

Standard Motor Starters

BQD Series Explosion-proof Motor Starters (Ex db 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

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

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	⊕ II 2 G Ex db IIB T6 or T5 Gb ⊕ 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 P7/22~31
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	
<p>4kW-7.5kW</p>	<p>11kW-22kW</p>

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

Technical data

Explosion-proof motor starters (reversible control)

BQD-□/□/□/ N

Explosion protection

Global (IECEX)

Gas and dust

IECEX CNEX 18.0035X

Ex db IIB T6 or T5 Gb

Ex tb IIIC T80 or T95 Db

Europe (ATEX)

Gas and dust

CNEX 18 ATEX 0028 X

⊕ II 2 G Ex db IIB T6 or T5 Gb

⊕ 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 P7/22~31

Entry direction

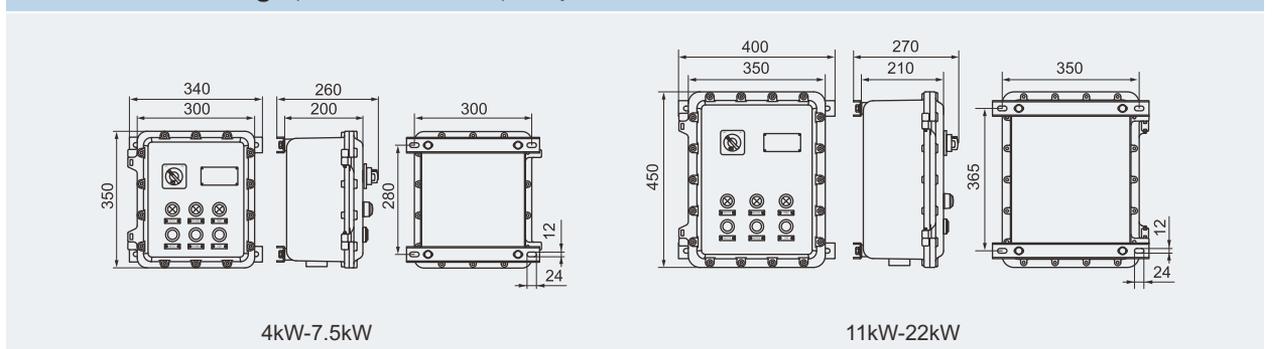
Bottom



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



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

Technical data	
Explosion-proof motor starters (star-delta control) BQD-□/□/□/ Y	
Explosion protection	IECEX CNEX 18.0035X
Global (IECEX)	Ex db IIB T6 or T5 Gb
Gas and dust	Ex tb IIIC T80 or T95 Db
Europe (ATEX)	CNEX 18 ATEX 0028 X
Gas and dust	⊕ II 2 G Ex db IIB T6 or T5 Gb
	⊕ 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 P7/22~31
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-22kW	30kW-45kW