

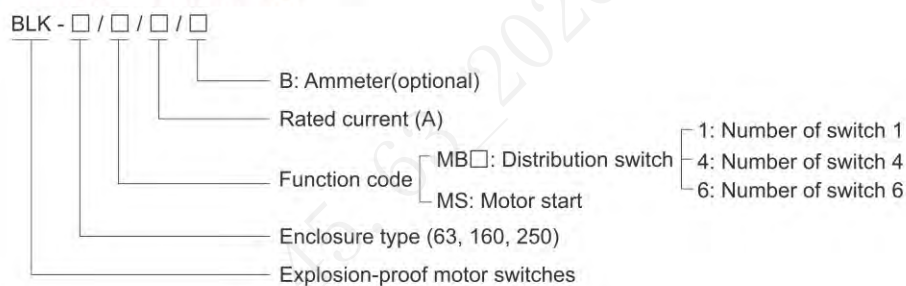
Motor Switches

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

Explosion-proof motor switches

BLK-63/MB□/□

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

Ex II 2 G Ex db IIC T6 Gb

Ex 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

Circuit breaker

MCB (miniature circuit breaker)

Max. working voltage

Max.690V AC 50/60Hz; 500V DC

Rated voltage

1P/230V AC, 2P/3P/4P/400V AC 50/60Hz

Rated current

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

Number of pole

1P, 2P, 3P, 4P

Breaking capacity

6kA, 10kA, 15kA

Impulse withstand voltage

6kV

Tripping characteristic

Instantaneous tripping range (5~10) In, (7~10) In or (10~14) In

Degree of protection

IP66

Internal & external earthing

M5/M8

Ambient temperature

-60°C~+55°C

Cable entries

Standard 1~16A: 2×M25×1.5 plugs

20~32A: 2×M32×1.5 plugs

40~63A: 2×M40×1.5 plugs

Cable gland (optional)

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

Entry direction

Bottom

Enclosure weight

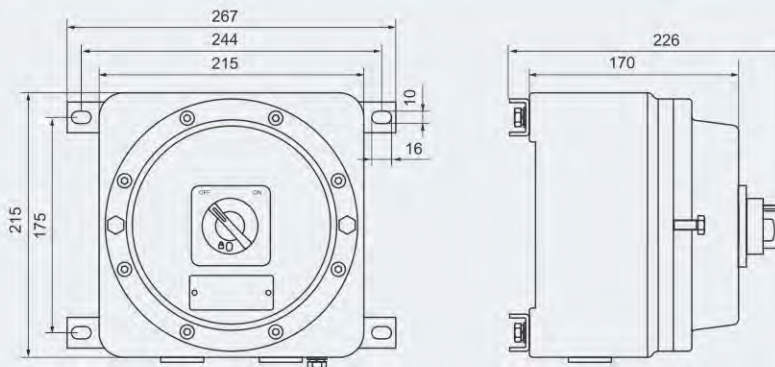
6.50 kg

Earth leakage protection

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□/□

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)

Presafe 17 ATEX 10687X

Gas and dust

Ex II 2 G Ex db IIC T6 Gb

Ex 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

Circuit breaker

MCB (miniature circuit breaker); MCCB (moulded case circuit breaker)

Max. working voltage

MCB: 440V AC 50/60Hz;

MCCB: 690V AC 50/60Hz; 500V DC

Rated voltage

MCB: 1P/230V AC, 2P/3P/4P/400V AC 50/60Hz

Rated current

MCB: max.50A(1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 50)

MCCB: 80A, 100A, 125A, 160A

Number of pole

MCB: 1P, 2P, 3P, 4P

MCCB: 3P, 4P

Breaking capacity

MCB: 6kA, 10kA, 15kA

MCCB: 380/415V AC 50/60Hz, 36kA/50kA; 440V AC 50/60Hz, 30kA/45kA

Impulse withstand voltage

MCB: 6kV; MCCB: 8kV

Tripping characteristic

Thermomagnetic type

Degree of protection

IP66

Internal & external earthing

M6/M8

Ambient temperature

-60°C~+55°C

Cable entries

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

Cable gland (optional)

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

Entry direction

Bottom

Enclosure weight

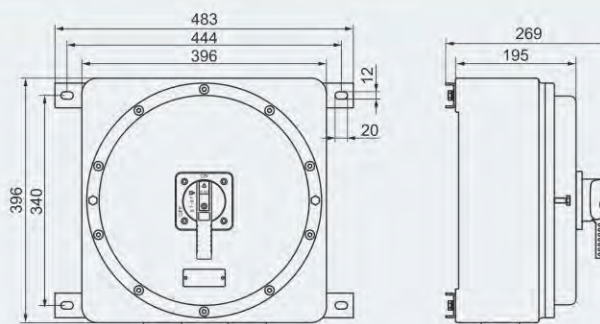
28.00kg

Earth leakage protection

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	Ex II 2 G Ex db IIC T6 Gb
	Ex 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

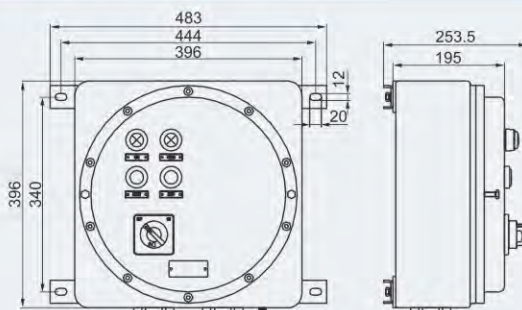
Entry direction

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□/□

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)

Presafe 17 ATEX 10687X

Gas and dust

Ex II 2 G Ex db IIC T6 Gb

Ex 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

Circuit breaker

MCB (miniature circuit breaker); MCCB (moulded case circuit breaker)

Max. working voltage

MCB: 440V AC 50/60Hz;

MCCB: 690V AC 50/60Hz; 500V DC

Rated voltage

MCB: 1P/230V AC, 2P/3P/4P/400V AC 50/60Hz

Rated current

MCB: max.50A(1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 50)

MCCB: 200A, 250A

Number of pole

MCB: 1P, 2P, 3P, 4P

MCCB: 3P, 4P

Breaking capacity

MCB: 6kA, 10kA, 15kA

MCCB: 380/415V AC 50/60Hz, 36kA/50kA; 440V AC 50/60Hz, 30kA/45kA

Impulse withstand voltage

MCB: 6kV; MCCB: 8kV

Tripping characteristic

Thermomagnetic type

Degree of protection

IP66

Internal & external earthing

M6/M8

Ambient temperature

-60°C~+55°C

Cable entries

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

Cable gland (optional)

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

Entry direction

Bottom

Enclosure weight

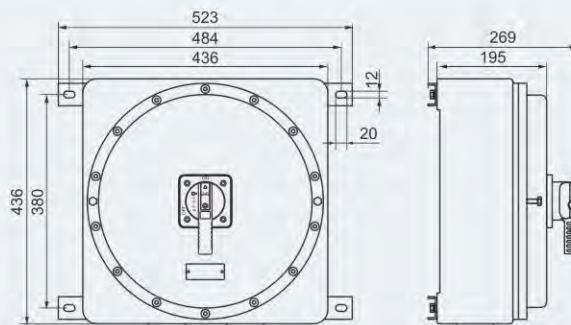
31.00kg

Earth leakage protection

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)

IECEX CQM 12.0037X

Gas and dust

Ex db IIC T6 Gb

Europe (ATEX)

Ex tb IIIC T80°C Db IP66

Gas and dust

Presafe 17 ATEX 10687X

Ex II 2 G Ex db IIC T6 Gb

Ex 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

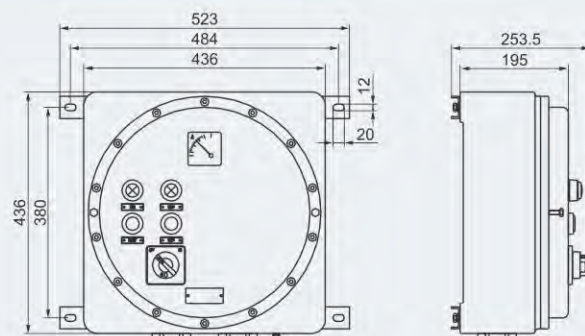
Entry direction

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