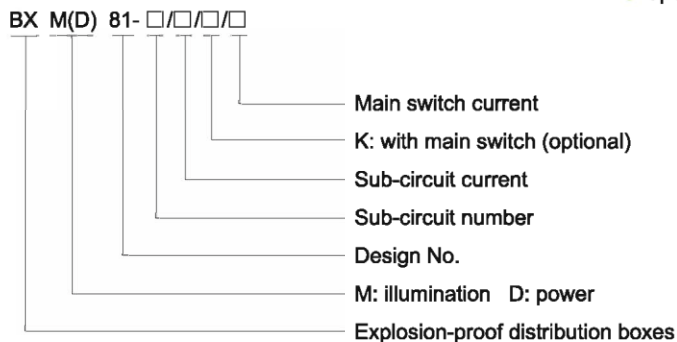




## Distribution Boxes BXM(D)81 Series Explosion-proof Illumination (Power) Distribution Boxes (Ex d IIB)

- ◆ 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 C, D
- ◆ Flameproof enclosure (Ex d IIB)
- ◆ Main switch and distribution switch are operated by external handle.
- ◆ Internal wiring to the terminal is finished.
- ◆ Weidmuller SAK EN series terminals.
- ◆ Entries plugged. Cable glands on request (see P7/20~25).
- ◆ Special requirements on request.

### ■ Catalogue number logic



Zones 1&2; 21&22

## Technical data

## Explosion-proof illumination distribution boxes

BXM81-□/□/□/□

## Explosion protection

Gas explosion protection

⊕ II 2 G Ex d IIB T6 Gb

Dust explosion protection

⊕ II 2 D Ex tb IIIC T80°C Db IP66

## Certificates

LCIE 11 ATEX 3064X; IECEx CQM 11.0032; GOST.R (Russia)

## Conformity to standards

EN 60079-0:2009, EN 60079-1:2007, EN 60079-31:2009

IEC 60079-0:2011, IEC 60079-1:2007, IEC 60079-31:2008

## General power supply

Rated voltage: max. 690V AC 50/60Hz; Rated current: max. 100A

## Sub circuit current

1A, 2A, 4A, 6A, 10A, 16A, 20A, 25A, 32A

## Exposed fastener

Stainless steel

## Enclosure material

Copper-free aluminium; powder coated surface

## Enclosure colour

Window grey (RAL7040)

## Built-in components

MCB (mini circuit breaker) or MCCB (moulded case circuit breaker)

Main switch

Note: electric leakage protection on request

MCB (mini circuit breaker)

Sub-circuit switch

Note: electric leakage protection on request

Terminal

Weidmuller SAK EN series

Indicator

Red, green, yellow

## Degree of protection

IP66

## Ambient temperature

-60°C~+55°C

## Cable entries

Standard M□ x 1.5 plug (see the Selection Table on P6/16)

## Cable gland (optional)

DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~25

## Entry direction

Bottom

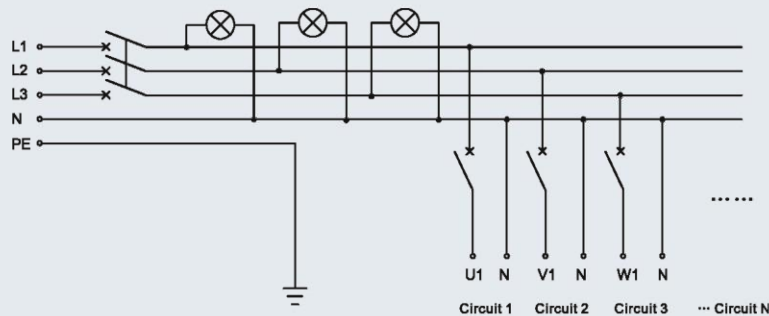
## Mounting

Surface type (standard)

Pedestal type (optional)



## Electrical schematic diagram



BXM81 series explosion-proof illumination distribution boxes

Selection table of BXM81 series explosion-proof illumination distribution boxes

Type	Description					Terminal	Cable entries
	Main switch	Sub-circuit number	Sub-circuit switch	Sub-circuit current	Indicator number		
BXM81-4/□/K/□	MCB or MCCB  Current: max. 100A	4	MCB 1P/2P	1A 2A 4A 6A 10A 16A 20A 25A 32A On request	3	Incoming 3 x SAK35EN+1N+1PE Outgoing 4 x SAK4EN+4N+4PE	1 x M40 x 1.5 + 4 x M25 x 1.5
BXM81-6/□/K/□		6			3	Incoming 3 x SAK35EN+1N+1PE Outgoing 6 x SAK4EN+6N+6PE	1 x M40 x 1.5 + 6 x M25 x 1.5
BXM81-8/□/K/□		8			3	Incoming 3 x SAK35EN+1N+1PE Outgoing 8 x SAK4EN+8N+8PE	1 x M40 x 1.5 + 8 x M25 x 1.5
BXM81-10/□/K/□		10			3	Incoming 3 x SAK35EN+1N+1PE Outgoing 10 x SAK4EN+10N+10PE	1 x M40 x 1.5 + 10 x M25 x 1.5
BXM81-12/□/K/□		12			3	Incoming 3 x SAK35EN+1N+1PE Outgoing 12 x SAK4EN+12N+12PE	1 x M40 x 1.5 + 12 x M25 x 1.5
BXM81-4/□	—	4	MCB 1P/2P	1A 2A 4A 6A 10A 16A 20A 25A 32A On request	3	Incoming 3 x SAK35EN+1N+1PE Outgoing 4 x SAK4EN+4N+4PE	1 x M40 x 1.5 + 4 x M25 x 1.5
BXM81-6/□		6			3	Incoming 3 x SAK35EN+1N+1PE Outgoing 6 x SAK4EN+6N+6PE	1 x M40 x 1.5 + 6 x M25 x 1.5
BXM81-8/□		8			3	Incoming 3 x SAK35EN+1N+1PE Outgoing 8 x SAK4EN+8N+8PE	1 x M40 x 1.5 + 8 x M25 x 1.5
BXM81-10/□		10			3	Incoming 3 x SAK35EN+1N+1PE Outgoing 10 x SAK4EN+10N+10PE	1 x M40x 1.5 + 10 x M25 x 1.5
BXM81-12/□		12			3	Incoming 3 x SAK35EN+1N+1PE Outgoing 12 x SAK4EN+12N+12PE	1 x M40 x 1.5 + 12 x M25 x 1.5

**Note**

1. Please specify the number and size of cable entries and sides of the enclosure to be fitted;
2. Single line drawing (SLD) shall be provided by user. Photocell, timer, AC contactor, thermal relay or others on request;
3. Please specify mounting type when ordering;
4. Rainproof canopy on request.

**Technical data**

**Explosion-proof power distribution boxes**

**BXD81-□/□/□/□**

**Explosion protection**

Gas explosion protection

⊕ II 2 G Ex d IIB T6 Gb

Dust explosion protection

⊕ II 2 D Ex tb IIIC T80°C Db IP66

**Certificates**

LCIE 11 ATEX 3064X; IECEx CQM 11.0032; GOST.R (Russia)

**Conformity to standards**

EN 60079-0:2009, EN 60079-1:2007, EN 60079-31:2009

IEC 60079-0:2011, IEC 60079-1:2007, IEC 60079-31:2008

**General power supply**

Rated voltage: max. 690V AC 50/60Hz; Rated current: max. 250A

**Sub circuit current**

1A, 2A, 4A, 6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A

**Exposed fastener**

Stainless steel

**Enclosure material**

Copper-free aluminium; powder coated surface

**Enclosure colour**

Window grey (RAL7040)

**Built-in components**

Main switch

MCB (mini circuit breaker) or MCCB (moulded case circuit breaker)

Note: electric leakage protection on request

Sub-circuit switch

MCB (mini circuit breaker)

Note: electric leakage protection on request

Terminal

Weidmuller SAK EN series

Indicator

Red, green, yellow

**Degree of protection**

IP66

**Ambient temperature**

-60°C~+55°C

**Cable entries**

Standard M□ x 1.5 plug (see the Selection Table on P6/18)

**Cable gland (optional)**

DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~25

**Entry direction**

Bottom

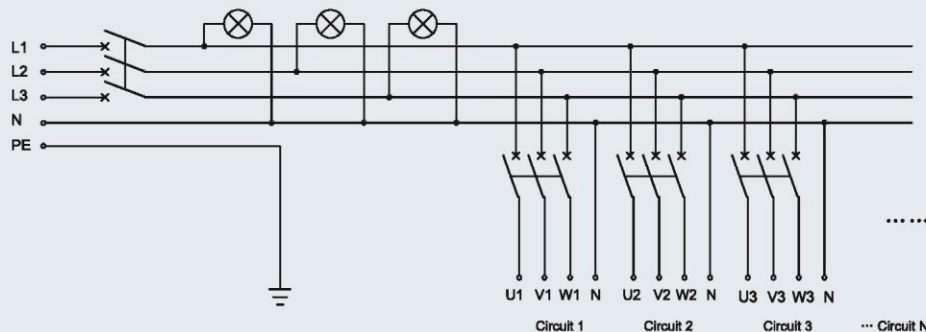
**Mounting**

Surface type (standard)

Pedestal type (optional)



**Electrical schematic diagram**



BXD81 Series Explosion-proof power distribution Boxes

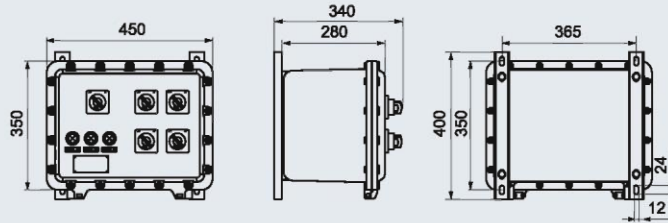
Selection table of BXD81 series explosion-proof power distribution boxes

Type	Description					Terminal	Cable entries		
	Main switch	Sub-circuit number	Sub-circuit switch	Sub-circuit current	Indicator number				
BXD81-4/□/K/□	MCB or MCCB	4	MCB 3P	1A	3	Incoming 3 x SAK70/35EN+1N+1PE Outgoing 12 x SAK10EN+4N+4PE	1 x M50 x 1.5 + 4 x M25 x 1.5		
BXD81-6/□/K/□		6		4A		3	Incoming 3 x SAK70/35EN+1N+1PE Outgoing 18 x SAK10EN+6N+6PE	1 x M50 x 1.5 + 6 x M25 x 1.5	
BXD81-8/□/K/□		8		16A		3	Incoming 3 x SAK70/35EN+1N+1PE Outgoing 24 x SAK10EN+8N+8PE	1 x M50 x 1.5 + 8 x M25 x 1.5	
BXD81-10/□/K/□		Current: max. 250A		10		20A	3	Incoming 3 x SAK70/35EN+1N+1PE Outgoing 30 x SAK10EN+10N+10PE	1 x M50 x 1.5 + 10 x M25 x 1.5
BXD81-12/□/K/□				12		25A	3	Incoming 3 x SAK70/35EN+1N+1PE Outgoing 36 x SAK10EN+12N+12PE	1 x M50 x 1.5 + 12 x M25 x 1.5
BXD81-4/□	—	4	MCB 3P	1A	3	Incoming 3 x SAK70/35EN+1N+1PE Outgoing 12 x SAK10EN+4N+4PE	1 x M50 x 1.5 + 4 x M25 x 1.5		
BXD81-6/□		6		4A		3	Incoming 3 x SAK70/35EN+1N+1PE Outgoing 18 x SAK10EN+6N+6PE	1 x M50 x 1.5 + 6 x M25 x 1.5	
BXD81-8/□		8		16A		3	Incoming 3 x SAK70/35EN+1N+1PE Outgoing 24 x SAK10EN+8N+8PE	1 x M50 x 1.5 + 8 x M25 x 1.5	
BXD81-10/□		10		20A		3	Incoming 3 x SAK70/35EN+1N+1PE Outgoing 30 x SAK10EN+10N+10PE	1 x M50 x 1.5 + 10 x M25 x 1.5	
BXD81-12/□		12		25A		3	Incoming 3 x SAK70/35EN+1N+1PE Outgoing 36 x SAK10EN+12N+12PE	1 x M50 x 1.5 + 12 x M25 x 1.5	

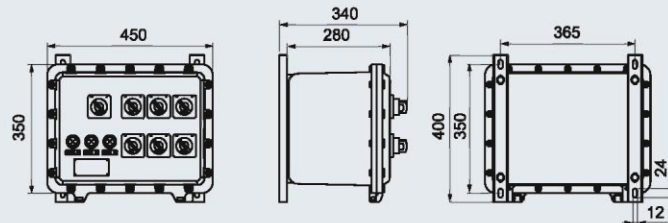
**Note**

1. Please specify the number and size of cable entries and sides of the enclosure to be fitted;
2. Single line drawing (SLD) shall be provided by user. Photocell, timer, AC contactor, thermal relay or others on request;
3. Please specify mounting type when ordering;
4. Rainproof canopy on request.

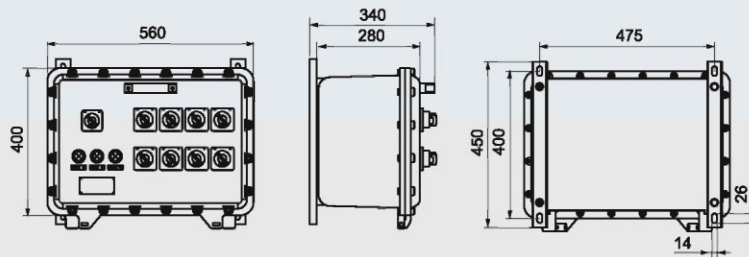
Dimension drawings (all dimensions in mm) - subject to alteration



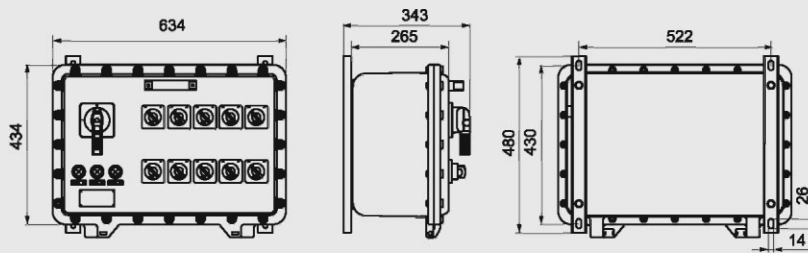
BXM81-4/□/□/□



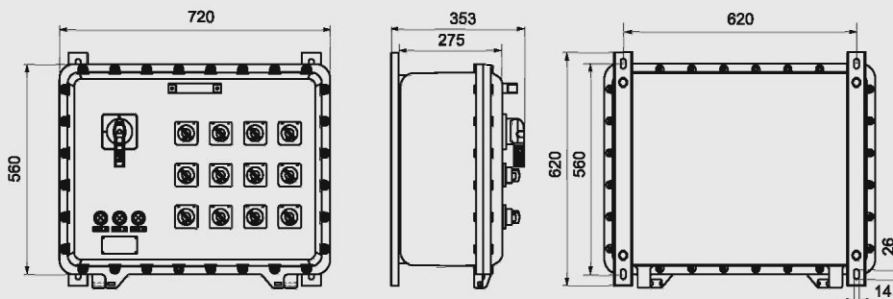
BXM81-6/□/□/□



BXM81-8/□/□/□



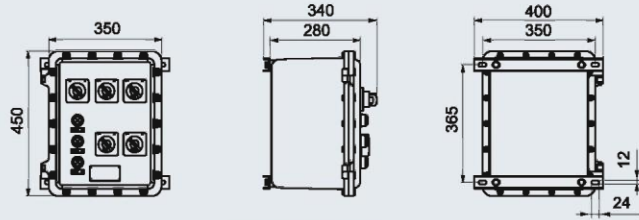
BXM81-10/□/□/□



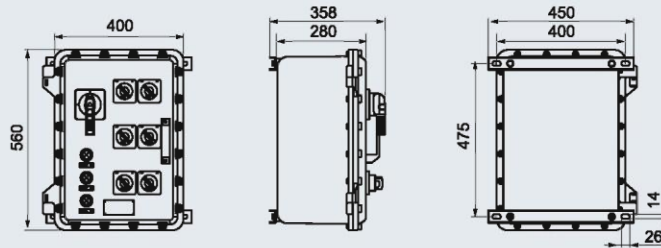
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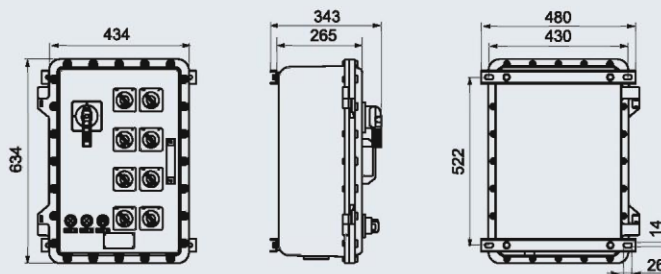
## Dimension drawings (all dimensions in mm) - subject to alteration



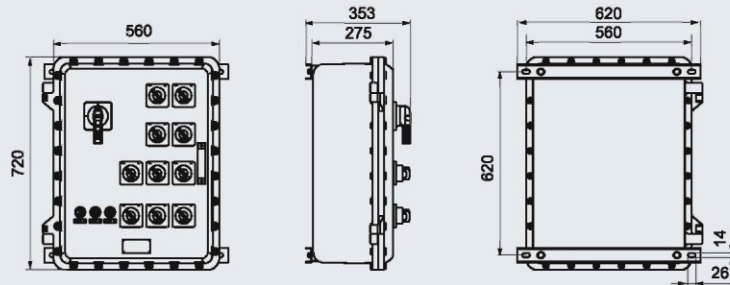
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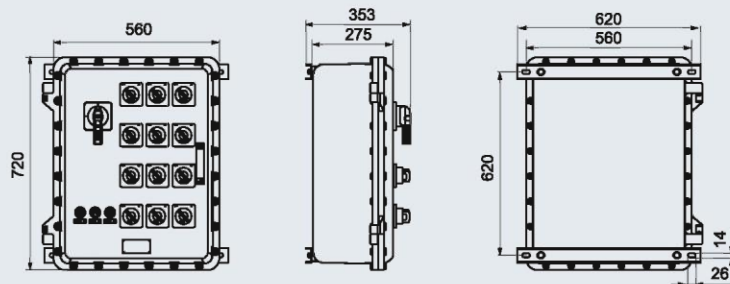
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BXD81-8/□/K□

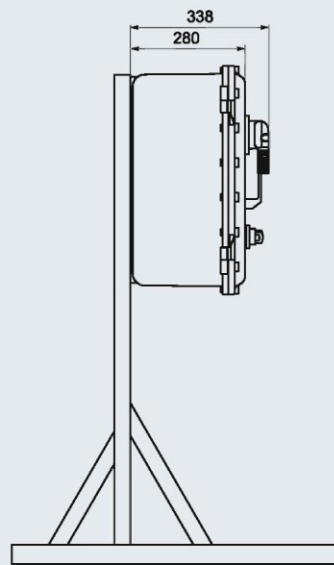


BXD81-10/□/K□

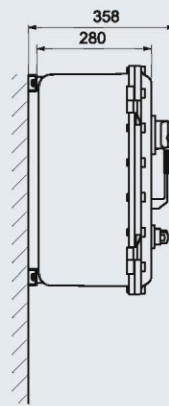


BXD81-12/□/K□

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



Pedestal type



Surface type