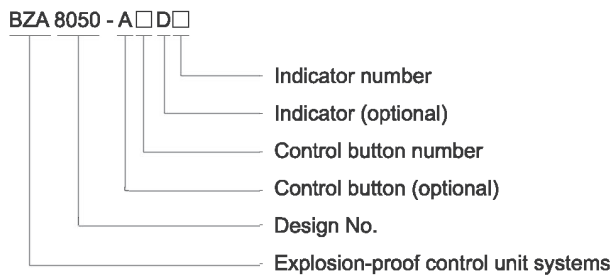


## Control Unit Systems

### BZA8050 Series Explosion-proof Control Unit Systems

- ◆ Explosion protection to
  - CENELEC
  - IEC
  - NEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
  - Class I, Zone 1 and Zone 2
  - Class I, Division 2, Groups A, B, C, D
- ◆ GRP enclosure (glass fibre-reinforced polyester resin).
- ◆ Three types of enclosure.
- ◆ Individual unit can be combined into larger units.



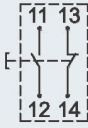



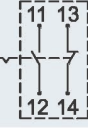

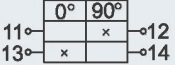
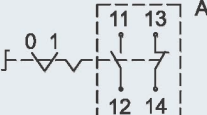
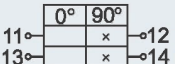
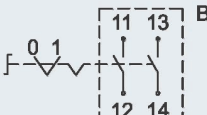
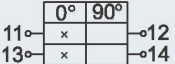
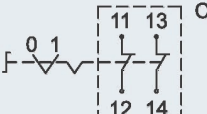
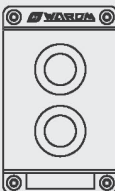

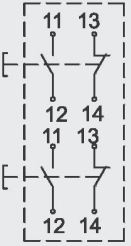

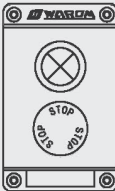

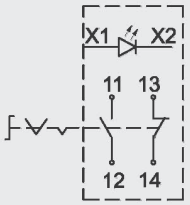

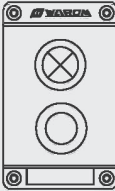

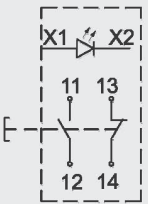

#### ■ Catalogue number logic



#### ■ Note



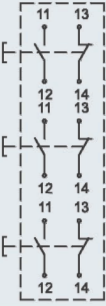




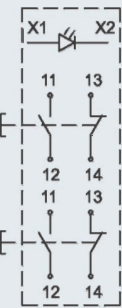


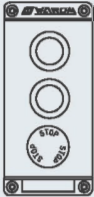














1. Please refer to the Selection Table on P4/21~22.
2. Please select internal components as below:
  - BA8050 explosion-proof control button selection table on P4/36~39 (Nominal contact is 1NO+1NC);
  - BD8050 explosion-proof indicator selection table on P4/40~42;
3. Example: BZA8050-A2
  - Components: two control buttons
  - Tech. Details: One start control button (40092B + 40090-1+40091-1, green, 1NO+1NC);
  - One stop control button (40092A+ 40090-1+40091-1, red, 1NO+1NC);
4. Special requirements on request.

## Zones 1&2; 21&22

| Selection table   |   |  |               |             |
|---|---|--|---------------|-------------|
| Outline   | Colour  | Chart of contact   | Ordering code | Weight (kg) |
| Spring-return button<br>                               | Red      |     | 40063A        | 0.65        |
|   | Green    |  | 40063B        |             |
| Mushroom stay-put emergency button<br>                 | Red      |     | 40064         | 0.65        |
| Rotary button<br>                                      |          |  A  | 40065A        | 0.65        |
|   |          |  B  | 40065B        | 0.65        |
|   |         |  C | 40065C        | 0.65        |
| Spring-return button<br>                             | Green  |   | 40066         | 0.85        |
|   | Red    |  |               |             |
| Indicator and mushroom stay-put emergency button<br> | Red    |   | 40067         | 0.85        |
|   | Red    |  |               |             |
| Indicator and spring-return button<br>               | Red    |   | 40068         | 0.85        |
|   | Red    |  |               |             |



**Selection table**

| Outline   | Colour   | Chart of contact   | Ordering code | Weight (kg) |
|---|--|--|---------------|-------------|
| Spring-return button<br>   | Yellow<br>  |    | 40069         | 1.10        |
|   | Green<br>   |  |               |             |
|   | Red<br>     |  |               |             |
| Spring-return button and indicator<br>                                       | Red<br>     |    | 40070         | 1.10        |
|   | Green<br>   |  |               |             |
|   | Red<br>     |  |               |             |
| Spring-return button and mushroom stay-put emergency button<br>            | Green<br> |  | 40071         | 1.10        |
|   | Red<br>   |  |               |             |
|   | Red<br>   |  |               |             |
| Spring-return button and rotary button<br>                                 | Green<br> |  | 40072         | 1.10        |
|   | Red<br>   |  |               |             |
|   | Red<br>   |  |               |             |
| Indicator, spring-return button and mushroom stay-put emergency button<br> | Red<br>   |  | 40073         | 1.10        |
|   | Red<br>   |  |               |             |
|   | Red<br>   |  |               |             |



**Technical data**

**Explosion-proof control unit systems BZA8050**

**Explosion protection**

Gas explosion protection

⊕ II 2 G Ex de IIC T6 Gb

Dust explosion protection

⊕ II 2 D Ex tb IIIC T80°C Db IP65

**Certificates**

LCIE 09 ATEX 3097; IECEx CQM 11.0018; BVC10.0204 (Brazil); FM (USA)

**Conformity to standards**

EN 60079-0:2009, EN 60079-1:2007, EN 60079-7:2007, EN 60079-31:2009  
IEC 60079-0:2011, IEC 60079-1:2007, IEC 60079-7:2006, IEC 60079-31:2008

**Enclosure material**

GRP (glass fibre-reinforced polyester resin)

**Enclosure colour**

Black

**Exposed fastener**

Stainless steel

**Rated voltage**

Max. 415V AC

**Rated current**

10A

**Degree of protection**

IP65

**Ambient temperature**

-20°C~+55°C

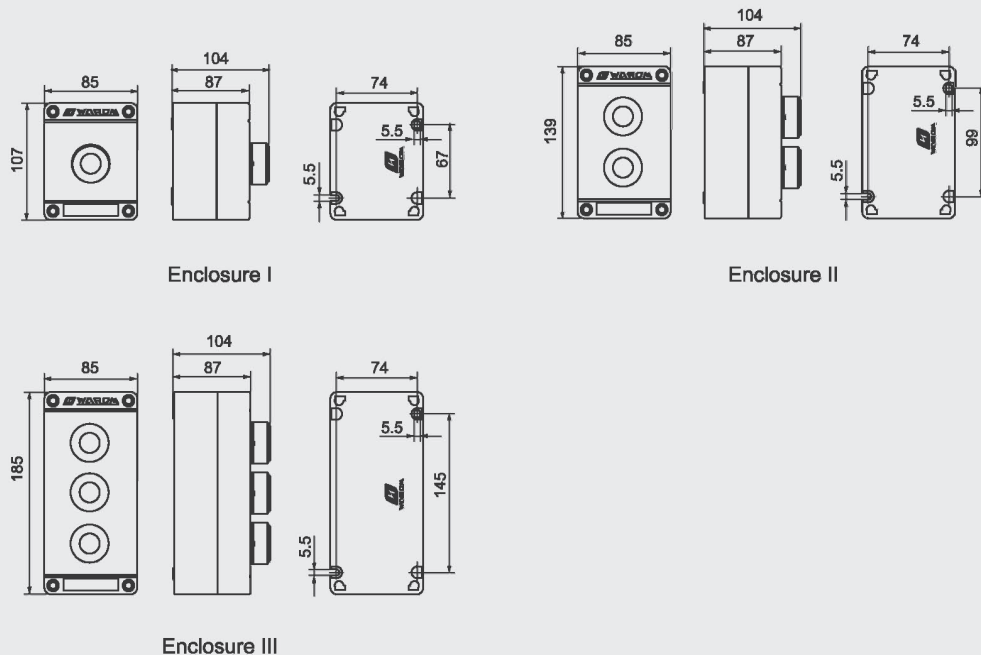
**Cable entries**

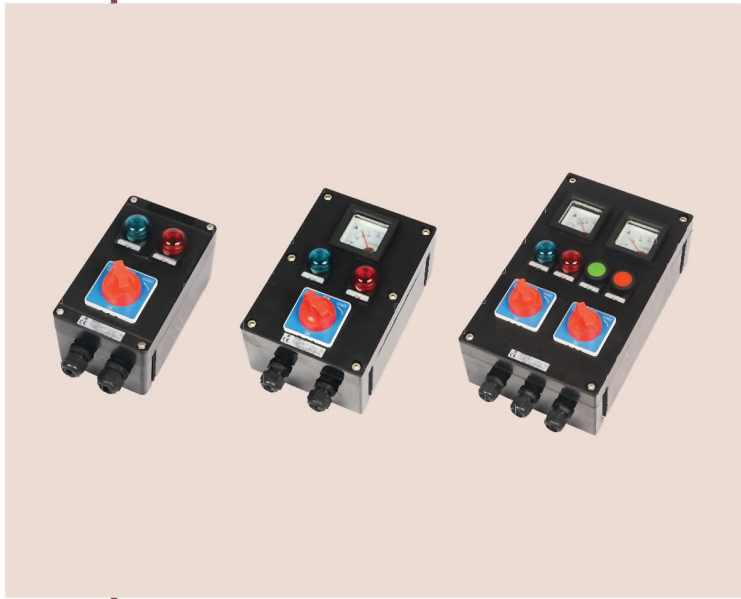
1 x M25 x 1.5 Cable gland (DQM- I, plastic)

**Available cable outer diameter**

Φ9~Φ16 (mm)

**Dimension drawings (all dimensions in mm) - subject to alteration**

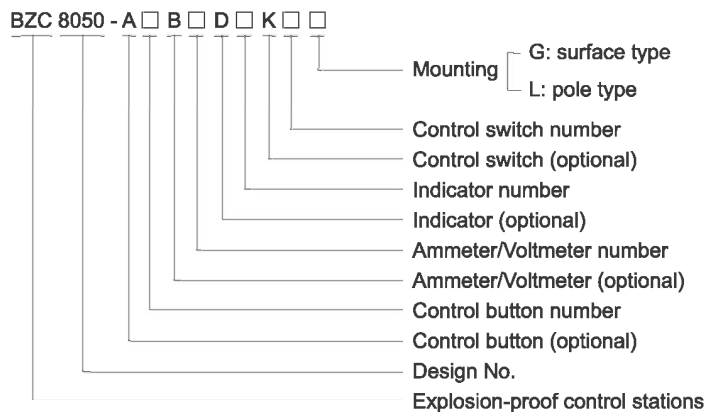




### Control Stations (GRP) BZC8050 Series Explosion-proof Control Stations

- ◆ Explosion protection to
  - CENELEC
  - IEC
  - NEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
  - Class I, Zone 1 and Zone 2
  - Class I, Division 2, Groups A, B, C, D
- ◆ GRP enclosure (glass fibre-reinforced polyester resin).
- ◆ Four types of enclosure.

#### ■ Catalogue number logic



#### ■ Note

1. Please refer to the Selection Table on P4/25.
2. Please select internal components as below:
  - BA8050 explosion-proof control button selection table on P4/36~39 (nominal contact is 1NO+1NC);
  - BD8050 explosion-proof indicator selection table on P4/40~42;
  - BK8050 explosion-proof control switch selection table on P4/43~48;
  - BB8050 explosion-proof ammeter/voltmeter selection table on P4/49~51;
3. Example: BZC8050-A2D2G
  - Components: Two control buttons, two indicators; surface type
  - Tech. Details: One start control button (40092B + 40090-1+40091-1, green, 1NO+1NC);
  - One stop control button (40092A+ 40090-1+40091-1, red, 1NO+1NC);
  - One indicator (40116+40100-2, green, 230V AC);
  - One indicator (40115+40099-2, red, 230V AC);
4. Special requirements on request.



## Zones 1&2; 21&22

| Control station BZC8050(GRP) selection table |                        |   |               |                       |
|--|------------------------|---|---------------|-----------------------|
| Enclosure type                               | Components arrangement | Cable entries and direction   | Ordering code | Enclosure weight (kg) |
| I  |                        | 2-M25 x 1.5<br>Bottom entry   | 40074.....    | 1.30                  |
| II   |                        | 1-M32 x 1.5<br>or<br>2-M25 x 1.5<br>Bottom entry                      | 40075.....    | 2.10                  |
| III  |                        | 1-M32 x 1.5<br>or<br>3-M25 x 1.5<br>Bottom entry                      | 40076.....    | 3.25                  |
| IIIx   |                        | 1-M40 x 1.5<br>or<br>2-M32 x 1.5<br>or<br>4-M25 x 1.5<br>Bottom entry | 40077.....    | 3.25                  |
| IV   |                        | 1-M40 x 1.5<br>or<br>2-M32 x 1.5<br>or<br>6-M25 x 1.5<br>Bottom entry | 40078.....    | 4.15                  |



#### Technical data

#### Explosion-proof control stations BZC8050 (GRP)

##### Explosion protection

Gas explosion protection

II 2 G Ex de IIC T6 Gb

Dust explosion protection

II 2 D Ex tb IIIC T80°C Db IP65

##### Certificates

LCIE 09 ATEX 3099; IECEx CQM 11.0029; BVC10.0205 (Brazil); FM (USA)

##### Conformity to standards

EN 60079-0:2009, EN 60079-1:2007, EN 60079-7:2007, EN 60079-31:2009  
IEC 60079-0:2011, IEC 60079-1:2007, IEC 60079-7:2006, IEC 60079-31:2008

##### Enclosure material

GRP (glass fibre-reinforced polyester resin)

##### Enclosure colour

Black

##### Exposed fastener

Stainless steel

##### Rated voltage

Max. 415V AC

##### Rated current

10A

##### Degree of protection

IP65

##### Ambient temperature

-20°C~+55°C

##### Components

1. BA8050 explosion-proof control button technical data on P4/36~39;
2. BD8050 explosion-proof indicator technical data on P4/40~42;
3. BK8050 explosion-proof control switch technical data on P4/43~48;
4. BB8050 explosion-proof ammeter/voltmeter technical data on P4/49~51;

##### Cable entries

M□ x 1.5 plug, please see the Selection Table on P4/25

##### Cable gland (optional)

DQM-I (Ex e) is recommended. Please see P7/16

##### Mounting

Surface type

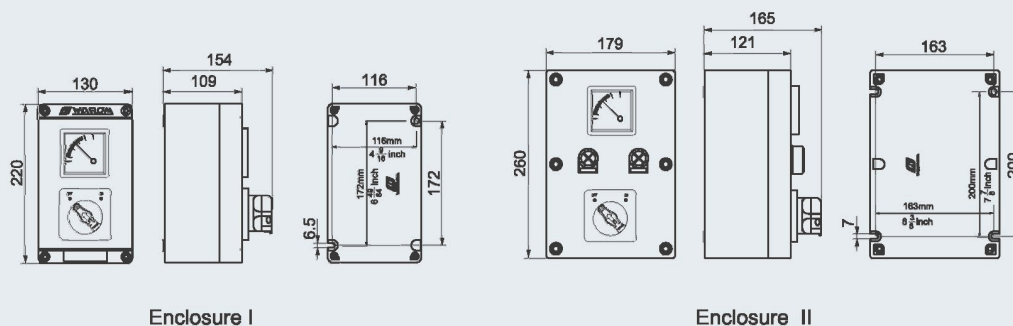
Pole type (for enclosure I, II, III only)

##### Note

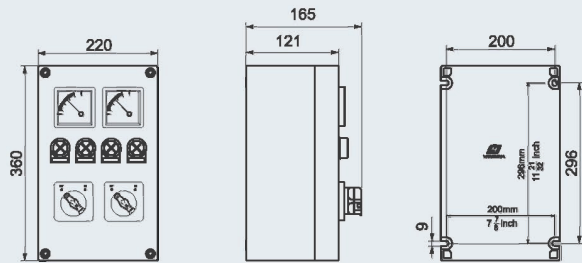
1. Please specify the number and size of entries (applicable for surface type only);
2. For pole type, only G1" entry is applicable;



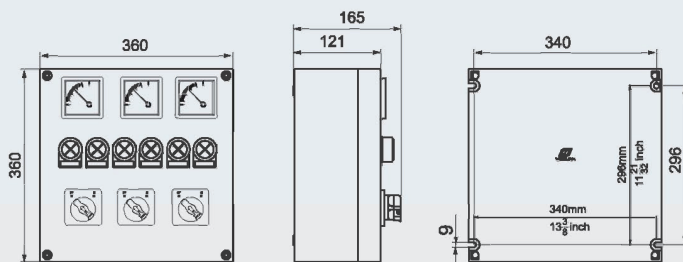
#### Dimension drawings (all dimensions in mm) - subject to alteration



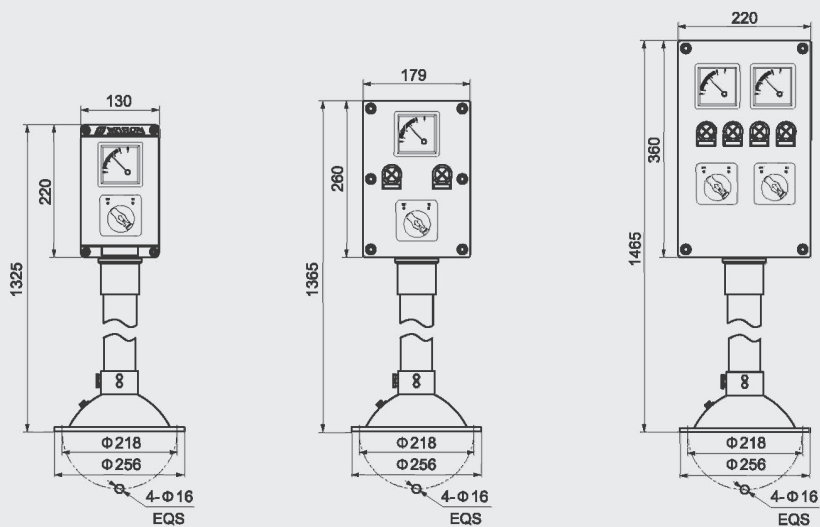
Dimension drawings (all dimensions in mm) - subject to alteration



Enclosure III



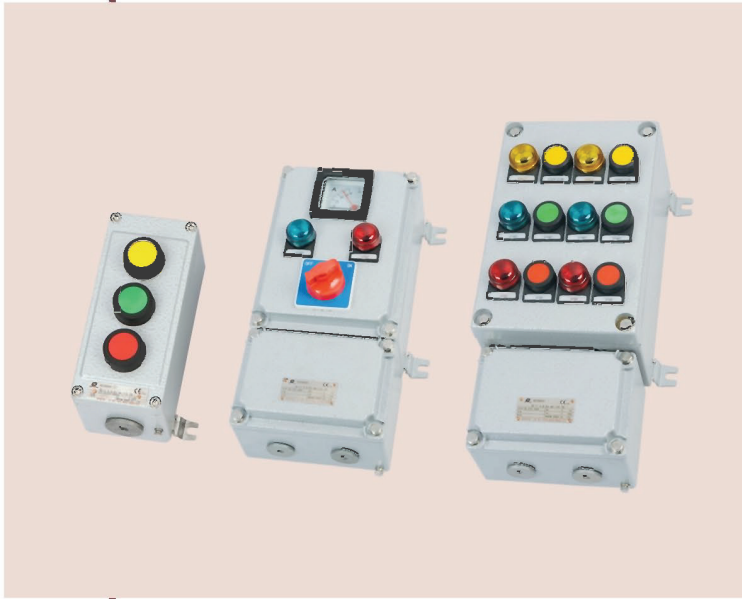
Enclosure IV



Pole type (for enclosure I, II, III only)



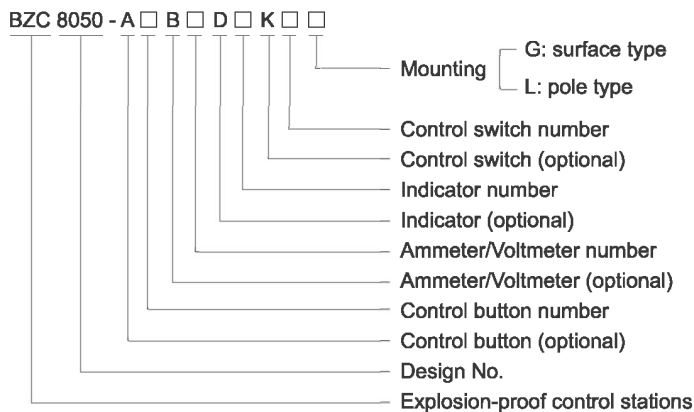




## Control Stations (Aluminium Alloy) BZC8050 Series Explosion-proof Control Stations

- ◆ Explosion protection to
  - CENELEC
  - IEC
  - NEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
  - Class I, Zone 1 and Zone 2
  - Class I, Division 2, Groups A, B, C, D
- ◆ Copper-free aluminium enclosure; powder coated surface.
- ◆ Seven types of enclosure.

### ■ Catalogue number logic








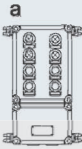
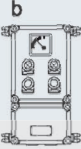
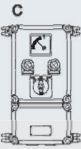



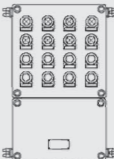





### ■ Note

1. Please refer to the Selection Table on P4/29.
2. Please select internal components as below:
  - BA8050 explosion-proof control button selection table on P4/36~39 (Nominal contact is 1NO+1NC);
  - BD8050 explosion-proof indicator selection table on P4/40~42;
  - BK8050 explosion-proof control switch selection table on P4/43~48;
  - BB8050 explosion-proof ammeter/voltmeter selection table on P4/49~51;
3. Example: BZC8050-A2D2G
  - Components: Two control buttons, two indicators; surface type
  - Tech. Details: One control start button (40092B + 40090-1+40091-1, green, 1NO+1NC);
  - One control stop button (40092A+ 40090-1+40091-1, red, 1NO+1NC);
  - One indicator (40116+40100-2, green, 230V AC);
  - One indicator (40115+40099-2, red, 230V AC);
4. Special requirements on request.

## Zones 1&2; 21&22

## Control Stations (Aluminium Alloy) BZC8050 Series Explosion-proof Control Stations

| Control station BZC8050 (aluminium alloy) selection table |   |   |               |                       |
|---|---|---|---------------|-----------------------|
| Enclosure type  | Components arrangement  | Cable entries and direction   | Ordering code | Enclosure weight (kg) |
| I   |    | 1-M25 x 1.5<br>Bottom entry   | 40079         | 0.65                  |
| II  |    | 1-M25 x 1.5<br>Bottom entry   | 40080         | 0.85                  |
| III   |    | 1-M25 x 1.5<br>Bottom entry   | 40081         | 1.10                  |
| IV  |             | 2-M25 x 1.5<br>Bottom entry   | 40082.....    | 3.75                  |
| V   |     | 1-M32 x 1.5<br>or<br>2-M25 x 1.5<br>Bottom entry                      | 40083.....    | 6.50                  |
| VI  |      | 1-M40 x 1.5<br>or<br>2-M32 x 1.5<br>or<br>4-M25 x 1.5<br>Bottom entry | 40084.....    | 9.00                  |
| VII   |     | 1-M40 x 1.5<br>or<br>2-M32 x 1.5<br>or<br>6-M25 x 1.5<br>Bottom entry | 40085.....    | 13.70                 |



## Control Stations (Aluminium Alloy)

### BZC8050 Series Explosion-proof Control Stations

#### Technical data

#### Explosion-proof control stations BZC8050 (aluminium alloy)

##### Explosion protection

Gas explosion protection

⊕ II 2 G Ex de IIC T6 Gb

Dust explosion protection

⊕ II 2 D Ex tb IIIC T80°C Db IP65

##### Certificates

LCIE 09 ATEX 3099; IECEx CQM 11. 0029; BVC10.0205 (Brazil); FM (USA)

##### Conformity to standards

EN 60079-0:2009, EN 60079-1:2007, EN 60079-7:2007, EN 60079-31:2009  
IEC 60079-0:2011, IEC 60079-1:2007, IEC 60079-7:2006, IEC 60079-31:2008

##### Enclosure material

Copper-free aluminium; powder coated surface

##### Enclosure colour

Window grey (RAL7040)

##### Exposed fastener

Stainless steel

##### Rated voltage

Max. 415V AC

##### Rated current

10A

##### Degree of protection

IP65

##### Ambient temperature

-20°C~+55°C

##### Components

1. BA8050 explosion-proof control button technical data on P4/36~39;
2. BD8050 explosion-proof indicator technical data on P4/40~42;
3. BK8050 explosion-proof control switch technical data on P4/43~48;
4. BB8050 explosion-proof ammeter/voltmeter technical data on P4/49~51;

##### Cable entries

M□ x 1.5 plug, please see the Selection Table on P4/29

##### Cable gland (optional)

DQM-I (Ex e) is recommended. Please see P7/17~19

##### Mounting

Surface type

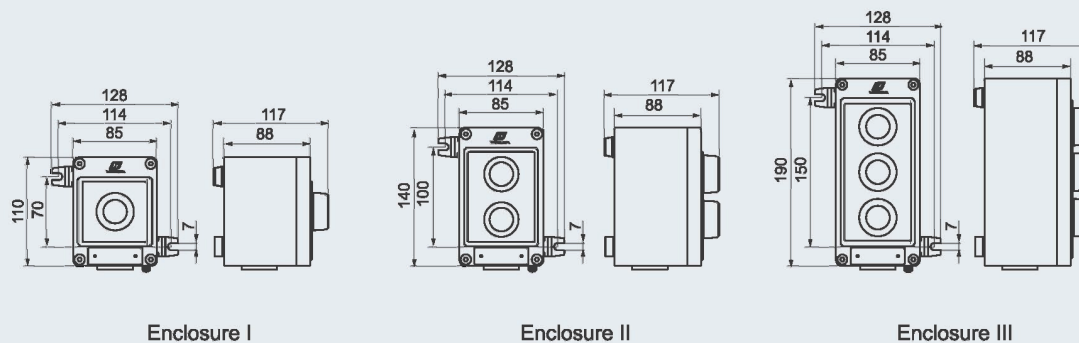
Pole type (for enclosure IV, V, VI only)

##### Note

1. Please specify the number and size of entries (applicable for surface type only);
2. For pole type, only G1" entry is applicable;

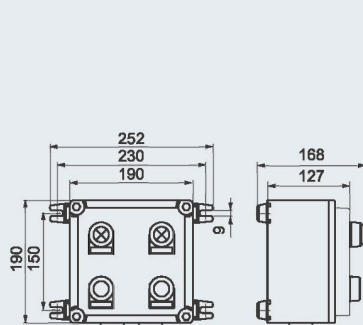


#### Dimension drawings (all dimensions in mm) - subject to alteration

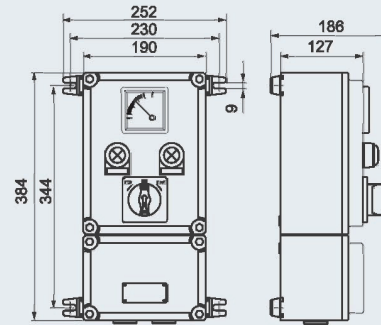


## Control Stations (Aluminium Alloy) BZC8050 Series Explosion-proof Control Stations

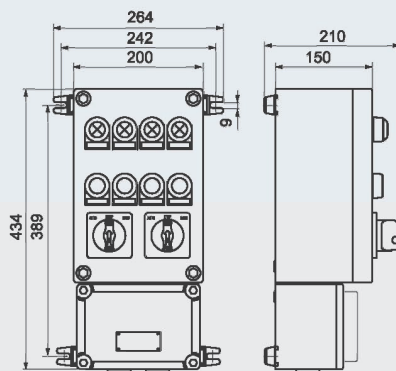
Dimension drawings (all dimensions in mm) - subject to alteration



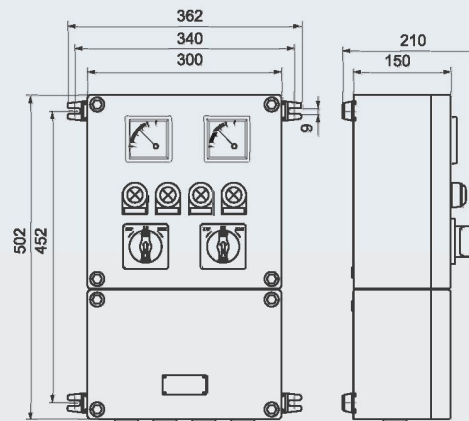
Enclosure IV



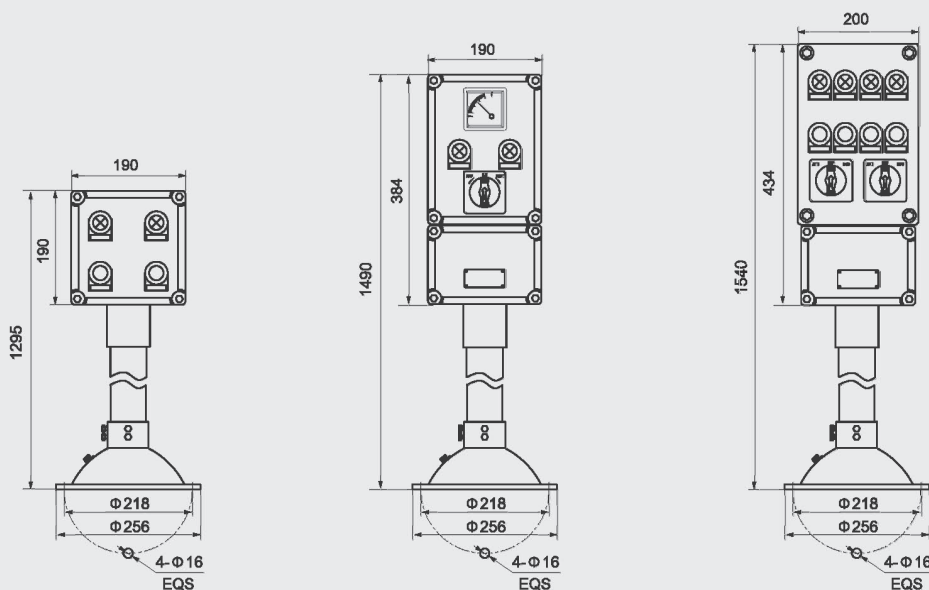
Enclosure V



Enclosure VI



Enclosure VII



Pole type (for enclosure IV, V, VI only)

