Explosion protection to
-CENELEC
-IEC
-NEC
Can be used in
Zone 1 and Zone 2
Zone 21 and Zone 22
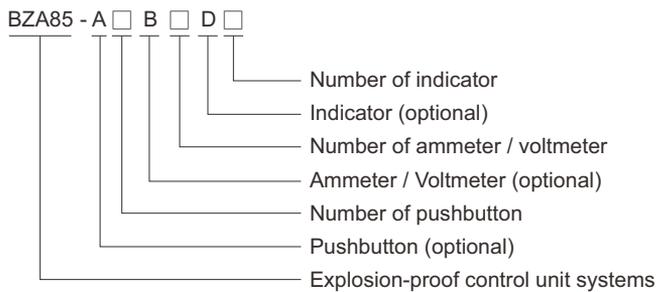Class I, Zone 1 and Zone 2
Class I, Division 1, Groups A , B, C, D
Copper-free Aluminium Alloy, powder coated surface.
Features excellent dustproof, waterproof, and corrosion-resistant properties, making it adaptable to various harsh working environments.
The layout of button, indicator, and other components on the control station is rational and straightforward, ensuring ease of use and quick mastery.

## Catalogue number logic

BZA85 - A ☐ B ☐ D ☐

- Number of indicator
- Indicator (optional)
- Number of ammeter / voltmeter
- Ammeter / Voltmeter (optional)
- Number of pushbutton
- Pushbutton (optional)
- Explosion-proof control unit systems

### Note

1. Please refer to the Selection table on P4/21~22.
2. Please select internal components as below:
   Selection table of HA pushbutton on P4/10~13 (nominal contact is 1NO+1NC);
   Selection table of HD indicator on P4/14~15;
   Dimension drawings of ammeter (type 48) and voltmeter (type 48) see P4/23.
3. Example: BZA85-A1
   Components: One control button;
   Tech. Details: One start control button (40036B + 40023 + 40024, green, 1NO+1NC).
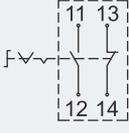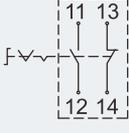4. Special requirements on request.

# Zones 1&2; 21&22

# Control Unit Systems
## BZA85 Series Explosion-proof Control Unit Systems

## Technical data

### Explosion-proof control unit systems  BZA85

| | |
|---|---|
| **Explosion protection** | |
| Global (IECEx) | IECEx CQM 17.0021X |
| Gas and dust | Ex db IIC T6 Gb |
| | Ex tb IIIC T80    Db IP66 |
| Europe (ATEX) | TÜV CY 18 ATEX 0206093 X |
| Gas and dust | ⟨Ex⟩ II 2 G Ex db IIC T6 Gb |
| | ⟨Ex⟩ II 2 D Ex tb IIIC T80    Db IP66 |
| **Certificates** | IECEx; ATEX; CU-TR |
| **Conformity to standards** | EN 60079-0, EN 60079-1, EN 60079-31 |
| | IEC 60079-0, IEC 60079-1, IEC60079-31 |
| **Enclosure material** | Copper-free Aluminium Alloy, powder coated surface |
| **Enclosure colour** | Window grey (RAL7040) |
| **Exposed fastener** | Stainless steel |
| **Rated voltage** | Max.500V AC, 250V DC (600V for voltmeter) |
| **Rated current** | Max.10A (AC), 6A (DC) |
| **Degree of protection** | IP66 |
| **Ambient temperature** | -60   ~+60 |
| **Components** | |
| HA pushbutton | Technical data on P4/8~11 |
| HD indicator | Technical data on P4/12~13 |

| Ammeter (type 48) / Voltmeter (type 48) | | Working mode | Accuracy | Overload  times |
|---|---|---|---|---|
| | Ammeter | Electromagnetic type (moving iron) | Class 1.5 | 5  times  (2 or 6  times  on  request) |
| | Voltmeter | | | - |

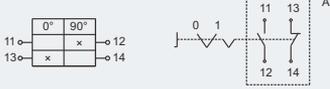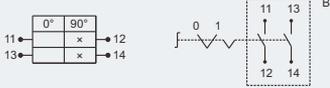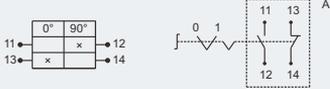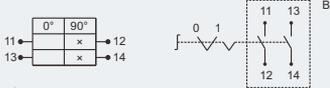| | |
|---|---|
| **Cable entries** | Standard 2 x M25 x 1.5 plugs |
| | 2 x NPT3/4" plugs on request |
| **Cable gland (optional)** | DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/22~31. |

## Selection table (Pushbutton / Indicator)

| Outline | Colour | | Chart of contact | Ordering code | Weight (kg) |
|---|---|---|---|---|---|
| Indicator | Red | ⊗ | X1 ▷ X2 | 40171A | 0.65 |
| | Green | ⊗ | | 40171B | |
| Spring-return button | Red | ◯ | 11 13 / 12 14 | 40172A | 0.65 |
| | Green | ◯ | | 40172B | |
| Mushroom stay-put emergency pushbutton | Red | ⊖ | 11 13 / 12 14 | 40173 | 0.7 |
| Mushroom turn-to-release emergency pushbutton | Red | ◗ | 11 13 / 12 14 | 40174 | 0.7 |

## Selection table (Pushbutton)

| Outline | Chart of contact | Ordering code | Weight (kg) |
|---|---|---|---|
| Key-operated pushbutton |  A | 40175A | 0.7 |
| |  B | 40175B | 0.7 |
| Rotary button |  A | 40176A | 0.7 |
| |  B | 40176B | 0.7 |

## Selection table (Ammeter)

| Version | Description | Overload scale | Measuring range | Ordering code | Weight (kg) |
|---|---|---|---|---|---|
|  | Direct measuring | - | 0~20/40 mA | 40177 | 0.70 |
| | | | 4~20/40 mA | 40178 | |
| | Direct measuring | - | 0~1 A | 40179 | |
| | | | 0~5 A | 40180 | |
| | For CT (current transformer) | 2 times or 6 times | sec. 1 A | 40181 | |
| | | | sec. 5 A | 40182 | |

## Selection table (Voltmeter)

| Version | Description | Measuring range | Ordering code | Weight (kg) |
|---|---|---|---|---|
|  | Direct measuring | 0~10 V | 40183 | 0.70 |
| | | 0~25 V | 40184 | |
| | | 0~40 V | 40185 | |
| | | 0~60 V | 40186 | |
| | | 0~100 V | 40187 | |
| | | 0~150 V | 40188 | |
| | | 0~250 V | 40189 | |
| | | 0~300 V | 40190 | |
| | | 0~450 V | 40191 | |
| | | 0~500 V | 40192 | |
| | For PT (potential transformer) | sec. 100 V | 40193 | |
| | | sec. 110 V | 40194 | |
| | | sec. 120 V | 40195 | |

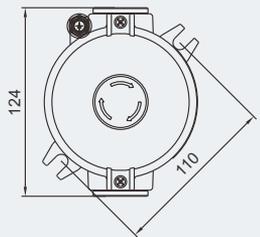# Control Unit Systems
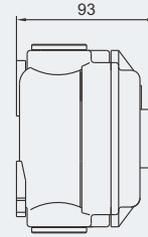## BZA85 Series Explosion-proof Control Unit Systems
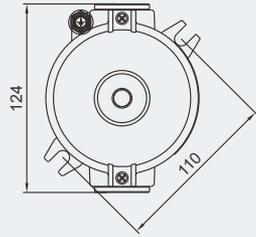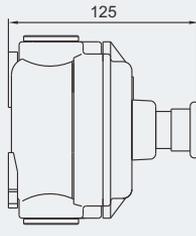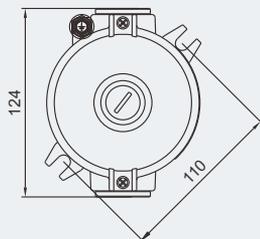
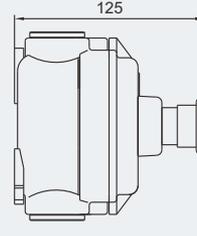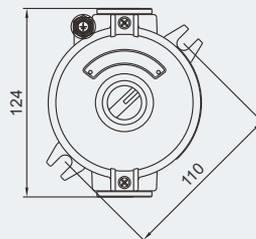**Dimension drawings** (all dimensions in mm) - subject to alteration
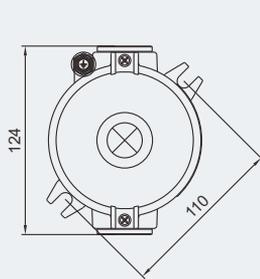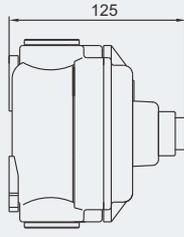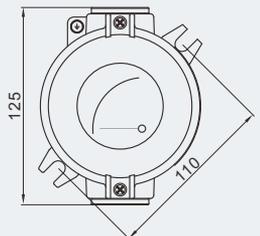


Indicator
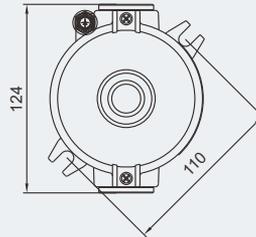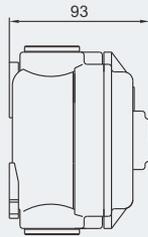
Spring-return button

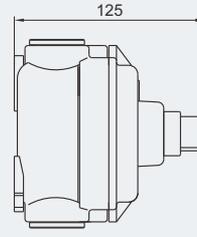Mushroom turn-to-release
emergency pushbutton

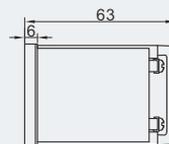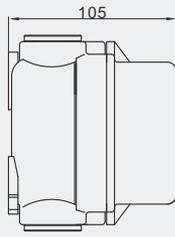Mushroom stay-put
emergency pushbutton

Key-operated pushbutton

Rotary button

Ammeter / Voltmeter

Ammeter (48 type) / Voltmeter (48 type)