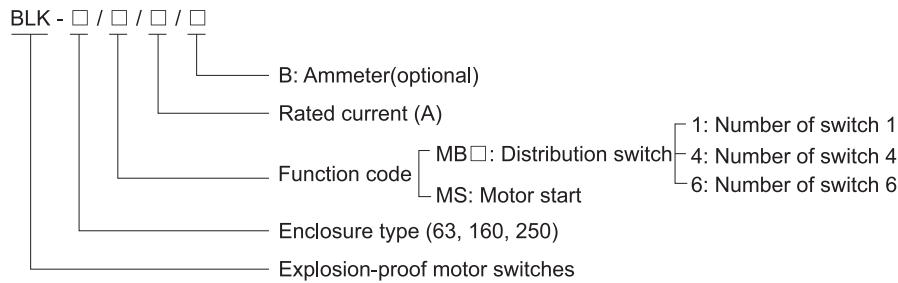


Motor Switches BLK Series Explosion-proof Motor Switches (Ex d IIC)



- ◆ 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 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

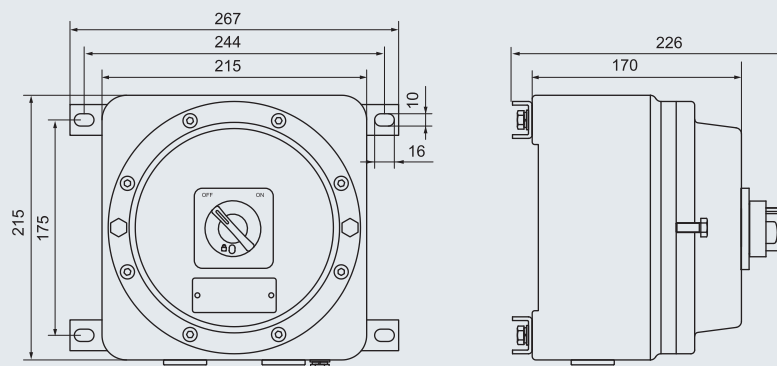
Motor Switches

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



| Technical data | |
|---------------------------------------|---|
| Explosion-proof motor switches | BLK-63/MB□/□ |
| Explosion protection | |
| Gas explosion protection | ⊕ II 2 G Ex db IIC T6 Gb |
| Dust explosion protection | ⊕ II 2 D Ex tb IIIC T80°C Db IP66 |
| Certificates | Presafe 17 ATEX 10687X; IECEX CQM 12.0037X KZ.7500525.22.01.00362 (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, 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 P7/20~29 |
| 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)

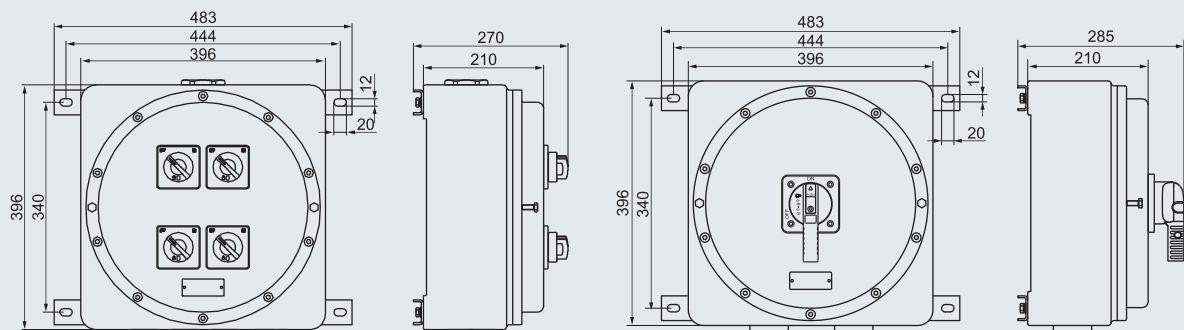
Technical data

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

| | |
|---------------------------------------|--|
| Explosion protection | <p>Gas explosion protection $\text{Ex II 2 G Ex db IIC T6 Gb}$</p> <p>Dust explosion protection $\text{Ex II 2 D Ex tb III C T80°C Db IP66}$</p> |
| Certificates | Presafe 17 ATEX 10687X; IECEx CQM 12.0037X KZ.7500525.22.01.00362 (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, 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 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 gland (optional) | DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~29 |
| 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 d IIC)

| Technical data | |
|---|--|
| Explosion-proof motor switches BLK-160/MS/□ | |
| Explosion protection | Ⓔ II 2 G Ex db IIC T6 Gb Ⓔ II 2 D Ex tb IIIC T80°C Db IP66 |
| Certificates | Presafe 17 ATEX 10687X; IECEx CQM 12.0037X KZ.7500525.22.01.00362 (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, 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 P7/20~29 |
| 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/16 | 4 | 16 | 7~10, Ie=8.5 | 9 | 2 x M25 x 1.5 | 28.00 |
| BLK-160/MS/20 | 5.5 | 20 | 9~13, Ie=11 | 12 | 2 x M25 x 1.5 | 28.00 |
| BLK-160/MS/25 | 7.5 | 25 | 12~18, Ie=16 | 18 | 2 x M32 x 1.5 | 28.00 |
| BLK-160/MS/32 | 11 | 32 | 16~24, Ie=23 | 25 | 2 x M32 x 1.5 | 28.00 |
| BLK-160/MS/40 | 15 | 40 | 23~32, Ie=30 | 32 | 2 x M32 x 1.5 | 28.00 |
| BLK-160/MS/50 | 18.5 | 50 | 30~38, Ie=36 | 40 | 2 x M40 x 1.5 | 28.00 |
| BLK-160/MS/63 | 22 | 63 | 37~50, Ie=46 | 50 | 2 x M40 x 1.5 | 28.00 |



| Dimension drawings (all dimensions in mm) - subject to alteration |
|---|
| <p style="text-align: center;">BLK-160/MS/□</p> |

Motor Switches

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

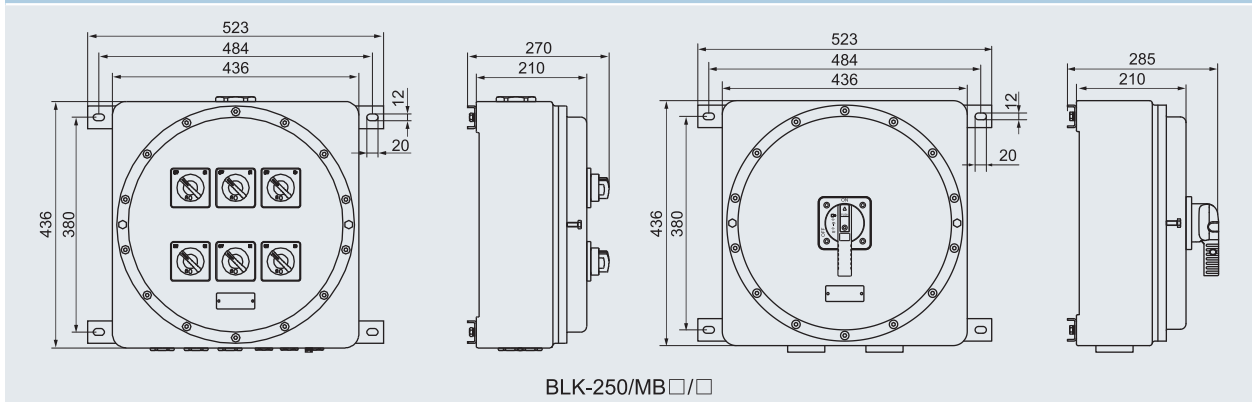
Technical data

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

| | |
|---------------------------------------|--|
| Explosion protection | |
| Gas explosion protection | ⊕ II 2 G Ex db IIC T6 Gb |
| Dust explosion protection | ⊕ II 2 D Ex tb III C T80°C Db IP66 |
| Certificates | Presafe 17 ATEX 10687X; IECEx CQM 12.0037X KZ.7500525.22.01.00362 (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, 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 P7/20~29 |
| Entry direction | Bottom |
| Enclosure weight | 31.00kg |
| Earth leakage protection | On request |



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



Motor Switches

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

| Technical data | |
|---------------------------------------|---|
| Explosion-proof motor switches | BLK-250/MS/□/B |
| Explosion protection | Ⓢ II 2 G Ex db IIC T6 Gb Ⓢ II 2 D Ex tb IIIC T80°C Db IP66 |
| Certificates | Presafe 17 ATEX 10687X; IECEx CQM 12.0037X KZ.7500525.22.01.00362 (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, 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 P7/20~29 |
| 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/16/B | 4 | 16 | 7~10, Ie=8.5 | 9 | 2 x M25 x 1.5 | 31.00 |
| BLK-250/MS/20/B | 5.5 | 20 | 9~13, Ie=11 | 12 | 2 x M25 x 1.5 | 31.00 |
| BLK-250/MS/25/B | 7.5 | 25 | 12~18, Ie=16 | 18 | 2 x M32 x 1.5 | 31.00 |
| BLK-250/MS/32/B | 11 | 32 | 16~24, Ie=23 | 25 | 2 x M32 x 1.5 | 31.00 |
| BLK-250/MS/40/B | 15 | 40 | 23~32, Ie=30 | 32 | 2 x M32 x 1.5 | 31.00 |
| BLK-250/MS/50/B | 18.5 | 50 | 30~38, Ie=36 | 40 | 2 x M40 x 1.5 | 31.00 |
| BLK-250/MS/63/B | 22 | 63 | 37~50, Ie=46 | 50 | 2 x M40 x 1.5 | 31.00 |



| Dimension drawings (all dimensions in mm) - subject to alteration | |
|---|--|
| | |
| BLK-250/MS/□/B | |