LIGHTING JUNCTION BOX

Cat No. Size		Channels		Max. No. of Terminals							
		Max. Length	Max. No.	4 mm^2	10 mm^2	16 mm^2	35 mm^2	50 mm^2	70 mm^2	95 mm^2	
DB 6006 260 x 160	L	245	1	30	20	16	–	–	–	–	
	B	145	2	32	22	18	6	–	–	–	
DB 6024 300 x 225	L	285	2	72	25	20	12	–	–	–	
	B	210	2	46	32	26	8	6	–	–	
DB 6031 300 x 300	L	285	2	72	50	20	12	–	–	–	
	B	285	2	72	50	20	12	5	–	–	
DB 6036 350 x 350	L	335	2	82	58	46	14	–	–	–	
	B	335	2	82	58	46	14	–	–	–	
DB 6039 350 x 250	L	335	2	82	58	46	14	–	–	–	
	B	235	3	81	57	32	18	6	6	–	
DB 6041 450 x 300	L	435	2	110	76	32	19	12	–	–	
	B	285	3	102	72	40	24	8	8	5	
DB 6070 DB 6075 ∅ 250	L	215	2	54	38	16	9	8	4	–	
	B	215	2	54	38	16	9	8	–	–	
DB 6093 550 x 550	L	535	4	276	192	160	72	32	32	9	
	B	535	4	276	192	160	72	32	32	9	
DB 6100 DB 6105 ∅ 250	L	215	2	54	38	16	9	8	4	–	
	B	215	2	54	38	16	9	8	–	–	
DB 6150 DB 6155 ∅ 250	L	215	2	54	38	16	9	8	4	–	
	B	215	2	54	38	16	9	8	–	–	
FPJ240 ∅ 240	L	225	1	28	20	14	8	–	–	–	
	B	225	1	28	20	14	8	–	–	–	

LIGHTING JUNCTION BOX

Cat No. Size		Channels		Max. No. of Terminals						
		Max. Length	Max. No.	4 mm^2	10 mm^2	16 mm^2	35 mm^2	50 mm^2	70 mm^2	95 mm^2
FLP 930 200 x 100	L	160	1	22	–	–	–	–	–	–
	B	60	1	8	–	–	–	–	–	–
IS 30666 225 x 205	L	160	2	22	32	26	16	10	10	8
	B	155	2	44	30	24	16	10	8	6
IS 30996 300 x 200	L	250	2	70	50	40	26	16	14	12
	B	150	2	42	30	24	16	10	8	6
IS 20510 200 x 150	L	145	1	18	13	–	–	–	–	–
	B	105	2	24	16	8	–	–	–	–
IS 30310 300 x 300	L	245	2	64	40	15	10	8	–	–
	B	245	2	64	40	15	10	8	–	–
ISJ 35310 350 x 300	L	275	2	72	48	20	12	10	–	–
	B	245	3	96	66	15	10	8	–	–

Note : These are typical arrangement. Configurations will be specific to requirements.
Higher sized terminals will be mounted in a single row.

Application Example

If a selection of 4 x 16 sq. mm, 4 x 10 sq.mm and 16 x 4 sq.mm clipon type terminals are to be fitted into one junction box, use the following procedure to make a proper selection.

1. For each size of terminal, obtain the correct thickness of the terminal from the above Chart alongside.
2. Calculate the total thickness of all terminals and any partition plate.

16mm2 terminals	-	4 Nos. x 12 mm	=	48mm
10mm2 terminals	-	4 Nos. x 10 mm	=	40mm
4mm2 terminals	-	16Nos. x 7 mm	=	112mm
End plate	-	3 Nos. x 3 mm	=	9mm
Total length of channel required			=	209mm

3. Based upon this total refer to the column on channels in the terminal selection chart and select the channel length which can accommodate all the above terminals. DB 6006, with a 220mm lengthwise channel is to be used in this case.
4. Where terminals are to be mounted on two rows then the same calculations are to be made for each row to ensure that the total number of terminals proposed to be mounted fir into each channel.
5. Precaution is to be taken to ensure that the gland to terminal distance specified for each terminal cable size is not violated. Refer Chart on Pages 3.12 and 3.13.

Clipon Terminal Sizes

Terminal Sizes	W x T (mm)	Type
2.5 sq.mm (Micro)	26 x 7	Clipon
2.5/4 sq.mm	40 x 7	Clipon
6/10 sq.mm	40 x 10	Clipon
16 sq.mm	50 x 12	Clipon
35 sq.mm	55 x 18	Clipon
50 sq.mm	75 x 28	Bus Bar
70 sq.mm	85 x 32	Bus Bar
95 sq.mm	96 x 40	Bus Bar

* Width of end clamps already included

LIGHTING JUNCTION BOX

Gland to Terminal Distance

All cables and insulated wires have, depending upon the conductor size and insulation thickness, a certain minimum bending radius. It is therefore essential that whenever a cable is terminated into and enclosure or junction box, adequate space is available for properly bending the incoming wires and connecting them to the terminal blocks without creating damaging stresses and hot spots in the wires. The chart below recommends the minimum gland to terminal distance that must be maintained for proper and safe termination. If cable lugs are used an additional 10-20 mm distance is required.

Cable Size	Cable OD/ID Approx. – mm	Gland to Terminal – mm	Type of Terminal
2 x 1.5 mm^2	15.0/ 8.6	40	Clipton
2 x 2.5 mm^2	16.0/ 9.6	40	Clipon
2 x 4 mm^2	17.5/11.1	40	Clipon
2 x 6 mm^2	18.5/12.1	40	Clipon
2 x 10 mm^2	20.0/13.6	40	Clipon
2 x 16 mm^2	22.5/16.9	50	Clipon
2 x 25 mm^2	25.0/19.4	50	Clipon
2 x 35 mm^2	27.5/21.9	70	Clipon
2 x 50 mm^2	31.0/25.4	100	Clipon
3 x 1.5 mm^2	15.5/ 9.1	40	Clipon
3 x 2.5 mm^2	17.0/ 10.6	40	Clipon
3 x 4 mm^2	18.0/11.6	40	Clipon
3 x 6 mm^2	19.5/ 13.1	40	Clipon
3 x 10 mm^2	21.5/ 17.9	40	Clipon
3 x 16 mm^2	23.5/13.9	50	Clipon
3 x 25 mm^2	23.5/ 17.9	50	Clipon
3 1/2 x 25 mm^2	26.0/20.4	50	Clipon
3 x 35 mm^2	25.5/ 19.9	70	Clipon
3 1/2 x 35 mm^2	27.5/ 21.9	70	Clipon
3 x 50 mm^2	29.5/ 23.5	100	Clipon
3 1/2 x 50 mm^2	31.0 / 25.0	100	Clipon
3 x 70 mm^2	33.0 / 27.0	140	Bus bar
3 1/2 x 70 mm^2	34.0 / 28.0	140	Bus bar
3 x 95 mm^2	37.0 / 31.0	190	Bus bar
3 1/2 x 95 mm^2	39.0 / 33.0	190	Bus bar
3 x 120 mm^2	39.0 / 32.6	210	Bus bar

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Cable Size	Cable OD/ID Approx–mm	Gland to Terminal–mm	Type of Terminal
3 1/2 x 120 mm^2	42.0 / 35.6	210	Bus bar
3 x 150 mm^2	43.0 / 36.2	225	Bus bar
3 1/2 x 150 mm^2	47.0 / 40.2	225	Bus bar
3 x 185 mm^2	47.0 / 40.2	280	Bus bar
3 1/2 x 185 mm^2	52.0 / 44.8	280	Bus bar
3 x 240 mm^2	54.0 / 46.4	360	Bus bar
3 1/2 x 240 mm^2	58.0 / 50.4	360	Bus bar
3 x 300 mm^2	60.0 / 52.0	375	Bus bar
3 1/2 x 300 mm^2	65.0 / 57.0	375	Bus bar
4 x 1.5 mm^2	16.0 / 9.6	40	Clipon
4 x 2.5 mm^2	17.5 / 11.1	40	Clipon
4 x 4 mm^2	19.0 / 12.6	40	Clipon
4 x 6 mm^2	20.5 / 14.1	40	Clipon
4 x 10 mm^2	21.5 / 15.9	40	Clipon
4 x 16 mm^2	25.5 / 19.9	50	Clipon
4 x 25 mm^2	26.0 / 20.4	50	Clipon
4 x 35 mm^2	28.5 / 22.9	70	Clipon
4 x 50 mm^2	33.0 / 27.0	100	Clipon

LIGHTING JUNCTION BOX

Anti Vibration Terminal Blocks

Description

Anti Vibration Spring loaded terminals are meant for use with all Ex e equipment. Specially designed spring loaded nuts, firmly and permanently maintain contact pressure on the conductors. This ensures that they do not lossen even under conditions of sustained vibration. Made out of brass or high tensile brass for special applications, these terminals meet all the requirement of IS 6381.

Six sizes of the basic anti vibration terminal are available for terminating conductors upto 70 sq mm. These basic terminals can be fitted on a number of DMC moulded terminal blocks to suit different requirements. The terminal block meet the requirements of IS 6381 in terms of the comparitive tracking index, clearances and creepage distances.

Cat No. 001
upto 2 x 6 sq. mm.

Cat No. 006
upto 2 x 6 sq. mm.

Cat No. 016
upto 2 x 6 sq. mm.

Cat No. 035
upto 2 x 35 sq. mm.

Cat No. 050
upto 2 x 50 sq. mm.

Cat No. 070
upto 2 x 70 sq. mm.

Anti-Vibration Terminal Blocks

Cat No. 06
with 4 Nos. 006 Terminals

Cat No. 07
with 2 Nos. 006 Terminals

Cat No. 012
with 6 Nos. 016 Terminals

Cat No. 015
with 6 Nos. 006 Terminals

Terminal Blocks

Cat No. 04
with 4 sq. mm. Terminals

Cat No. 018
with 4 sq. mm. Terminals

Cat No. 027
with 4 sq. mm. Terminals

Cat No. 015
with 6 Nos. 006 Terminals