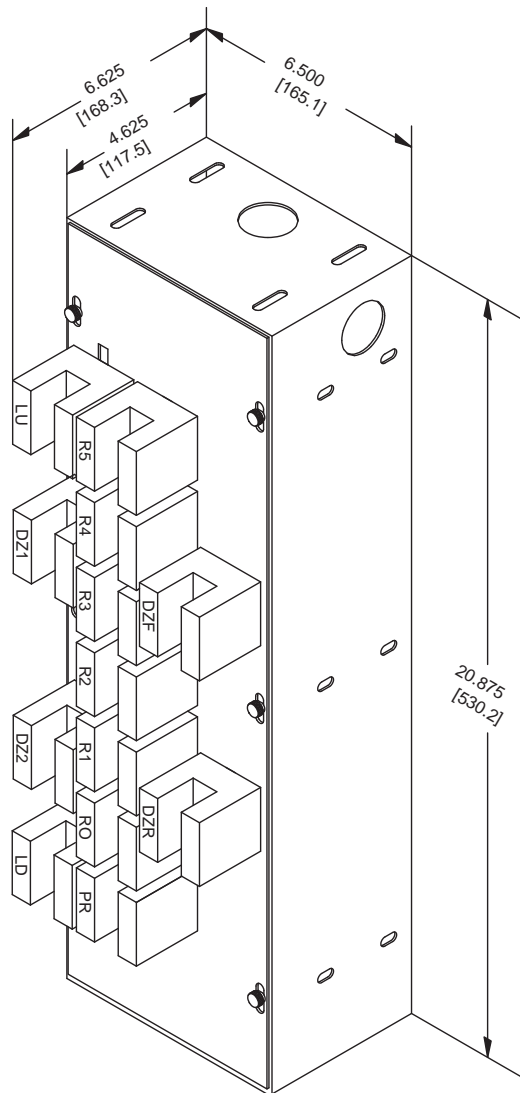
- Part Number: VS-1 (See figure 16.13)

Enclosure

The LS-QUIK has a steel enclosure with a rear access screw cover for sensor adjustment and has a steel front plate for sensor mounting.

- Part Number: 15-07-0006
- Dimensions (inch [mm]): 20.875 [530.225] H X 6.5 [165.1] W X 6.625 [168.275] D
- Weight (lbs. [kg]): 14 [6.36] approximately (assembled)

Figure 16.16 LS-QUIK Enclosure

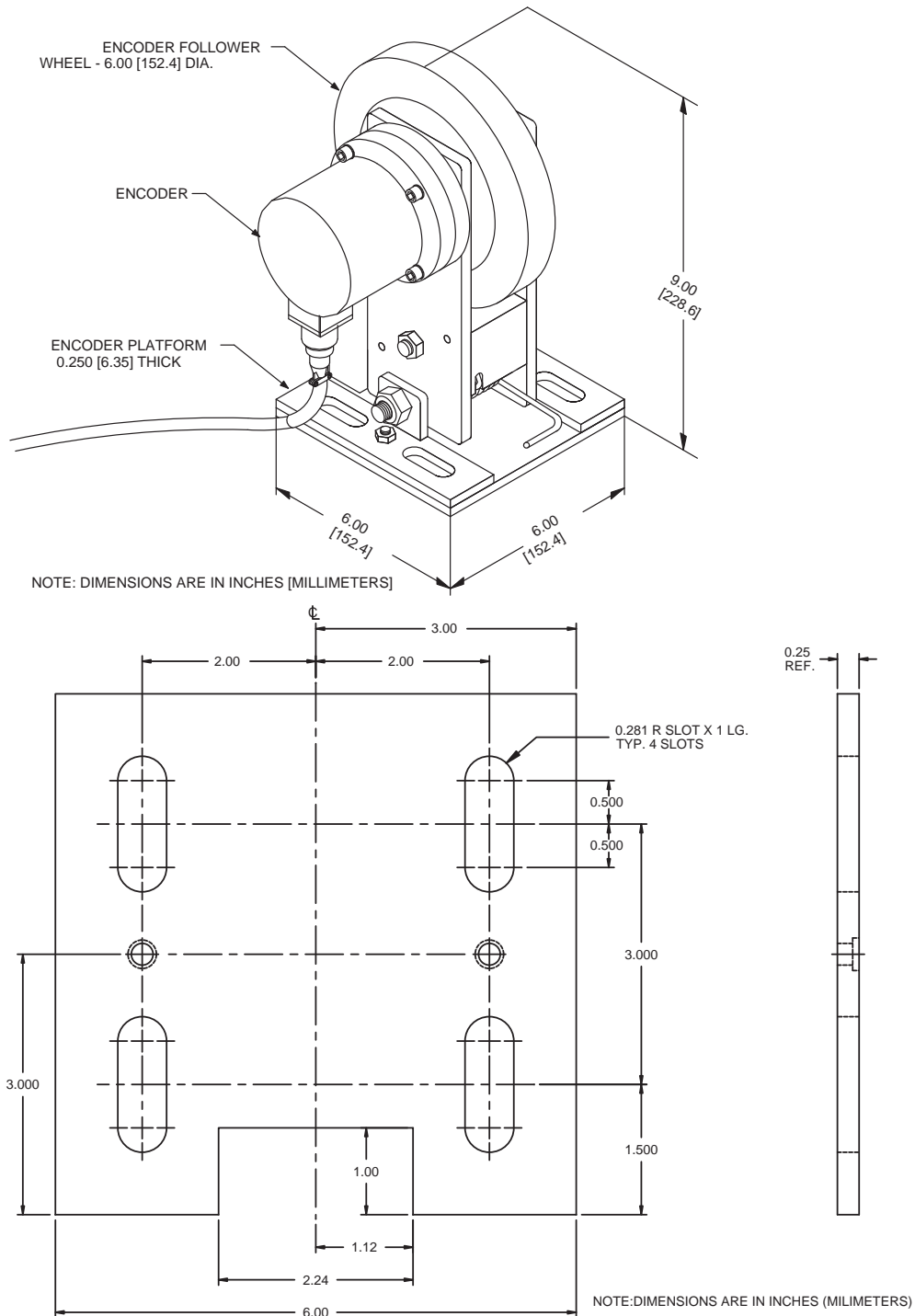


Encoder

The encoder and follower wheel are mounted on the encoder base plate. The encoder base plate is mounted above the car roller guide assembly. A spring applies pressure to the follower wheel to ensure proper contact with the guide rail.

- Part Number: LSQK-ENCDR
- Part Number: 11-02-0003 Encoder Base Plate

Figure 16.17 LS-QUIK Wheel Driven Encoder Assembly

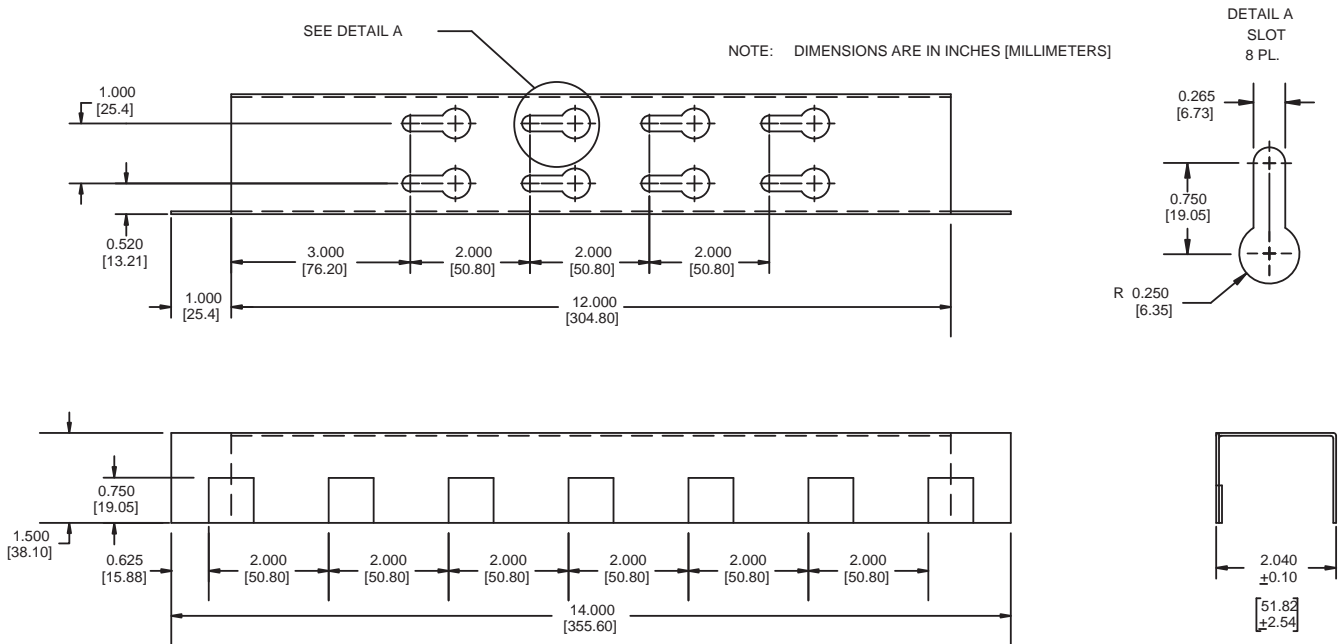


LS-QUIK Vane

This vane is used for absolute floor encoding, as well as door zone and leveling. The vane has break-out tabs that are removed to encode the various floors.

- Part Number: 40-05-0010

Figure 16.18 LS-QUIK Vane



Isolated Platform Load Weigher

The isolated platform load weigher consists of the following:

- Part Number: LW-SA-1 Sensor Assembly
- Part Number: 40-02-0094 Target Brackets (2 each)
- Part Number HC-LWIPA Enclosure Assembly

Figure 16.19 Isolated Platform Load Weigher

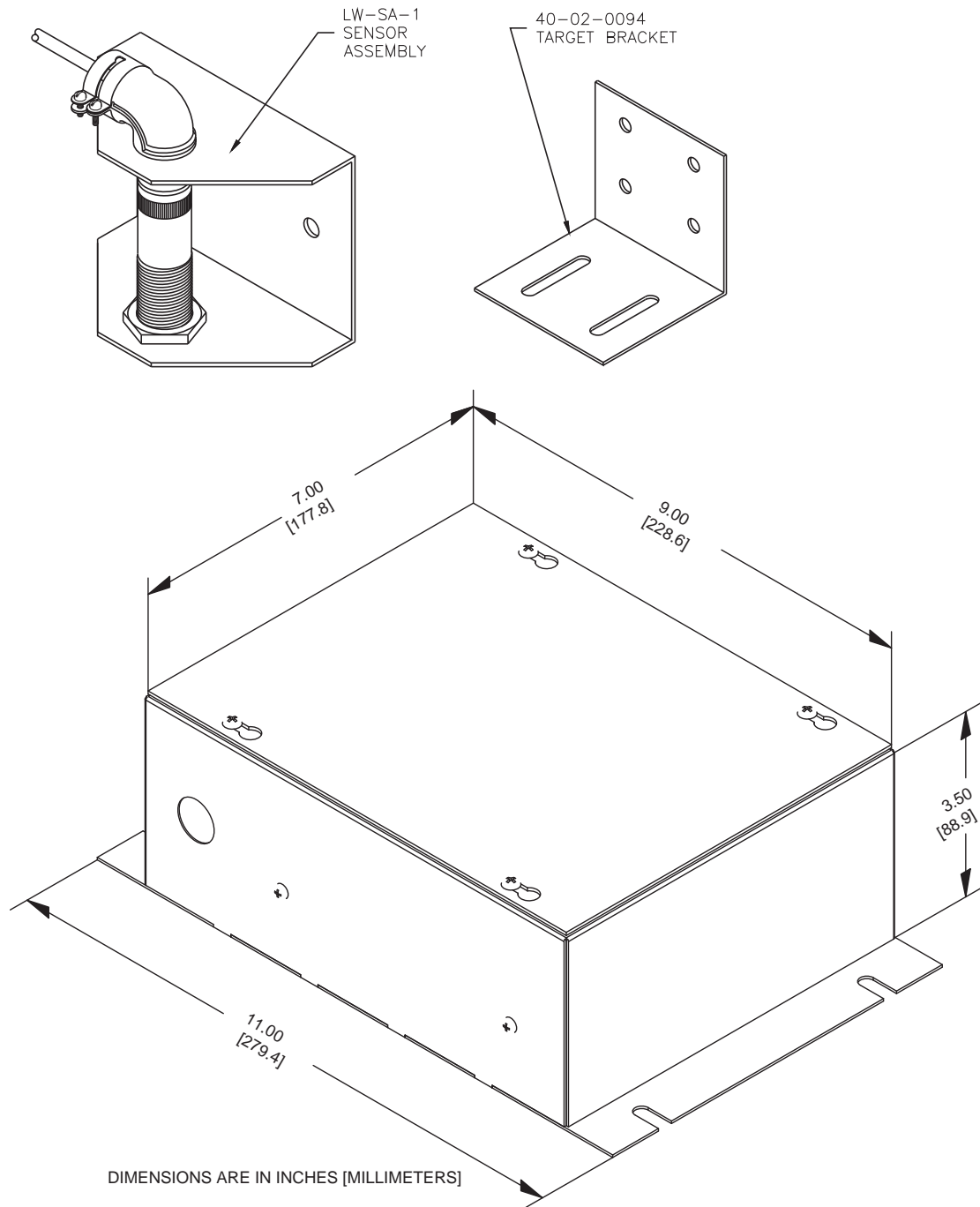
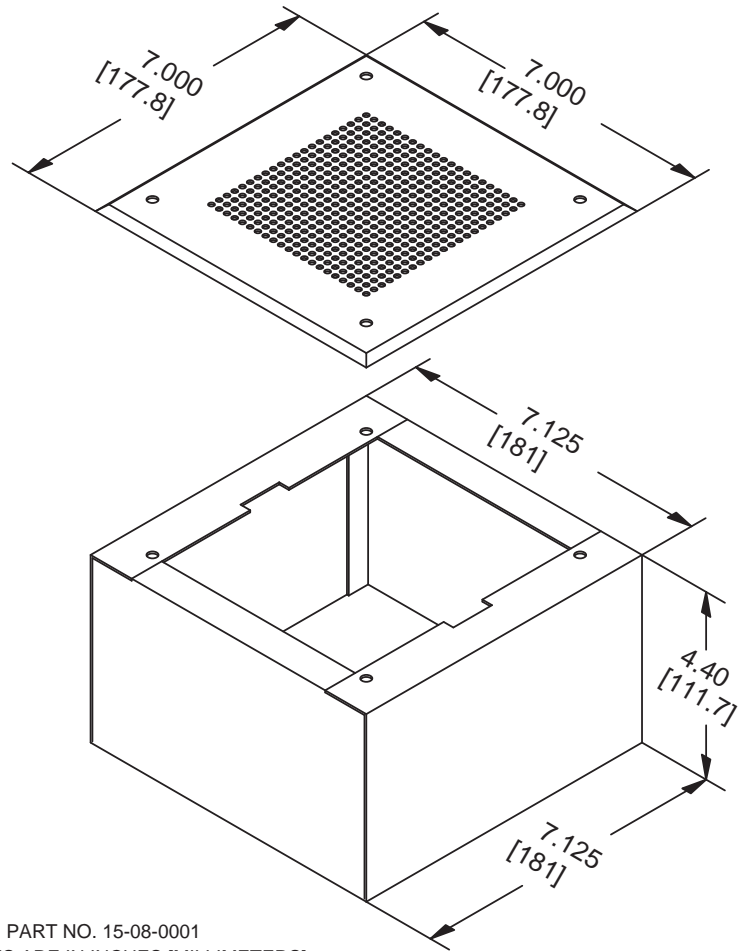


Figure 16.20 Speaker Enclosure (White)



PART NO. 15-08-0001
DIMENSIONS ARE IN INCHES [MILLIMETERS]

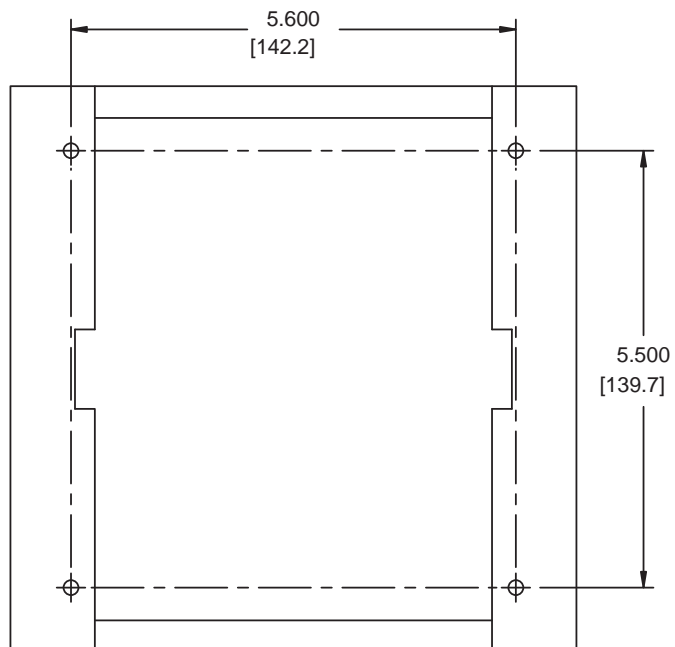
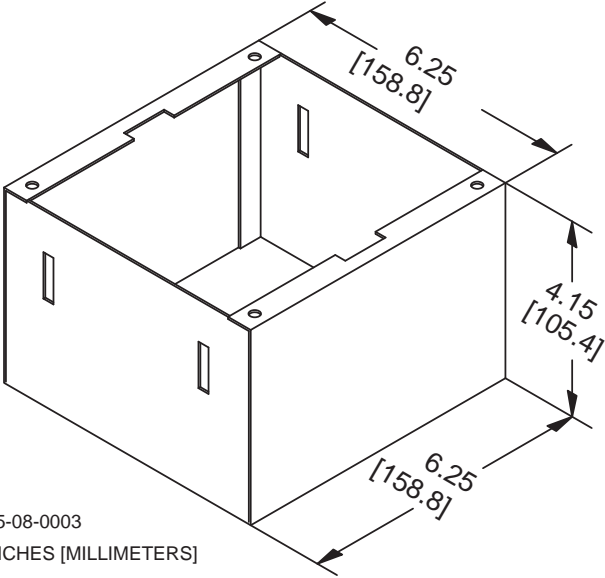
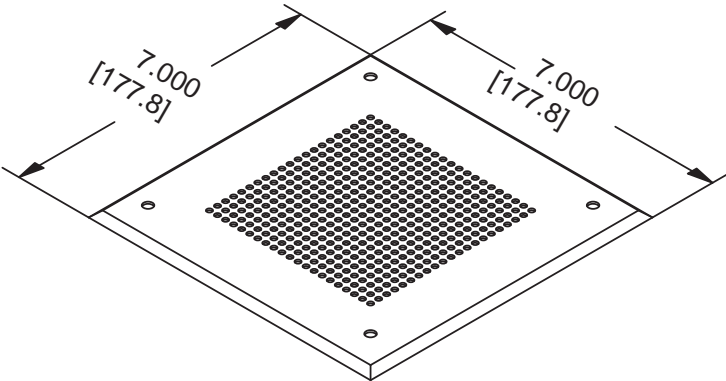




Figure 16.21 Speaker Enclosure, Black



PART NO. 15-08-0003
DIMENSIONS ARE IN INCHES [MILLIMETERS]

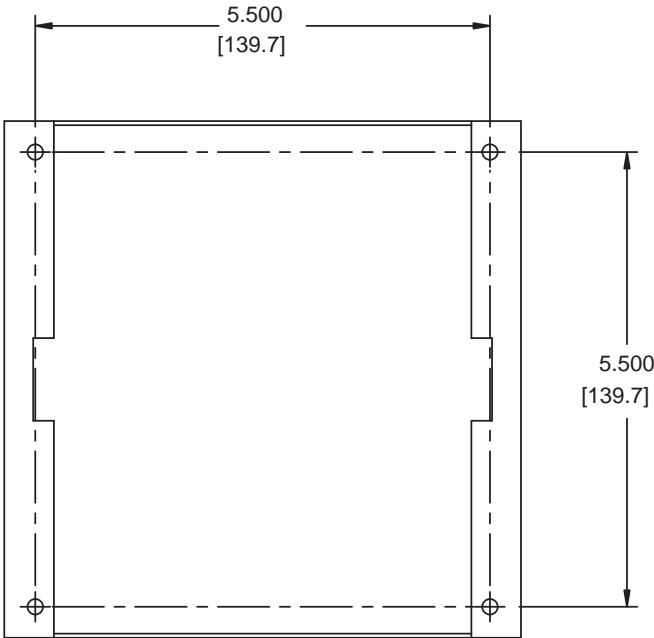
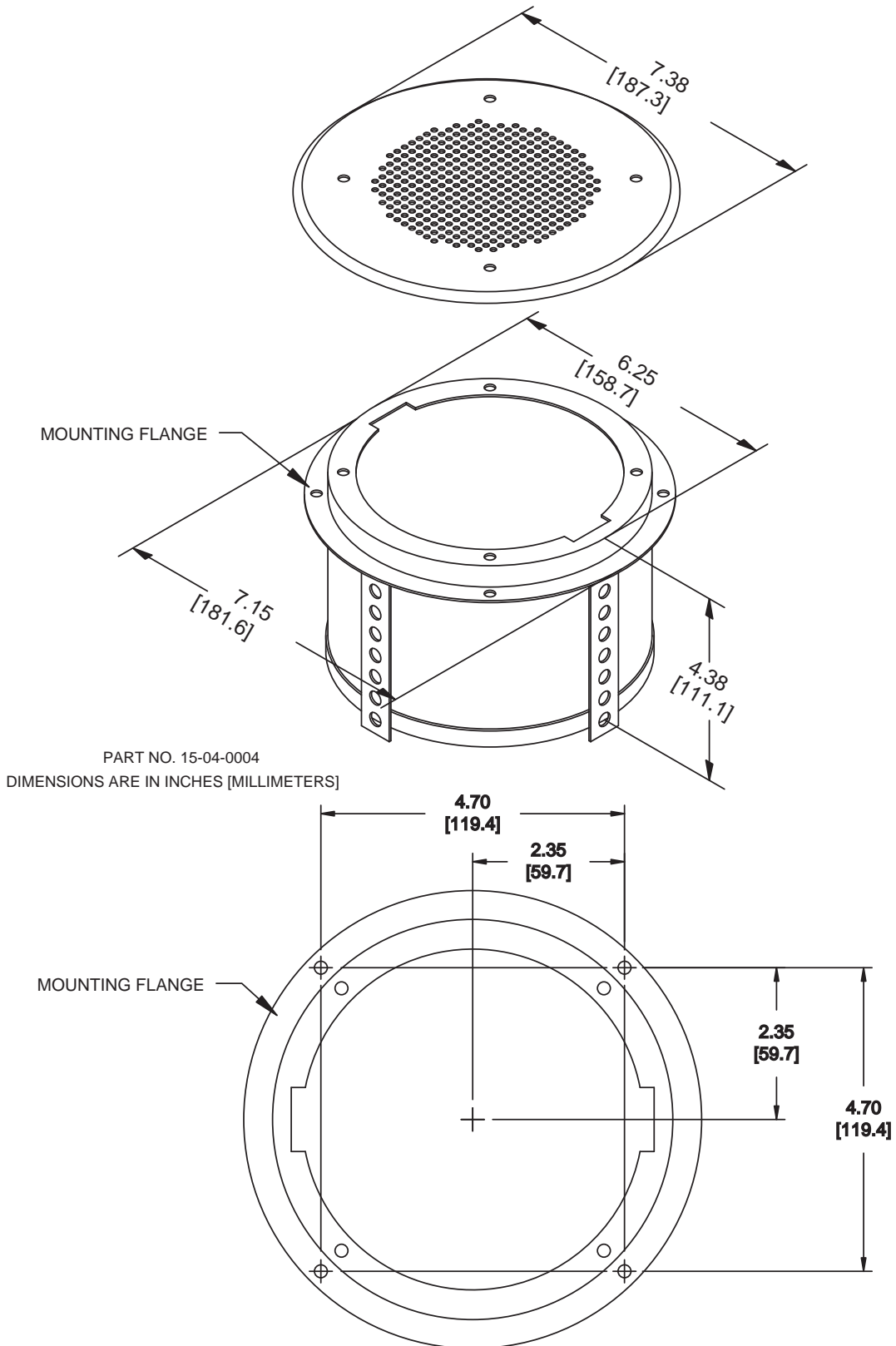


Figure 16.22 Speaker Enclosure

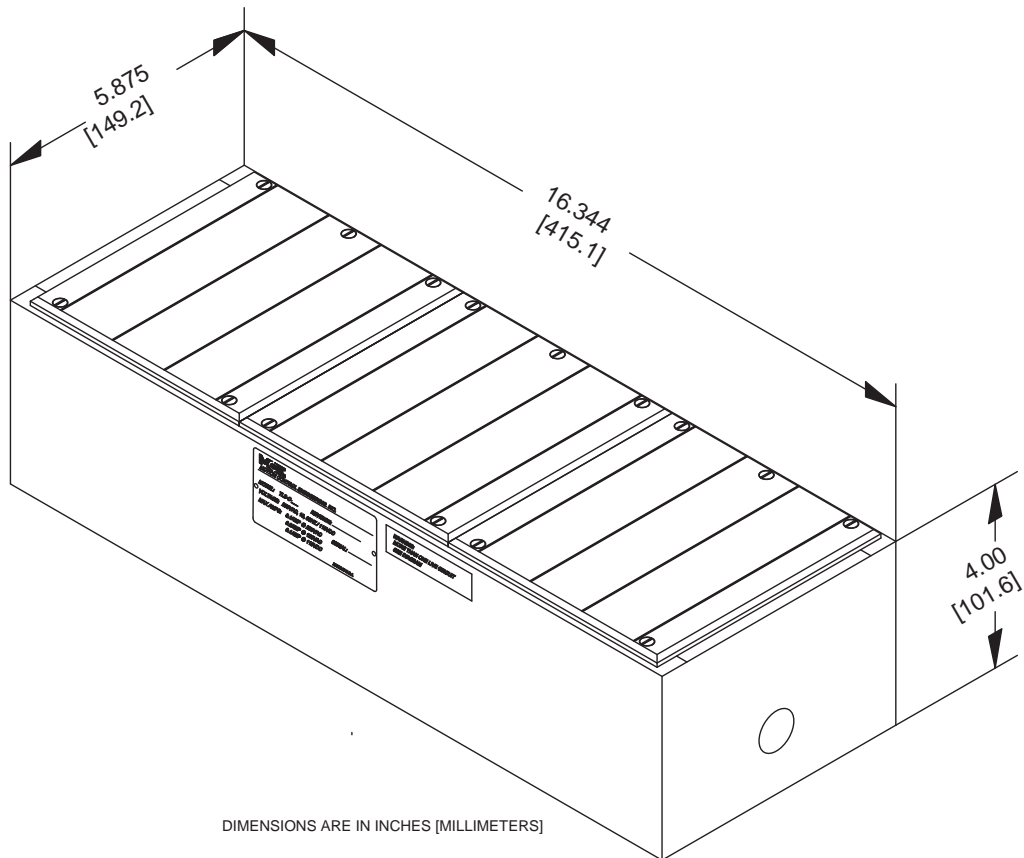


TLS Terminal Limit Switches

TLS-C-12 and TLS-C-16 are cartop mounted, magnetically operated switch arrays. TLS-1 is an individually sealed, magnetically operated switch mounted on its own bracket.

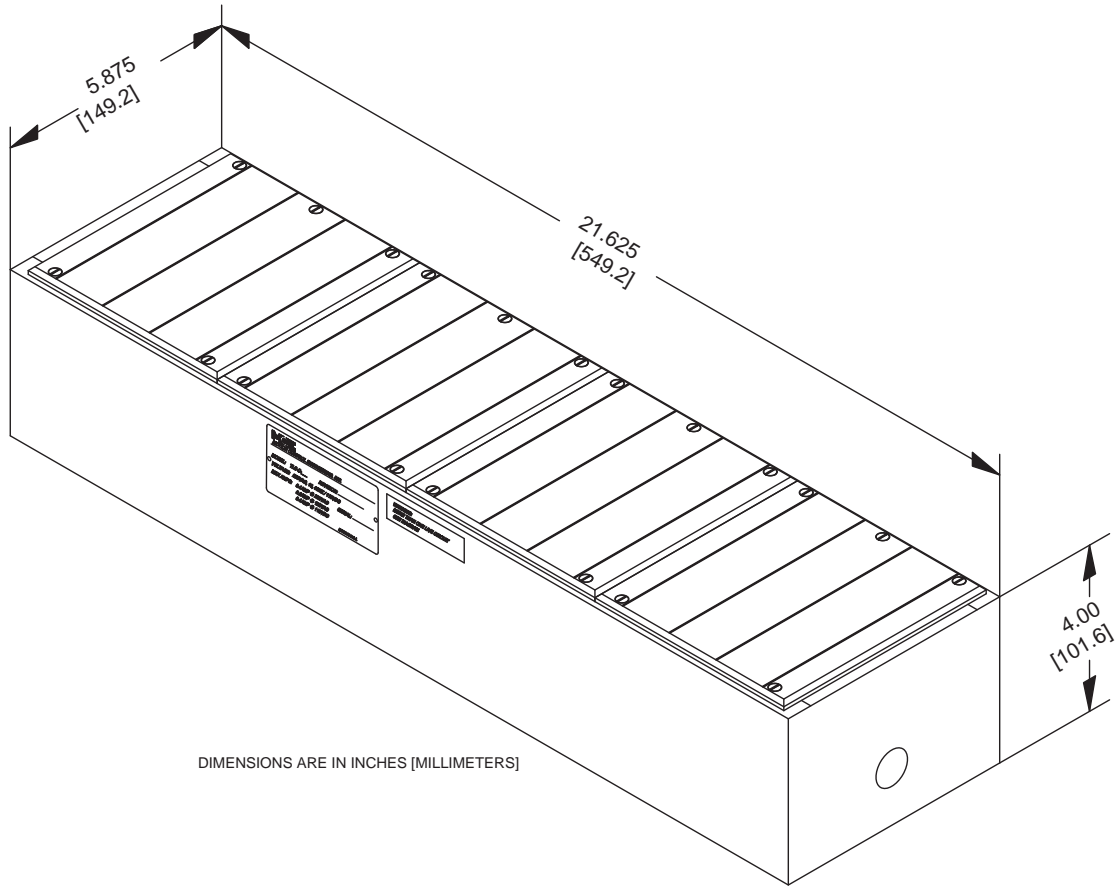
- Part Number: TLS-C-12
- Dimensions (inch [mm]): 16.344 [415.1] L X 5.875 [149.2] W X 4 [101.6] D

Figure 16.23 TLS-C-12 Terminal Limit Switches



- Part Number: TLS-C-16
- Dimensions (inch [mm]): 21.625 [549.2] L X 5.875 [149.2] W X 4 [101.6] D

Figure 16.24 TLS-C-16 Terminal Limit Switches



- Part Number: TLS-1

Figure 16.25 TLS-1 Terminal Limit Switches

