Terminal Boxes
BXJ-S Series Terminal Boxes

- Explosion protection to
  - -CENELEC
  - -IEC
  - -NEC
- Can be used in
  - Zone 0, Zone 1 and Zone 2
  - Zone 21 and Zone 22
  - Class I, Zone 1 and Zone 2
  - Class I, Division 2, Groups A, B, C, D
- Stainless steel enclosure.
- International brand of explosion-proof terminal blocks.

Catalogue number logic

BXJ-S - □ □

- Internal terminal type (a, b, c, d, e, f, g, h, i, j)
- Enclosure type (I, II, III, IIIB, IV, IVB, V, VB, VI, VIB, VII, VIIB, VIII)
- Terminal boxes (Stainless steel)

Technical data

Terminal boxes (Ex eb IIC Ex ia IIC) BXJ-S-□□

Explosion protection	
Global (IECEx)	IECEx CQM 21.0022X
Gas and dust	Ex eb IIC T6...T3 Gb Ex ia IIC T6 Ga Ex eb ia IIC T4 Gb Ex tb IIIC T80℃...T130℃ Db
Europe (ATEX)	TPS 21 ATEX 089761 0020X
Gas and dust	Ⓔx II 2 G Ex eb IIC T6...T3 Gb Ⓔx II 1 G Ex ia IIC T6 Ga Ⓔx II 2 D Ex tb IIIC T80℃...T130℃ Db
Certificates	IECEx; ATEX; CU-TR; INMETRO; UL
Conformity to standards	EN 60079-0, EN 60079-7, EN 60079-11, EN 60079-31 IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31 UL 1203, UL 508, UL 50, UL 50E, UL 508A CSA C22.2 No.213, CSA C22.2 No.14, CSA C22.2 No. 94.1, CSA C22.2 No. 94.2
Enclosure material	Stainless steel
Terminal	International brand of explosion-proof terminal blocks
Exposed fastener	Stainless steel
Rated voltage	Max. 1000V AC Max. 1500V DC

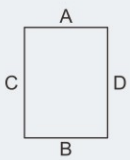
Zones 0&1&2; 21&22

Terminal boxes (Ex eb IIC Ex ia IIC) BXJ-S-□□

Rated current	Max. 1000A					
	Cross section	2.5mm²	4mm²	6mm²	10mm²	16mm²
	Ex e Rated current	24A	32A	41A	57A	76A
	Ex ia Rated current	5A	5A	-	-	-
	Cross section	35mm²	70mm²	120mm²	185mm²	300mm²
	Ex e Rated current	125A	192A	269A	353A	520A
	Ex ia Rated current	-	-	-	-	-
	Cross section	2×185mm²	2×300mm²	3×300mm²	-	-
	Ex e Rated current	550A	700A	1000A	-	-
	Ex ia Rated current	-	-	-	-	-
Internal & external earthing	M6/M6					
Degree of protection	IP66					
Ambient temperature	Ex eb: -40˚C/-60˚C~+30˚C/+40˚C/+45˚C/+55˚C/+60˚C/+70˚C Ex ia: -40˚C/-60˚C~+70˚C					

Cable entry table

Table of max. number of possible enclosure entries with cable glands DQM-I



		Size								
		M20×1.5	M25×1.5	M32×1.5	M40×1.5	M50×1.5	M63×1.5	M75×1.5	M90×1.5	M115×1.5
I	A/B	2	2	1	1	1	/	/	/	/
	C/D	2	2	1	1	1	/	/	/	/
II	A/B	8	8	3	3	2	1	/	/	/
	C/D	8	8	3	3	2	1	/	/	/
III	A/B	10	8	5	5	3	2	/	/	/
	C/D	10	8	5	5	3	2	/	/	/
IIIB	A/B	15	12	8	8	6	2	/	/	/
	C/D	10	8	5	5	3	2	/	/	/
IV	A/B	10	10	5	4	3	3	/	/	/
	C/D	14	12	7	5	4	4	/	/	/
IVB	A/B	15	15	8	8	6	3	/	/	/
	C/D	21	18	10	10	8	4	/	/	/
V	A/B	16	16	8	6	5	4	/	/	/
	C/D	16	16	8	6	5	4	/	/	/
VB	A/B	24	24	21	12	10	8	/	/	/
	C/D	24	24	21	12	10	8	/	/	/
VI	A/B	27	24	14	12	10	5	/	/	/
	C/D	30	30	16	14	12	6	/	/	/
VIB	A/B	45	32	28	18	15	10	/	/	/
	C/D	55	40	32	21	18	12	/	/	/
VII	A/B	30	30	16	14	12	6	/	/	/
	C/D	42	39	22	20	16	8	/	/	/
VIIB	A/B	55	40	32	21	18	12	7	6	3
	C/D	70	52	44	30	24	16	11	9	4
VIII	A/B	70	52	44	30	24	16	11	9	4
	C/D	90	64	56	36	33	20	16	14	5

Note: For cable entries:

1) Please specify the direction and size of each cable entry.
2) Cable gland is optional, DQM-I (Ex eb) is recommended. Please see P6/20~23.
3) Can be equipped with Gland plate.

Selection table for max. dissipated power

Enclosure type	Ambient temperature	Maximum heat loss power consumption (W)			Enclosure type	Ambient temperature	Maximum heat loss power consumption (W)		
		T6 or T80℃	T5 or T80℃	T4 or T95℃			T6 or T80℃	T5 or T80℃	T4 or T95℃
BXJ-S-I	-60℃ to +40℃	5.87	7.93	-	BXJ-S-VB	-60℃ to +40℃	107.37	167.77	-
	-60℃ to +45℃	5.31	7.45	-		-60℃ to +45℃	60.4	154.61	-
	-60℃ to +55℃	-	5.87	-		-60℃ to +55℃	-	107.37	-
	-60℃ to +60℃	2.91	5.31	-		-60℃ to +60℃	52.61	60.4	-
	-60℃ to +70℃	-	2.91	7.93		-60℃ to +70℃	-	52.61	167.77
BXJ-S-II	-60℃ to +40℃	46.98	72.15	-	BXJ-S-VI	-60℃ to +40℃	111.96	168.4	-
	-60℃ to +45℃	41.19	64.72	-		-60℃ to +45℃	99.65	143.49	-
	-60℃ to +55℃	-	46.98	-		-60℃ to +55℃	-	111.96	-
	-60℃ to +60℃	19.59	41.19	-		-60℃ to +60℃	48.83	99.65	-
	-60℃ to +70℃	-	19.59	72.15		-60℃ to +70℃	-	48.83	168.4
BXJ-S-III	-60℃ to +40℃	26.48	36.79	-	BXJ-S-VIB	-60℃ to +40℃	166.55	288.35	-
	-60℃ to +45℃	22.84	36.34	-		-60℃ to +45℃	157.9	254.79	-
	-60℃ to +55℃	-	26.48	-		-60℃ to +55℃	-	166.55	-
	-60℃ to +60℃	16.35	22.84	-		-60℃ to +60℃	46.14	157.9	-
	-60℃ to +70℃	-	16.35	36.79		-60℃ to +70℃	-	46.14	288.35
BXJ-S-IIIB	-60℃ to +40℃	19.97	39.14	-	BXJ-S-VII	-60℃ to +40℃	288.28	425.07	-
	-60℃ to +45℃	16.78	35.5	-		-60℃ to +45℃	248.57	376.53	-
	-60℃ to +55℃	-	19.97	-		-60℃ to +55℃	-	288.28	-
	-60℃ to +60℃	8.44	16.78	-		-60℃ to +60℃	110.48	248.57	-
	-60℃ to +70℃	-	8.44	39.14		-60℃ to +70℃	-	110.48	425.07
BXJ-S-IV	-60℃ to +40℃	66.16	102.46	-	BXJ-S-VIIB	-60℃ to +40℃	279.63	374.9	-
	-60℃ to +45℃	52.28	81.68	-		-60℃ to +45℃	223.86	341.6	-
	-60℃ to +55℃	-	66.16	-		-60℃ to +55℃	-	279.63	-
	-60℃ to +60℃	29.4	52.28	-		-60℃ to +60℃	121.03	223.86	-
	-60℃ to +70℃	-	29.4	102.46		-60℃ to +70℃	-	121.03	374.9
BXJ-S-IVB	-60℃ to +40℃	115.24	191.22	-	BXJ-S-VIII	-60℃ to +40℃	577.44	816.6	-
	-60℃ to +45℃	111.37	162.22	-		-60℃ to +45℃	546.65	799.9	-
	-60℃ to +55℃	-	115.24	-		-60℃ to +55℃	-	577.44	-
	-60℃ to +60℃	52.97	111.37	-		-60℃ to +60℃	263.62	546.65	-
	-60℃ to +70℃	-	52.97	191.22		-60℃ to +70℃	-	263.62	816.6
BXJ-S-V	-60℃ to +40℃	127.22	195.34	-					
	-60℃ to +45℃	106.06	175.32	-					
	-60℃ to +55℃	-	127.22	-					
	-60℃ to +60℃	47.14	106.06	-					
	-60℃ to +70℃	-	47.14	195.34					

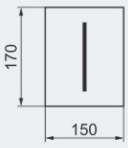
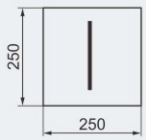
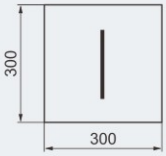
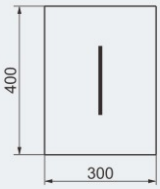
For current exceeds 520A，the copper bar is used. The below table applies.

Enclosure type	Ambient temperature	Maximum heat loss power consumption (W)			Enclosure type	Ambient temperature	Maximum heat loss power consumption (W)		
		T6 or T80℃	T3 or T130℃	T3 or T95℃			T6 or T80℃	T3 or T130℃	T3 or T95℃
BXJ-S-VI	-60℃ to +30℃	SS (550A)	-	-	BXJ-S-VIIB	-60℃ to +30℃	SS (550A)	-	-
	-60℃ to +70℃	-	SS (550A)	-		-60℃ to +70℃	-	SS (550A)	-
BXJ-S-VIB	-60℃ to +30℃	SS (550A)	-	-		-60℃ to +70℃	-	MS (700A)	-
	-60℃ to +70℃	-	SS (550A)	-	BXJ-S-VIII	-60℃ to +30℃	SS (550A)	-	-
BXJ-S-VII	-60℃ to +30℃	SS (550A)	-	-		-60℃ to +70℃	-	SS (550A)	-
	-60℃ to +70℃	-	SS (550A)	-		-60℃ to +70℃	-	MS (700A)	-
	-60℃ to +70℃	-	MS (550A)	-		-60℃ to +70℃	-	-	LS (700A)

Selection table of BXJ-S series terminal boxes

Max. cross section of cable connected to terminals is 300mm^2

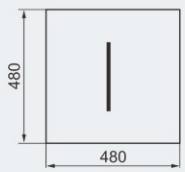
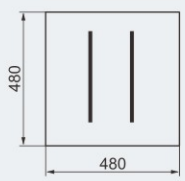
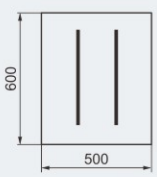
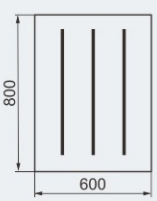
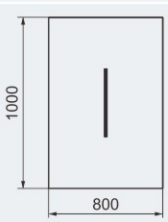
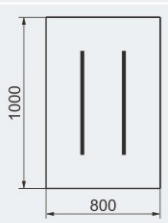
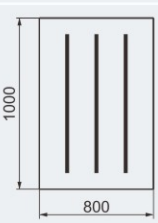
See table for max. number of fitted terminals

Cross section of cable (mm^2)		2.5 (a)	4 (b)	6 (c)	10 (d)	16 (e)	35 (f)	70 (g)	120 (h)	185 (i)	300 (j)	Weight (kg)
Enclosure code/Ordering code	Outline											
I		12	12	8	—	—	—	—	—	—	—	1.73
II		27	23	18	15	12	8	—	—	—	—	3.80
III, IIIB		30	28	25	20	14	10	—	—	—	—	5.20 (III) 5.77 (IIIB)
IV, IVB		45	40	35	28	23	9	—	—	—	—	6.50 (IV) 7.10 (IVB)

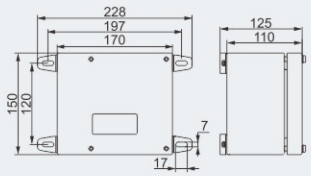
Selection table of BXJ-S series terminal boxes

Max. cross section of cable connected to terminals is 300mm^2

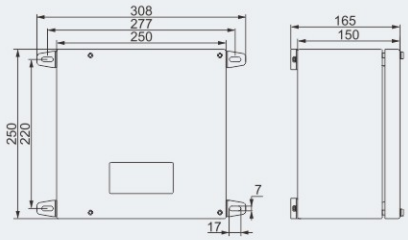
See table for max. number of fitted terminals

Cross section of cable (mm^2)		2.5 (a)	4 (b)	6 (c)	10 (d)	16 (e)	35 (f)	70 (g)	120 (h)	185 (i)	300 (j)	Weight (kg)
Enclosure code/Ordering code	Outline											
V, VB		56	50	40	30	20	16	—	—	—	—	12.40 (V) 17.60 (VB)
		112	100	80	60	40	—	—	—	—	—	12.70 (V) 17.90 (VB)
VI, VIB		150	140	120	100	80	56	—	—	—	—	17.60 (VI) 26.40 (VIB)
VII, VIIB		315	300	240	225	180	120	—	—	—	—	29.30 (VII) 34.30 (VIIB)
VIII		135	125	105	95	80	50	27	24	18	18	52.00 (VIII)
		270	250	210	190	160	100	—	—	—	—	
		405	375	315	285	240	—	—	—	—	—	

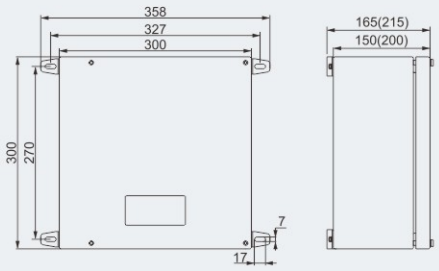
Dimension drawings (all dimensions in mm) - subject to alteration



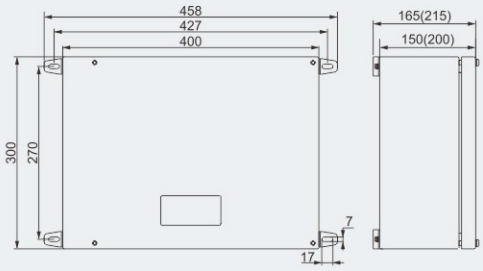
Type I



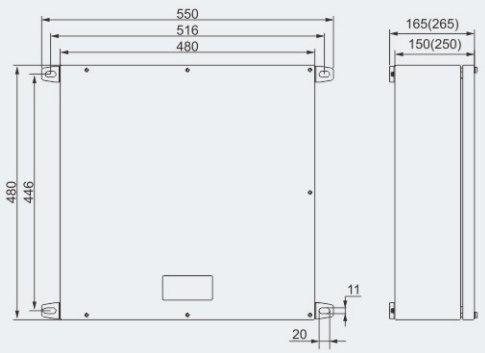
Type II



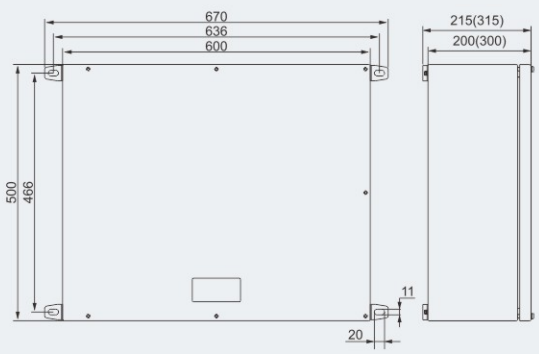
Type III, IIIB



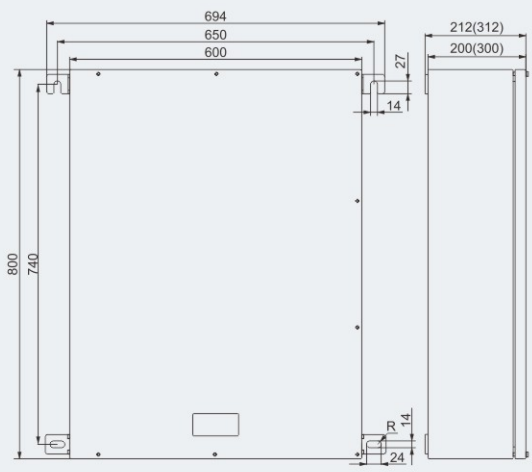
Type IV, IVB



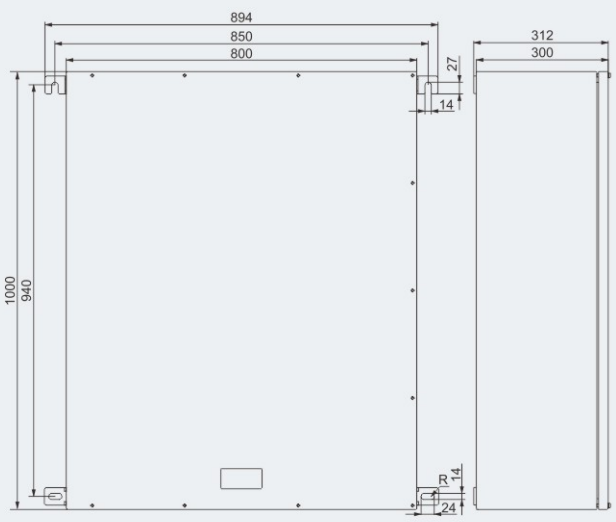
Type V, VB



Type VI, VIB



Type VII, VIIB



Type VIII