

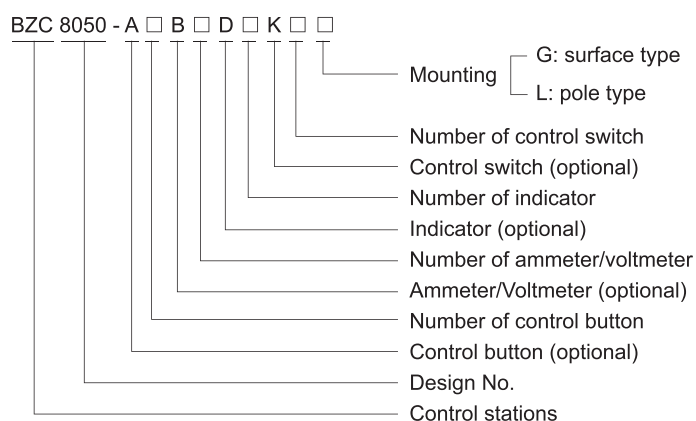
Control Stations

BZC8050 Series Control Stations (Aluminium Alloy)



- ◆ 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

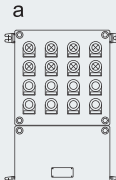
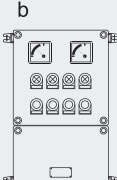
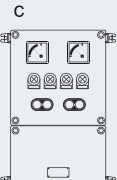
1. Please refer to the Selection table on P4/33.
2. Please select internal components as below:
 - BA8050 control button Selection table on P4/40~43 (Nominal contact is 1NO+1NC);
 - BD8050 indicator Selection table on P4/44~46;
 - BK8050 control switch Selection table on P4/47~52;
 - BB8050 explosion-proof ammeter/voltmeter Selection table on P4/53~55;
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

BZC8050 Series Control Stations (Aluminium Alloy)

Selection table of control station BZC8050 (aluminium alloy)

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

Control Stations

BZC8050 Series Control Stations (Aluminium Alloy)

Technical data

Control stations BZC8050 (aluminium alloy)

Explosion protection

Gas explosion protection

Ex II 2 G Ex d e IIC T6 Gb

Dust explosion protection

Ex II 2 D Ex tb IIIC T80°C Db IP65

Certificates

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

Conformity to standards

EN 60079-0:2012, 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

Main circuit current: 6A (for BZC8050-A2D2, BZC8050-A2B1)
16A (for BZC8050-K1)
10A (for others)

Degree of protection

IP65

Ambient temperature

-20°C~+55°C

Components

1. BA8050 control button Technical data on P4/40~43;
2. BD8050 indicator Technical data on P4/44~46;
3. BK8050 control switch Technical data on P4/47~52;
4. BB8050 explosion-proof ammeter/voltmeter Technical data on P4/53~55;

Cable entries

M□ x 1.5 plug, please see the Selection table on P4/33

Cable gland (optional)

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

Mounting

Surface type

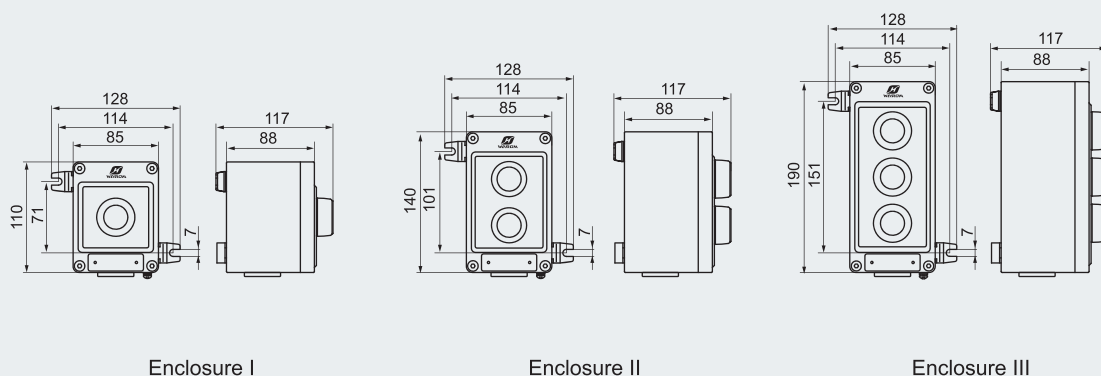
Pole type (for enclosure IV, V, VI only)

Note

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



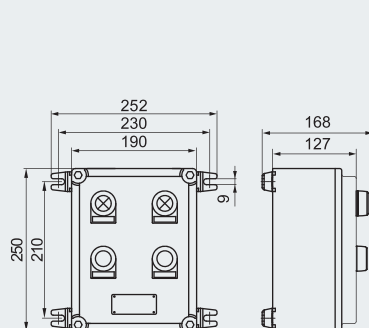
Dimension drawings (all dimensions in mm) - subject to alteration



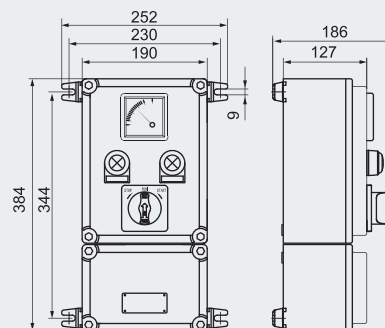
Control Stations

BZC8050 Series Control Stations (Aluminium Alloy)

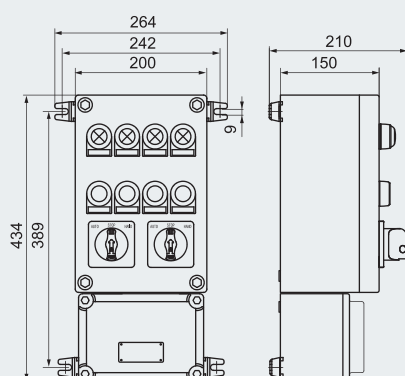
Dimension drawings (all dimensions in mm) - subject to alteration



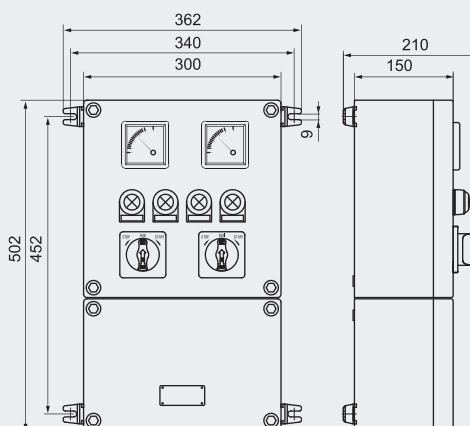
Enclosure IV



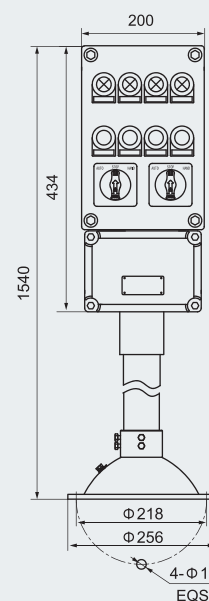
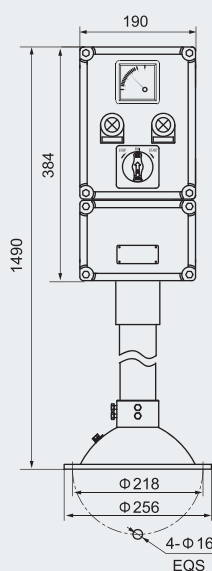
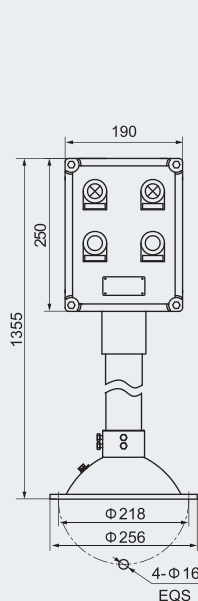
Enclosure V



Enclosure VI



Enclosure VII



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

Components for BZC8050 Control Stations

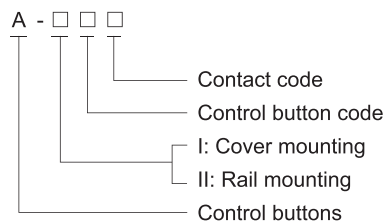
BA8050 Series Control Buttons



- ◆ 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
- ◆ 2 versions of component
 - 1 NO
 - 1 NC
- ◆ Six different ways of operation
 - Spring-return control button
 - Mushroom stay-put emergency control button
 - Key-operated control button
 - Rotary control button
 - Double control button
 - Mushroom turn-to-release emergency control button
- ◆ Mushroom stay-put emergency pushbutton/ mushroom turn-to-release emergency pushbutton can be equipped with protection cover, please specify when ordering. Material of protection cover: stainless steel and PC, please specify when ordering.

■ Catalogue number logic

BA8050(A for short)



Zones 1&2; 21&22

Components for BZC8050 Control Stations

BA8050 Series Control Buttons

Selection table

Version	Description	Contact code	Ordering code	Weight (kg)
 I: Cover mounting	 11 12 1NC	R	40090-1 / 40090-2	0.06
 II: Rail mounting	 11 12 1NO	S	40091-1 / 40091-2	0.05

The last number of ordering code: 1 - cover mounting; 2 - rail mounting

Selection table

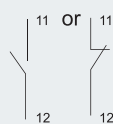
Version	Description	Code	Ordering code	Weight (kg)
	Spring-return control button ● Red ● Green ● Yellow	a b c	40092A 40092B 40092C	0.05
	Mushroom stay-put emergency control button Red	d	40093	0.05
	Key-operated control button Black	e	40094	0.05
	Rotary control button Red	f	40095	0.05
	Mushroom turn-to-release emergency control button Red	g	40096	0.05
	Double control button Red/Green	h	40097	0.05
	Pushbutton with indicator ● Red ● Green ● Yellow	i j k	40098A 40098B 40098C	0.05

Components for BZC8050 Control Stations

BA8050 Series Control Buttons

Technical data

Control buttons BA8050

Explosion protection	II 2 G Ex d e IIC Gb																	
Certificates	LCIE 07 ATEX 0006U; IECEx LCI 08.0013U; BR232259-U(Brazil)																	
Conformity to standards	EN 60079-0:2012, EN 60079-1:2007, EN 60079-7:2007 IEC 60079-0:2011, IEC 60079-1:2007, IEC 60079-7:2006																	
Enclosure material	Polyamide (PA66)																	
Rated voltage	Max. 415V AC																	
Rated current	6A																	
Contact type																		
Switch capacity	<table><tr><td>AC 11, cosj=0.7</td><td>230V-4A</td><td>415V-2.5A</td></tr><tr><td>DC1 L/R=1ms</td><td>60V-4A</td><td>110V-2.5A</td></tr><tr><td>DC11 L/R=15ms</td><td>60V-6A</td><td>110V-2.5A</td></tr><tr><td>L/R=30ms</td><td>4A</td><td>1.6A</td></tr><tr><td>L/R=100ms</td><td>2.5A</td><td>1.0A</td></tr></table>			AC 11, cosj=0.7	230V-4A	415V-2.5A	DC1 L/R=1ms	60V-4A	110V-2.5A	DC11 L/R=15ms	60V-6A	110V-2.5A	L/R=30ms	4A	1.6A	L/R=100ms	2.5A	1.0A
AC 11, cosj=0.7	230V-4A	415V-2.5A																
DC1 L/R=1ms	60V-4A	110V-2.5A																
DC11 L/R=15ms	60V-6A	110V-2.5A																
L/R=30ms	4A	1.6A																
L/R=100ms	2.5A	1.0A																
Mechanical life	10 ⁶ times																	
Electrical life	10 ⁶ times																	
Ambient temperature	-20°C~+70°C																	
Terminal	Suitable for 2.5mm ² cable																	
Button element																		
Material	Polyamide (PA66)																	
Washer	Silicon rubber																	
Function																		
Spring-return control button	Spring-return control button																	
Mushroom stay-put emergency control button	Self-latching when pulled, self-locking																	
Key-operated control button	Rotate to lock; release with key, key movable in both ways																	
Rotary control button	Two-position switch function, key movable in 90°																	
Double control button	Spring-return control button, 1 control button element has the function of 2 control buttons																	
Mushroom turn-to-release emergency control button	Rotary resetting control button; self-locking																	



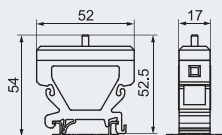
Accessories

Description	Material	Ordering code	Weight (kg)	Description	Material	Ordering code	Weight (kg)
Cover mounting bracket 	PC	40098	0.01	Emergency pushbutton protection cover 	PC	40198	0.02
Rail 	aluminium alloy (1m)	40120	0.12	Emergency pushbutton protection cover 	Stainless steel	40199	0.10

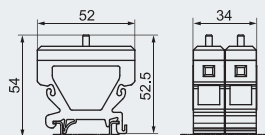
Components for BZC8050 Control Stations

BA8050 Series Control Buttons

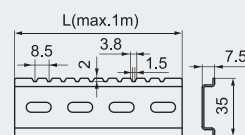
Dimension drawings (all dimensions in mm) - subject to alteration



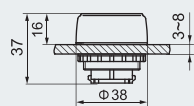
Control button, single (rail mounting)



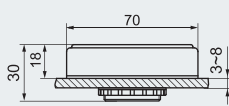
Control button, double (rail mounting)



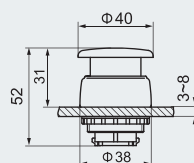
Rail



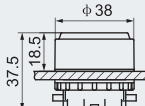
Spring-return control button



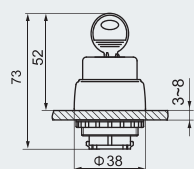
Double control button



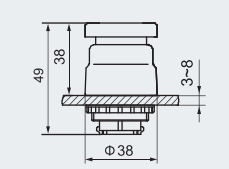
Mushroom stay-put emergency control button



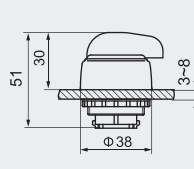
Pushbutton with indicator



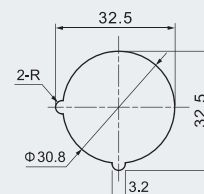
Key-operated control button



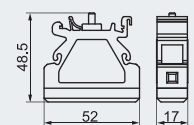
Mushroom turn-to-release emergency control button



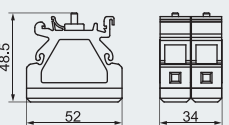
Rotary control button



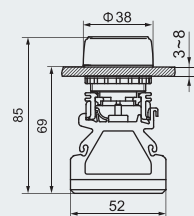
Mounting hole



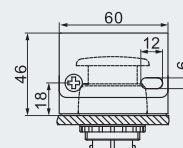
Control button, single (cover mounting)



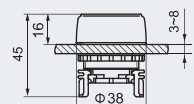
Control button, double (cover mounting)



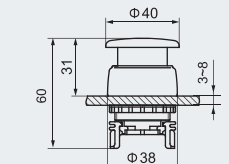
Control button cover mounting



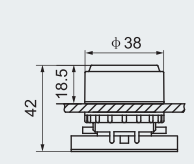
BA8050
Emergency pushbutton with
stainless steel protection cover



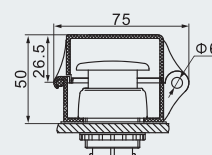
Operation for spring-return control button



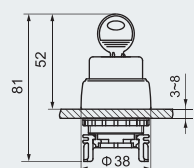
Mushroom stay-put emergency control button



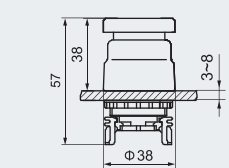
Pushbutton with indicator



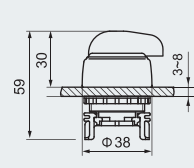
BA8050
Emergency pushbutton with
PC protection cover



Key-operated control button



Mushroom turn-to-release emergency control button



Rotary control button

Components for BZC8050 Control Stations

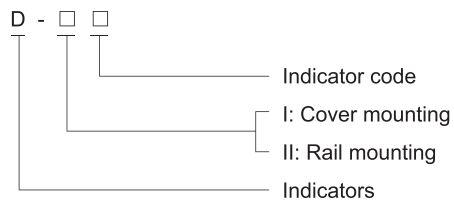
BD8050 Series Indicators



- ◆ 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
- ◆ Available in
 - red
 - green
 - yellow
 - blue
 - white
- ◆ Two mounting types
 - cover mounting
 - rail mounting

■ Catalogue number logic

BD8050(D for short)



Components for BZC8050 Control Stations

BD8050 Series Indicators

Selection table						
Version	Voltage	Schematic diagram	Colour	Code	Ordering code	Weight (kg)
Indicator  I: Cover mounting	Rated voltage: AC 230V...AC 415V Voltage range: -10%...+6% Frequency: 0Hz...60Hz		Red	Ra	40099A/40099B	0.05
			Green	Ga	40100A/40100B	
			Yellow	Ya	40101A/40101B	
			Blue	Ba	40166A/40166B	
			White	Wa	40102A/40102B	
	Rated voltage: AC/DC 48V...110V Voltage range: -10%...+6% Frequency: 0Hz...60Hz		Red	Rb	40103A/40103B	0.05
			Green	Gb	40104A/40104B	
			Yellow	Yb	40105A/40105B	
			Blue	Bb	40167A/40167B	
			White	Wb	40106A/40106B	
 II: Rail mounting	Rated voltage: AC/DC 12V...36V Voltage range: -10%...+6% Frequency: 0Hz...60Hz		Red	Rc	40107A/40107B	0.05
			Green	Gc	40108A/40108B	
			Yellow	Yc	40109A/40109B	
			Blue	Bc	40168A/40168B	
			White	Wc	40110A/40110B	
	Rated voltage: DC 220V, 380V Voltage range: -10%...+6%		Red	Rd	40111A/40111B	0.05
			Green	Gd	40112A/40113B	
			Yellow	Yd	40113A/40113B	
			Blue	Bd	40169A/40169B	
			White	Wd	40114A/40114B	
Indicator cover  I: Cover mounting			Red	a	40115A	0.05
			Green	b	40116A	
			Yellow	c	40117A	
			White	d	40118A	
			Blue	e	40170A	
Indicator cover  II: Rail mounting			Red	a	40115B	
			Green	b	40116B	
			Yellow	c	40117B	
			White	d	40118B	
			Blue	e	40170B	



The last letter of ordering code: A-cover mounting; B-rail mounting.

Components for BZC8050 Control Stations

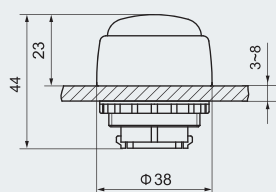
BD8050 Series Indicators

Technical data

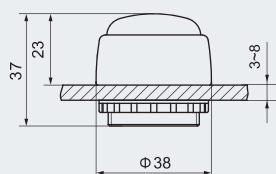
Indicators BD8050

Explosion protection	Ex II 2 G Ex d e IIC Gb
Certificates	LCIE 09 ATEX 3098U; IECEX CQM 11.0012U; BR232260-U(Brazil)
Conformity to standards	EN 60079-0:2012, EN 60079-1:2007, EN 60079-7:2007 IEC 60079-0:2011, IEC 60079-1:2007, IEC 60079-7:2006
Rated voltage	12V...415V AC/DC (-10%...+6%)
Rated current	Max.15mA
Frequency	0Hz...60Hz
Rated output wattage	Max.1W
Service life	10 ⁵ hours
Ambient temperature	-20°C~+70°C
Colour	Red, green, yellow, blue, white
Lamp	LED
Enclosure material	Polyamide (PA66)
Terminal	Suitable for 2.5mm ² cable
Indicator cover material	PC

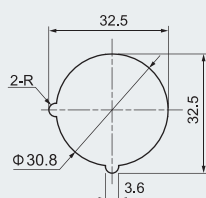
Dimension drawings (all dimensions in mm) - subject to alteration



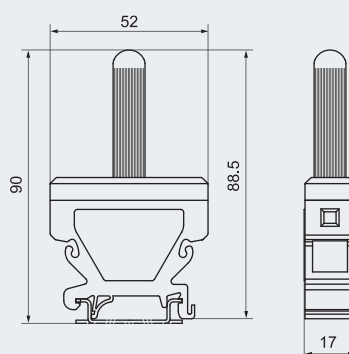
I: Cover mounting



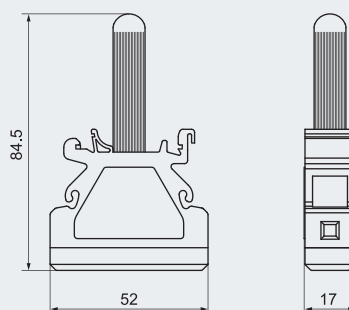
II: Rail mounting
Indicator cover



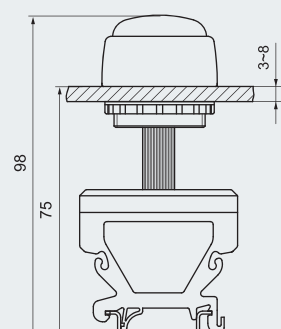
Mounting hole



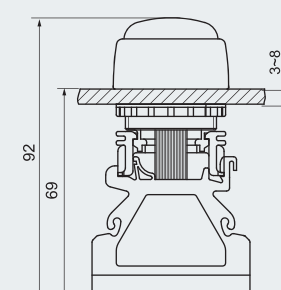
Indicator
(rail mounting)



Indicator
(cover mounting)



Rail mounting



Cover mounting