

**METHODOLOGY FOR SIZING OF CONTROL CABLES**

<b>S.No.</b>	<b>From</b>	<b>To</b>	<b>Cable size</b>
<b><u>1</u></b>	CB MB	CRP panels	i) 10CX2.5Sq mm ii) 19CX1.5 Sq mm iii) 27CX 1.5 Sq mm
<b><u>2</u></b>	CB MB	Earth switch MB	i) 3CX 2.5 Sqmm ii) 5C X2.5 Sq mm
<b><u>3</u></b>	Isolator MB	Earth switch MB	10CX2.5Sq mm
<b><u>4</u></b>	Isolator MB	CRP panels	19CX1.5 Sq mm
<b><u>5</u></b>	CT	CT JB	i) 5C X2.5 Sq mm ii) 10C X2.5 Sq mm
<b><u>6</u></b>	CT JB	CRP panels	i) 5C X2.5 Sq mm ii) 10C X2.5 Sq mm
<b><u>7</u></b>	CVT	CVT JB	i) 5C X2.5 Sq mm ii) 10C X2.5 Sq mm
<b><u>8</u></b>	CVT JB	CRP panels	i) 5C X2.5 Sq mm ii) 10C X2.5 Sq mm
<b><u>9</u></b>	LA	LA JB	3C X2.5 Sq mm
<b><u>10</u></b>	LA JB	CRP panels	5C X2.5 Sq mm
<b><u>11</u></b>	Reactor MB/CMB ( for 1-Ph)	CRP panels	i) 3CX2.5Sq mm ii) 5CX2.5 Sq mm iii) 19CX 1.5 Sq mm iv) 27CX 1.5 Sq mm v) Paired Cables
<b><u>12</u></b>	ICT MB/CMB ( for 1-Ph)	CRP panels	i) 3CX2.5Sq mm ii) 5CX2.5 Sq mm iii) 19CX 1.5 Sq mm iv) 27CX 1.5 Sq mm v) Paired Cables

**METHODOLOGY FOR SIZING OF POWER CABLES**

S.No.	From	To	Existing Cable size	Cable type
1.	Main Switch Board	LT Transformer	2-1C X 630 mm <sup>2</sup> :For each phase 1-1C X 630 mm <sup>2</sup> : for neutral	XLPE
2	Main Switch Board	AC Distribution Board	2-3½C X 300 mm <sup>2</sup>	XLPE
3	Main Switch Board	Oil Filtration Unit	1-3½C X 300 mm <sup>2</sup>	XLPE
4	Main Switch Board	Colony Lighting	1-3½C X 300 mm <sup>2</sup>	XLPE
5	Main Switch Board	HVW pump LCP	1-3½C X 300 mm <sup>2</sup>	XLPE
6	Main Switch Board	Main Lighting distribution board	2-3½C X 300 mm <sup>2</sup>	XLPE
7	AC Distribution Board	D.G. Set AMF Panel	For 500 kVA DG set: 2-3½C X 300 mm <sup>2</sup> For 250 kVA DG set: 1-3½C X 300 mm <sup>2</sup>	XLPE
8	AC Distribution Board	Emergency Lighting distribution board	3½C X 70mm <sup>2</sup> :For 765/400kV S/s  3½C X 35mm <sup>2</sup> :For 400/220kV S/s	PVC
9	AC Distribution Board	ICT MB	3½C X 70mm <sup>2</sup> :For 765/400kV S/s  3½C X 35mm <sup>2</sup> :For 400/220kV S/s	PVC
10	AC Distribution Board	Bay MB	3½C X 70mm <sup>2</sup> :For 765/400kV S/s  3½C X 35mm <sup>2</sup> For 400/220kV S/s	PVC
11	Bay MB	AC Kiosk	1-4C X 16 mm <sup>2</sup>	PVC
12	AC Distribution Board	Battery Charger 220 V	1-3½C X 70 mm <sup>2</sup>	PVC
13	AC Distribution Board	Battery Charger 48 V	1-3½C X 35 mm	PVC
14	DCDB	Battery	2-1C X 150 mm <sup>2</sup>	PVC
15	DCDB	Battery Charger	2-1C X 150 mm <sup>2</sup>	PVC
16	DCDB	Protection/PLCC panel	1-4C X 16 mm <sup>2</sup> : 765/400kV S/s  1-4C X 6 mm <sup>2</sup> : 400/220kV S/s	PVC
17	Main Lighting DB	Lighting panels(Indoor)	1-3½C X 35 mm <sup>2</sup>	PVC

18	Main Lighting DB	Lighting panels (outdoor)	1-3½C X 70 mm2	PVC
19	Main Lighting DB	Receptacles (Indoor)	1-3½C X 35 mm2	PVC
20	Main Lighting DB	Receptacles (Outdoor)	1-3½C X 70 mm2	PVC
21	Lighting Panel	Sub lighting panels	These Cables shall be included in Price of item for Lighting fixture	PVC
22	Lighting Panel	Street Lighting Poles	These Cables shall be included in Price of item for Lighting fixture	PVC
23	Lighting Panel/ Sub lighting panels	Lighting Fixtures (Outdoor)	These Cables shall be included in Price of item for Lighting fixture	PVC
24	Bay MB	Equipment	1-4C X 16 mm <sup>2</sup> : For CB 1-4C X 6 mm <sup>2</sup> : For Isolator/earths switch 1-2C X 6 : For CT/CVT	PVC
25	ELDB	Lighting panel	3½C X 70mm <sup>2</sup> :For 765/400kV S/s  3½C X 35mm <sup>2</sup> :For 400/220kV S/s	PVC