Control Unit Systems
BZA85 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 1, Groups A , B, C, D
- Copper-free Aluminium Alloy, powder coated surface.

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 P4/25~26.
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 P4/27.
3. Example: BZA85-A1
   Components: One control button;
   Tech. Details: One start control button (40036B + 40033, green, 1NO+1NC).
4. Special requirements on request.

Zones 1&2; 21&22

Technical data

Explosion-proof control unit systems BZA85

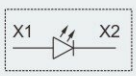
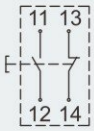
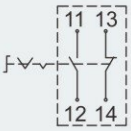
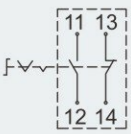
Explosion protection	
Global (IECEx)	IECEx CQM 17.0021X
Gas and dust	Ex db IIC T6 Gb
	Ex tb IIIC T80℃ Db IP66
Europe (ATEX)	TÜV CY 18 ATEX 0206093 X
Gas and dust	Ⓔx II 2 G Ex db IIC T6 Gb
	Ⓔx II 2 D Ex tb IIIC T80℃ Db IP66
Certificates	IECEx; ATEX; CU-TR
Conformity to standards	EN 60079-0, EN 60079-1, 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
Rated current	Max.10A (AC), 6A (DC)
Degree of protection	IP66, IP67(optional)
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)

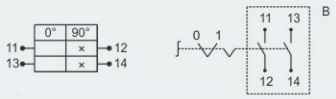
	Working mode	Accuracy	Overload times
Ammeter	Electromagnetic type (moving iron)	Class 1.5	5 times (2 or 6 times on request)
Voltmeter			-

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 P7/20~31.

Selection table (Pushbutton / Indicator)

Outline	Colour	Chart of contact	Ordering code	Weight (kg)
Indicator	Red		40171A	0.65
	Green		40171B	
Spring-return button	Red		40172A	0.65
	Green		40172B	
Mushroom stay-put emergency pushbutton	Red		40173	0.7
Mushroom turn-to-release emergency pushbutton	Red		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

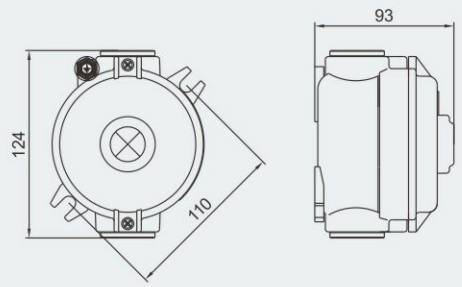
Selection table (Ammeter)

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	

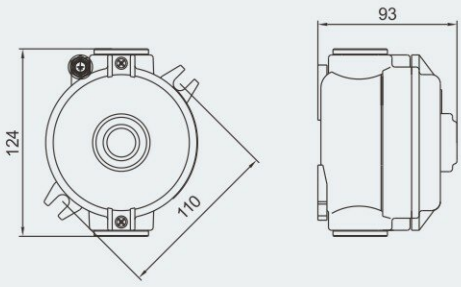
Selection table (Voltmeter)

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	

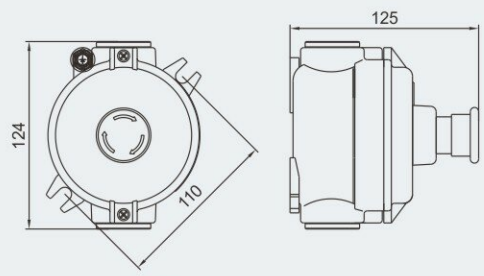
Dimension drawings (all dimensions in mm) - subject to alteration



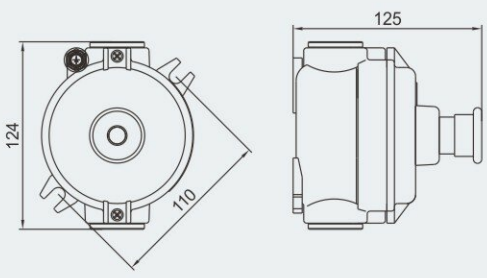
Indicator



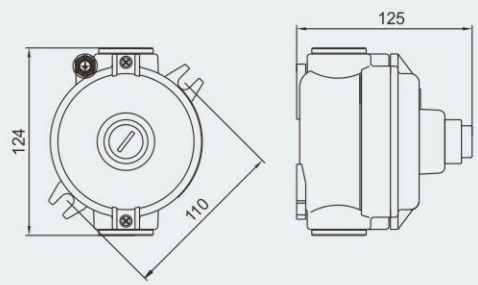
Spring-return button



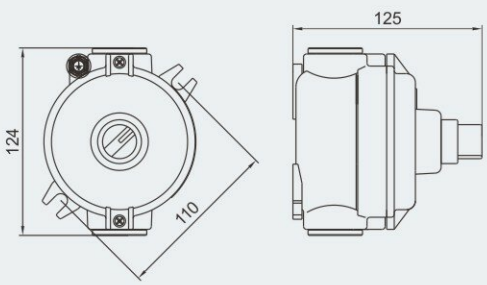
Mushroom turn-to-release emergency pushbutton



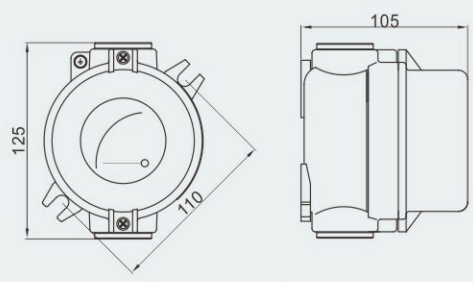
Mushroom stay-put emergency pushbutton



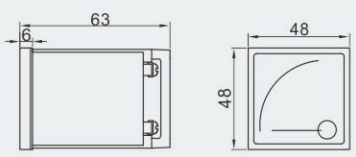
Key-operated pushbutton



Rotary button



Ammeter / Voltmeter



Ammeter (48 type) / Voltmeter (48 type)