

# Explosion-proof Control Station

## KBX03 - Series

 II 2 G Ex db eb IIC T6 Gb

 II 2 D Ex tb IIIC T80°C Db

### 1. Application and Features

- Explosion proof certificates
  - ATEX : SEV 22 ATEX 0606 X
  - IECEx : IECEx SEV 22.0011X
- Application in hazardous area
  - Zone 1 and Zone 2,
  - Zone 21 and Zone 22
- There are 5 types of enclosure, assembled with explosion-proof components (control buttons, switches, indicator lights, potentiometers, ammeters, etc.) and terminal blocks. The components are rail-type structure, which can be quickly installed and convenient for installation and maintenance.
- The emergency stop button can be equipped with anti-misoperation mechanism and padlock by requirements.
- Stainless steel exposed fasteners, anti-drop structure, convenient for installation and maintenance.



### 2. Product definition

|                                 |    |                |   |                             |    |                                 |    |                                                       |   |                                                            |   |
|---------------------------------|----|----------------|---|-----------------------------|----|---------------------------------|----|-------------------------------------------------------|---|------------------------------------------------------------|---|
| K                               | BX | 03             | X | AX                          | BX | DX                              | KX | PX                                                    | X | X                                                          | X |
| K - KHJ                         |    | Design No.     |   | Button quantity (Optional)  |    | Signal lamp quantity (Optional) |    | Potentiometer quantity (Optional)                     |   | Inlet direction<br>D-Top inlet<br>X-Bottom inlet (default) |   |
| Explosion-proof control station |    | Enclosure code |   | Ammeter quantity (Optional) |    | Switch quantity (Optional)      |    | Installation method<br>G-Hanging type<br>L-Stand type |   | Inlet Nos. / Thread specification                          |   |

#### Note:

- Example: KBX03-19A2B1GXM25X1.5, 19# enclosure, which with two control buttons, one ammeter, wall mounting type, one bottom inlet M25X1.5.
- The specific requirements of the components are based on the drawings.
- Button code, switch code, signal lamp code, ammeter code.
- The rain shade is customizable by requirements.

### 3. Technical Parameter

|                      |                                         |                                                                                                              |                     |
|----------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------|---------------------|
| Ex marking           | Gas                                     |  II 2 G Ex db eb IIC T6 Gb  | Ex db eb IIC T6 Gb  |
|                      | Dust                                    |  II 2 D Ex tb IIIC T80°C Db | Ex tb IIIC T80°C Db |
| Exective standards   |                                         | IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31<br>EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31       |                     |
| Enclosure materials  | Enclosure                               | GRP (Polyester resin, glass fibre reinforced), antistatic                                                    |                     |
|                      | Rain shade                              | Bended steel plate surface powder coated (black color) or stainless steel 304/316, please note when needed.  |                     |
| Color of enclosure   |                                         | Black                                                                                                        |                     |
| Exposed fasteners    |                                         | Stainless steel exposed fasteners, anti-drop structure                                                       |                     |
| Rated voltage        |                                         | Maximum 415VAC, 250V DC                                                                                      |                     |
| Rated current        |                                         | 6A、10A、16A                                                                                                   |                     |
| Wire diameter        | ≤6A: 0.75~2.5mm <sup>2</sup>            |                                                                                                              |                     |
|                      | 6A<I≤10A: 1.5~2.5mm <sup>2</sup>        |                                                                                                              |                     |
|                      | 10A<I≤16A: 2.5mm <sup>2</sup>           |                                                                                                              |                     |
| Degree of protection |                                         | IP66                                                                                                         |                     |
| Ambient temperature  |                                         | -40°C~+40/45/50/55/60/65/70°C                                                                                |                     |
| Components           | K0101 explosion-proof control button.   |                                                                                                              |                     |
|                      | K0102 explosion-proof indicator.        |                                                                                                              |                     |
|                      | K0101-S explosion-proof control switch. |                                                                                                              |                     |
|                      | K0109 explosion-proof ammeter.          |                                                                                                              |                     |
| Installation method  |                                         | Wall type and stand type                                                                                     |                     |
| Cable entries        | Wall type                               | M16X1.5~M63X1.5<br>Without cable entry device as default, please note if which is needed.                    |                     |

### 4. Components and accessories



K0101- Control button



K0101-A2 Double button



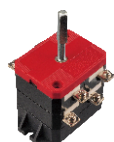
K0102- Signal lamp



K0101-A Illuminated control buttons



K0109- Ammeter



K0155 Switch



φ38 operating handle



φ65 operating handle (with padlock available)

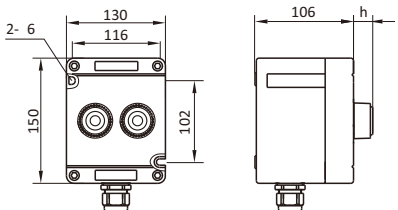
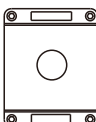
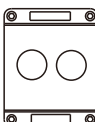
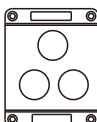
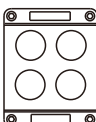
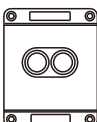
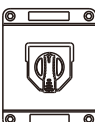
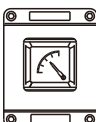
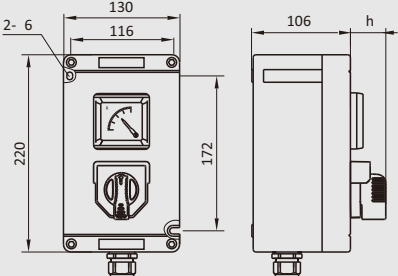
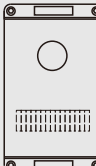
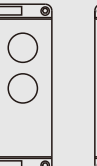
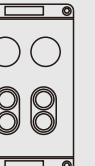
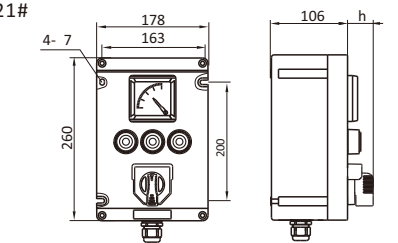
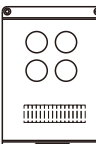
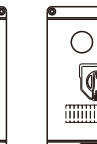
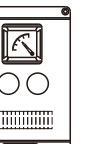
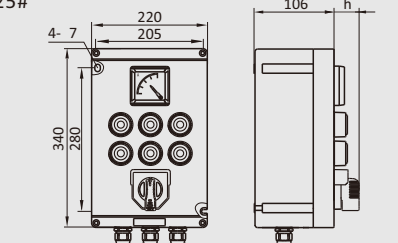
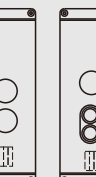
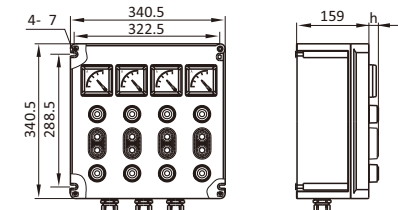
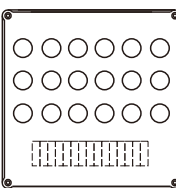
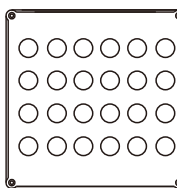
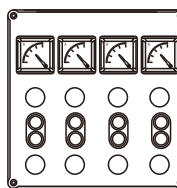
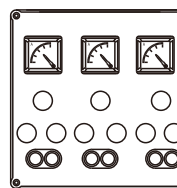


Square operating handle

**Note:**

1. K0109-48 occupies 2 components position;
2. φ 65 and square operating handle occupies 2 components position;
3. K0155 switch, K0109-72 occupies 2~3 components position.

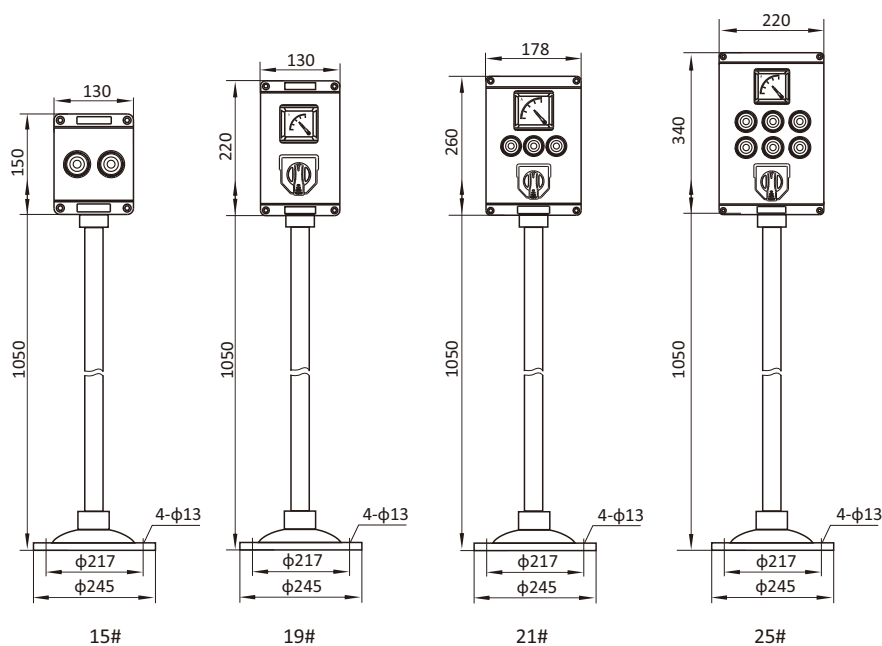
## 5. Selection Table (Dimensions in mm)

| Outline                                                                                           | Component layout                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>15#</b><br>   |       <br>1501    1502    1503    1504    1505    1506    1507                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>19#</b><br>  |      <br>1901    1902    1903    1904    1905    1906<br>     <br>1907    1908    1909    1910    1911    1912 |
| <b>21#</b><br> |      <br>2101    2102    2103    2104    2105    2106                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>25#</b><br> |      <br>2501    2502    2503    2504    2505    2506                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>29#</b><br> |    <br>2901    2902    2903    2904                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## 6. Height of electrical accessories

| Electrical accessories | Frame of ammeter | Standard button | Double Button | Button with key | Self-lock button | Mushroom button | Mushroom button with key | Indicator light | illuminated button | Control switch S1, S3 | Control switch S2 | potentiometer (single turn) | potentiometer multi turn) |
|------------------------|------------------|-----------------|---------------|-----------------|------------------|-----------------|--------------------------|-----------------|--------------------|-----------------------|-------------------|-----------------------------|---------------------------|
| h(mm)                  | 11               | 20.5            | 21.5          | 38(62)          | 40               | 32              | 45(69)                   | 23.5            | 20.5               | 40                    | 42                | 27                          | 40.5                      |

## 7. Outline and Installation (stand type)



## 8. Accessories list

| Item                          | Picture                                                                             | Purchase code  | Weight (kg) |
|-------------------------------|-------------------------------------------------------------------------------------|----------------|-------------|
| Stand type<br>connection part |  | 1.01.901.00007 | 0.3         |
| Pole                          |  | 1.01.901.00006 | 3.4         |
| Basis                         |  | 1.01.901.00005 | 0.6         |