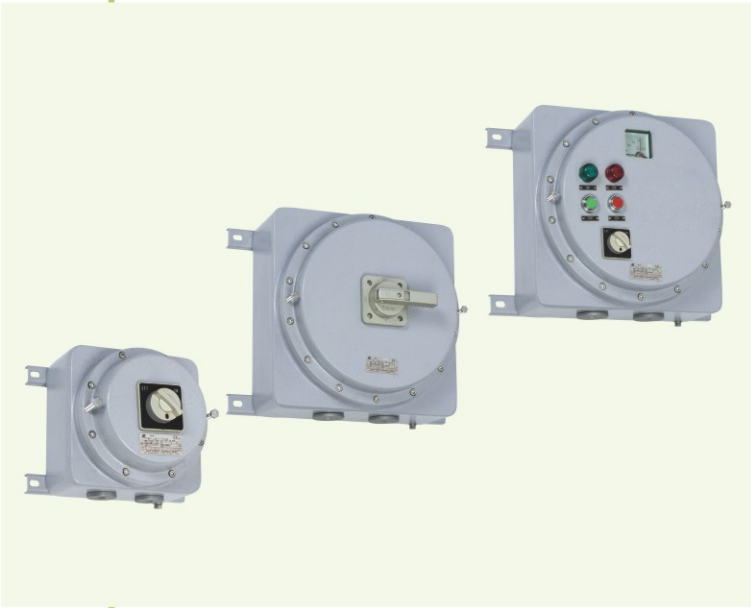
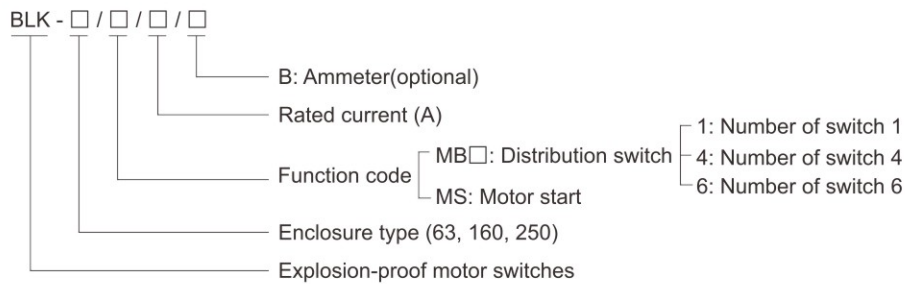


## Motor Switches BLK Series Explosion-proof Motor Switches (Ex db IIC)



- ◆ 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
- ◆ Classified as IIC according to gas atmosphere.
- ◆ Copper-free Aluminium Alloy enclosure, powder coated surface.
- ◆ Built-in MCB (miniature circuit breaker), MCCB (moulded case circuit breaker).
- ◆ Earth leakage protection device is optional.

### ■ Catalogue number logic



### ■ Note

1. Please select the model by Catalogue number logic above, and specify all technical data;
2. Please specify Ex-mark when ordering;
3. Entry size and direction on request.

Zones 1&2; 21&22

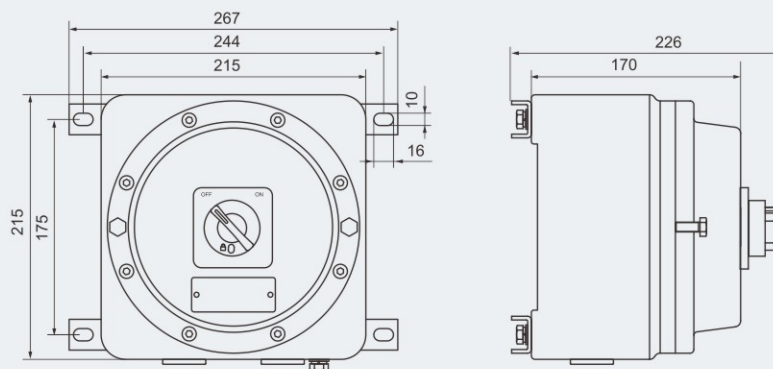
## Motor Switches

### BLK Series Explosion-proof Motor Switches (Ex db IIC)

Technical data	
<b>Explosion-proof motor switches</b> <b>BLK-63/MB□/□</b>	
<b>Explosion protection</b>	
Global (IECEX)	IECEX CQM 12.0037X
Gas and dust	Ex db IIC T6 Gb Ex tb IIIC T80°C Db IP66
Europe (ATEX)	Presafe 17 ATEX 10687X
Gas and dust	⊕ II 2 G Ex db IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80°C Db
<b>Certificates</b>	IECEX; ATEX
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31
<b>Enclosure material</b>	Copper-free Aluminium Alloy, powder coated surface
<b>Enclosure colour</b>	Window grey (RAL7040)
<b>Exposed fastener</b>	Stainless steel
<b>Circuit breaker</b>	MCB (miniature circuit breaker)
<b>Max. working voltage</b>	Max.690V AC 50/60Hz; 500V DC
<b>Rated voltage</b>	1P/230V AC, 2P/3P/4P/400V AC 50/60Hz
<b>Rated current</b>	1A, 2A, 4A, 6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A
<b>Number of pole</b>	1P, 2P, 3P, 4P
<b>Breaking capacity</b>	6kA, 10kA, 15kA
<b>Impulse withstand voltage</b>	6kV
<b>Tripping characteristic</b>	Instantaneous tripping range (5~10) In, (7~10) In or (10~14) In
<b>Degree of protection</b>	IP66
<b>Internal &amp; external earthing</b>	M5/M8
<b>Ambient temperature</b>	-60°C~+55°C
<b>Cable entries</b>	Standard 1~16A: 2×M25×1.5 plugs 20~32A: 2×M32×1.5 plugs 40~63A: 2×M40×1.5 plugs
<b>Cable gland (optional)</b>	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P6/24~39
<b>Entry direction</b>	Bottom
<b>Enclosure weight</b>	6.50 kg
<b>Earth leakage protection</b>	On request



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



BLK-63/MB□/□

## Motor Switches

### BLK Series Explosion-proof Motor Switches (Ex db IIC)

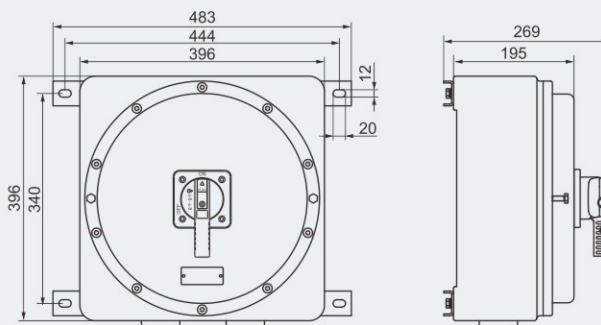
#### Technical data

#### Explosion-proof motor switches BLK-160/MB□/□

<b>Explosion protection</b>	IECEX CQM 12.0037X
Global (IECEX)	Ex db IIC T6 Gb
Gas and dust	Ex tb IIIC T80°C Db IP66
Europe (ATEX)	Presafe 17 ATEX 10687X
Gas and dust	⊕ II 2 G Ex db IIC T6 Gb
	⊕ II 2 D Ex tb IIIC T80°C Db
<b>Certificates</b>	IECEX; ATEX
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31
<b>Enclosure material</b>	Copper-free Aluminium Alloy, powder coated surface
<b>Enclosure colour</b>	Window grey (RAL7040)
<b>Exposed fastener</b>	Stainless steel
<b>Circuit breaker</b>	MCB (miniature circuit breaker); MCCB (moulded case circuit breaker)
<b>Max. working voltage</b>	MCB: 440V AC 50/60Hz; MCCB: 690V AC 50/60Hz; 500V DC
<b>Rated voltage</b>	MCB: 1P/230V AC, 2P/3P/4P/400V AC 50/60Hz
<b>Rated current</b>	MCB: max.50A(1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 50) MCCB: 80A, 100A, 125A, 160A
<b>Number of pole</b>	MCB: 1P, 2P, 3P, 4P MCCB: 3P, 4P
<b>Breaking capacity</b>	MCB: 6kA, 10kA, 15kA MCCB: 380/415V AC 50/60Hz, 36kA/50kA; 440V AC 50/60Hz, 30kA/45kA
<b>Impulse withstand voltage</b>	MCB: 6kV; MCCB: 8kV
<b>Tripping characteristic</b>	Thermomagnetic type
<b>Degree of protection</b>	IP66
<b>Internal &amp; external earthing</b>	M6/M8
<b>Ambient temperature</b>	-60°C~+55°C
<b>Cable entries</b>	Standard 4×1~16A: 1×M40×1.5 + 4×M25×1.5 plugs 4×20~32A: 1×M50×1.5 + 4×M32×1.5 plugs 4×40~63A: 1×M63×1.5 + 4×M40×1.5 plugs 1×80~100A: 2×M50×1.5 plugs 1×125~160A: 2×M63×1.5 plugs
<b>Cable gland (optional)</b>	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P6/24~39
<b>Entry direction</b>	Bottom
<b>Enclosure weight</b>	28.00kg
<b>Earth leakage protection</b>	On request



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



BLK-160/MB□/□

## Motor Switches

### BLK Series Explosion-proof Motor Switches (Ex db IIC)

#### Technical data

#### Explosion-proof motor switches BLK-160/MS/□

##### Explosion protection

Global (IECEX)	IECEX CQM 12.0037X
Gas and dust	Ex db IIC T6 Gb Ex tb IIIC T80°C Db IP66
Europe (ATEX)	Presafe 17 ATEX 10687X
Gas and dust	⊕ II 2 G Ex db IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80°C Db

##### Certificates

IECEX; ATEX

##### Conformity to standards

EN 60079-0, EN 60079-1, EN 60079-31  
IEC 60079-0, IEC 60079-1, IEC 60079-31

##### Enclosure material

Copper-free Aluminium Alloy, powder coated surface

##### Enclosure colour

Window grey (RAL7040)

##### Exposed fastener

Stainless steel

##### Components

MCB (miniature circuit breaker)  
AC contactor  
Thermal overload relay  
Indicator, pushbutton

##### Rated voltage

Max.440V AC 50/60Hz

##### Degree of protection

IP66

##### Internal & external earthing

M6/M8

##### Ambient temperature

-60°C~+55°C

##### Cable entries

Standard M□×1.5 plug; See Selection table as below

##### Cable gland (optional)

DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P6/24~39

##### Entry direction

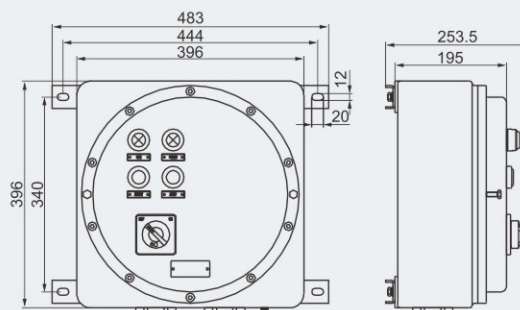
Bottom

#### Selection table

Version	Control motor power (kW)	Rated current of circuit breaker (A)	Adjustable range of setting current of thermal relay (A)	Rated current of contactor (A)	Cable entry size	Enclosure weight (kg)
BLK-160/MS/10	4	10	7~10, Ie=9	12	2×M25×1.5	28.00
BLK-160/MS/16	5.5	16	9~13, Ie=12	18	2×M25×1.5	28.00
BLK-160/MS/20	7.5	20	12~18, Ie=17	25	2×M25×1.5	28.00
BLK-160/MS/32	11	32	16~24, Ie=21	32	2×M32×1.5	28.00
BLK-160/MS/40	15	40	30~40, Ie=32	40	2×M32×1.5	28.00
BLK-160/MS/50	18.5	50	37~50, Ie=40	50	2×M40×1.5	28.00
BLK-160/MS/63	22	63	37~50, Ie=48	65	2×M40×1.5	28.00



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



BLK-160/MS/□

## Motor Switches

### BLK Series Explosion-proof Motor Switches (Ex db IIC)

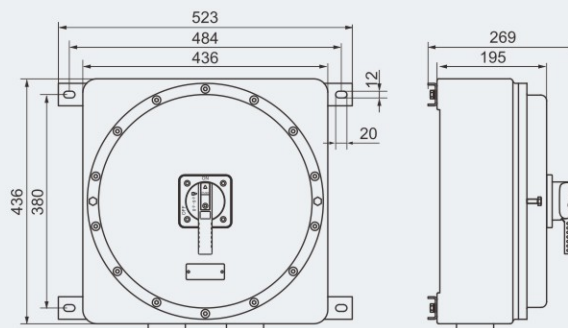
#### Technical data

#### Explosion-proof motor switches BLK-250/MB□/□

<b>Explosion protection</b>	IECEX CQM 12.0037X
Global (IECEX)	Ex db IIC T6 Gb
Gas and dust	Ex tb IIIC T80°C Db IP66
Europe (ATEX)	Presafe 17 ATEX 10687X
Gas and dust	⊕ II 2 G Ex db IIC T6 Gb
	⊕ II 2 D Ex tb IIIC T80°C Db
<b>Certificates</b>	IECEX; ATEX
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31
<b>Enclosure material</b>	Copper-free Aluminium Alloy, powder coated surface
<b>Enclosure colour</b>	Window grey (RAL7040)
<b>Exposed fastener</b>	Stainless steel
<b>Circuit breaker</b>	MCB (miniature circuit breaker); MCCB (moulded case circuit breaker)
<b>Max. working voltage</b>	MCB: 440V AC 50/60Hz; MCCB: 690V AC 50/60Hz; 500V DC
<b>Rated voltage</b>	MCB: 1P/230V AC, 2P/3P/4P/400V AC 50/60Hz
<b>Rated current</b>	MCB: max.50A(1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 50) MCCB: 200A, 250A
<b>Number of pole</b>	MCB: 1P, 2P, 3P, 4P MCCB: 3P, 4P
<b>Breaking capacity</b>	MCB: 6kA, 10kA, 15kA MCCB: 380/415V AC 50/60Hz, 36kA/50kA; 440V AC 50/60Hz, 30kA/45kA
<b>Impulse withstand voltage</b>	MCB: 6kV; MCCB: 8kV
<b>Tripping characteristic</b>	Thermomagnetic type
<b>Degree of protection</b>	IP66
<b>Internal &amp; external earthing</b>	M6/M8
<b>Ambient temperature</b>	-60°C~+55°C
<b>Cable entries</b>	Standard 6×1~16A: 1×M40×1.5 + 6×M25×1.5 plugs 6×20~32A: 1×M50×1.5 + 6×M32×1.5 plugs 6×40~63A: 1×M63×1.5 + 6×M40×1.5 plugs 1×200~250A: 2×M63×1.5 plugs
<b>Cable gland (optional)</b>	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P6/24~39
<b>Entry direction</b>	Bottom
<b>Enclosure weight</b>	31.00kg
<b>Earth leakage protection</b>	On request



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



BLK-250/MB□/□

## Motor Switches

### BLK Series Explosion-proof Motor Switches (Ex db IIC)

#### Technical data

#### Explosion-proof motor switches BLK-250/MS/□/B

##### Explosion protection

Global (IECEX)

Gas and dust

IECEX CQM 12.0037X

Ex db IIC T6 Gb

Ex tb IIIC T80°C Db IP66

Europe (ATEX)

Gas and dust

Presafe 17 ATEX 10687X

⊕ II 2 G Ex db IIC T6 Gb

⊕ II 2 D Ex tb IIIC T80°C Db

##### Certificates

IECEX; ATEX

##### Conformity to standards

EN 60079-0, EN 60079-1, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-31

##### Enclosure material

Copper-free Aluminium Alloy, powder coated surface

##### Enclosure colour

Window grey (RAL7040)

##### Exposed fastener

Stainless steel

##### Components

MCB (miniature circuit breaker)

AC contactor

Thermal overload relay

Indicator, pushbutton

Ammeter

##### Rated voltage

Max.440V AC 50/60Hz

##### Degree of protection

IP66

##### Internal & external earthing

M6/M8

##### Ambient temperature

-60°C~+55°C

##### Cable entries

Standard M□×1.5 plug; See Selection table as below

##### Cable gland (optional)

DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P6/24~39

##### Entry direction

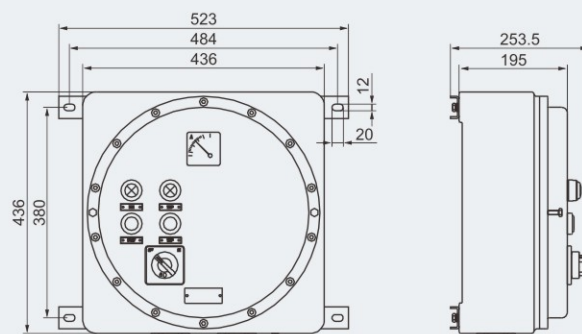
Bottom

#### Selection table

Version	Control motor power (kW)	Rated current of circuit breaker (A)	Adjustable range of setting current of thermal relay (A)	Rated current of contactor (A)	Cable entry size	Enclosure weight (kg)
BLK-250/MS/10/B	4	10	7~10, Ie=9	12	2×M25×1.5	31.00
BLK-250/MS/16/B	5.5	16	9~13, Ie=12	18	2×M25×1.5	31.00
BLK-250/MS/20/B	7.5	20	12~18, Ie=17	25	2×M25×1.5	31.00
BLK-250/MS/32/B	11	32	16~24, Ie=21	32	2×M32×1.5	31.00
BLK-250/MS/40/B	15	40	30~40, Ie=32	40	2×M32×1.5	31.00
BLK-250/MS/50/B	18.5	50	37~50, Ie=40	50	2×M40×1.5	31.00
BLK-250/MS/63/B	22	63	37~50, Ie=48	65	2×M40×1.5	31.00



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



BLK-250/MS/□/B