

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (3C X 2.5 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	3Cx2.5sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cable with Copper Conductor		
3	Cable Code				
4	Conductor				
	a) Material		Annealed Bare Copper Conductor as per IS:8130		
	b) Class		Class 1		
	c) Shape of conductor		Solid Circular		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Round Wire Armour as per IS:3975		
	b) Type		Steel wire/ Strip		
	c) Diameter (nominal)	mm	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	12.5		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Red, Yellow, Blue		
13	Drum length (In non-returnable steel/ wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	7.41		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	8.87		
	c) Short circuit rating of conductor for 1 sec	KA/sec	0.283-0.29		
	d) Approx Reactance @50Hz	Ohm/Km	0.106-0.119		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.41		
	g) Bending radius (minimum)	mm	12 x Overall Diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	50		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	27		
	b) In Air @40°C	Amps	24		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flammability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE OF 6.6KV (3Cx185 sqmm) HT CABLE

Purchaser: Brahmaputra Cracker And Polymer Limited

Location: Dibrugarh, Assam

6.6 KV(UE), 3C X 185MM² AL CONDUCTOR, XLPE INSULATED, ARMoured CABLE

SL.NO.	PARAMETERS	REQUIREMENT	VENDOR ACCEPTANCE	Remarks
1	NO. OF CORES X CROSS-SECTION	3C X 185MM ²		
2	CONDUCTOR MATERIAL	AL.		
3	STRAND TYPE	CIRCULAR STRANDED		
4	INSULATION MATERIAL	XLPE		
5	VOLTAGE GRADE	6.6KV (UE)		
6	TYPE OF ARMOUR	FLAT STRIP		
7	TYPE OF SHIELDING	EXTRUDED SEMI-CONDUCTING SHIELDING OF BOTH CONDUCTOR & INSULATION, AND NON-MAGNETIC METALLIC TAPE SCREEN OVER THE EXTRUDED INSULATION SCREEN.		
8	INNER SHEATH	PVC		
9	OUTER SHEATH	PVC		
10	FLAME RETARDANT	REQUIRED		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (3C X 4 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	3Cx4 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cables with Copper Conductor		
3	Cable Code				
4	Conductor				
	a) Material		Annealed Bare Copper Conductor as per IS:8130		
	b) Class		Class 1		
	c) Shape of conductor		Solid Circular		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Round Wire/Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	13.5		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Red, Yellow, Blue		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	4.61		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	5.52		
	c) Short circuit rating of conductor for 1 sec	KA/sec	0.46		
	d) Approx Reactance @50Hz	Ohm/Km	0.102-0.106		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.41-0.46		
	g) Bending radius (minimum)	mm	12 x Overall Diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	50		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	36		
	b) In Air @40°C	Amps	30		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flammability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (3C X 6 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited

Location: Dibrugarh, Assam

Sl. No.	Description	Unit	3Cx6 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cables with Copper Conductor		
3	Cable Code				
4	Conductor				
	a) Material		Annealed Bare Copper Conductor as per IS:8130		
	b) Class		Class 1		
	c) Shape of conductor		Solid Circular		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Round Wire Armour as per IS:3975		
	b) Type		Steel wire/Flat Strip		
	c) Diameter (nominal)	mm	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	15		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Red, Yellow, Blue		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	3.08		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	3.69		
	c) Short circuit rating of conductor for 1 sec	KA/sec	0.69		
	d) Approx Reactance @50Hz	Ohm/Km	0.0962-0.110		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.47-0.52		
	g) Bending radius (minimum)	mm	12 x Overall Diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	50		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	45		
	b) In Air @40°C	Amps	39		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flammability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (3C X 10 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	3Cx10 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cables with Copper Conductor		
3	Cable Code				
4	Conductor				
	a) Material		Annealed Bare Copper Conductor as per IS:8130		
	b) Class		Class 2		
	c) Shape of conductor		Stranded Circular		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	16.5		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Red, Yellow, Blue		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	1.83		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	2.19		
	c) Short circuit rating of conductor for 1 sec	KA/sec	1.15		
	d) Approx Reactance @50Hz	Ohm/Km	0.0908-0.100		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.56-0.63		
	g) Bending radius (minimum)	mm	12 x Overall Diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	50		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	60		
	b) In Air @40°C	Amps	52		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flammability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT CONTROL CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR CONTROL CABLE (7C X 2.5 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	7Cx2.5 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT control cables with Copper Conductor		
3	Cable Code				
4	Conductor				
	a) Material		Annealed Bare Copper Conductor as per IS:8130		
	b) Class		Class 1		
	c) Shape of conductor		Solid Circular		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Round wire/Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	18.5		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Grey for all cores with core number printed/embossed on each core		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	7.41		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	8.87		
	c) Short circuit rating of conductor for 1 sec	KA/sec	0.283-0.29		
	d) Approx Reactance @50Hz	Ohm/Km	0.106-0.119		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.41		
	g) Bending radius (minimum)	mm	12 x Overall Diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	50		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	20		
	b) In Air @40°C	Amps	17		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flammability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT CONTROL CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR CONTROL CABLE (19C X 2.5 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	19Cx2.5 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT control cables with Copper Conductor		
3	Cable Code				
4	Conductor				
	a) Material		Annealed Bare Copper Conductor as per IS:8130		
	b) Class		Class 1		
	c) Shape of conductor		Solid Circular		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Round wire/Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	28/26		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Grey for all cores with core number printed/embossed on each core		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	7.41		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	8.87		
	c) Short circuit rating of conductor for 1 sec	KA/sec	0.283-0.29		
	d) Approx Reactance @50Hz	Ohm/Km	0.106-0.119		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.41		
	g) Bending radius (minimum)	mm	12 x Overall Diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	50		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	14		
	b) In Air @40°C	Amps	12		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flammability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (4C X4 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	4Cx4 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cables with Copper Conductor		
3	Cable Code				
4	Conductor				
	a) Material		Annealed Bare Copper Conductor as per IS:8130		
	b) Class		Class 1		
	c) Shape of conductor		Solid Circular		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Round Wire/Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm			
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	19		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Phase - Red, Yellow, Blue Neutral - Black		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	4.61		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	5.52		
	c) Short circuit rating of conductor for 1 sec	KA/sec	0.46		
	d) Approx Reactance @50Hz	Ohm/Km	0.1020-0.1060		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.41-0.46		
	g) Bending radius (minimum)	mm	12 x overall diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	50		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	36		
	b) In Air @40°C	Amps	30		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flammability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (4C X16 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	4Cx16 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cables with Copper Conductor		
3	Cable Code				
4	Conductor				
	a) Material		Annealed Bare Copper Conductor as per IS:8130		
	b) Class		Class 2		
	c) Shape of conductor		Stranded Circular		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	23		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Phases - Red, Yellow, Blue; Neutral- Black colour		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	1.15		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	1.38		
	c) Short circuit rating of conductor for 1 sec	KA/sec	0.84		
	d) Approx Reactance @50Hz	Ohm/Km	0.0859-0.097		
	e) Approx inductance per core	mH/Km	As per IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.76-0.82		
	g) Bending radius (minimum)	mm	12 x Overall Diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	50		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	77		
	b) In Air @40°C	Amps	66		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flammability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (3C X35 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	3Cx35 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS 398		
2	Cable Type		LT power cables with Aluminium conductor		
3	Cable Code				
4	Conductor				
	a) Material		Aluminum of H2 grade as per class-2 of IS:8130		
	b) Shape of conductor		Stranded compacted sector shape		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	25		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Red, Yellow, Blue		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	0.868		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	1.04		
	c) Short crcuit rating of conductor for 1 sec	KA/sec	2.65		
	d) Approx Reactance @50Hz	Ohm/Km	0.081-0.97		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.922-0.98		
	g) Bending radius (minimum)	mm	12x Overall diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	30		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	92		
	b) In Air @40°C	Amps	86		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flamability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (3C X50 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	3Cx50 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cables with Aluminium conductor		
3	Cable Code				
4	Conductor				
	a) Material		Aluminum of H2 grade as per class-2 of IS:8130		
	b) Shape of conductor		Stranded compacted sector shape		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	27		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Red, Yellow, Blue		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	0.641		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	0.77		
	c) Short crcuit rating of conductor for 1 sec	KA/sec	3.79		
	d) Approx Reactance @50Hz	Ohm/Km	0.0765-0.094		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.5-1.020		
	g) Bending radius (minimum)	mm	12 x Overall diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	30		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	134		
	b) In Air @40°C	Amps	138		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flamability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (3.5C X35 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	3.5Cx35 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cables with Aluminium conductor		
3	Cable Code				
4	Conductor				
	a) Material		Aluminum of H2 grade as per class-2 of IS:8130		
	b) Shape of conductor		Stranded compacted sector shape		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm			
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	25		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Phase- Red, Yellow, Blue Neutral- Black		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	0.868		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	1.04		
	c) Short crcuit rating of conductor for 1 sec	KA/sec	2.65		
	d) Approx Reactance @50Hz	Ohm/Km	0.081-.097		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.922-.98		
	g) Bending radius (minimum)	mm	12 x overall diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	30		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	92		
	b) In Air @40°C	Amps	86		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flamability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (3.5C X50 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited

Location: Dibrugarh, Assam

Sl. No.	Description	Unit	3.5Cx50 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cables with Aluminium conductor		
3	Cable Code				
4	Conductor				
	a) Material		Aluminum of H2 grade as per class-2 of IS:8130		
	b) Shape of conductor		Stranded compacted sector shape		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	27		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Phase- Red, Yellow, Blue Neutral- Black		
14	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
15	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	0.641		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	0.77		
	c) Short crcuit rating of conductor for 1 sec	KA/sec	3.79		
	d) Approx Reactance @50Hz	Ohm/Km	0.0765-0.094		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.5-1.02		
	g) Bending radius (minimum)	mm	12 x overall diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	30		
16	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	134		
	b) In Air @40°C	Amps	138		
17	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flamability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
18	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
19	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (3.5C X95 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited

Location: Dibrugarh, Assam

Sl. No.	Description	Unit	3.5Cx95 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cables with Aluminium conductor		
3	Cable Code				
4	Conductor				
	a) Material		Aluminum of H2 grade as per class-2 of IS:8130		
	b) Shape of conductor		Stranded compacted sector shape		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm			
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	31.1		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Phase- Red, Yellow, Blue Neutral- Black		
13	Drum length (In non-returnable steel drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	0.32		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	0.41		
	c) Short crcuit rating of conductor for 1 sec	KA/sec	8.93		
	d) Approx Reactance @50Hz	Ohm/Km	0.074-0.093		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	0.60-1.20		
	g) Bending radius (minimum)	mm	12 x overall diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	30		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	197		
	b) In Air @40°C	Amps	216		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1 As per IS:10810 (Part 61) & IS:10210 (Part 62)		
	e) Flamability test on completed cable		Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		

DATA SHEET FOR LT POWER CABLES AS PER EIL SPEC. 6-51-0051 REV.8
TECHNICAL SPECIFICATION FOR POWER CABLE (3C X150 Sq.mm)

Purchaser: Brahmaputra Cracker And Polymer Limited
Location: Dibrugarh, Assam

Sl. No.	Description	Unit	3Cx150 sqmm	VENDOR'S ACCEPTANCE	Remarks
	General				
1	Standard Referred		IS:1554/I/1988		
2	Cable Type		LT power cables with Aluminium conductor		
3	Cable Code				
4	Conductor				
	a) Material		Aluminum of H2 grade as per class-2 of IS:8130		
	b) Shape of conductor		Stranded compacted sector shape		
5	Maximum conductor temperature				
	a) Continuous	Deg C	90		
	b) Short Circuit	Deg C	250		
6	Insulation				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thickness (nominal)	mm	As per applicable IS standard		
7	Inner Sheath				
	a) Material		Extruded PVC "Type ST-2" as per IS:5831		
	b) Thikness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
8	Armour				
	a) Material		Galvanised Steel Strip Armour as per IS:3975		
	b) Type		Flat Strip		
	c) Width x Thickness (nominal)	mm (WxT)	As per applicable IS standard		
9	Outer Sheath				
	a) Material		Extruded FR-LSH PVC "Type ST-2" as per IS:5831		
	b) Thickness (minimum)	mm	As per applicable IS standard		
	c) Colour		Black		
10	Nominal O.D of cable (approx)	mm	41		
11	Tolerance on O.D	mm	±2		
12	Colour scheme for core identification		Phase- Red, Yellow, Blue		
13	Drum length (In non-returnable steel/wooden drum)	mtrs	1000		
	a) Tolerance	%	±3		
	b) Overall Qty. Tolerance	%	±2		
14	a) Maximum DC resistance of conductor @ 20°C	Ohm/Km	0.206		
	b) Approx AC resistance of conductor @ 70°C	Ohm/Km	0.249		
	c) Short crcuit rating of conductor for 1 sec	KA/sec	11.41		
	d) Approx Reactance @50Hz	Ohm/Km	0.0740-0.0916		
	e) Approx inductance per core	mH/Km	As per applicable IS standard		
	f) Approx capacitance @50 Hz	µF/Km	1.165-1.310		
	g) Bending radius (minimum)	mm	12 x overall diameter		
	h) Safe pulling force (Maximum) with pulling eye	N/sqmm	30		
15	Continuous Current Carrying capacity of cable when laid up				
	a) In ground @30°C	Amps	210		
	b) In Air @40°C	Amps	205		
16	FR-LSH Properties (for FR-LSH PVC sheath only)				
	a) Oxygen Index		Min. 29 as per ASTM D-2863		
	b) Temperature Index		Min. 250°C as per ASTM D-2863		
	c) Smoke Density rating		Max. 60% as per ASTM D-2843		
	d) Acid gas generation		Max. 20% by weight as per IEC-60754 P-1		
	e) Flamability test on completed cable		As per IS:10810 (Part 61) & IS:10210 (Part 62) Category AF		
17	Sequential length marking		Shall be provided on outer sheath at every 1 meter		
18	Embossing/ Printing		Company Name, 1.1KV, Cable size, "FR-LSH, Category-C2"		