

# Harmony™ control stations and enclosures

Catalog  
**2011**





---

|                       |   |
|-----------------------|---|
| Selection guide ..... | 4 |
|-----------------------|---|

|                    |   |
|--------------------|---|
| Introduction ..... | 6 |
|--------------------|---|

## *XAL 22 mm control stations:*

|                  |   |
|------------------|---|
| Components. .... | 7 |
|------------------|---|

|                      |   |
|----------------------|---|
| Specifications ..... | 8 |
|----------------------|---|

|                  |    |
|------------------|----|
| References ..... | 10 |
|------------------|----|

|                  |    |
|------------------|----|
| Dimensions ..... | 12 |
|------------------|----|

## *XAP 22 mm enclosures:*

|                  |    |
|------------------|----|
| Components. .... | 14 |
|------------------|----|

|                      |    |
|----------------------|----|
| Specifications ..... | 15 |
|----------------------|----|

|                  |    |
|------------------|----|
| References ..... | 16 |
|------------------|----|

|                  |    |
|------------------|----|
| Dimensions ..... | 16 |
|------------------|----|

## *9001B standard duty control stations:*

|                  |    |
|------------------|----|
| References ..... | 20 |
|------------------|----|

|                  |    |
|------------------|----|
| Dimensions ..... | 22 |
|------------------|----|

## *9001KY/SKY 30 mm control stations:*

|                  |    |
|------------------|----|
| Components. .... | 24 |
|------------------|----|

|                  |    |
|------------------|----|
| References ..... | 25 |
|------------------|----|

|                  |    |
|------------------|----|
| Dimensions ..... | 27 |
|------------------|----|

|             |    |
|-------------|----|
| Index ..... | 28 |
|-------------|----|

| Family                      | XAL                                                                                                               | XAP                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
|                             |                                 |                                |
|                             | XALD02                                                                                                            | XAPA1100      XAPA1104                                                                                            |
| Type of Product/Material    | XALD – Polycarbonate<br>XALK – Polycarbonate                                                                      | XAPA – glass filled polyester<br>XAPG – die cast zinc<br>XAPE – anodized aluminum                                 |
| Number of holes             | 1 to 3                                                                                                            | 0 to 16                                                                                                           |
| Type of Operators           | XB5 (22mm)                                                                                                        | XB5 (22mm)                                                                                                        |
| Available without Operators | Yes                                                                                                               | Yes                                                                                                               |
| Available with Operators    | Yes                                                                                                               | No                                                                                                                |
| Approvals                   | UL File E164353<br>CCN NKCR<br>CSA File LR 44087<br>Class 3211-03                                                 | UL File E164353<br>CCN NKCR<br>CSA File LR 44087<br>Class 3211-03                                                 |
| Conforming to Standards     | CE Marked<br>EN/IEC 60947-1,<br>EN/IEC 60947-5-1,<br>EN/IEC 60947-5-4,<br>JIS C 4520<br>UL 508<br>CSA C22.2 No.14 | CE Marked<br>EN/IEC 60947-1,<br>EN/IEC 60947-5-1,<br>EN/IEC 60947-5-4,<br>JIS C 4520<br>UL 508<br>CSA C22.2 No.14 |
| Cable Entry                 | No. 13 knock out                                                                                                  | XAPA – undrilled<br>XAPG – Tapped 3/4NPT<br>XAPE – flush mount (n/a)<br>XAPE – fiber pull box                     |
| Page                        | 7                                                                                                                 | 14                                                                                                                |

| Family                      | 9001B                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 9001KY/SKY                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             |  <p>NEMA 1 Surface Mounting 9001BG**</p>  <p>NEMA 1 Flush Mounting 9001BF**</p>  <p>NEMA 4 9001BW**</p>  <p>NEMA 7 and 9 9001BR**</p> |  <p>9001KYSS3</p>  <p>9001KY3</p>  <p>9001KYAF3</p>  <p>9001SKY2</p> |
| Type of Product/Material    | <b>9001BG</b> – plastic cover<br><b>9001BF</b> – stainless steel<br><b>9001BW</b> – die cast zinc<br><b>9001BR</b> – cast aluminum                                                                                                                                                                                                                                                                                                                                          | <b>KYAF</b> – sheet steel<br><b>KYSS</b> – stainless steel<br><b>KY</b> – die cast zinc<br><b>SKY</b> – plastic                                                                                                                                                                                                                                                                                                   |
| Number of holes             | 1 to 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1 to 6                                                                                                                                                                                                                                                                                                                                                                                                            |
| Type of Operators           | Built in                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 9001K/SK (30mm)                                                                                                                                                                                                                                                                                                                                                                                                   |
| Available without Operators | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes                                                                                                                                                                                                                                                                                                                                                                                                               |
| Available with Operators    | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Yes                                                                                                                                                                                                                                                                                                                                                                                                               |
| Approvals                   | UL File E78403<br>CCN NKCR<br>CSA File LR 25490<br>Class 3211-03                                                                                                                                                                                                                                                                                                                                                                                                            | UL File E78403<br>CCN NKCR<br>CSA File LR 25490<br>Class 3211-03                                                                                                                                                                                                                                                                                                                                                  |
| Conforming to Standards     | CE Marked<br>EN/IEC 60947-1,<br>EN/IEC 60947-5-1,<br>EN/IEC 60947-5-4,<br>JIS C 4520<br>UL 508<br>CSA C22.2 No.14                                                                                                                                                                                                                                                                                                                                                           | CE Marked<br>EN/IEC 60947-1,<br>EN/IEC 60947-5-1,<br>EN/IEC 60947-5-4,<br>JIS C 4520<br>UL 508<br>CSA C22.2 No.14                                                                                                                                                                                                                                                                                                 |
| Cable Entry                 | <b>9001BG</b> – 1/2" and 3/4" knockouts<br><b>9001BF</b> – none<br><b>9001BW</b> – 1/2 - 14 NPT<br><b>9001BR</b> – 1/2 - 14 NPT                                                                                                                                                                                                                                                                                                                                             | <b>9001KYAF</b> – undrilled<br><b>9001KYSS</b> – 3/4 - 14 NPT<br><b>9001KY</b> – 3/4 - 14 NPT<br><b>9001SKY</b> – 3/4 - 14 NPT                                                                                                                                                                                                                                                                                    |
| Page                        | 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 24                                                                                                                                                                                                                                                                                                                                                                                                                |

# Harmony™ control stations and enclosures



### Introduction

#### XAL 22 mm polycarbonate control stations

XAL enclosures are available as empty enclosures with 22 mm diameter holes or as control stations with installed XB5 plastic operators.

#### XAP 22 mm empty enclosures

XAPA glass-reinforced polyester enclosures, XAPG die-cast zinc enclosures, and XAPE anodized aluminum flush mount enclosures are available with or without 22 mm holes for use with XB4 metal and XB5 plastic operators.

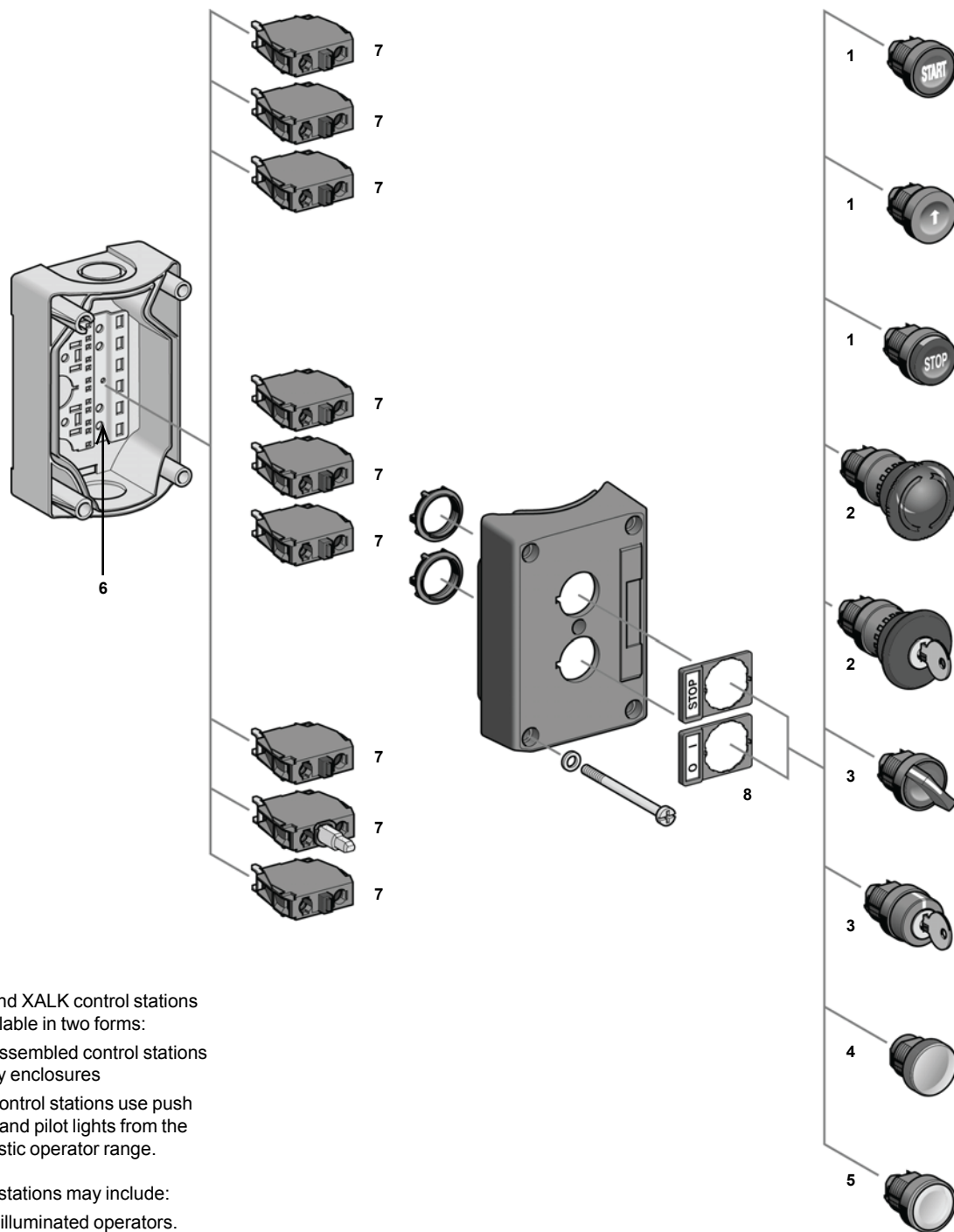
#### 9001B standard duty control stations

9001B control stations are fully assembled units with one, two or three product-specific operators. Various enclosure options include NEMA 1, flush plate, NEMA 4, and NEMA 7/9.

#### 9001KY/SKY control stations

9001KY and 9001SKY enclosures are available as empty enclosures with 30 mm diameter holes or as control stations with installed 9001K or 9001SK operators.

#### Components



XALD and XALK control stations are available in two forms:

- Pre-assembled control stations
- Empty enclosures

These control stations use push buttons and pilot lights from the XB5 plastic operator range.

Control stations may include:

- 1 - Non-illuminated operators.
- 2 - Mushroom head operators.
- 3 - Selector switches.
- 4 - Pilot lights.
- 5 - Illuminated operators.
- 6 - Base of enclosure (with mounting plate).
- 7 - Contact block and light module combinations.
- 8 - Legends.

# Harmony™ control stations and enclosures

## XAL 22 mm control stations

### Environmental Specifications

|                                           |                                                                                                                                                                                                                                                         |                                                                                                                                 |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Protective treatment standard version     |                                                                                                                                                                                                                                                         | “TH”                                                                                                                            |
| Ambient air temperature around the device | Storage                                                                                                                                                                                                                                                 | -40 to +158 °F (- 40 to +70 °C)                                                                                                 |
|                                           | Operation                                                                                                                                                                                                                                               | -13 to +158 °F (- 25 to +70 °C) unless otherwise stated                                                                         |
| Electric shock protection                 | Conforming to IEC 60536                                                                                                                                                                                                                                 | Class II                                                                                                                        |
| Degree of protection                      | Conforming to IEC 60529                                                                                                                                                                                                                                 | IP 65, unless otherwise stated<br>IP 66, for booted push button heads                                                           |
|                                           | Conforming to UL 50, CSA C22.2 No. 94                                                                                                                                                                                                                   | Type 1, 4X, 12, and 13, unless otherwise stated                                                                                 |
| Resistance to high pressure cleaner       |                                                                                                                                                                                                                                                         | 1,015 psi (70 x 10 <sup>5</sup> Pa-70 bars); distance: 3.94 in (0.1 m)<br>Temperature: 131 °F (55 °C)                           |
| Mechanical shock protection               | Conforming to EN 50102                                                                                                                                                                                                                                  | Non-illuminated heads: IK 03                                                                                                    |
|                                           |                                                                                                                                                                                                                                                         | Illuminated heads: IK 05                                                                                                        |
| Conforming to standards                   |                                                                                                                                                                        | IEC 60947-1, IEC/EN 60947-5-1, IEC 60947-5-4,<br>EN 60947-1, JIS C 4520,<br>UL 508, CSA C22.2 No. 14                            |
| Product certifications                    | UL Listed, CSA Certified<br> File E164353<br>CCN NKCR  File LR 44087<br>Class 3211 03 | Standard single contacts with screw clamp terminals: A600; R300<br>Light blocks with screw clamp terminals                      |
| Terminal identification                   | Conforming to EN 50005 and<br>EN 50013                                                                                                                                                                                                                  |                                                                                                                                 |
| Material and colors                       |                                                                                                                                                                                                                                                         | XALD: polycarbonate, light grey RAL 7035 and dark grey RAL 7016<br>XALK: polycarbonate, light grey RAL 7035 and yellow RAL 1012 |
| Cable entries                             |                                                                                                                                                                                                                                                         | Cable entries: 'knock-outs' for No. 13 (CM 12, PG 13.5) cable glands and<br>tapped ISO 20                                       |
| Cover Screws                              |                                                                                                                                                                                                                                                         | Stainless steel, tightening torque 2 Nm (18 lb-in)                                                                              |

### Contact Block Specifications – ZENL••

|                                               |                                           |                 |                                                                                                                                          |
|-----------------------------------------------|-------------------------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Mechanical Specifications                     |                                           |                 |                                                                                                                                          |
| Contact operation                             | N/C or N/O                                |                 | Slow break                                                                                                                               |
| Positive operation                            | Conforming to IEC/EN 60947-5-1 Appendix K |                 | All functions incorporating a N/C contact are positive opening operation                                                                 |
| Operating travel (to change electrical state) | Push button                               |                 | Changing N/C state: 0.06 in (1.5 mm)<br>Changing N/O state: 0.11 in (2.6 mm)<br>Total travel: 0.17 in (4.3 mm)                           |
|                                               | Push button                               |                 | Changing N/C state: 0.79 lbf (3.5 N)<br>Changing N/O state: 0.85 lbf (3.8 N)                                                             |
| Operating force                               | Additional contact only                   |                 | Single N/C contact: 0.45 lbf (2 N)<br>Single N/O contact: 0.52 lbf (2.3 N)                                                               |
|                                               | Emergency stop with N/C + N/O             |                 | Standard push-pull: 10.12 lbf (45 N)<br>Trigger action push-pull: 11.24 lbf (50 N)                                                       |
|                                               | Emergency stop with N/C + N/O             |                 | Standard turn to release and key release: 8.99 lbf (40 N)<br>Trigger action turn to release and key release: 9.89 lbf (44 N)             |
| Operating torque (to change electrical state) | Selector switches                         |                 | N/O contact: 1.24 lb-in (0.14 N•m)                                                                                                       |
|                                               | Additional contact only                   |                 | N/O contact: 0.44 lb-in (0.05 N•m)                                                                                                       |
| Mechanical durability (in operating cycles)   | Push button                               | Momentary       | 5 million                                                                                                                                |
|                                               | Selector switches                         | Non-illuminated | 3 million                                                                                                                                |
|                                               |                                           | Illuminated     | 1 million                                                                                                                                |
|                                               | Toggle switches                           |                 | 500,000                                                                                                                                  |
|                                               | Emergency stop push button                |                 | 100,000                                                                                                                                  |
| Vibration resistance                          | Conforming to IEC 60068-2-6               |                 | Frequency (2 to 500 Hz): 5 gn                                                                                                            |
| Shock resistance                              | Conforming to IEC 60068-2-27              |                 | All functions except mushroom head push buttons–<br>Half sine wave acceleration 11 ms: 50 gn<br>Half sine wave acceleration 18 ms: 30 gn |
|                                               |                                           |                 | Mushroom head push buttons–<br>Half sine wave acceleration 11 ms: 10 gn                                                                  |



## Contact Block Specifications – ZENL•• (continued)

### Electrical Specifications

|                                                                                                                                                     |                                                                         |                                                                                                                                                                                                                                                                                                                                                                              |         |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|
| <b>Cabling capacity</b>                                                                                                                             | Conforming to IEC 60947-1                                               | Screw and captive clamp terminals<br>Min: 1 x 24 AWG (0.22 mm <sup>2</sup> ) without cable end<br>1 x 22 AWG (0.34 mm <sup>2</sup> ) for linking<br>Max: 2 x 16 AWG (1.5 mm <sup>2</sup> ) with cable end<br>Cross headed screw (Pozidrive type 1) slotted for flat 4 and 5.5 mm screwdriver<br>Typical torque: 0.8 N•m (8.55 lb-in)<br>Maximum torque: 1.2 N•m (10.7 lb-in) |         |         |
| <b>Contact material</b>                                                                                                                             |                                                                         | Silver alloy (Ag/Ni)                                                                                                                                                                                                                                                                                                                                                         |         |         |
| <b>Short-circuit protection</b>                                                                                                                     | Conforming to IEC/EN 60947-5-1                                          | Standard blocks with screw clamp terminals: 10 A (gG cartridge fuse conforming to IEC 60269-1)                                                                                                                                                                                                                                                                               |         |         |
| <b>Rated insulation voltage</b>                                                                                                                     | Conforming to IEC 60947-1                                               | Standard blocks with screw clamp terminals:<br>Ui = 600 V, degree of pollution 3                                                                                                                                                                                                                                                                                             |         |         |
| <b>Rated impulse withstand voltage</b>                                                                                                              | Conforming to IEC 60947-1                                               | Standard block with screw clamp terminals: Uimp = 6 kV                                                                                                                                                                                                                                                                                                                       |         |         |
| <b>Rated operational specifications<br/>Conforming to IEC/EN 60947-5-1</b>                                                                          | AC supply:<br>Utilization category AC-15                                | A600: Ue = 600 Vac and Ie = 1.2 A or Ue = 240 Vac and Ie = 3 A<br>or Ue = 120 Vac and Ie = 6 A                                                                                                                                                                                                                                                                               |         |         |
|                                                                                                                                                     | DC supply:<br>Utilization category DC-13                                | R300: Ue = 250 Vdc and Ie = 0.1 A or Ue = 125 Vdc and Ie = 0.22 A                                                                                                                                                                                                                                                                                                            |         |         |
| <b>Electrical durability<br/>Conforming to IEC/EN 60947-5-1<br/>Appendix C<br/>Operating rate 3600 operating cycles/<br/>hour. Load factor: 0.5</b> | AC supply for 1 million operating cycles,<br>utilization category AC-15 | 24 Vac                                                                                                                                                                                                                                                                                                                                                                       | 120 Vac | 230 Vac |
|                                                                                                                                                     |                                                                         | 4 A                                                                                                                                                                                                                                                                                                                                                                          | 3 A     | 2 A     |
|                                                                                                                                                     | DC supply for 1 million operating cycles,<br>utilization category DC-13 | 24 Vdc                                                                                                                                                                                                                                                                                                                                                                       | 110 Vdc |         |
|                                                                                                                                                     |                                                                         | 0.4 A                                                                                                                                                                                                                                                                                                                                                                        | 0.15 A  |         |
| <b>Electrical reliability</b>                                                                                                                       | Failure rate<br>Conforming to IEC 947-5-4                               | Standard blocks:<br>- at 17 V and 5 mA, $\lambda < 10^{-6}$<br>- at 5 V and 1 mA, $\lambda < 10^{-6}$                                                                                                                                                                                                                                                                        |         |         |

## Light Module Specifications– ZALV••

### Mechanical Specifications

|                             |                              |                                                                                      |
|-----------------------------|------------------------------|--------------------------------------------------------------------------------------|
| <b>Vibration resistance</b> | Conforming to IEC 60068-2-6  | Frequency (2 to 500 Hz): 15 gn                                                       |
| <b>Shock resistance</b>     | Conforming to IEC 60068-2-27 | Half sine wave acceleration 11 ms: 50 gn<br>Half sine wave acceleration 18 ms: 30 gn |

### Electrical Specifications

|                                               |                                                                   |                                                                                                                                                                                                                                                                                                                                                                              |  |  |
|-----------------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| <b>Cabling capacity</b>                       | Conforming to IEC 60947-1                                         | Screw and captive clamp terminals<br>Min: 1 x 24 AWG (0.22 mm <sup>2</sup> ) without cable end<br>1 x 22 AWG (0.34 mm <sup>2</sup> ) for linking<br>Max: 2 x 16 AWG (1.5 mm <sup>2</sup> ) with cable end<br>Cross headed screw (Pozidrive type 1) slotted for flat 4 and 5.5 mm screwdriver<br>Typical torque: 0.8 N•m (8.55 lb-in)<br>Maximum torque: 1.2 N•m (10.7 lb-in) |  |  |
| <b>Rated insulation voltage</b>               | Conforming to IEC 60947-1                                         | Pilot light blocks with protected LED:<br>Ui = 250 V, degree of pollution 3                                                                                                                                                                                                                                                                                                  |  |  |
| <b>Rated impulse withstand voltage</b>        | Conforming to IEC 60947-1                                         | Pilot light blocks with protected LED: Uimp = 4 kV                                                                                                                                                                                                                                                                                                                           |  |  |
| <b>Voltage limits</b>                         | Nominal voltage                                                   | 24 V: 21.6 to 24.6 Vac; 19.2 to 30 Vdc<br>120V: 102 to 132 Vac<br>240V: 195 to 264 Vac                                                                                                                                                                                                                                                                                       |  |  |
| <b>Current consumption</b>                    | Applicable to all colors                                          | 24 Vac/Vdc supply blocks: 18 mA<br>120 Vac supply blocks: 14 mA<br>240 Vac supply blocks: 14 mA                                                                                                                                                                                                                                                                              |  |  |
| <b>Service life</b>                           | At nominal voltage and at an ambient temperature of 77 °F (25 °C) | 100,000 hours                                                                                                                                                                                                                                                                                                                                                                |  |  |
| <b>Surge withstand</b>                        | Conforming to IEC 61000-4-5                                       | 2/1 kV                                                                                                                                                                                                                                                                                                                                                                       |  |  |
| <b>Resistance to fast transients</b>          | Conforming to IEC 61000-4-4                                       | 2 kV                                                                                                                                                                                                                                                                                                                                                                         |  |  |
| <b>Resistance to electromagnetic fields</b>   | Conforming to IEC 61000-4-3                                       | 10 V/m                                                                                                                                                                                                                                                                                                                                                                       |  |  |
| <b>Resistance to electrostatic discharges</b> | Conforming to IEC 61000-4-2                                       | 8/6 kV                                                                                                                                                                                                                                                                                                                                                                       |  |  |
| <b>Electromagnetic emission</b>               | Conforming to EN 55011                                            | Class B                                                                                                                                                                                                                                                                                                                                                                      |  |  |

# Harmony™ control stations and enclosures

## XAL 22 mm control stations



XALD101

### Start or Stop Function

Polycarbonate; Light gray base, RAL7035; Dark gray lid, RAL7016

| Description                                  | Type of Push | Type of Contact<br>N.O. | N.C. | Marking                      | Reference |
|----------------------------------------------|--------------|-------------------------|------|------------------------------|-----------|
| <b>Marking on Legend Holder</b>              |              |                         |      |                              |           |
| 1 momentary push button                      | Flush black  | 1                       | —    | Start                        | XALD101   |
|                                              | Flush red    | —                       | 1    | Stop                         | XALD111   |
| <b>Marking on Legend Holder</b>              |              |                         |      |                              |           |
| 1 mushroom head push button 40 mm, momentary | Red          | —                       | 1    | Emergency stop on red legend | XALD164   |



XALK174

### Emergency Stop or Emergency Off Function

Polycarbonate; Light gray base, RAL7035; Yellow lid, RAL1012

| Description                            | Type               | Type of Contact<br>N.O. | N.C. | Reference |
|----------------------------------------|--------------------|-------------------------|------|-----------|
| 1 mushroom head push button 40 mm, red | Standard (1)       | —                       | 1    | XALK174   |
| Turn-to-release                        | Trigger action (2) | —                       | 1    | XALK178   |
| 1 mushroom head push button 40 mm, red | Standard (1)       | —                       | 1    | XALK184   |
| Key release (Key No. 455)              | Trigger action (2) | —                       | 1    | XALK188   |
| 1 mushroom head push button 40 mm, red | Standard (1)       | —                       | 1    | XALK194   |
| Push-pull                              |                    |                         |      |           |

(1) Emergency Off (IEC 60364-5-53)

(2) Emergency Stop (EN / IEC 13850)



XALD211

### Start-Stop Function

Polycarbonate; Light gray base, RAL7035; Dark gray lid, RAL7016

| Description              | Type of Push  | Type of Contact<br>N.O. | N.C. | Text    | Reference |
|--------------------------|---------------|-------------------------|------|---------|-----------|
| 2 momentary push buttons | 1 flush black | 1                       | —    | Start   | XALD211   |
|                          | 1 flush red   | —                       | 1    | Stop    |           |
|                          | 1 flush black | 1                       | —    | Forward | XALD221   |
|                          | 1 flush black | 1                       | —    | Reverse |           |



XALD321

### Three Function

Polycarbonate; Light gray base, RAL7035; Dark gray lid, RAL7016

| Description                            | Type of Push  | Type of Contact<br>N.O. | N.C. | Text    | Reference |
|----------------------------------------|---------------|-------------------------|------|---------|-----------|
| 3 momentary push buttons (no markings) | 1 flush black | 1                       | —    | Open    | XALD341   |
|                                        | 1 flush red   | —                       | 1    | Stop    |           |
|                                        | 1 flush black | 1                       | —    | Close   |           |
|                                        |               | 1                       | —    | Forward | XALD311   |
|                                        |               | —                       | 1    | Stop    |           |
|                                        |               | 1                       | —    | Reverse |           |
|                                        |               | 1                       | —    | Up      | XALD321   |
|                                        |               | —                       | 1    | Stop    |           |
|                                        |               | 1                       | —    | Down    |           |

# Harmony™ control stations and enclosures

## XAL 22 mm control stations



XALD02

### Empty Enclosures – Polycarbonate (for use with XB5 plastic push buttons, pilot lights, selector switches, mushroom head operators, legend plates and accessories)

| Description                                                                                    | Number of Holes | Reference |
|------------------------------------------------------------------------------------------------|-----------------|-----------|
| For normal environments, CSA approved and UL Listed (with stainless steel lid mounting screws) |                 |           |
| Light gray base RAL7035                                                                        | 1               | XALD01    |
| Dark gray lid RAL7016                                                                          | 2               | XALD02    |
|                                                                                                | 3               | XALD03    |
|                                                                                                | 4               | XALD04    |
|                                                                                                | 5               | XALD05    |
| Light gray base RAL7035, Yellow lid RAL1012                                                    | 1               | XALK01    |



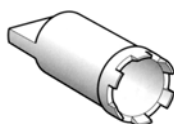
ZENL1111



ZALV\*\*



ZB5SZ3



ZB5AZ905

### Electrical Block and Accessories (for mounting on metal plate at back of enclosure)

| Description                                             | Type         | Color  | Reference |
|---------------------------------------------------------|--------------|--------|-----------|
| Electrical blocks with screw clamp terminal connections |              |        |           |
| Metal-plate-mounting contact blocks                     | N.O. contact | —      | ZENL1111  |
|                                                         | N.C. contact | —      | ZENL1121  |
| Light blocks with                                       | 24 Vac/Vdc   | White  | ZALVB1    |
|                                                         |              | Green  | ZALVB3    |
|                                                         |              | Red    | ZALVB4    |
|                                                         |              | Yellow | ZALVB5    |
|                                                         |              | Blue   | ZALVB6    |
|                                                         | 120 Vac      | White  | ZALVG1    |
|                                                         |              | Green  | ZALVG3    |
|                                                         |              | Red    | ZALVG4    |
|                                                         |              | Yellow | ZALVG5    |
|                                                         |              | Blue   | ZALVG6    |
|                                                         | 230 Vac      | White  | ZALVM1    |
|                                                         |              | Green  | ZALVM3    |
|                                                         |              | Red    | ZALVM4    |
|                                                         |              | Yellow | ZALVM5    |
|                                                         |              | Blue   | ZALVM6    |

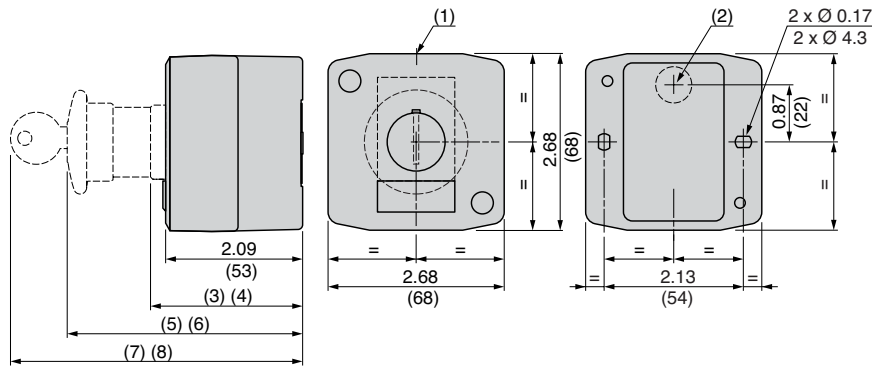
Protected  
LED

### Accessories

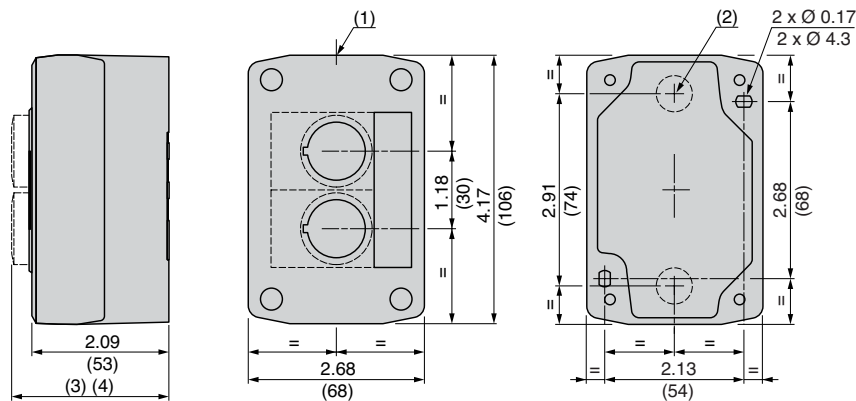
| Description                                                               | Application                           | Reference |
|---------------------------------------------------------------------------|---------------------------------------|-----------|
| Plastic blanking plug, round-shape<br>(must order mounting nut ZB5AZ901)  | XALD●● enclosures                     | ZB5SZ3    |
| Plastic blanking plug, square-shape<br>(must order mounting nut ZB5AZ901) | XALD●● enclosures                     | ZB5SZ5    |
| Mounting nut                                                              | ZB5SZ● blanking plug                  | ZB5AZ901  |
| Grounding terminal                                                        | XALD●● enclosures                     | XALZ09    |
| Tightening tool                                                           | Tightening head mounting nut ZB5AZ901 | ZB5AZ905  |

### Dimensions

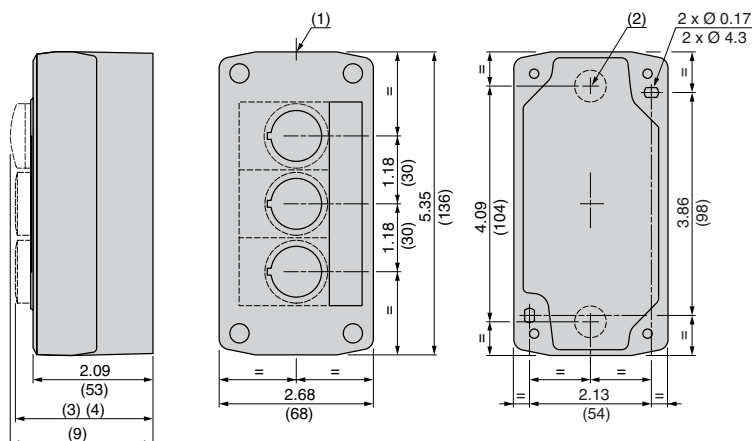
#### Single-way control stations XALD1••, K1••, D01



#### Two-way control stations XALD2••, K2••, D02



#### Three-way control stations XALD3••, K3••, D03



- (1) 2 knock-outs for PG 13.5 cable glands, maximum capacity 0.47 in (12 mm).  
 (2) Knock-out for cable entry, maximum capacity 0.55 in (14 mm).

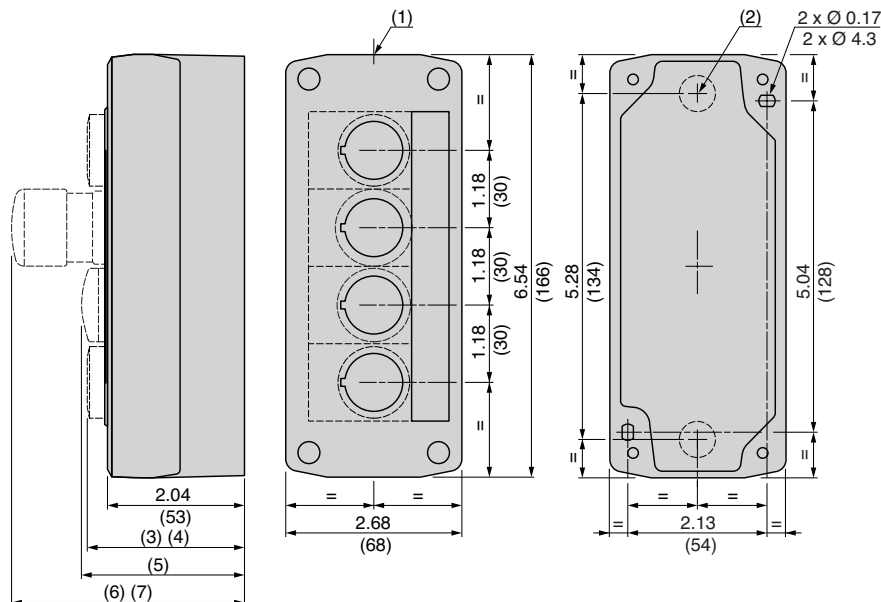
#### Examples:

- (3) 2.44 in (62 mm) for full guard buttons.  
 (4) 2.59 in (66 mm) for no guard buttons.  
 (5) 3.58 in (91 mm) for latching mushroom head push buttons.  
 (6) 2.91 in (74 mm) for key switches.  
 (7) 4.45 in (113 mm) for latching mushroom head push buttons with key release.  
 (8) 3.78 in (96 mm) for key switches with key.  
 (9) 2.52 in (64 mm) for pilot lights.

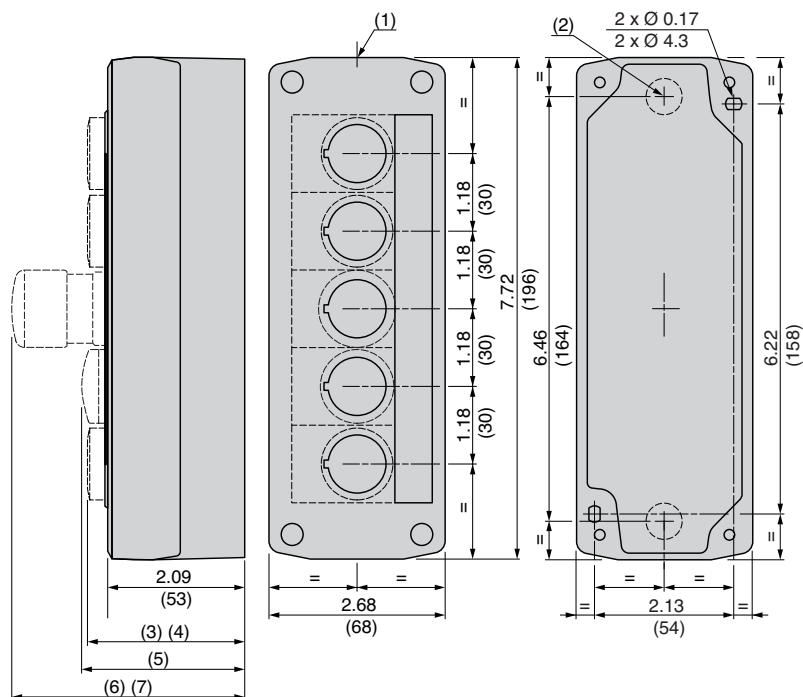
Dual Dimensions: in (mm)

### Dimensions (continued)

#### Four-way control stations XALD4•, K4•, D04



#### Five-way control stations XALD5•, K5•, D05



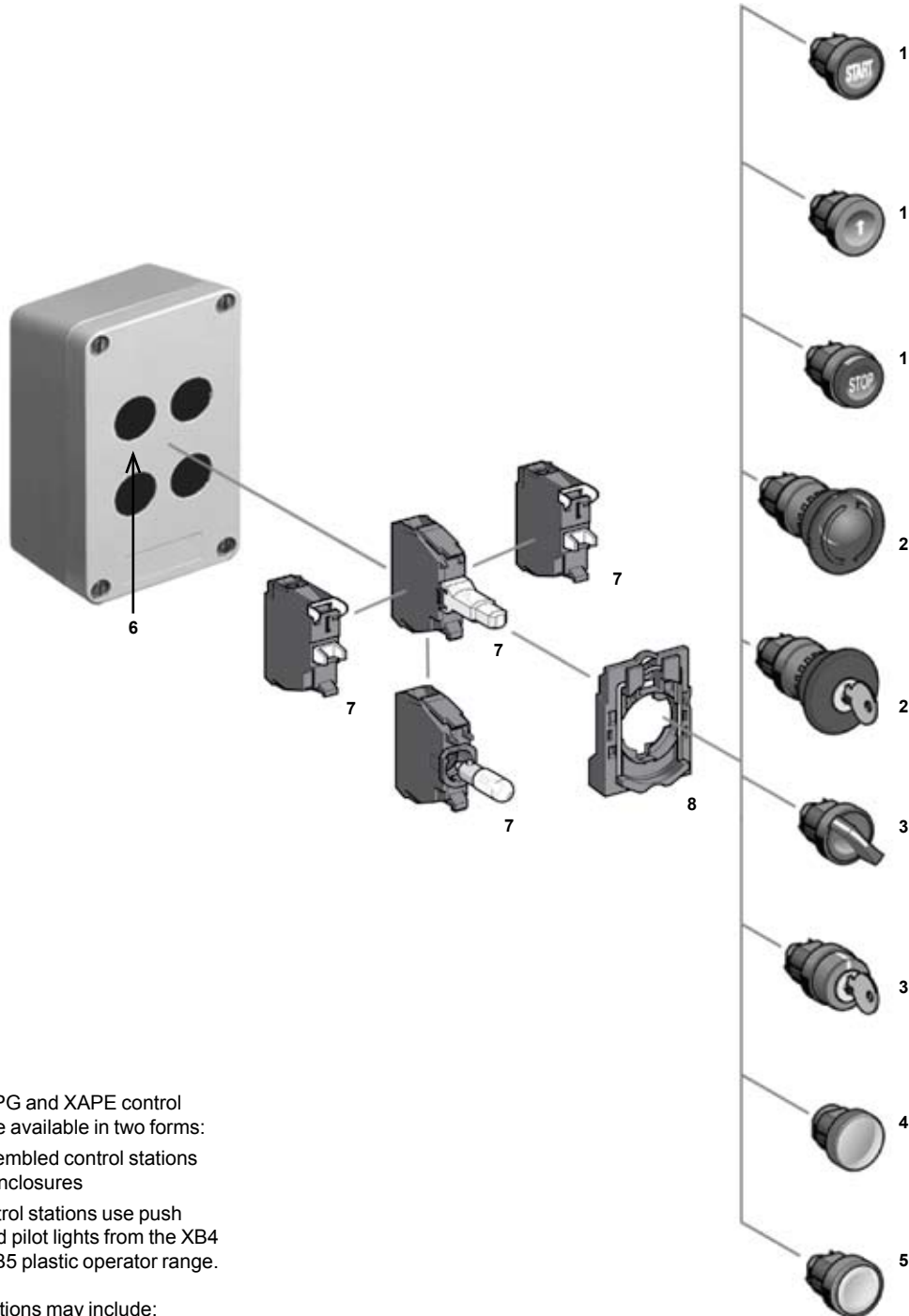
- (1) 2 knock-outs for PG 13.5 cable glands, maximum capacity 0.47 in (12 mm).  
 (2) Knock-out for cable entry, maximum capacity 0.55 in (14 mm).

#### Examples:

- (3) 2.44 in (62 mm) for full guard buttons.  
 (4) 2.59 in (66 mm) for no guard buttons.  
 (5) 2.52 in (64 mm) for pilot lights.  
 (6) 3.43 in (87 mm) for mushroom head push buttons.  
 (7) 3.07 in (78 mm) for selector switches.

Dual Dimensions: in (mm)

#### Components



XAPA, XAPG and XAPE control stations are available in two forms:

- Pre-assembled control stations
- Empty enclosures

These control stations use push buttons and pilot lights from the XB4 metal or XB5 plastic operator range.

Control stations may include:

- 1 - Non-illuminated operators.
- 2 - Mushroom operators.
- 3 - Selector switches.
- 4 - Pilot lights.
- 5 - Illuminated operators.
- 6 - Enclosure.
- 7 - Contact blocks and light modules.
- 8 - Mounting collar.

# Harmony™ control stations and enclosures

## XAP 22 mm enclosures

### XAPA Glass-reinforced polyester insulated enclosures

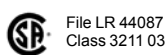
|                           |                                                                                                                        |
|---------------------------|------------------------------------------------------------------------------------------------------------------------|
| Material                  | Glass-reinforced polyester.                                                                                            |
| Approvals                 | Special version: CSA Type 4 and 5 (undrilled version)                                                                  |
| Protective treatment      | Standard version: "TC" and "TH" treatments.                                                                            |
| Ambient temperature       | Operation: -25 °C to +70 °C (-13 °F to +158 °F). Storage: -40 °C to +70 °C (-40 °F to +158 °F).                        |
| Degree of protection      | IP 65 conforming to IEC 60529 and IP 657 conforming to NF C 20-010. Type 4, 4X, 12.                                    |
| Electric shock protection | Class II conforming to IEC 60536 and NF C 20-030.                                                                      |
| Flame resistance          | CSTB: M3, NF C 20-455: 850 °C, IEC 60092: 960 °C, UL 94: VO.                                                           |
| Chemical resistance       | High degree of resistance to acids, bases, sea water, mineral salts, all solvents, gasoline, diesel, oils and greases. |
| Cable entry               | Undrilled                                                                                                              |

### XAPG Die Cast metal enclosures

|                           |                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------|
| Material                  | Zinc alloy (XAPG1-XAP4) Aluminum (XAPG5)                                                                            |
| Approvals                 | Special version: CSA Type 4 and 5 (undrilled version); UL Type 1, 2, 4, and 12; Standard CSA Type 1, 4, 4X, and 12. |
| Protective treatment      | Standard version: "TC" treatment. Special version: "TH" treatment.                                                  |
| Ambient temperature       | Operation: -25 °C to +70 °C (-13 °F to +158 °F). Storage: -40 °C to +70 °C (-40 °F to +158 °F).                     |
| Degree of protection      | IP 65 conforming to IEC 60529 and IP 657 conforming to NF C 20-010. UL Type 4, 12.                                  |
| Electric shock protection | Class I conforming to IEC 60536 and NF C 20-030.                                                                    |
| Chemical resistance       | Special treatments on request.                                                                                      |
| Cable entry               | Tapped entries for cable glands, see dimensions on page 19                                                          |

### XAPE Flush mount enclosures

|                           |                                                                                                                                                |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Material and color        | Anodized aluminum front plate. Insulated protective rear cover.                                                                                |
| Protective treatment      | Standard version: "TC" and "TH" treatments.                                                                                                    |
| Ambient temperature       | Operation: -25 °C to +70 °C (-13 °F to +158 °F). Storage: -40 °C to +70 °C (-40 °F to +158 °F).                                                |
| Degree of protection      | IP 65 conforming to IEC 60529 and IP 657 conforming to NF C 20-010. CSA Type 1, 4, 4X, and 12.                                                 |
| Electric shock protection | Class I conforming to IEC 60536 and NF C 20-030.                                                                                               |
| Chemical resistance       | High degree of resistance to organic acids, diluted mineral acids, salts, alcohol, acetone, chloride and fluoride solvents, oils and gasoline. |
| Cable entry               | Fiber pull box                                                                                                                                 |



# Harmony™ control stations and enclosures

XAP 22 mm enclosures

Glass-reinforced polyester enclosures



XAPA1100



XAPA2100

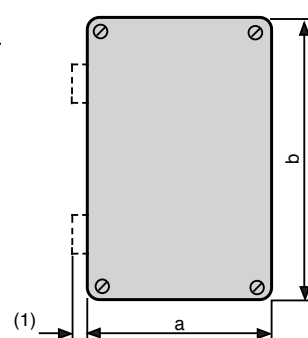
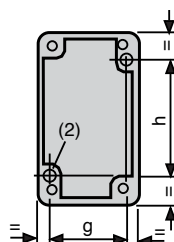
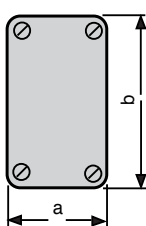
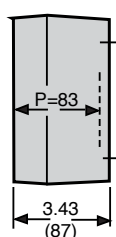
## Undrilled Enclosures, Glass-Reinforced Polyester

| Type                                           |                                  | H x W Dimensions: in (mm) | References |
|------------------------------------------------|----------------------------------|---------------------------|------------|
| NEMA 4, 4X, 13<br>Usable depth 3.27 in (83 mm) | without hinges                   | 3.34 x 5.75 (85 x 146)    | XAPA1100   |
|                                                |                                  | 3.34 x 8.90 (85 x 226)    | XAPA2100   |
|                                                |                                  | 5.95 x 9.49 (151 x 241)   | XAPA3100   |
| Undrilled Grounding Plate                      | with hinges                      | 5.95 x 9.49 (151 x 241)   | XAPA4100   |
|                                                | Sheet steel with<br>ground screw | For XAPA1100              | XAPZ100    |
|                                                |                                  | For XAPA2100              | XAPZ200    |
|                                                |                                  | For XAPA3100 and 4100     | XAPZ300    |

## Undrilled Insulated enclosures XAPA1100, XAP2100

## Mounting

## XAPA3100, XAPA4100



Cable entries not drilled  
(1) 0.43 in (11 mm) for XAPA4... stations with hinges  
(2) 2 x 0.22 in (5.6 mm) untapped holes, depth 0.47 in (12 mm)

| XAP   | a                | b                | g                | h                |
|-------|------------------|------------------|------------------|------------------|
| A1100 | 3.35 in (85 mm)  | 5.75 in (146 mm) | 2.76 in (70 mm)  | 4.13 in (105 mm) |
| A2100 | 3.35 in (85 mm)  | 8.90 in (226 mm) | 2.76 in (70 mm)  | 7.09 in (180 mm) |
| A3100 | 5.94 in (151 mm) | 9.49 in (241 mm) | 5.31 in (135 mm) | 7.87 in (200 mm) |
| A4100 | 5.94 in (151 mm) | 9.49 in (241 mm) | 5.31 in (135 mm) | 7.87 in (200 mm) |



# Harmony™ control stations and enclosures

## XAP 22 mm enclosures

### Glass-reinforced polyester enclosures



XAPA1104

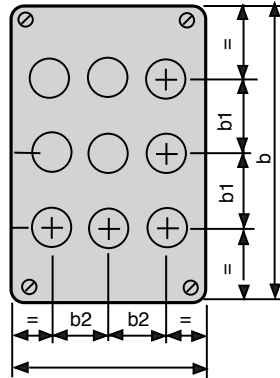
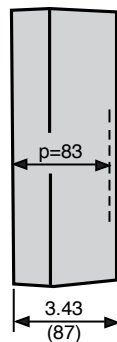


XAPA2108

#### Drilled Insulated Enclosures, Glass-Reinforced Polyester

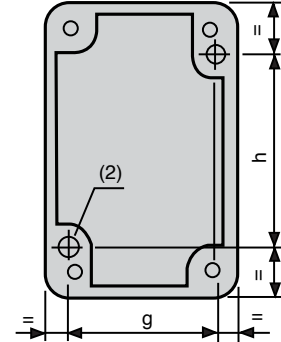
| Type                                                                                                | Number of Knock-outs<br>22 mm | Number of Rows |            | References |
|-----------------------------------------------------------------------------------------------------|-------------------------------|----------------|------------|------------|
|                                                                                                     |                               | Vertical       | Horizontal |            |
| NEMA 4, 4X, 13<br>Usable depth<br>3.27 in (83 mm)<br>1.58 in (40 mm) centerline<br>spacing of holes | 1                             | 1              | 1          | XAPA1110   |
|                                                                                                     | 2                             | 1              | 2          | XAPA1120   |
|                                                                                                     | 4                             | 2              | 2          | XAPA1104   |
|                                                                                                     | 8                             | 2              | 4          | XAPA2108   |
|                                                                                                     | 16                            | 4              | 4          | XAPA3116   |
| Drilled Grounding Plate                                                                             | Sheet steel with ground screw | For XAPA1110   |            | XAPZ110    |
|                                                                                                     |                               | For XAPA1120   |            | XAPZ120    |
|                                                                                                     |                               | For XAPA1104   |            | XAPZ104    |
|                                                                                                     |                               | For XAPA2108   |            | XAPZ208    |
|                                                                                                     |                               | For XAPA3116   |            | XAPZ316    |

#### Insulated enclosures with cut-outs XAPA



Cable entries not drilled  
(2) 2 x 0.22 in (5.6 mm) untapped holes, depth 0.47 in (12 mm)

#### Mounting



#### For 22 mm control and signaling units

| XAP   | a                | b                | b1              | b2              | g                | h                |
|-------|------------------|------------------|-----------------|-----------------|------------------|------------------|
| A1110 | 3.35 in (85 mm)  | 5.75 in (146 mm) | —               | —               | 2.76 in (70 mm)  | 4.13 in (105 mm) |
| A1120 | 3.35 in (85 mm)  | 5.75 in (146 mm) | 1.57 in (40 mm) | —               | 2.76 in (70 mm)  | 4.13 in (105 mm) |
| A1104 | 3.35 in (85 mm)  | 5.75 in (146 mm) | 1.57 in (40 mm) | 1.18 in (30 mm) | 2.76 in (70 mm)  | 4.13 in (105 mm) |
| A2108 | 3.35 in (85 mm)  | 8.90 in (226 mm) | 1.57 in (40 mm) | 1.18 in (30 mm) | 2.76 in (70 mm)  | 7.09 in (180 mm) |
| A3116 | 5.94 in (151 mm) | 9.49 in (241 mm) | 1.57 in (40 mm) | 1.18 in (30 mm) | 5.31 in (135 mm) | 7.87 in (200 mm) |

# Harmony™ control stations and enclosures

## XAP 22 mm enclosures

### Die cast enclosures



XAPG39400



XAPG29703

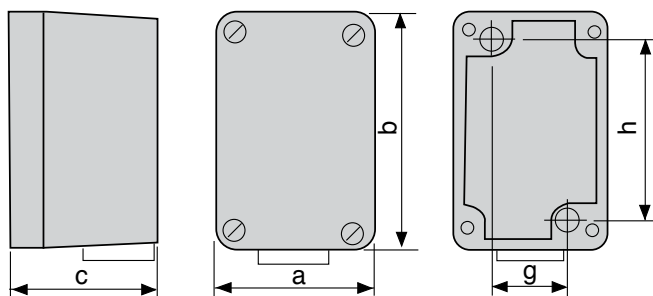
#### Undrilled Die Cast Zinc Enclosures (Painted Grey RAL 7032)

| Type            | Material | Usable Depth    | H x W x D<br>Dimensions                       | References |
|-----------------|----------|-----------------|-----------------------------------------------|------------|
| NEMA Type 4, 13 | Zinc     | 1.93 in (49 mm) | 3.15 x 3.15 x 2.03 in<br>(80 x 80 x 51.5 mm)  | XAPG19100  |
|                 |          |                 | 5.12 x 3.15 x 2.03 in<br>(130 x 80 x 51.5 mm) | XAPG29100  |
|                 |          |                 | 6.89 x 3.15 x 2.03 in<br>(175 x 80 x 51.5 mm) | XAPG39100  |
|                 |          | 2.93 (74.5 mm)  | 3.15 x 3.15 x 3.03 in<br>(80 x 80 x 77 mm)    | XAPG19400  |
|                 |          |                 | 5.12 x 3.15 x 3.03 in<br>(130 x 80 x 77 mm)   | XAPG29400  |
|                 |          |                 | 6.89 x 3.15 x 3.03 in<br>(175 x 80 x 77 mm)   | XAPG39400  |
|                 | Aluminum | 2.93 (74.5 mm)  | 8.66 x 3.15 x 3.03 in<br>(220 x 80 x 77 mm)   | XAPG49400  |
|                 |          |                 | 12.20 x 3.35 x 3.03 in<br>(310 x 85 x 77 mm)  | XAPG59400  |

#### Drilled Die Cast Zinc Enclosures (Painted Grey RAL 7032)

| Type                                                                 | Material | Usable Depth    | Number of<br>22 mm knock-outs | References |
|----------------------------------------------------------------------|----------|-----------------|-------------------------------|------------|
| NEMA Type 4, 13<br>1.18 in (30 mm)<br>centerline<br>spacing of holes | Zinc     | 1.93 in (49 mm) | 2                             | XAPG19702  |
|                                                                      |          |                 | 3                             | XAPG29703  |
|                                                                      |          |                 | 4                             | XAPG39704  |
|                                                                      |          | 2.93 (74.5 mm)  | 2                             | XAPG19802  |
|                                                                      |          |                 | 3                             | XAPG29803  |
|                                                                      |          |                 | 4                             | XAPG39804  |
| NEMA Type 4, 13<br>1.58 in (40 mm)<br>centerline<br>spacing of holes | Zinc     | 1.93 in (49 mm) | 1                             | XAPG19201  |
|                                                                      |          |                 | 2                             | XAPG29202  |
|                                                                      |          |                 | 3                             | XAPG39203  |
|                                                                      |          | 2.93 (74.5 mm)  | 1                             | XAPG19501  |
|                                                                      |          |                 | 2                             | XAPG29502  |
|                                                                      |          |                 | 3                             | XAPG39503  |
|                                                                      |          |                 | 4                             | XAPG49504  |
|                                                                      | Aluminum | 2.93 (74.5 mm)  | 5                             | XAPG59505  |

| References | a<br>in (mm) | b<br>in (mm) | c<br>in (mm) | g<br>in (mm) | h<br>in (mm) | Conduit<br>opening<br>supplied |
|------------|--------------|--------------|--------------|--------------|--------------|--------------------------------|
| XAPG19201  | 3.15 (80)    | 3.15 (80)    | 2.03 (51.5)  | 1.97 (50)    | 2.56 (65)    | 3/4" NPT                       |
| XAPG29202  | 3.15 (80)    | 5.12 (130)   | 2.03 (51.5)  | 1.97 (50)    | 4.53 (115)   | 3/4" NPT                       |
| XAPG39203  | 3.15 (80)    | 6.90 (175)   | 2.03 (51.5)  | 1.97 (50)    | 6.30 (160)   | 3/4" NPT                       |
| XAPG19501  | 3.15 (80)    | 3.15 (80)    | 3.03 (77)    | 1.97 (50)    | 2.56 (65)    | 3/4" NPT                       |
| XAPG29502  | 3.15 (80)    | 5.12 (130)   | 3.03 (77)    | 1.97 (50)    | 4.53 (115)   | 3/4" NPT                       |
| XAPG39503  | 3.15 (80)    | 6.90 (175)   | 3.03 (77)    | 1.97 (50)    | 6.30 (160)   | 3/4" NPT                       |
| XAPG49504  | 3.15 (80)    | 8.66 (220)   | 3.03 (77)    | 1.97 (50)    | 8.07 (205)   | 3/4" NPT                       |
| XAPG59505  | 3.35 (85)    | 12.20 (310)  | 3.03 (77)    | 2.16 (55)    | 11.60 (295)  | 3/4" NPT                       |
| XAPG19702  | 3.15 (80)    | 3.15 (80)    | 2.03 (51.5)  | 1.97 (50)    | 2.56 (65)    | 3/4" NPT                       |
| XAPG29703  | 3.15 (80)    | 5.12 (130)   | 2.03 (51.5)  | 1.97 (50)    | 4.53 (115)   | 3/4" NPT                       |
| XAPG39704  | 3.15 (80)    | 6.90 (175)   | 2.03 (51.5)  | 1.97 (50)    | 6.30 (160)   | 3/4" NPT                       |
| XAPG19802  | 3.15 (80)    | 3.15 (80)    | 3.03 (77)    | 1.97 (50)    | 2.56 (65)    | 3/4" NPT                       |
| XAPG29803  | 3.15 (80)    | 5.12 (130)   | 3.03 (77)    | 1.97 (50)    | 4.53 (115)   | 3/4" NPT                       |
| XAPG39804  | 3.15 (80)    | 6.90 (175)   | 3.03 (77)    | 1.97 (50)    | 6.30 (160)   | 3/4" NPT                       |





XAPE301



XAPE302



XAPE303



XAPE305

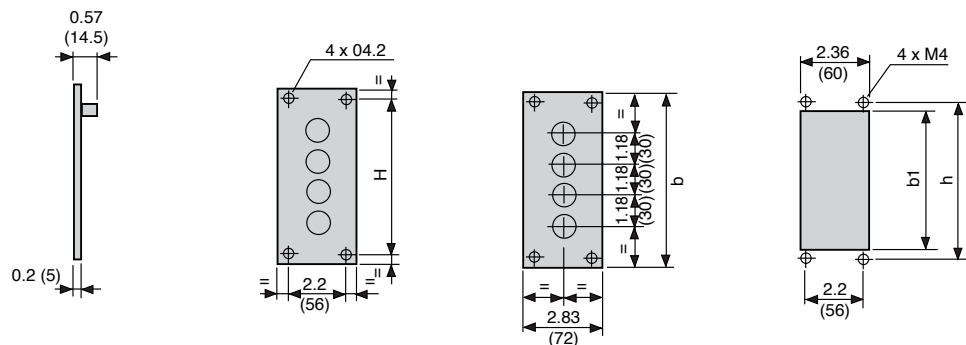
#### Drilled Anodized Aluminum Flush Plates (for use with XB4 metal push buttons, pilot lights, selector switches, mushroom head operators, legend plates and accessories)

| Type                                                              | Material             | Number of<br>22mm holes | H x W<br>Dimensions: in (mm) | References |
|-------------------------------------------------------------------|----------------------|-------------------------|------------------------------|------------|
| NEMA Type 4, 13<br>1.18 in (30)<br>centerline spacing<br>of holes | Anodized<br>Aluminum | 1                       | 2.83 x 2.83 (72 x 72)        | XAPE301    |
|                                                                   |                      | 2                       | 4.13 x 2.83 (105 x 72)       | XAPE302    |
|                                                                   |                      | 3                       | 5.43 x 2.83 (138 x 72)       | XAPE303    |
|                                                                   |                      | 4                       | 6.73 x 2.83 (171 x 72)       | XAPE304    |
|                                                                   |                      | 5                       | 8.03 x 2.83 (204 x 72)       | XAPE305    |

#### Optional Fiberglass Back Box (for finger protection, if required)

| Type                   | Material                 | References                      |
|------------------------|--------------------------|---------------------------------|
| Protective rear covers | Insulating<br>Fiberglass | For flush plate XAPE301 XAPE901 |
|                        |                          | For flush plate XAPE302 XAPE902 |
|                        |                          | For flush plate XAPE303 XAPE903 |
|                        |                          | For flush plate XAPE304 XAPE904 |
|                        |                          | For flush plate XAPE305 XAPE905 |

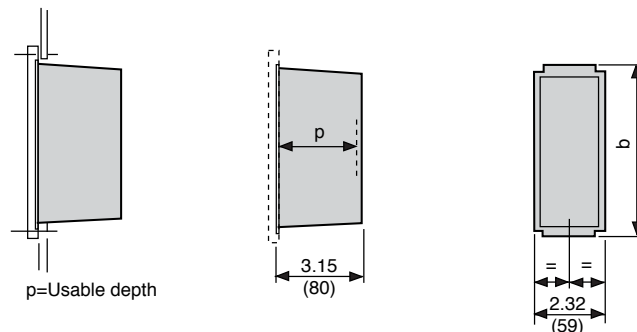
#### Flush mounting enclosures Front plate with cut-outs for 22 mm XB4 and XB5 operators XAPE30●



#### Front plate with cut-outs for 22 mm XB4 and XB5 operators

| XAP  | b<br>in (mm) | b1<br>in (mm) | h<br>in (mm) |
|------|--------------|---------------|--------------|
| E301 | 2.83 (72)    | 1.73 (44)     | 2.20 (56)    |
| E302 | 4.13 (105)   | 3.03 (77)     | 3.50 (89)    |
| E303 | 5.43 (138)   | 4.33 (110)    | 4.80 (122)   |
| E304 | 6.73 (171)   | 5.63 (143)    | 6.10 (155)   |
| E305 | 8.03 (204)   | 6.93 (176)    | 7.40 (188)   |

#### Mounting of front plate and protective rear cover



#### Protective rear cover for front plate XAPE30●

| XAP  | b<br>in (mm) | p<br>in (mm) |
|------|--------------|--------------|
| E901 | 2.05 (52)    | 3.25 (82.5)  |
| E902 | 3.35 (85)    | 3.25 (82.5)  |
| E903 | 4.65 (118)   | 3.25 (82.5)  |
| E904 | 5.94 (151)   | 3.25 (82.5)  |
| E905 | 7.24 (184)   | 3.25 (82.5)  |

# Harmony™ control stations and enclosures

## 9001B standard duty control stations

Note: When ordering, add prefix "9001" to the reference.



NEMA 1  
Surface Mounting  
9001BG201



NEMA 1  
Flush Mounting  
(w/o pullbox)  
9001BF201



NEMA 4  
9001BW243



NEMA 7 and 9  
9001BR103

### Control Stations

| No. of Buttons | Nameplate Markings and Features                   | Contact Symbol (1) | Surface Mounting NEMA 1 | Stainless Steel Flush Plate (2) | Watertight and Dusttight NEMA 4 | For Hazardous Locations NEMA 7 & 9 (3) |
|----------------|---------------------------------------------------|--------------------|-------------------------|---------------------------------|---------------------------------|----------------------------------------|
|                |                                                   |                    | References              | References                      | References                      | References                             |
| 1              | Start                                             | 1                  | BG101                   | BF101                           | BW146                           | BR101                                  |
|                | Stop                                              | 3                  | BG102                   | BF102                           | BW147                           | —                                      |
|                | Stop (Mushroom Button)                            | 3                  | BG103                   | —                               | BW151                           | BR103                                  |
|                | Stop (Lockout)                                    | 3                  | BG104                   | —                               | BW148                           | BR104                                  |
|                | Universal (w/o legend insert)                     | 16                 | BG107                   | BF107                           | BW159                           | BR107                                  |
|                | Off-On (Selector Switch)                          | 19                 | BG111                   | —                               | —                               | —                                      |
|                | Hand-Off-Auto (Selector Switch)                   | 17                 | BG112                   | —                               | —                               | —                                      |
|                | Universal Selector Switch (w/o legend insert)     | 19 or 17           | BG114                   | —                               | —                               | —                                      |
| 2              | Start-Stop                                        | 145                | BG201                   | BF201                           | BW240                           | BR204                                  |
|                | Start-Stop (for latching Applications)            | 146                | BG202                   | —                               | BW252                           | BR202                                  |
|                | Start-Stop (Mushroom on Stop)                     | 145                | BG203                   | —                               | BW250                           | BR203                                  |
|                | Start-Stop (Lockout on Stop)                      | 145                | BG204                   | —                               | BW241                           | BR204                                  |
|                | Start-Stop (Mushroom on both)                     | 145                | BG205                   | —                               | BW246                           | BR205                                  |
|                | Forward-Reverse                                   | 146                | BG206                   | —                               | BW242                           | —                                      |
|                | Open-Close                                        | 146                | BG207                   | —                               | BW244                           | —                                      |
|                | Up-Down                                           | 146                | BG208                   | BF208                           | BW243                           | BR208                                  |
|                | Raise-Lower                                       | 146                | BG209                   | —                               | BW253                           | —                                      |
|                | On-Off                                            | 145                | BG210                   | BF210                           | BW245                           | —                                      |
|                | On-Off                                            | 146                | BG211                   | BF211                           | BW254                           | —                                      |
|                | Universal (w/o legend inserts)                    | 25                 | BG214                   | —                               | BW260                           | BR214                                  |
|                | Start-Stop (Maintained Contact)                   | 10                 | BG215                   | BF215                           | BW255                           | BR215                                  |
|                | On -Off (Maintained Contact)                      | 10                 | BG216                   | BF216                           | BW256                           | BR216                                  |
|                | Universal (Maintained contact w/o legend inserts) | 10                 | BG218                   | —                               | —                               | BR218                                  |
| 3              | Fast-Slow-Stop                                    | 109                | BG301                   | —                               | —                               | —                                      |
|                | Forward-Reverse-Stop                              | 109                | BG302                   | —                               | —                               | —                                      |
|                | Open-Close-Stop                                   | 109                | BG303                   | BF303                           | —                               | —                                      |
|                | Raise-Lower-Stop                                  | 109                | BG304                   | —                               | —                               | —                                      |
|                | Up-Down-Stop                                      | 109                | BG305                   | BF305                           | —                               | —                                      |
|                | Start-Jog-Stop                                    | 109                | BG316                   | —                               | —                               | —                                      |
|                | Universal (w/o legend inserts)                    | 8                  | BG307                   | —                               | —                               | —                                      |
|                | Start-Stop, Red Pilot Light: 120Vac/dc            | 145 & 121          | BG308                   | BF308                           | —                               | —                                      |

(1) See Contact Symbols on page 21.

(2) Uses standard 2.0 or 2.13 in. deep wall boxes, single gang for Types BF1 and BF2, two gang for Type BF3

(3) Also rated for Class I, Division I and II, Groups B, C, or D; Class II, Division I and II, Groups E, F, or G

### Accessories

| Description<br>(for use with 9001BG●●● control stations) | Color | References |
|----------------------------------------------------------|-------|------------|
| Mushroom Caps for NEMA 1                                 | Red   | B301       |
| Mushroom Caps for NEMA 4                                 | Red   | B303       |
| Lockout Kit for NEMA 1                                   | —     | B321       |
| Pilot Light Lenses, NEMA 1 Surface Mount                 | Red   | B331       |
| Pilot Light Lenses, NEMA 1 Surface Mount                 | Green | B332       |
| Pilot Light Lenses, NEMA 1 Flush Mount                   | Red   | B341       |
| Pilot Light Lenses, NEMA 1 Flush Mount                   | Green | B342       |

### Replacement Covers

| Description                            | References |
|----------------------------------------|------------|
| Replacement Covers for BW240           | BWD219     |
| Replacement Covers for BW241 (4)       | BWD220     |
| Replacement Covers for BW242-BW260     | BWD219     |
| Replacement Covers for Type BR devices | N/A        |

(4) Includes factory installed lockout on the cover.

For Replacement Interiors, see page 21.

For Electrical Contact Ratings, see page 21.

### Interchangeable Push Button Legend Inserts

| Marking       | For 9001BG●●● | For 9001BR●●● | For 9001BW●●● (Round Button) | For 9001BW●●● (Mushroom Button) |
|---------------|---------------|---------------|------------------------------|---------------------------------|
| Start         | B101          | B161          | B259                         | B282                            |
| Stop          | B102          | B162          | B260                         | B283                            |
| Fast          | B103          | —             | —                            | —                               |
| Slow          | B104          | —             | —                            | —                               |
| Forward       | B105          | —             | B255                         | —                               |
| Reverse       | B106          | —             | B256                         | —                               |
| Open          | B107          | —             | B263                         | —                               |
| Close         | B108          | —             | B264                         | —                               |
| Raise         | B109          | —             | B261                         | —                               |
| Lower         | B110          | —             | B262                         | —                               |
| Up            | B111          | —             | B253                         | B276                            |
| Down          | B112          | —             | B254                         | B277                            |
| On            | B115          | B175          | B257                         | —                               |
| Off           | B116          | B176          | B258                         | —                               |
| Hand          | B117          | —             | B265                         | —                               |
| Auto          | B118          | —             | B266                         | —                               |
| Jog           | B119          | —             | —                            | —                               |
| Blank (Black) | B129          | B189          | B251                         | B251                            |
| Blank (Red)   | B129R         | B189R         | B252                         | B252                            |

### "C" Shaped Mounting Bracket for 9001BR●●● Interior

#### Reference

3110112001 (Do not add prefix "9001" to this reference.)

# Harmony™ control stations and enclosures

## 9001B standard duty control stations

Note: When ordering, add prefix "9001" to the reference.



9001BGC214  
(Type BGC contact block assemblies include cover.)



9001BGB214



9001BOC361

### Replacement Interiors For Type B Standard Duty Push Button Stations

| For Control Station Types | Contact Symbol (see below) | Contact Block Assembly Type | Terminal Block Wiring Receptacle Type |
|---------------------------|----------------------------|-----------------------------|---------------------------------------|
| BF101–BF107               | 16                         | BOC107                      | BFB107                                |
| BF111–BF114               | 19 or 17                   | BOC114                      | BFB114                                |
| BF121–BF123               | 121                        | BOC123                      | BFB123                                |
| BF201–BF214               | 25                         | BOC214                      | BFB214                                |
| BF215–BF218               | 10                         | BOC218                      | BFB214                                |
| BF221–BF224               | 7 or 19 & 121              | BOC224                      | BFB224                                |
| BF225–BF226               | 17 or 19 & 16              | BOC226                      | BFB226                                |
| BF301–BF307               | 8                          | BOC214<br>BOC107            | BFB214<br>BFB107                      |
| BF308–BF309               | 25 & 121                   | BOC214<br>BOC123            | BFB214<br>BFB123                      |
| BF310–BF313               | 10 & 121                   | BOC218<br>BOC123            | BFB214<br>BFB123                      |
| BF314–BF315               | 17 or 19 & 25              | BOC214<br>BOC114            | BFB214<br>BFB114                      |
| BG101–BG107               | 16                         | BGC107                      | BGB107                                |
| BG111–BG114               | 17 or 19                   | BGC114                      | BGB114                                |
| BG121–BG123               | 121                        | BGC123                      | BGB123                                |
| BG201–BG214               | 25                         | BGC214                      | BGB214                                |
| BG215–BG218               | 10                         | BGC218                      | BGB214                                |
| BG221–BG224               | 17 or 19 & 121             | BGC224                      | BGB224                                |
| BG225–BG226               | 17 or 19 & 16              | BGC226                      | BGB226                                |
| BG301–BG307               | 8                          | BGC307                      | BGB307                                |
| BG316–BG326               |                            |                             |                                       |
| BG308–BG309               | 25 & 121                   | BGC309                      | BGB309                                |
| BG310–BG313               | 10 & 121                   | BGC313                      | BGB309                                |
| BG314–BG315               | 17 or 19 & 25              | BGC315                      | BGB315                                |
| BR101–BR107               | 16                         | BOC107                      | BFB107                                |
| BR202–BR214               | 25                         | BOC214                      | BFB214                                |
| BR215–BR219               | 10                         | BOC218                      | BFB214                                |
| BW101–BW107               | 16                         | BOC107                      | BFB107                                |
| BW202–BW214               | 25                         | BOC214                      | BFB214                                |
| BW215–BW218               | 10                         | BOC218                      | BFB214                                |
| BW146–BW159               | 16                         | BOC360                      |                                       |
| BW240–BW260               | 25                         | BOC361                      |                                       |
| BW255–BW258               | 10                         | BOC362                      |                                       |

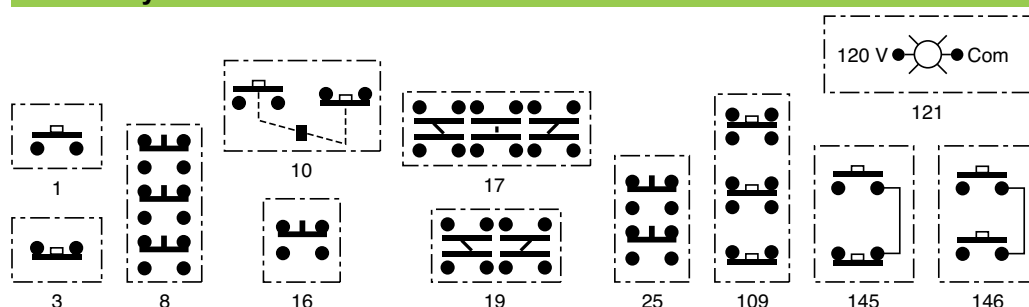
Notes: Contact block assemblies for all Type BG stations include cover and contact block. Replacement contact block assemblies and terminal block wiring receptacles for push buttons have provision for 1 N.O. & 1 N.C. circuit on each button. Unneeded circuits need not be wired. Order separate legend plates, if required, from listing on page 20.

### Electrical Contact Ratings

(OSHA Regulation, Section 1910.70, Overhead and Gantry Cranes, limits the voltage of pendant push buttons to 150 Vac or 300 Vdc.)

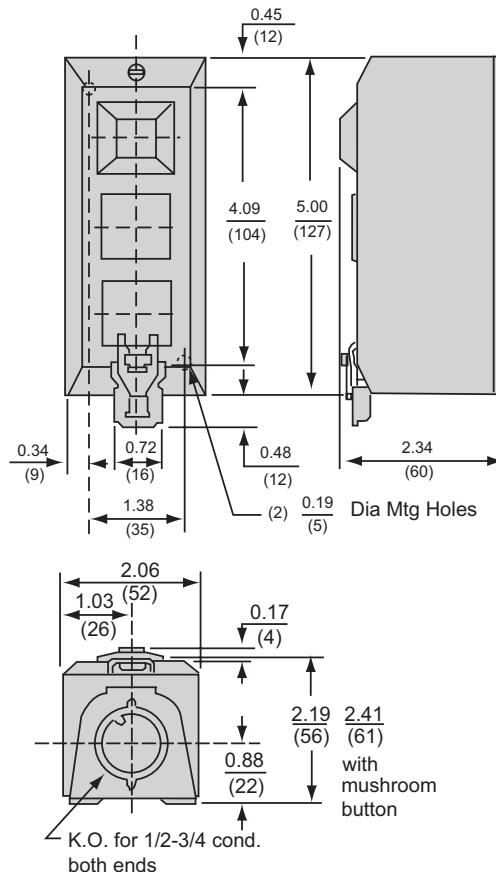
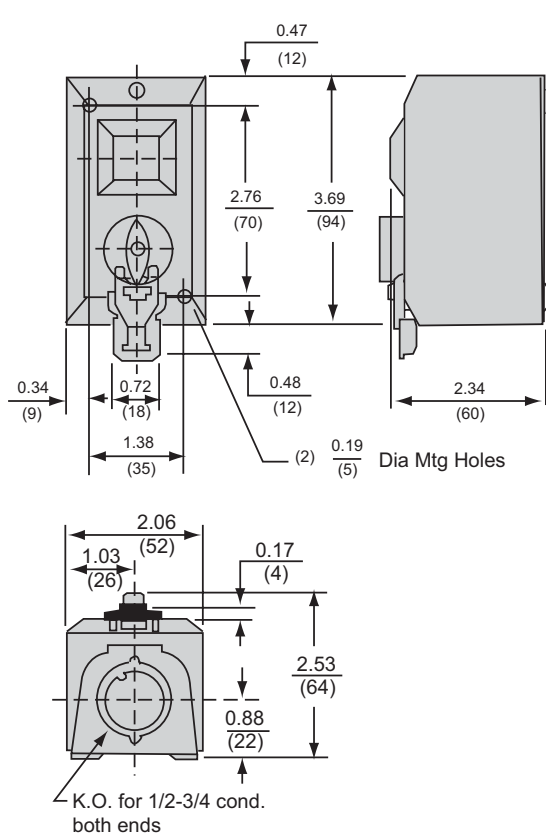
| AC—NEMA B600 |                               |      |       |     |                                   |                                                      | DC—NEMA P600 |                           |                                   |
|--------------|-------------------------------|------|-------|-----|-----------------------------------|------------------------------------------------------|--------------|---------------------------|-----------------------------------|
| Volts        | Inductive<br>35% Power Factor |      |       |     |                                   | Resistive<br>75% Power Factor                        | Volts        | Inductive and Resistive   |                                   |
|              | Make                          |      | Break |     | Continuous<br>Carrying<br>Amperes | Make, Break and<br>Continuous<br>Carrying<br>Amperes |              | Make and Break<br>Amperes | Continuous<br>Carrying<br>Amperes |
|              | A                             | VA   | A     | VA  |                                   |                                                      |              |                           |                                   |
| 120          | 30.5                          | 3600 | 3.75  | 360 | 5                                 | 5                                                    | 120          | 1.1                       | 5                                 |
| 240          | 15                            | 3600 | 1.5   | 360 | 5                                 | 5                                                    | 240          | 0.55                      | 5                                 |
| 480          | 7.5                           | 3600 | .75   | 360 | 5                                 | 5                                                    | 600          | 0.2                       | 5                                 |
| 600          | 6                             | 3600 | .6    | 360 | 5                                 | 5                                                    |              |                           |                                   |

### Contact Symbols

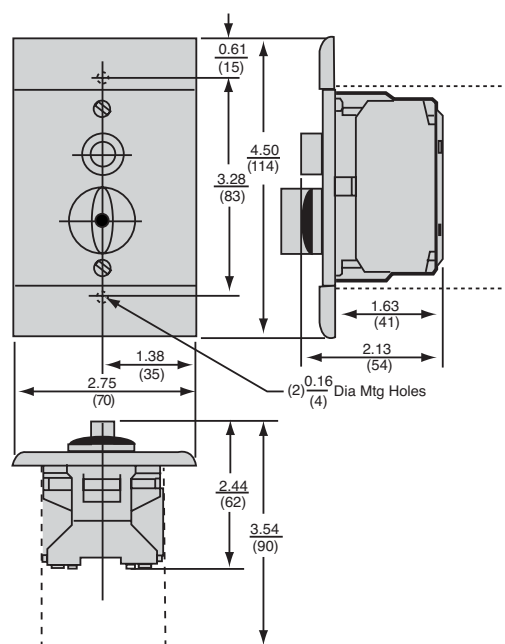
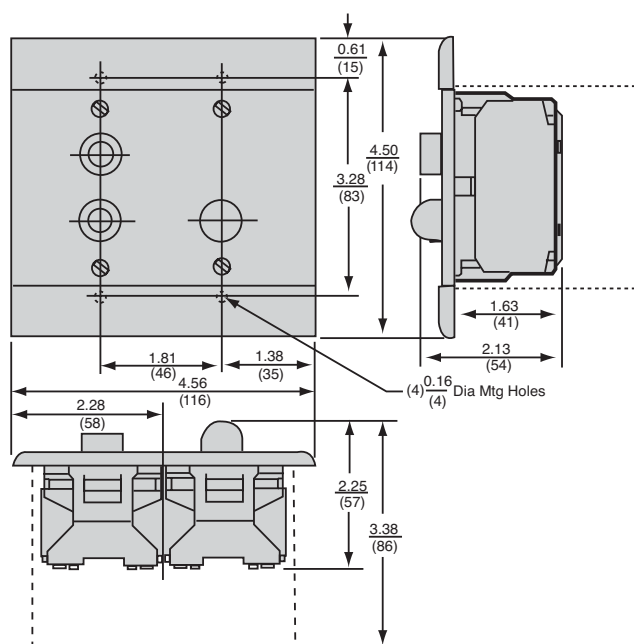


### Dimensions

#### Surface Mount Type BG, Glass Filled Polyester Cover



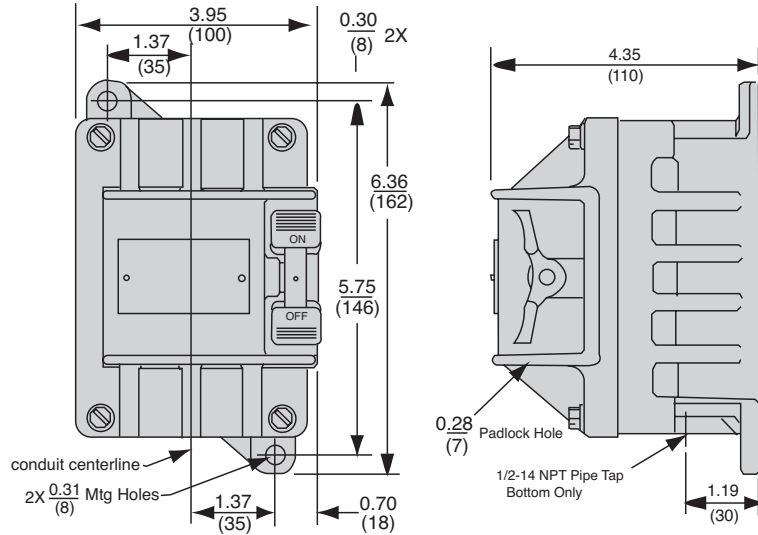
#### Flush Mount Type BF, Stainless Steel



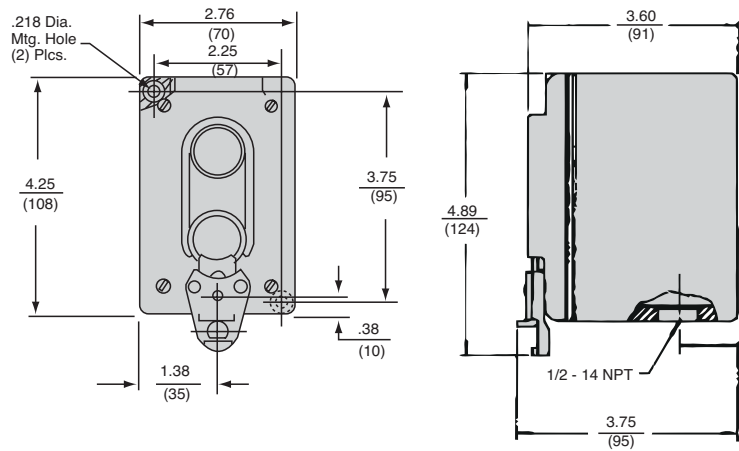
Dual Dimensions: in (mm)

### Dimensions

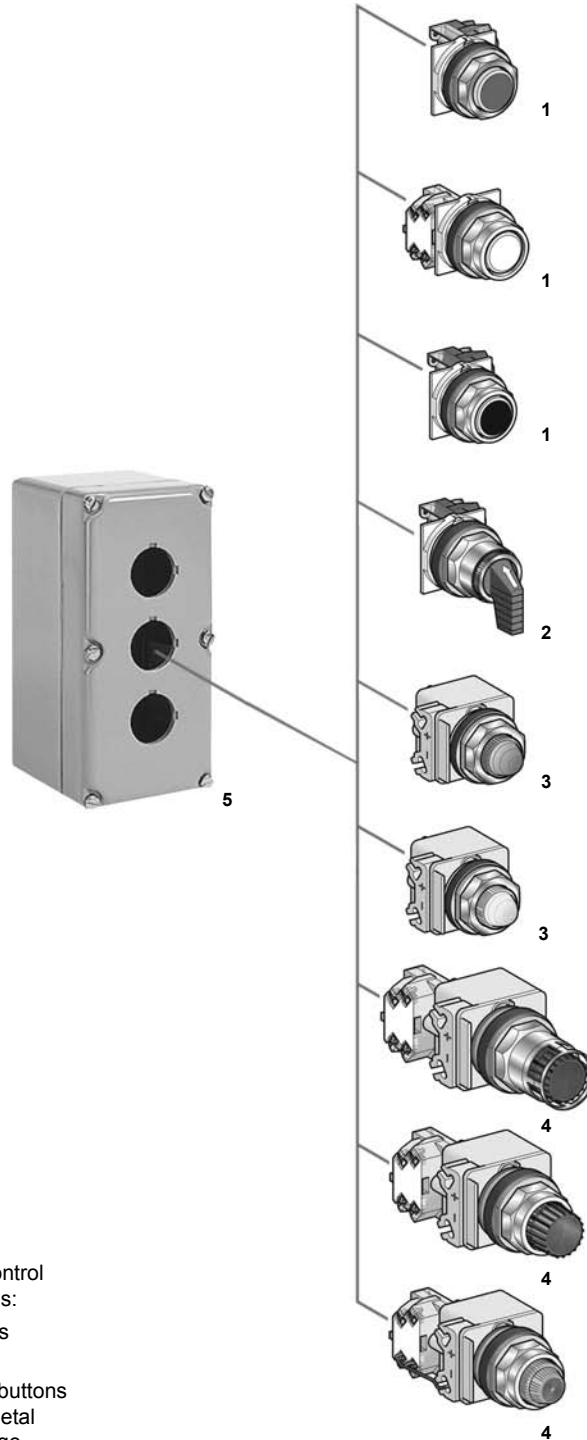
#### Hazardous Location Type BR, Cast Aluminum Enclosure



#### Watertight & Dusttight Type BW, Cast Zinc Enclosure



### Components



9001KY and 9001SKY 30 mm control stations are available in two forms:

- Pre-assembled control stations
- Empty enclosures

These control stations use push buttons and pilot lights from the 9001K metal and 9001SK plastic operator range.

Control stations may include:

- 1 - Non-illuminated operators.
- 2 - Selector switches.
- 3 - Pilot lights.
- 4 - Illuminated operators.
- 5 - Enclosure.



# Harmony™ control stations and enclosures

## 9001KY/SKY 30 mm empty enclosures

Note: When ordering, add prefix "9001" to the reference.

### Empty Enclosures (for Customer Assembly)

UL Types 1, 3 and 13/  
NEMA 1, 3, and 13

UL Types 1, 3, 4 and 13/  
NEMA 1, 3, 4 and 13

UL Types 1, 3, 4, 4X and 13/  
NEMA 1, 3, 4, 4X and 13



| No of Holes | Sheet Steel (1) | Die Cast Zinc (1) | Stainless Steel (304) (1) | Polymeric (Plastic) (2) |
|-------------|-----------------|-------------------|---------------------------|-------------------------|
|             | Reference       | Reference         | Reference                 | Reference               |
| 1           | KYAF1           | KY1               | KYSS1                     | SKY1                    |
| 2           | KYAF2           | KY2 (3)           | KYSS2                     | SKY2                    |
| 3           | KYAF3           | KY3 (3)           | KYSS3                     | SKY3                    |
| 4           | KYAF4           | KY4 (3)           | KYSS4                     | SKY4                    |
| 6           | KYAF6           | KY6               | KYSS6                     | SKY6                    |

### Empty Guarded Enclosures (mushroom head operator not included)

UL Types 1, 3, 4 and 13/  
NEMA 1, 3, 4 and 13

| No of Holes | Die Cast Zinc (1) |           |                  |           |
|-------------|-------------------|-----------|------------------|-----------|
|             | Cover Color       | Box Color | Conduit Opening  | Reference |
| 1           | Gray              | Gray      | 3/4 in. - 14 NPT | KYG1      |
| 1           | Yellow            | Gray      | 3/4 in. - 14 NPT | KYG1Y     |
| 1           | Gray              | Gray      | 25 mm Metric     | TYG1      |
| 1           | Yellow            | Gray      | 25 mm Metric     | TYG1Y     |



9001KYG1Y



9001K26

### Stainless Steel (302) NEMA 1 Flush Plates (4) (5)

| No of Holes | Description                                         | Reference |
|-------------|-----------------------------------------------------|-----------|
| 1           | 1 Hole flush plate, cover screws, insulating liners | K25       |
| 2           | 2 Hole flush plate, cover screws, insulating liners | K26       |
| 3           | 3 Hole flush plate, cover screws, insulating liners | K27       |
| 4           | 4 Hole flush plate, cover screws, insulating liners | K28       |

(1) Use 9001K metal push buttons, pilot lights, selector switches, mushroom head operators, legend plates and accessories."

(2) Use 9001SK plastic push buttons, pilot lights, selector switches, mushroom head operators, legend plates and accessories.

(3) Only KN200 series legend plates will fit upright on these enclosures with their long axis vertical.

(4) To be used with a standard 2 x 3 in. general purpose switch box. A 2.5 in. deep switch box should be used if two Type KA contact blocks are mounted side by side. If two Type KA contact blocks are mounted in tandem, a 3.5 in. deep box should be used.

(5) Although 9001K oiltight/watertight operators are used, an assembled control station using these flush plates is not oiltight and watertight. These kits include a stainless steel flush plate, cover screws and a set of liners which must be used to maintain electrical clearances.

# Harmony™ control stations and enclosures

## 9001KY/SKY 30 mm control stations

Note: When ordering, add prefix "9001" to the reference.

### Assembled Control Stations

| No. of Holes                                                                             | Operator Style and Features                                        | Reference Consists of: |           |                       |                  |                        |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------|-----------|-----------------------|------------------|------------------------|
|                                                                                          |                                                                    | Enclosure              | Operators | Contact Blocks        | Legend Plates    |                        |
| UL Types 1, 3, 4 and 13/NEMA 1, 3, 4 and 13 Die Cast Zinc Enclosure (1)                  |                                                                    |                        |           |                       |                  |                        |
| 1                                                                                        | Selector Switch (3 Pos Maintained)                                 | KYK111                 | KY1       | KS43B                 | KA1              | Hand-Off-Auto          |
|                                                                                          | Selector Switch (2 Pos Maintained)                                 | KYK110                 | KY1       | KS11B                 | KA1              | Off-On                 |
|                                                                                          | Push Button (Momentary)                                            | KYK11                  | KY1       | KR1B                  | KA1              | Start                  |
|                                                                                          | Push Button (Momentary)                                            | KYK13                  | KY1       | KR1R                  | KA1              | Stop                   |
|                                                                                          | Mushroom Button (Momentary)                                        | KYK14                  | KY1       | KR4R                  | KA1              | Stop                   |
|                                                                                          | Push Button (with Lockout)                                         | KYK15                  | KY1       | KR3R, K4              | KA1              | Stop                   |
|                                                                                          | Break Glass Operator                                               | KYK116                 | KY1       | K15                   | KA1              | To Stop—Break Glass    |
|                                                                                          | Break Glass Operator (Red Enclosure)                               | KYK117                 | KY1S1     | K15                   | KA1              | To Stop—Break Glass    |
| 2                                                                                        | 2 Push Buttons (Lockout on Stop)                                   | KYK224                 | KY2       | KR1B, KR3R, K4        | KA1, KA1         | Jog-Stop               |
|                                                                                          | 2 Push Buttons                                                     | KYK218                 | KY2       | KR1B, KR3R            | KA1, KA1         | On-Off                 |
|                                                                                          | 2 Push Buttons                                                     | KYK26                  | KY2       | KR1B, KR1B            | KA1, KA1         | Open-Close             |
|                                                                                          | 2 Push Buttons                                                     | KYK25                  | KY2       | KR1B, KR1B            | KA1, KA1         | Up-Down                |
|                                                                                          | 2 Push Buttons                                                     | KYK21                  | KY2       | KR1B, KR3R            | KA1, KA1         | Start-Stop             |
|                                                                                          | 2 Push Buttons (with Sealed Contacts) (4)                          | KYK223                 | KY2       | KR1B, KR3R            | KA51, KA51       | Start-Stop             |
|                                                                                          | 2 Push Buttons (Lockout on Stop)                                   | KYK23                  | KY2       | KR1B, KR3R, K4        | KA1, KA1         | Start-Stop             |
|                                                                                          | 2 Push Buttons (Maintained/Interlocked)                            | KYK27                  | KY2       | KR11GR                | KA1              | Start-Stop             |
|                                                                                          | 1 Push Button, 1 Mushroom Button                                   | KYK22                  | KY2       | KR1B, KR4R            | KA1, KA1         | Start-Stop             |
| 3                                                                                        | 3 Push Buttons                                                     | KYK31                  | KY3       | KR1B, KR1B, KR3R      | KA1, KA1, KA1    | Forward; Reverse; Stop |
|                                                                                          | 3 Push Buttons (Lockout on Stop)                                   | KYK326                 | KY3       | KR1B, KR1B, KR3R, K4  | KA1, KA1, KA1    | Forward; Reverse; Stop |
|                                                                                          | 3 Push Buttons (With Sealed Contacts & Lockout on Stop) (4)        | KYK322                 | KY3       | KR1B, KR1B, KR3R, K4  | KA51, KA51, KA51 | Forward; Reverse; Stop |
|                                                                                          | 3 Push Buttons                                                     | KYK33                  | KY3       | KR1B, KR1B, KR3R      | KA1, KA1, KA1    | Open; Close; Stop      |
|                                                                                          | Red 120v Pilot Light, 2 Push Buttons                               | KYK317                 | KY3       | KP1R31, KR1B, KR3R    | KA2, KA3         | Start; Stop            |
|                                                                                          | 3 Push Buttons                                                     | KYK32                  | KY3       | KR1B, KR1B, KR3R      | KA1, KA1, KA1    | Up; Down; Stop         |
|                                                                                          | 3 Push Buttons (Lockout on Stop)                                   | KYK325                 | KY3       | KR1B, KR1B, KR3R, K4  | KA1, KA1, KA1    | Up ; Down; Stop        |
| UL Types 1, 3, 4 and 13/NEMA 1, 3, 4 and 13—Stainless Steel (304) (2)                    |                                                                    |                        |           |                       |                  |                        |
| 1                                                                                        | Push Button (Momentary)                                            | KYSS101                | KYSS1     | KR1B                  | KA1              | Start                  |
|                                                                                          | Push Button (Momentary)                                            | KYSS103                | KYSS1     | KR1B                  | KA3              | Stop                   |
|                                                                                          | Selector Switch (2 Pos Maintained)                                 | KYSS110                | KYSS1     | KS11B                 | KA1              | Off-On                 |
|                                                                                          | Selector Switch (3 Pos Maintained)                                 | KYSS111                | KYSS1     | KS43B                 | KA1              | Hand-Off-Auto          |
| 2                                                                                        | 2 Push Buttons                                                     | KYSS201                | KYSS2     | KR1B, KR3R            | KA1, KA3         | Start; Stop            |
|                                                                                          | 2 Push Buttons (Lockout on Stop)                                   | KYSS203                | KYSS2     | KR1B, KR3R, K5        | KA1, KA3         | Start; Stop            |
|                                                                                          | 2 Push Buttons (Maintained with Interlock)                         | KYSS210                | KYSS2     | KR11U                 | KA1, KA1         | Start; Stop            |
|                                                                                          | 2 Push Buttons                                                     | KYSS205                | KYSS2     | KR1B, KR1B            | KA1, KA1         | Up; Down               |
| UL Types 1, 3, 4, 4X and 13/NEMA 1, 3, 4, 4X and 13—Stainless Steel (304) (3)            |                                                                    |                        |           |                       |                  |                        |
| 1                                                                                        | Push Button (Momentary)                                            | KYSK101                | KYSS1     | SKR1B                 | KA1              | Start                  |
|                                                                                          | Push Button (Momentary)                                            | KYSK103                | KYSS1     | SKR3R                 | KA3              | Stop                   |
|                                                                                          | Selector Switch (2 Pos Maintained)                                 | KYSK110                | KYSS1     | SKS11B                | KA1              | Off-On                 |
|                                                                                          | Selector Switch (3 Pos Maintained)                                 | KYSK111                | KYSS1     | SKS43B                | KA1              | Hand-Off-Auto          |
| 2                                                                                        | 2 Push Buttons                                                     | KYSK201                | KYSS2     | SKR1B, SKR3R          | KA1, KA3         | Start; Stop            |
|                                                                                          | 2 Push Buttons (Lockout on Stop)                                   | KYSK203                | KYSS2     | SKR1B, SKR3R, K5      | KA1, KA3         | Start; Stop            |
|                                                                                          | 2 Push Buttons (Maintained with Interlock)                         | KYSK210                | KYSS2     | SKR11U                | KA1, KA1         | Start; Stop            |
|                                                                                          | 2 Push Buttons                                                     | KYSK205                | KYSS2     | SKR1B, SKR1B          | KA1, KA1         | Up; Down               |
| UL Types 1, 3, 4, 4X and 13/NEMA 1, 3, 4, 4X and 13—Polymeric (Plastic) (3)              |                                                                    |                        |           |                       |                  |                        |
| 1                                                                                        | Selector Switch (3 Pos Maintained)                                 | SKY111                 | SKY1      | SKS43B                | KA1              | Hand-Off-Auto          |
|                                                                                          | Selector Switch (2 Pos Maintained)                                 | SKY110                 | SKY1      | SKS11B                | KA1              | Off-On                 |
|                                                                                          | Selector Switch (2 Pos Maintained with Sealed Contacts) (4)        | SKY122                 | SKY1      | SKS11B                | KA51             | Off-On                 |
|                                                                                          | Push Button (with Lockout)                                         | SKY105                 | SKY1      | SKR3R, K5             | KA3              | Stop                   |
| 2                                                                                        | 2 Push Buttons                                                     | SKY201                 | SKY2      | SKR1B, SKR3R          | KA1, KA3         | Start-Stop             |
|                                                                                          | 2 Push Buttons (Lockout on Stop)                                   | SKY203                 | SKY2      | SKR1B, SKR1R, K5      | KA1, KA3         | Start-Stop             |
|                                                                                          | 2 Push Buttons (With Sealed Contacts) (4)                          | SKY223                 | SKY2      | SKR1B, SKR3R          | KA51, KA51       | Start-Stop             |
|                                                                                          | 2 Push Buttons (With Sealed Contacts) (4)                          | SKY222                 | SKY2      | SKR1B, SKR3R          | KA51, KA51       | On-Off                 |
|                                                                                          | 2 Push Buttons                                                     | SKY205                 | SKY2      | SKR1B, SKR1B          | KA1, KA1         | Up-Down                |
| 3                                                                                        | 3 Push Buttons                                                     | SKY302                 | SKY3      | SKR1B, SKR1B, SKR3R   | KA1, KA1, KA3    | Up-Down-Stop           |
|                                                                                          | 3 Push Buttons                                                     | SKY303                 | SKY3      | SKR1B, SKR1B, SKR3R   | KA1, KA1, KA3    | Open-Close-Stop        |
|                                                                                          | Red 120v Pilot Light, 2 Push Buttons                               | SKY315A                | SKY3      | SKP1R31, SKR1B, SKR3R | KA1, KA3         | Start-Stop             |
| UL Types 1, 3, 4 and 13/NEMA 1, 3, 4 and 13 Die Cast Zinc Enclosures with Integral Guard |                                                                    |                        |           |                       |                  |                        |
| 1                                                                                        | Guarded Enclosure (grey) with 120V Red LED Pilot Light             | KYG11                  | KYG1      | KP38LRR9              | —                | order separately       |
|                                                                                          | Guarded Enclosure (grey) with 120V Green LED Pilot Light           | KYG12                  | KYG1      | KP38LGG9              | —                | order separately       |
|                                                                                          | Guarded Enclosure (Yellow Cover) with Red Push-Pull Mushroom       | KYG1Y1                 | KYG1Y     | KR9R                  | KA3              | Emergency Stop         |
|                                                                                          | Guarded Enclosure (Yellow Cover) with Red Turn-To Release Mushroom | KYG1Y2                 | KYG1Y     | KR16                  | KA3              | Emergency Stop         |

(1) Uses 9001K metal operators and metal legend plates.

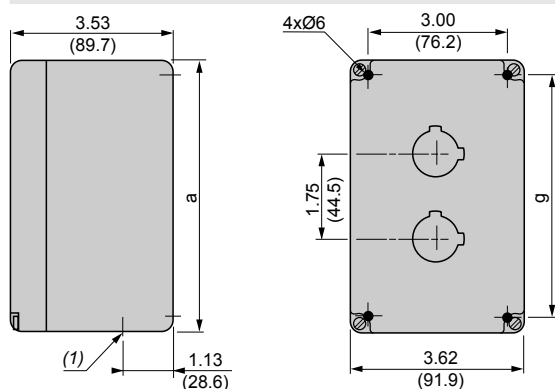
(2) Uses 9001K metal operators and plastic legend plates.

(3) Uses 9001SK plastic operators and plastic legend plates.

(4) Control Station components are UL listed for use in Class 1, Division 2, Groups A, B, C, or D.

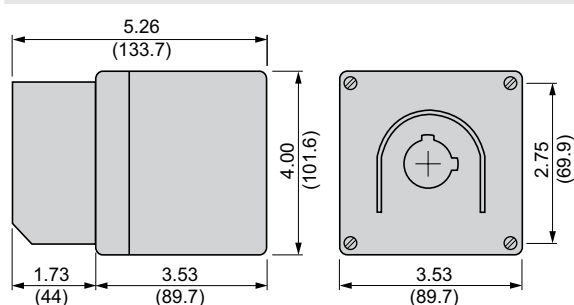
### Dimensions

#### 9001KY● and 9001TY● enclosures



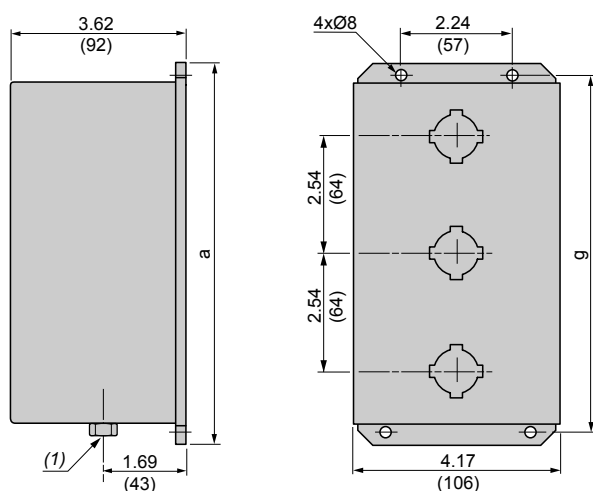
(1) Conduit thread: 9001KY●: 3/4 - 14 NPT 9001TY●: 14 mm.

#### 9001KYG1 and 9001TYG1 enclosures



|                         | a: in (mm)   | g: in (mm)    |
|-------------------------|--------------|---------------|
| 9001KY1, TY1            | 4.0 (101.6)  | 2.75 (69.9)   |
| 9001KY2, TY2 (as shown) | 5.75 (146.1) | 4.5 (114.3)   |
| 9001KY3, TY3            | 7.0 (177.8)  | 6.225 (158.8) |
| 9001KY4, TY4            | 9.25 (235.0) | 8.0 (203.2)   |

#### 9001KYAF● and 9001KYSS● enclosures

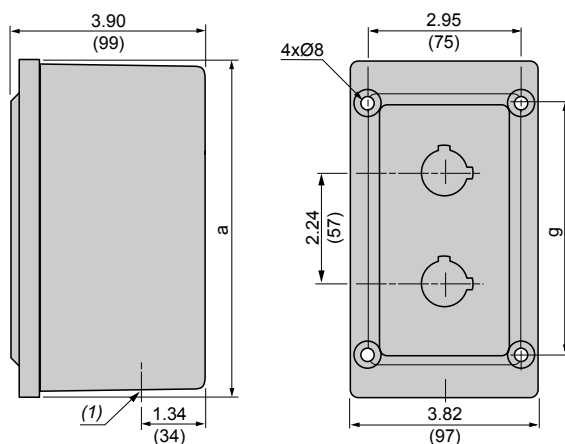


(1) 9001KYSS● includes 3/4 - 14 NPT conduit hub.  
9001KYAF is undrilled and does not include conduit hub.

#### 9001KYAF● and 9001KYSS● a: in (mm) g: in (mm)

|                      |             |             |
|----------------------|-------------|-------------|
| 9001KYAF1            | 4.45 (133)  | 4.61 (117)  |
| 9001KYAF2            | 7.76 (197)  | 7.13 (181)  |
| 9001KYAF3 (as shown) | 10.24 (260) | 9.61 (244)  |
| 9001KYAF4            | 12.76 (324) | 12.13 (308) |
| 9001KYSS1            | 4.45 (133)  | 4.61 (117)  |
| 9001KYSS2            | 7.76 (197)  | 7.13 (181)  |
| 9001KYSS3 (as shown) | 10.24 (260) | 9.61 (244)  |
| 9001KYSS4            | 12.76 (324) | 12.13 (308) |

#### 9001SKY● enclosures



(1) Knockout conduit thread: 3/4".

#### a: in (mm) g: in (mm)

|                     |            |            |
|---------------------|------------|------------|
| 9001SKY1            | 6.65 (169) | 4.88 (124) |
| 9001SKY2 (as shown) | 6.65 (169) | 4.88 (124) |
| 9001SKY3            | 8.90 (226) | 7.13 (181) |

# Harmony™ control stations and enclosures

| Reference   | Page | Reference | Page | Reference | Page | Reference  | Page | Reference | Page |
|-------------|------|-----------|------|-----------|------|------------|------|-----------|------|
| <b>3110</b> |      | BFB226    | 20   | BR215     | 20   | KYSK110    | 25   | XAPE305   | 19   |
| 3110112001  | 20   | BG101     | 20   | BR216     | 20   | KYSK111    | 25   | XAPE901   | 19   |
| <b>B</b>    |      | BG102     | 20   | BR218     | 20   | KYSK201    | 25   | XAPE902   | 19   |
| B101        | 20   | BG103     | 20   | BW146     | 20   | KYSK203    | 25   | XAPE903   | 19   |
| B102        | 20   | BG104     | 20   | BW147     | 20   | KYSK205    | 25   | XAPE904   | 19   |
| B103        | 20   | BG107     | 20   | BW148     | 20   | KYSK210    | 25   | XAPE905   | 19   |
| B104        | 20   | BG111     | 20   | BW151     | 20   | KYSS1      | 24   | XAPG19100 | 18   |
| B105        | 20   | BG112     | 20   | BW159     | 20   | KYSS101    | 25   | XAPG19201 | 18   |
| B106        | 20   | BG114     | 20   | BW240     | 20   | KYSS103    | 25   | XAPG19400 | 18   |
| B107        | 20   | BG201     | 20   | BW241     | 20   | KYSS110    | 25   | XAPG19501 | 18   |
| B108        | 20   | BG202     | 20   | BW242     | 20   | KYSS111    | 25   | XAPG19702 | 18   |
| B109        | 20   | BG203     | 20   | BW243     | 20   | KYSS2      | 24   | XAPG19802 | 18   |
| B110        | 20   | BG204     | 20   | BW244     | 20   | KYSS201    | 25   | XAPG29100 | 18   |
| B111        | 20   | BG205     | 20   | BW245     | 20   | KYSS203    | 25   | XAPG29202 | 18   |
| B112        | 20   | BG206     | 20   | BW246     | 20   | KYSS205    | 25   | XAPG29400 | 18   |
| B115        | 20   | BG207     | 20   | BW250     | 20   | KYSS210    | 25   | XAPG29502 | 18   |
| B116        | 20   | BG208     | 20   | BW252     | 20   | KYSS3      | 24   | XAPG29703 | 18   |
| B117        | 20   | BG209     | 20   | BW253     | 20   | KYSS4      | 24   | XAPG29803 | 18   |
| B118        | 20   | BG210     | 20   | BW254     | 20   | KYSS6      | 24   | XAPG39100 | 18   |
| B119        | 20   | BG211     | 20   | BW255     | 20   | <b>SKY</b> |      | XAPG39203 | 18   |
| B129        | 20   | BG214     | 20   | BW256     | 20   | SKY1       | 24   | XAPG39400 | 18   |
| B129R       | 20   | BG215     | 20   | BW260     | 20   | SKY105     | 25   | XAPG39503 | 18   |
| B161        | 20   | BG216     | 20   | BWD219    | 20   | SKY110     | 25   | XAPG39704 | 18   |
| B162        | 20   | BG218     | 20   | BWD220    | 20   | SKY111     | 25   | XAPG39804 | 18   |
| B175        | 20   | BG301     | 20   | <b>K</b>  |      | SKY122     | 25   | XAPG49400 | 18   |
| B176        | 20   | BG302     | 20   | K25       | 24   | SKY2       | 24   | XAPG49504 | 18   |
| B189        | 20   | BG303     | 20   | K26       | 24   | SKY201     | 25   | XAPG59400 | 18   |
| B189R       | 20   | BG304     | 20   | K27       | 24   | SKY203     | 25   | XAPG59505 | 18   |
| B251        | 20   | BG305     | 20   | K28       | 24   | SKY205     | 25   | XAPZ100   | 16   |
| B252        | 20   | BG307     | 20   | <b>KY</b> |      | SKY222     | 25   | XAPZ104   | 17   |
| B253        | 20   | BG308     | 20   | KY1       | 24   | SKY223     | 25   | XAPZ110   | 17   |
| B254        | 20   | BG316     | 20   | KY2       | 24   | SKY3       | 24   | XAPZ120   | 17   |
| B255        | 20   | BGB107    | 20   | KY3       | 24   | SKY302     | 25   | XAPZ200   | 16   |
| B256        | 20   | BGB114    | 20   | KY4       | 24   | SKY303     | 25   | XAPZ208   | 17   |
| B257        | 20   | BGB123    | 20   | KY6       | 24   | SKY315A    | 25   | XAPZ300   | 16   |
| B258        | 20   | BGB214    | 20   | KYAF1     | 24   | SKY4       | 24   | XAPZ316   | 17   |
| B259        | 20   | BGB224    | 20   | KYAF2     | 24   | SKY6       | 24   | <b>Z</b>  |      |
| B260        | 20   | BGB226    | 20   | KYAF3     | 24   | <b>XAL</b> |      | ZALVB1    | 11   |
| B261        | 20   | BGB307    | 20   | KYAF4     | 24   | XALD01     | 11   | ZALVB3    | 11   |
| B262        | 20   | BGB309    | 20   | KYAF6     | 24   | XALD02     | 11   | ZALVB4    | 11   |
| B263        | 20   | BGB315    | 20   | KYG1      | 24   | XALD03     | 11   | ZALVB5    | 11   |
| B264        | 20   | BGC107    | 20   | KYG11     | 25   | XALD04     | 11   | ZALVB6    | 11   |
| B265        | 20   | BGC114    | 20   | KYG12     | 25   | XALD05     | 11   | ZALVG1    | 11   |
| B266        | 20   | BGC123    | 20   | KYG1Y     | 24   | XALD101    | 10   | ZALVG3    | 11   |
| B276        | 20   | BGC214    | 20   | KYG1Y1    | 25   | XALD111    | 10   | ZALVG4    | 11   |
| B277        | 20   | BGC218    | 20   | KYG1Y2    | 25   | XALD164    | 10   | ZALVG5    | 11   |
| B282        | 20   | BGC224    | 20   | KYK11     | 25   | XALD211    | 10   | ZALVG6    | 11   |
| B283        | 20   | BGC226    | 20   | KYK110    | 25   | XALD221    | 10   | ZALVM1    | 11   |
| B301        | 20   | BGC307    | 20   | KYK111    | 25   | XALD311    | 10   | ZALVM3    | 11   |
| B303        | 20   | BGC309    | 20   | KYK116    | 25   | XALD321    | 10   | ZALVM4    | 11   |
| B321        | 20   | BGC313    | 20   | KYK117    | 25   | XALD341    | 10   | ZALVM5    | 11   |
| B331        | 20   | BGC315    | 20   | KYK13     | 25   | XALK01     | 11   | ZALVM6    | 11   |
| B332        | 20   | BOC107    | 20   | KYK14     | 25   | XALK174    | 10   | ZB5AZ901  | 11   |
| B341        | 20   | BOC114    | 20   | KYK15     | 25   | XALK178    | 10   | ZB5AZ905  | 11   |
| B342        | 20   | BOC123    | 20   | KYK21     | 25   | XALK184    | 10   | ZB5SZ3    | 11   |
| BF101       | 20   | BOC214    | 20   | KYK218    | 25   | XALK188    | 10   | ZENL1111  | 11   |
| BF102       | 20   | BOC218    | 20   | KYK22     | 25   | XALK194    | 10   | ZENL1121  | 11   |
| BF107       | 20   | BOC224    | 20   | KYK223    | 25   | XALZ09     | 11   |           |      |
| BF201       | 20   | BOC226    | 20   | KYK224    | 25   | <b>XAP</b> |      |           |      |
| BF208       | 20   | BOC360    | 20   | KYK23     | 25   | XAPA1100   | 16   |           |      |
| BF210       | 20   | BOC361    | 20   | KYK25     | 25   | XAPA1104   | 17   |           |      |
| BF211       | 20   | BOC362    | 20   | KYK26     | 25   | XAPA1110   | 17   |           |      |
| BF215       | 20   | BR101     | 20   | KYK27     | 25   | XAPA1120   | 17   |           |      |
| BF216       | 20   | BR103     | 20   | KYK31     | 25   | XAPA2100   | 16   |           |      |
| BF303       | 20   | BR104     | 20   | KYK317    | 25   | XAPA2108   | 17   |           |      |
| BF305       | 20   | BR107     | 20   | KYK32     | 25   | XAPA3100   | 16   |           |      |
| BF308       | 20   | BR202     | 20   | KYK322    | 25   | XAPA3116   | 17   |           |      |
| BFB107      | 20   | BR203     | 20   | KYK325    | 25   | XAPA4100   | 16   |           |      |
| BFB114      | 20   | BR204     | 20   | KYK326    | 25   | XAPE301    | 19   |           |      |
| BFB123      | 20   | BR205     | 20   | KYK33     | 25   | XAPE302    | 19   |           |      |
| BFB214      | 20   | BR208     | 20   | KYSK101   | 25   | XAPE303    | 19   |           |      |
| BFB224      | 20   | BR214     | 20   | KYSK103   | 25   | XAPE304    | 19   |           |      |



<http://www.schneider-electric.us/>

**Schneider Electric USA, Inc.**

8001 Knightdale Blvd.  
Knightdale, NC 27545

USA Customer Care Center  
Tel: 888-778-2733

**Schneider Electric Canada**

5985 McLaughlin Rd.  
Mississauga, Ontario, Canada L5R 1B8

Canada Customer Care Center  
Tel: 800-565-6699

The information and dimensions in this catalog are provided for the convenience of our customers. While this information is believed to be accurate, Schneider Electric reserves the right to make updates and changes without prior notification and assumes no liability for any errors or omissions.

Harmony, Schneider Electric and logo are trademarks or registered trademarks of Schneider Electric or its affiliates in the United States and other countries. Other trademarks used herein are the property of their respective owners.

Design: Schneider Electric  
Photos: Schneider Electric