

NEMA Manual Starting Switch Specifications

Bulletin Numbers 600, 609, 609U

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Additional Resources




These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, http://www.ab.com	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.



Manual Motor Starters

			
Bulletin	600	609	609U
Features	<ul style="list-style-type: none"> • Single-phase switch • Used on compressors, fans, pumps, and table saws 	<ul style="list-style-type: none"> • Single- and three-phase switches • Contact position indicator • Locking feature • Reversing and 2-speed 	<ul style="list-style-type: none"> • Single- and three-phase switches • Contact position indicator • Locking feature • Undervoltage protection
Type of Operator 1-Phase Motor Voltage Push Button/ Toggle Lever/ Key	<p>Single Pole: 115...230V AC (1 Hp)</p> <p>Two Pole: 115...230V AC (1 Hp)</p>	115...230V AC, 60 Hz (1...5 Hp)	115...230V AC, 60 Hz (1...5 Hp)
Type of Operator 3-Phase Motor Voltage Push Button / Toggle Lever	—	115...230V AC, 60 Hz (3...10 Hp)	115...230V AC, 60 Hz (3...10 Hp)
Enclosures NEMA Type	1, 4, 7 & 9	1, 3R, 4/4X, 7 & 9, and 12	1, 3R, 4/4X, 7 & 9, and 12

Group Fusing

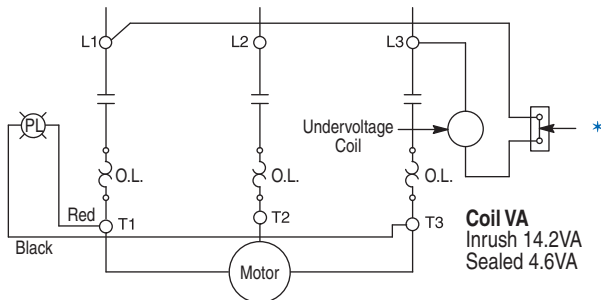
The Bulletin 609 sizes 0 and 1 in Type 1, 4X, and 12 enclosures are UL Listed for group fusing with Class J fuses only. See table below for maximum fuse ratings.

The Bulletin 609U and 609TU Sizes 0 and 1 in Type 1, 4/4X, and 3R/12 enclosures are UL Listed for group fusing with Class J fuses only. See table below for maximum fuse ratings.

Full Load Current of Smallest Motor Amperes [A]	Maximum Fuse Ratings [A]	
	Nominal System Voltages	
	120...240V	480...600V
0.45...2.99	30	30
3.00...6.49	60	30
6.50...18.0	100	—

609U and 609TU Typical Wiring Diagram

(See Applicable Codes and Laws)



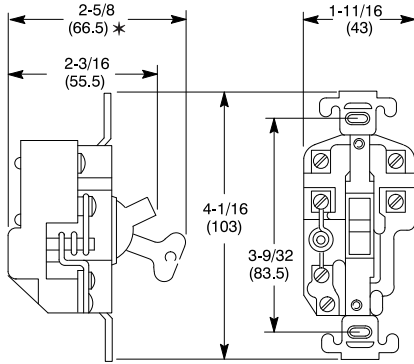
★ Remove Jumper "A" to connect remote stop operator wires to vacated terminals.
Note: Jumper not available on devices in Type 7 and 9 Enclosure.

Approximate Dimensions

600 Single-Phase Manual Starting Switch

Dimensions are shown in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.

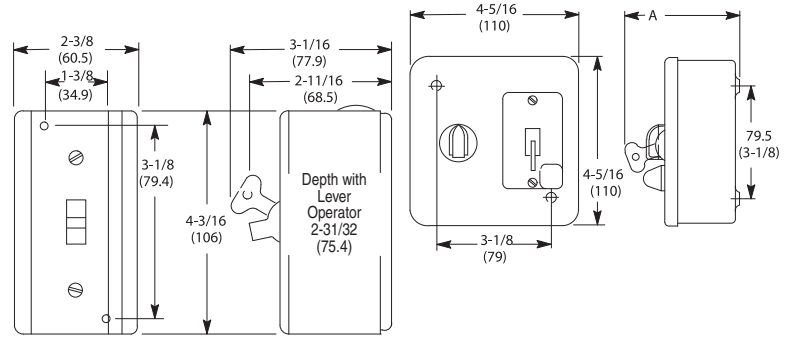
Open Type without Enclosure



Cat. Nos.

600- TOX4 600- TOX109 600- TOX216
 TOX5 TOX110
 TOX49 TOX149

Type 1 General Purpose Enclosure Surface Mounting



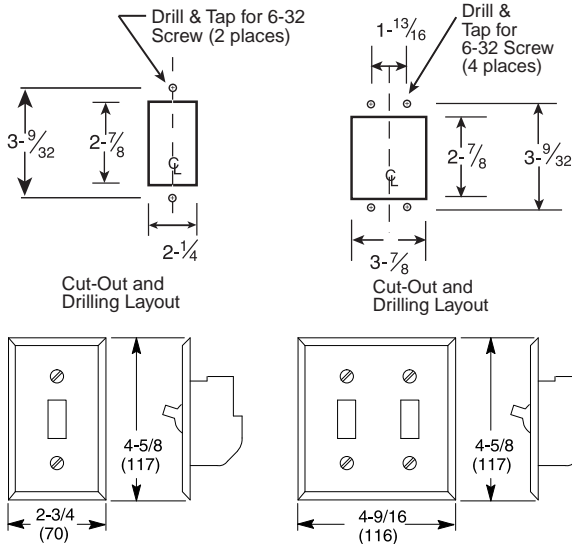
Cat. Nos.

600- TAX4 600- TAX49 600- TAX142
 TAX5 TAX109 TAX145
 TAX9 TAX110 TAX149
 TAX10 TAX142 TAX216

Dimension A in inches (millimeters)

Key Inserted	1-1/8 (79.5)
Selector Switch	2-3/4 (70)
Toggle Operator	2-9/16 (65)

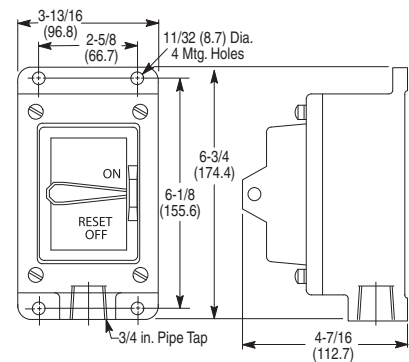
Type 1 General Purpose Enclosure Flush Mounting



Cat. Nos.

600- TQX4 600- TQX49
 TQX5 TQX109
 TQX9 TQX110
 600- TQX142
 TQX144
 TQX216

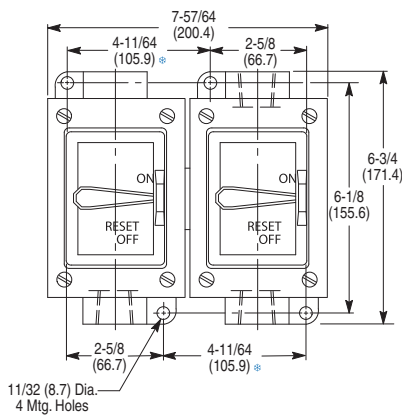
Type 4 Watertight Enclosure; Type 7 and 9 Hazardous Locations Enclosure



Cat. Nos.

600- TCX5 600- TEX5

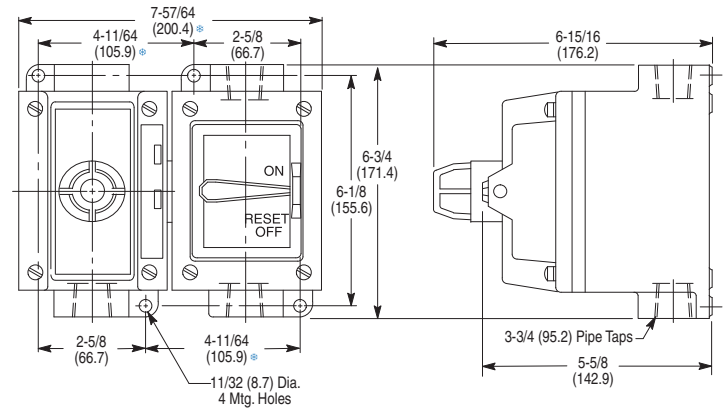
Type 4 Watertight Enclosure, Type 7 & 9



Cat. Nos.

600- TCX9 600- TEX9
 TCX142 TTX10

Type 7 & 9 Hazardous Locations Enclosure



Cat. Nos.

600- TCA7 600- TEA7
 TCD75 TED7

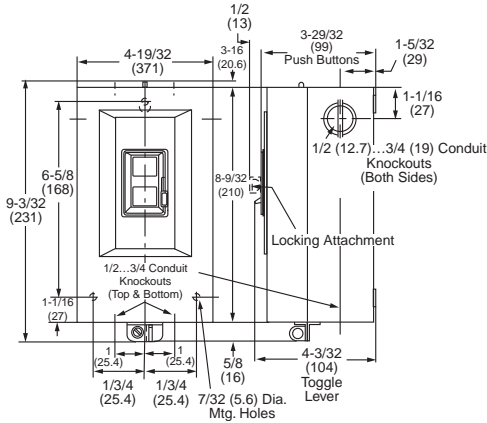
* Lever Type Dimension is 2-17/32 in. (64.5 mm).

* This dimension may vary up to ±1/8 in. (3.2 mm). Mounting holes should be located at time of installation using device as a template.

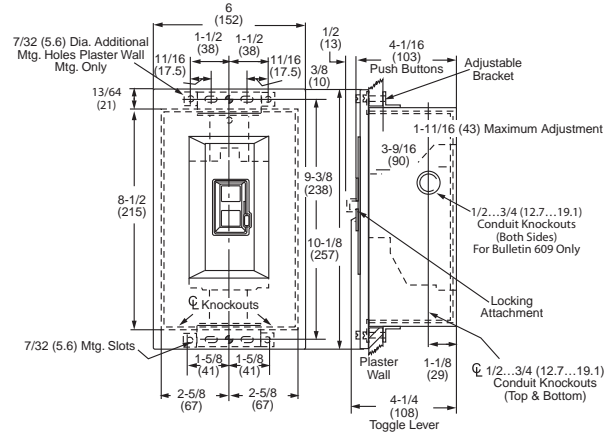
Dimensions are shown in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.

Bulletin 609 – 609U

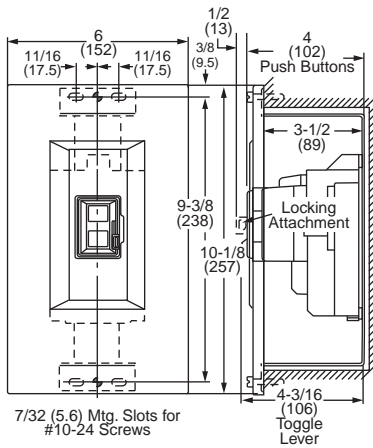
NEMA Type 1



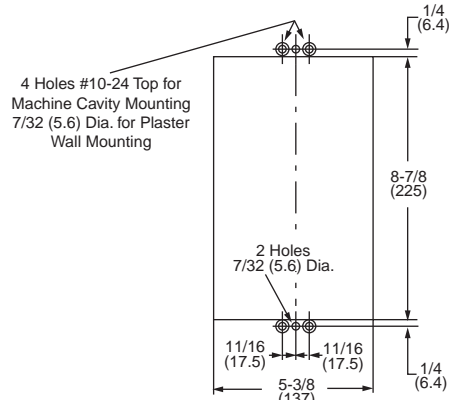
Surface Mounting



Flush Mounting for Plaster Wall

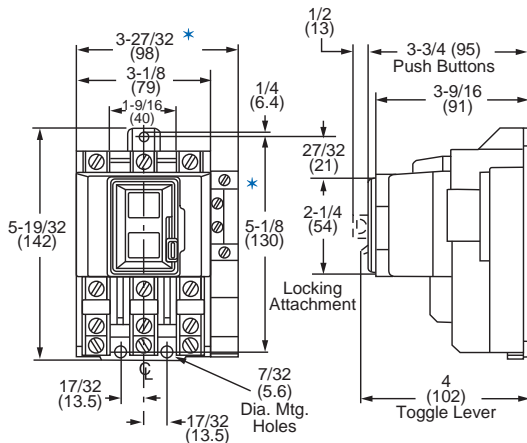


Flush Mounting for Machine Cavity



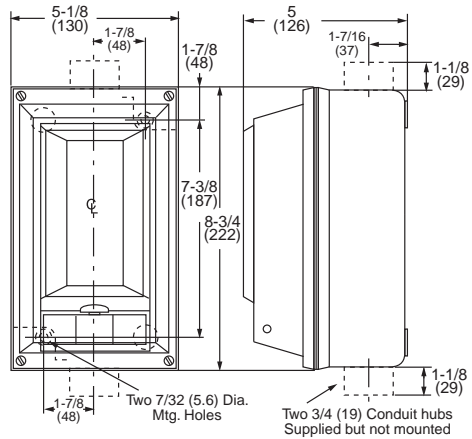
Flush Mounting Cavity and Drilling Layout

Open Type — Without Enclosure



* Undervoltage solenoid applies only to Bulletins 609U and 609TU.

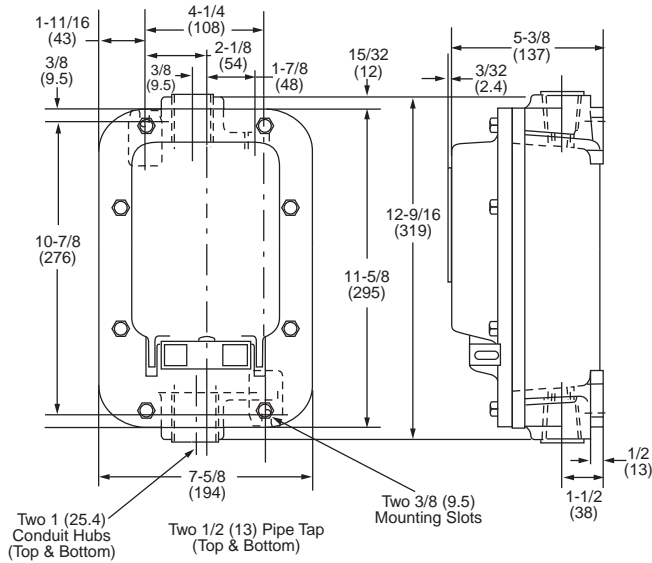
NEMA Type 4/4X



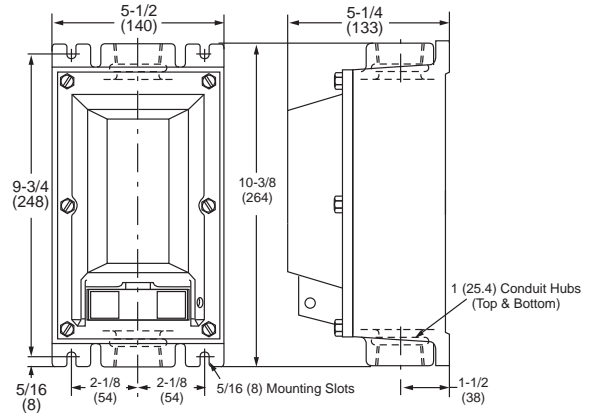
Dimensions are shown in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.

Bulletin 609 – 609U, Continued

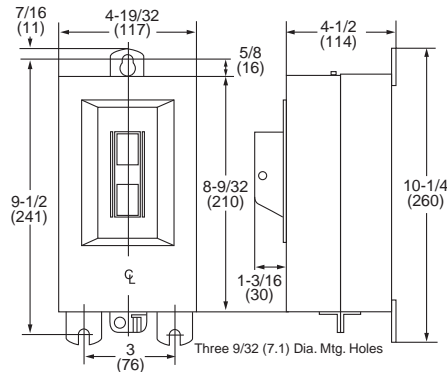
NEMA Type 3R, 7 & 9



NEMA Type 7 & 9

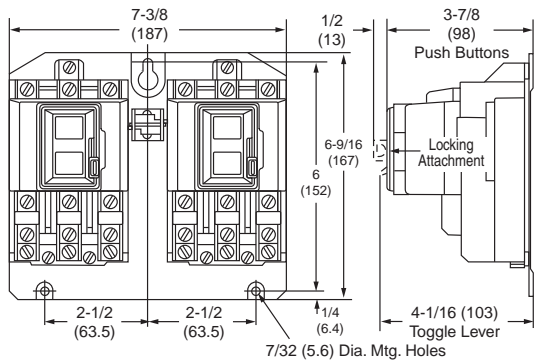


NEMA Type 12

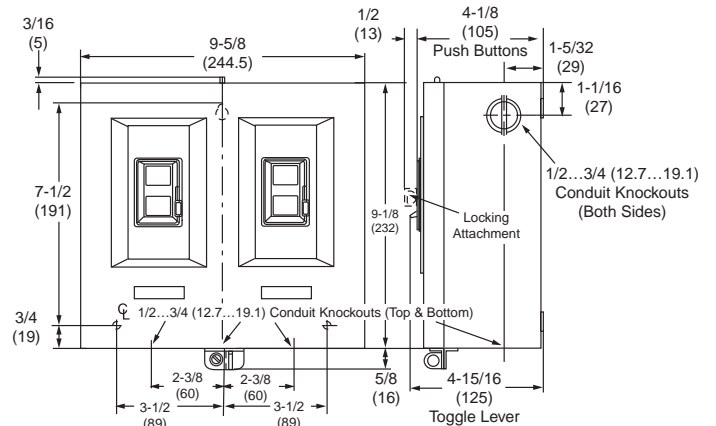


Bulletin 609RS, 609TS

Open Type Without Enclosure



NEMA Type 1



Important User Information

Read this document and the documents listed in the additional resources section about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice.

If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

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