

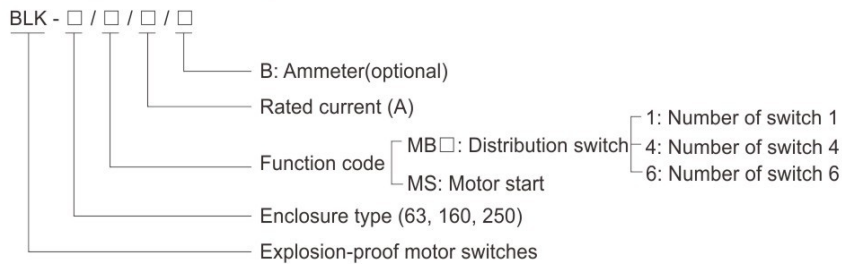
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Motor Switches BLK Series Explosion-proof Motor Switches (Ex d IIC)



- ◆ 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

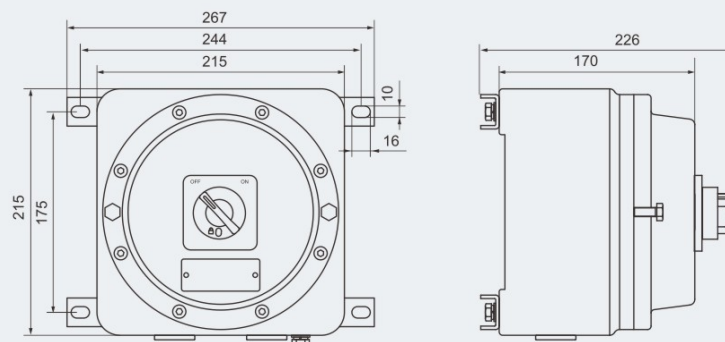
Motor Switches

BLK Series Explosion-proof Motor Switches (Ex d 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	⊕ II 2 G Ex db IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80°C 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, 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 x M25 x 1.5 plugs 20~32A: 2 x M32 x 1.5 plugs 40~63A: 2 x M40 x 1.5 plugs
Cable gland (optional)	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~31
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 d IIC)

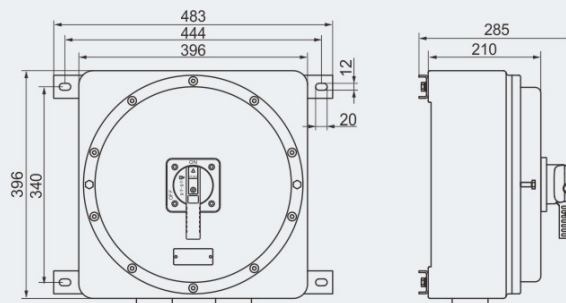
Technical data

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

Explosion protection	IECEX CQM 12.0037X Ex db IIC T6 Gb Ex tb IIIC T80°C Db IP66
Global (IECEX) Gas and dust	Presafe 17 ATEX 10687X ⊕ II 2 G Ex db IIC T6 Gb ⊕ II 2 D Ex tb IIIC T80°C Db IP66
Europe (ATEX) Gas and dust	IECEX; ATEX; CU-TR
Certificates	EN 60079-0, EN 60079-1, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-31
Conformity to standards	Copper-free Aluminium Alloy, powder coated surface
Enclosure material	Window grey (RAL7040)
Enclosure colour	Stainless steel
Exposed fastener	MCB (miniature circuit breaker); MCCB (moulded case circuit breaker)
Circuit breaker	MCB: 440V AC 50/60Hz; MCCB: 690V AC 50/60Hz; 500V DC
Max. working voltage	MCB: 1P/230V AC, 2P/3P/4P/400V AC 50/60Hz
Rated voltage	MCB: max.50A(1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 50) MCCB: 80A, 100A, 125A, 160A
Rated current	MCB: 1P, 2P, 3P, 4P MCCB: 3P, 4P
Number of pole	MCB: 6kA, 10kA, 15kA MCCB: 380/415V AC 50/60Hz, 36kA/50kA; 440V AC 50/60Hz, 30kA/45kA
Breaking capacity	MCB: 6kV; MCCB: 8kV
Impulse withstand voltage	Thermomagnetic type
Tripping characteristic	IP66
Degree of protection	M6/M8
Internal&external earthing	-60°C~+55°C
Ambient temperature	Standard 4 x 1~16A: 1 x M40 x 1.5 + 4 x M25 x 1.5 plugs 4 x 20~32A: 1 x M50 x 1.5 + 4 x M32 x 1.5 plugs 4 x 40~63A: 1 x M63 x 1.5 + 4 x M40 x 1.5 plugs 1 x 80~100A: 2 x M50 x 1.5 plugs 1 x 125~160A: 2 x M63 x 1.5 plugs
Cable entries	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~31
Cable gland (optional)	Bottom
Entry direction	28.00kg
Enclosure weight	On request
Earth leakage protection	



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



BLK-160/MB□/□

Motor Switches

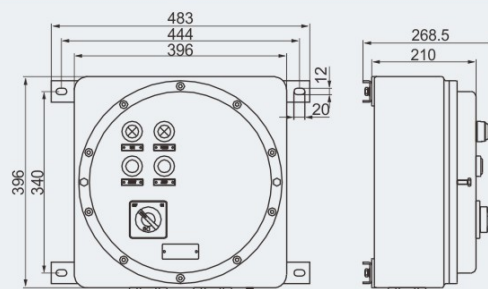
BLK Series Explosion-proof Motor Switches (Ex d IIC)

Technical data	
Explosion-proof motor switches BLK-160/MS/□	
Explosion protection	IECEX CQM 12.0037X Ex db IIC T6 Gb Ex tb IIIC T80°C Db IP66
Global (IECEX) Gas and dust	
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 IP66
Certificates	IECEX; ATEX; CU-TR
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□ x 1.5 plug; See Selection table as below
Cable gland (optional)	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~31
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 x M25 x 1.5	28.00
BLK-160/MS/16	5.5	16	9~13, Ie=12	18	2 x M25 x 1.5	28.00
BLK-160/MS/20	7.5	20	12~18, Ie=17	25	2 x M25 x 1.5	28.00
BLK-160/MS/32	11	32	16~24, Ie=21	32	2 x M32 x 1.5	28.00
BLK-160/MS/40	15	40	30~40, Ie=32	40	2 x M32 x 1.5	28.00
BLK-160/MS/50	18.5	50	37~50, Ie=40	50	2 x M40 x 1.5	28.00
BLK-160/MS/63	22	63	37~50, Ie=48	65	2 x M40 x 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 d IIC)

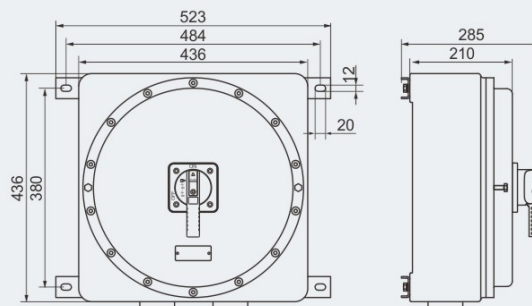
Technical data

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

Explosion protection	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 IP66
Certificates	IECEX; ATEX; CU-TR
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 x 1~16A: 1 x M40 x 1.5 + 6 x M25 x 1.5 plugs 6 x 20~32A: 1 x M50 x 1.5 + 6 x M32 x 1.5 plugs 6 x 40~63A: 1 x M63 x 1.5 + 6 x M40 x 1.5 plugs 1 x 200~250A: 2 x M63 x 1.5 plugs
Cable gland (optional)	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~31
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

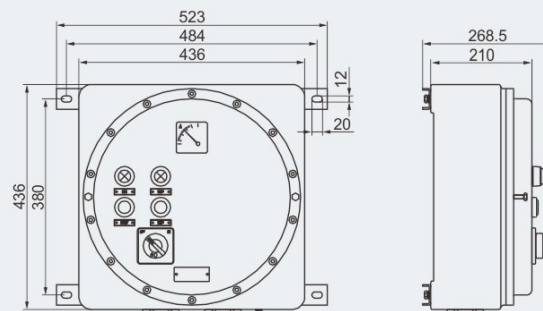
BLK Series Explosion-proof Motor Switches (Ex d IIC)

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 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 IP66
Certificates	IECEX; ATEX; CU-TR
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□ x 1.5 plug; See Selection table as below
Cable gland (optional)	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~31
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, le=9	12	2 x M25 x 1.5	31.00
BLK-250/MS/16/B	5.5	16	9~13, le=12	18	2 x M25 x 1.5	31.00
BLK-250/MS/20/B	7.5	20	12~18, le=17	25	2 x M25 x 1.5	31.00
BLK-250/MS/32/B	11	32	16~24, le=21	32	2 x M32 x 1.5	31.00
BLK-250/MS/40/B	15	40	30~40, le=32	40	2 x M32 x 1.5	31.00
BLK-250/MS/50/B	18.5	50	37~50, le=40	50	2 x M40 x 1.5	31.00
BLK-250/MS/63/B	22	63	37~50, le=48	65	2 x M40 x 1.5	31.00

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



BLK-250/MS/□/B

