

# 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 <a href="#">1770-4.1</a> | Provides general guidelines for installing a Rockwell Automation industrial system. |
| Product Certifications website, <a href="http://www.ab.com">http://www.ab.com</a>           | 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   |
|---|---|--|--|
| <b>Features</b>   | <ul style="list-style-type: none"> <li>Single-phase switch</li> <li>Used on compressors, fans, pumps, and table saws</li> </ul> | <ul style="list-style-type: none"> <li>Single- and three-phase switches</li> <li>Contact position indicator</li> <li>Locking feature</li> <li>Reversing and 2-speed</li> </ul> | <ul style="list-style-type: none"> <li>Single- and three-phase switches</li> <li>Contact position indicator</li> <li>Locking feature</li> <li>Undervoltage protection</li> </ul> |
| <b>Type of Operator</b><br><b>1-Phase Motor Voltage</b><br>Push Button/ Toggle Lever/ Key | <b>Single Pole:</b><br>115...230V AC (1 Hp)<br><b>Two Pole:</b><br>115...230V AC (1 Hp)   | 115...230V AC, 60 Hz<br>(1...5 Hp)   | 115...230V AC, 60 Hz<br>(1...5 Hp)   |
| <b>Type of Operator</b><br><b>3-Phase Motor Voltage</b><br>Push Button / Toggle Lever     | —   | 115...230V AC, 60 Hz<br>(3...10 Hp)  | 115...230V AC, 60 Hz<br>(3...10 Hp)  |
| <b>Enclosures NEMA Type</b>   | 1, 4, 7 & 9   | 1, 3R, 4/4X, 7 & 9, and 12   | 1, 3R, 4/4X, 7 & 9, and 12   |

Group Fusing

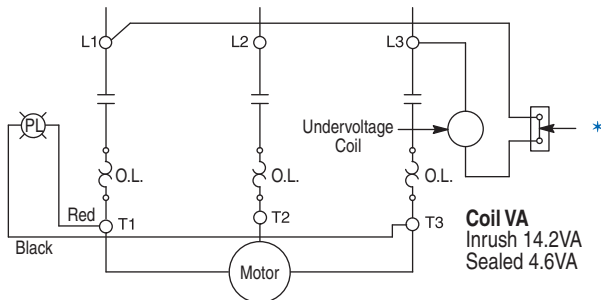
The Bulletin 609 sizes 0 and 1 in Type 1, 4X, and 12 enclosures are UL Listed for group fusing with Class J fuses only. See table below for maximum fuse ratings.

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)



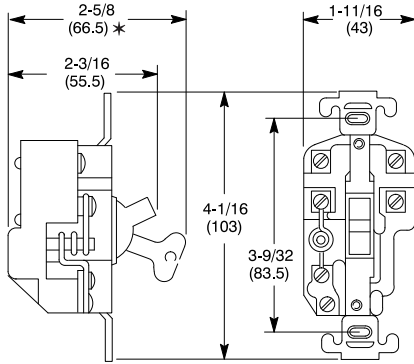
★ Remove Jumper "A" to connect remote stop operator wires to vacated terminals.  
 Note: Jumper not available on devices in Type 7 and 9 Enclosure.

## 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



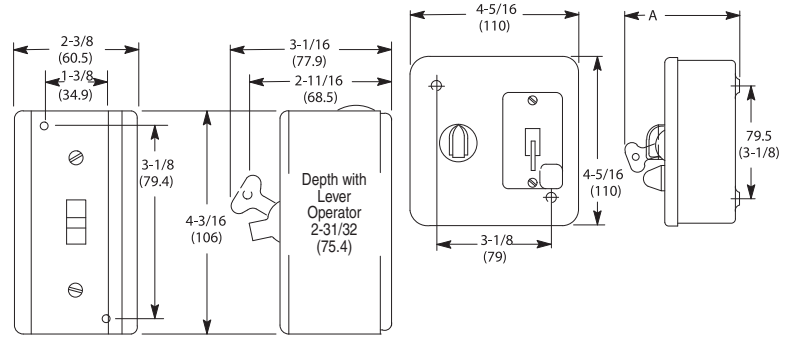
Cat. Nos.

600- TOX4  
TOX5  
TOX49

600- TOX109  
TOX110  
TOX149

600- TOX216

### Type 1 General Purpose Enclosure Surface Mounting



Cat. Nos.

600- TAX4  
TAX5  
TAX9  
TAX10

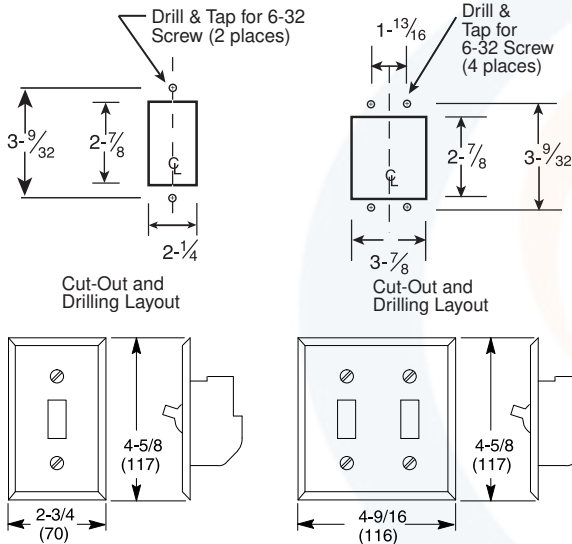
600- TAX49  
TAX109  
TAX110  
TAX142

600- TAX142  
TAX145  
TAX149  
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



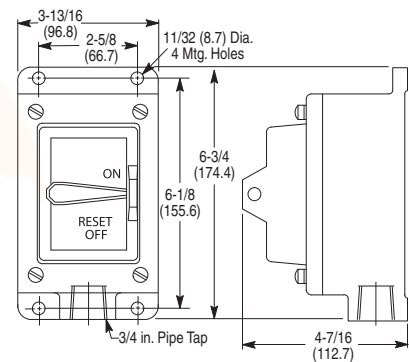
Cat. Nos.

600- TQX4  
TQX5  
TQX9

600- TQX49  
TQX109  
TQX110

600- TQX142  
TQX144  
TQX216

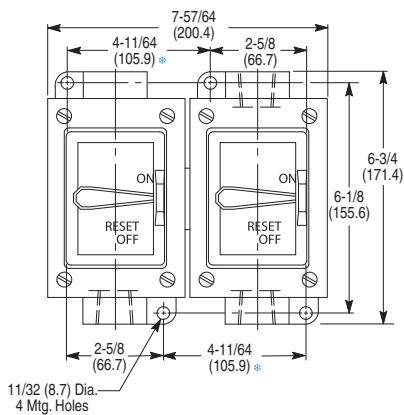
### Type 4 Watertight Enclosure; Type 7 and 9 Hazardous Locations Enclosure



Cat. Nos.

600- TCX5 600- TEX5

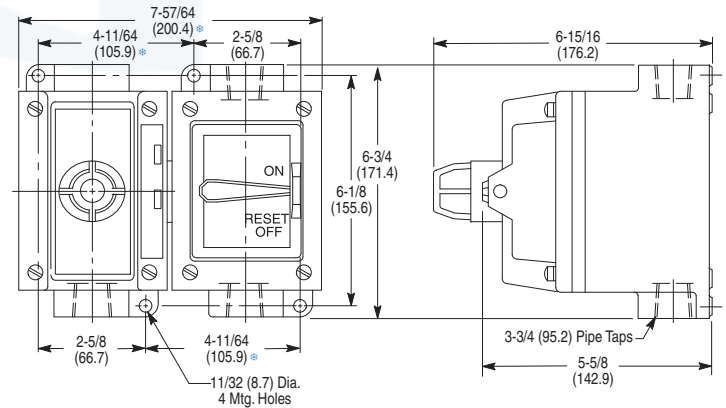
### Type 4 Watertight Enclosure, Type 7 & 9



Cat. Nos.

600- TCX9 600- TEX9  
TCX142 TEX10

### 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.