Standard Motor Starters
BQD Series Explosion-proof Motor Starters (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
- Classified as IIB according to gas atmosphere.
- Different motor starters.
- Copper-free Aluminium Alloy enclosure, powder coated surface.

Catalogue number logic

BQD - □ / □ / □ / □

- S: Direct-on-line control (optional)
- N: Reversible control
- Y: Star-delta control

Setting current of thermal relay (A)
Rated current of circuit breaker (A)
Control motor power (kW)
Explosion-proof motor starters

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, entry direction, enclosure material, etc. on request.

Zones 1&2; 21&22

Technical data

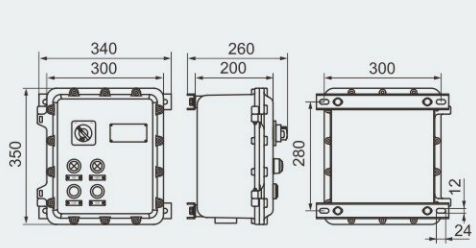
Explosion-proof motor starters (direct-on-line control) BQD-□/□/□

Explosion protection	
Global (IECEx)	IECEx CNEX 18.0035X
Gas and dust	Ex db IIB T6 or T5 Gb Ex tb IIIC T80℃ or T95℃ Db
Europe (ATEX)	CNEX 18 ATEX 0028 X
Gas and dust	Ⓔx II 2 G Ex db IIB T6 or T5 Gb Ⓔx II 2 D Ex tb IIIC T80℃ or T95℃ 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	380/400V AC 50/60Hz
Degree of protection	IP66
Internal&external earthing	M6/M8
Ambient temperature	T6/T80℃ for Tamb: -60℃~+50℃; T5/T95℃ for Tamb: -60℃~+60℃
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

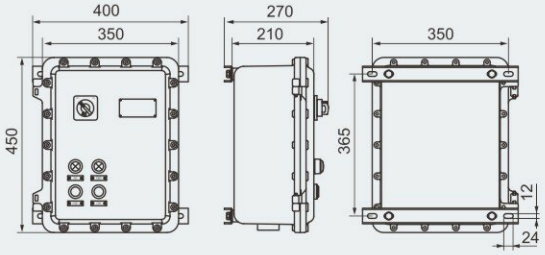
Selection table

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)
BQD-4/10/7~10	4	10	7~10, Ie=9	12	2 x M25 x 1.5	20.00
BQD-5.5/16/9~13	5.5	16	9~13, Ie=12	18	2 x M25 x 1.5	20.00
BQD-7.5/20/12~18	7.5	20	12~18, Ie=17	25	2 x M25 x 1.5	20.00
BQD-11/32/16~24	11	32	16~24, Ie=21	32	2 x M32 x 1.5	30.00
BQD-15/40/30~40	15	40	30~40, Ie=32	40	2 x M32 x 1.5	30.00
BQD-18.5/50/37~50	18.5	50	37~50, Ie=40	50	2 x M40 x 1.5	30.00
BQD-22/63/37~50	22	63	37~50, Ie=48	65	2 x M40 x 1.5	30.00

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



4kW-7.5kW



11kW-22kW

Standard Motor Starters
BQD Series Explosion-proof Motor Starters (Ex d IIB)

Technical data

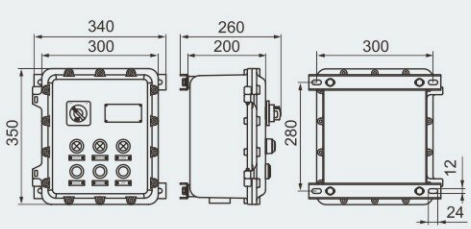
Explosion-proof motor starters (reversible control) BQD-□/□/□/ N

Explosion protection	
Global (IECEx)	IECEx CNEX 18.0035X
Gas and dust	Ex db IIB T6 or T5 Gb
	Ex tb IIIC T80℃ or T95℃ Db
Europe (ATEX)	CNEX 18 ATEX 0028 X
Gas and dust	Ⓔx II 2 G Ex db IIB T6 or T5 Gb
	Ⓔx II 2 D Ex tb IIIC T80℃ or T95℃ 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	380/400V AC 50/60Hz
Degree of protection	IP66
Internal&external earthing	M6/M8
Ambient temperature	T6/T80℃ for Tamb: -60℃~+50℃; T5/T95℃ for Tamb: -60℃~+60℃
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

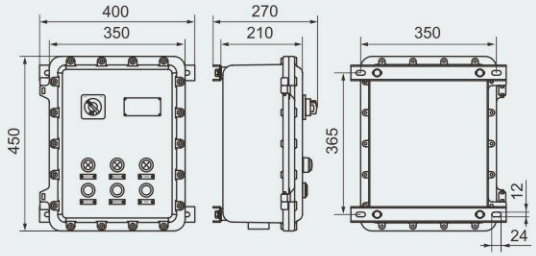
Selection table

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)
BQD-4/10/7~10/N	4	10	7~10, Ie=9	12	2 x M25 x 1.5	20.50
BQD-5.5/16/9~13/N	5.5	16	9~13, Ie=12	18	2 x M25 x 1.5	20.50
BQD-7.5/20/12~18/N	7.5	20	12~18, Ie=17	25	2 x M25 x 1.5	20.50
BQD-11/32/16~24/N	11	32	16~24, Ie=21	32	2 x M32 x 1.5	30.50
BQD-15/40/30~40/N	15	40	30~40, Ie=32	40	2 x M32 x 1.5	30.50
BQD-18.5/50/37~50/N	18.5	50	37~50, Ie=40	50	2 x M40 x 1.5	30.50
BQD-22/63/37~50/N	22	63	37~50, Ie=48	65	2 x M40 x 1.5	30.50

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



4kW-7.5kW



11kW-22kW

Technical data

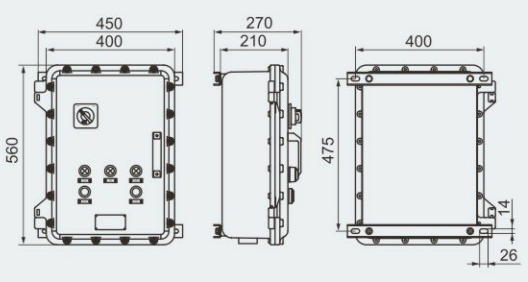
Explosion-proof motor starters (star-delta control) BQD-□/□/□/ Y

Explosion protection	
Global (IECEx)	IECEx CNEX 18.0035X
Gas and dust	Ex db IIB T6 or T5 Gb
	Ex tb IIIC T80℃ or T95℃ Db
Europe (ATEX)	CNEX 18 ATEX 0028 X
Gas and dust	Ⓔx II 2 G Ex db IIB T6 or T5 Gb
	Ⓔx II 2 D Ex tb IIIC T80℃ or T95℃ Db
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) or MCCB (moulded case circuit breaker)
	AC contactor
	Thermal overload relay
	Indicator, pushbutton
Rated voltage	380/400V AC 50/60Hz
Degree of protection	IP66
Internal&external earthing	M6/M8
Ambient temperature	T6/T80℃ for Tamb: -60℃~+50℃; T5/T95℃ for Tamb: -60℃~+60℃
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

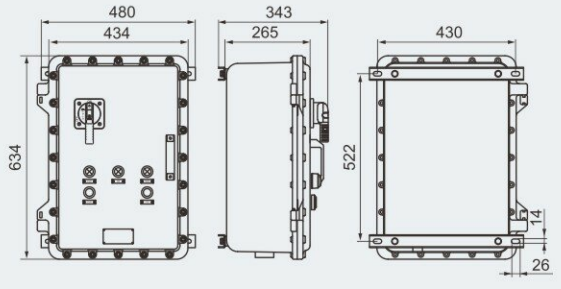
Selection table

Version	Control motor power (kW)	Rated current of circuit breaker (A)	Adjustable range of setting current of thermal relay (A)	Setting value of delay time	Cable entry size	Enclosure weight (kg)
BQD-18.5/50/17~25/Y	18.5	50	17~25, Ie=23.5	13s	3 x M50 x 1.5	40.00
BQD-22/63/23~32/Y	22	63	23~32, Ie=28	15s	3 x M50 x 1.5	40.00
BQD-30/80/30~40/Y	30	80	30~40, Ie=38	17s	3 x M63 x 1.5	54.50
BQD-37/80/37~50/Y	37	80	37~50, Ie=47	18s	3 x M63 x 1.5	54.50
BQD-45/100/48~65Y	45	100	48~65, Ie=57	20s	3 x M63 x 1.5	54.50

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



18.5kW-37kW



45kW