

Table: LV Underground Cable 0.6/1 kV, NYY 1 x 300 RM

Designation	Unit	Required	Offered
Manufacturer's name		To be specified	
Cable type (one – core)		NYY	
Conductor material		Copper	
Conductor shape		Circular stranded	
Nominal cross-sectional area of conductor	mm ²	300	
Insulation material of conductor	mm	PVC	
Insulation thickness		2.2	
Outer sheath material		PVC	
Thickness of outer sheath	mm	1.8	
Overall diameter of cable(D)	mm	30	
Weight of cable	kg/km	3219	
Minimum bending radius	mm	15 D	
Nominal voltage	kV	0.6/1.0	
Max. Permissible operating voltage	kV	1.2	
Service voltage	kV	0.4/0.230	
Frequency	Hz	50	
Effective a.c. resistance at 70° C	Ω/km	0.075	
Max. admissible short circuit current (1s)	kA	34.5	
Current carrying capacity (in air)	A	557	
Inductance per conductor	mH/km	To be specified	
Standards		IEC 60502 DIN VDE 0271 VDE 0295 (IEC60228) VDE0293-	

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Table: LV Underground Cable 0.6/1 kV, NYY 1 x 150 RM

Designation	Unit	Required	Offered
Manufacturer's name		To be specified	
Cable type (one – core)		NYY	
Conductor material		Copper	
Conductor shape		Circular stranded	
Nominal cross-sectional area of conductor	mm ²	150	
Insulation material of conductor	mm	PVC	
Insulation thickness		2.2	
Outer sheath material		PVC	
Thickness of outer sheath	mm	1.8	
Overall diameter of cable (D)	mm	22.5	
Weight of cable	kg/km	1620	
Minimum bending radius	mm	15 D	
Nominal voltage	kV	0.6/1.0	
Max. Permissible operating voltage	kV	1.2	
Service voltage	kV	0.4/0.230	
Frequency	Hz	50	
Effective a.c. resistance at 70° C	Ω/km	0.124	
Max. admissible short circuit current (1s)	kA	17.25	
Current carrying capacity (in air)	A	352	
Inductance per conductor	mH/km	To be specified	
Standards		IEC 60502 DIN VDE 0271 VDE 0295 (IEC60228) VDE0293	

مشخصات تخلیگی برای تجهیزات برقی پروژه اصلاح و ترمیم شبکه برق و لسانی خاص کجکی ولایت هلمند

Table: LV Underground Cable 0.6/1 kV, NYY 1 x 120 RM

Designation	Unit	Required	Offered
Manufacturer's name		To be specified	
Cable type (one – core)		NYY	
Conductor material		Copper	
Conductor shape		Circular stranded	
Nominal cross-sectional area of conductor	mm ²	120	
Insulation material of conductor	mm	PVC	
Insulation thickness		1.6	
Outer sheath material		PVC	
Thickness of outer sheath	mm	1.8	
Overall diameter of cable (D)	mm	21	
Weight of cable	kg/km	1400	
Minimum bending radius	mm	15 D	
Nominal voltage	kV	0.6/1.0	
Max. Permissible operating voltage	kV	1.2	
Service voltage	kV	0.4/0.230	
Frequency	Hz	50	
Effective a.c. resistance at 70° C	Ω/km	0.184	
Max. admissible short circuit current (1s)	kA	13.8	
Current carrying capacity (in air)	A	310	
Inductance per conductor	mH/km	To be specified	
Standards		IEC 60502 DIN VDE 0271 VDE 0295 (IEC60228) VDE0293	

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Table: Technical Data for Overhead Line Conductor ACSR 120/20 mm²

Designation	Unit	Required	Offered
Manufacturer's name		To be specified	
Type		Aluminum conductor	
		Steel – reinforced (ACSR)	
Nominal cross-section	mm ²	120/20	
Cross-section ratio AL/St approx.		To be specified	
Steel			
- construction	N/mm	7/1.9	
- diameter	mm	5.7	
- cross-section	mm ²	19.8	
Aluminum			
- construction	N/mm	26/2.44	
- cross-section	mm ²	121.6	
Total cross-section	mm ²	141.4	
Conductor diameter approx.	mm	15.5	
Conductor weight			
- steel	kg/km	156	
- aluminum	kg/km	335	
- grease	kg/km	2.9	
- with grease total approx.	kg/km	493.9	
Current carrying capacity	A	410	
Nominal conductor breaking load	KN	44.5	
Calculated conductor resistance at 20° C	Ω/km	0.2376	
Standard length per reel approx.	m	to be specified	
Dispatch reel nominal size	m	to be specified	
Standard specifications		IEC 209	
		DIN 48204	
		BS EN 50182	

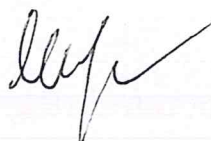
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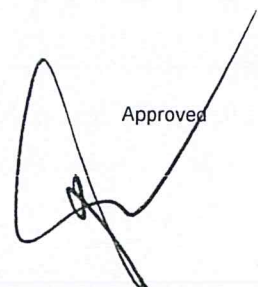


Table: Technical Data for Overhead Line Conductor ACSR 95/15 mm²

Designation	Unit	Required	Offered
Manufacturer's name		To be specified	
Type		Aluminum conductor	
		Steel – reinforced (ACSR)	
Nominal cross-section	mm ²	95/15	
Cross-section ratio AL/St approx.		To be specified	
Steel			
- construction	N/mm	7/1.67	
- diameter	mm	5.01	
- cross-section	mm ²	15.3	
Aluminum			
- construction	N/mm	26/2.15	
- cross-section	mm ²	94.4	
Total cross-section	mm ²	109.7	
Conductor diameter approx.	mm	13.6	
Conductor weight			
- steel	kg/km	120	
- aluminum	kg/km	260	
- grease	kg/km	2.2	
- with grease total approx.	kg/km	380.6	
Current carrying capacity	A	350	
Nominal conductor breaking load	KN	34.93	
Calculated conductor resistance at 20° C	Ω/km	0.3060	
Standard length per reel approx.	m	to be specified	
Dispatch reel nominal size	m	to be specified	
Standard specifications		IEC 209 DIN 48204 BS EN 50182	

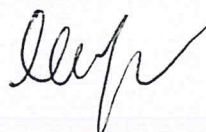
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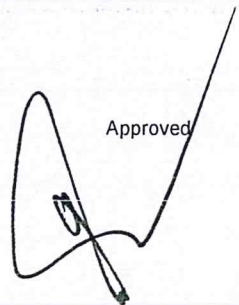


Table: Technical Data for Overhead Line Conductor ACSR 50/8 mm²

Designation	Unit	Required	Offered
Manufacturer's name		To be specified	
Type		Aluminum conductor	
		Steel – reinforced (ACSR)	
Nominal cross-section	mm ²	50/8	
Cross-section ratio AL/St approx.		To be specified	
Steel			
- construction	N/mm	1/3.2	
- diameter	mm	3.2	
- cross-section	mm ²	8.04	
Aluminum			
- construction	N/mm	6/3.2	
- cross-section	mm ²	48.3	
Total cross-section	mm ²	56.3	
Conductor diameter approx.	mm	9.6	
Conductor weight			
- steel	kg/km	64	
- aluminum	kg/km	132	
- grease	kg/km	0.9	
- with grease total approx.	kg/km	196	
Current carrying capacity	A	210	
Nominal conductor breaking load	KN	16.81	
Calculated conductor resistance at 20° C	Ω/km	0.5939	
Standard length per reel approx.	m	to be specified	
Dispatch reel nominal size	m	to be specified	
Standard specifications			
		IEC 209	
		DIN 48204	
		BS EN 50182	

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Table: Technical Data for Overhead Line Conductor ACSR 70/12 mm²

Designation	Unit	Required	Offered
Manufacturer's name		To be specified	
Type		Aluminum conductor	
		Steel – reinforced (ACSR)	
Nominal cross-section	mm ²	70/12	
Cross-section ratio AL/St approx.		To be specified	
Steel			
- construction	N/mm	7/1,44	
- diameter	mm	4.32	
- cross-section	mm ²	11.4	
Aluminum			
- construction	mm	26/1.85	
- cross-section	mm ²	69.9	
Total cross-section	mm ²	81.3	
Conductor diameter approx.	mm	11.7	
Conductor weight			
- steel	kg/km	89	
- aluminum	kg/km	193	
- grease	kg/km	1.7	
- with grease total approx.	kgVkm	283	
Current carrying capacity	A	290	
Nominal conductor breaking load	KN	26.27	
Calculated conductor resistance at 20° C	Ω/km	0.4132	
Standard length per reel approx.	m	to be specified	
Dispatch reel nominal size	m	to be specified	
Standard specifications		IEC 209	
		DIN 48204	
		BS EN 50182	

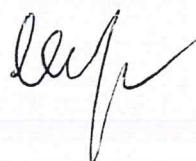
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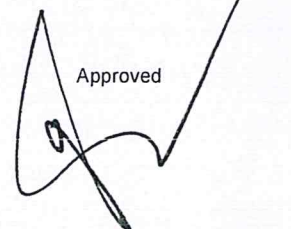


Table: Technical Data for ABC Low Voltage Cables LV ABC 4 x 95 mm²

Description	Unit	Required	Offered
Manufacturer			
Rated Voltage	kV	0.6/1	
<u>Phases and Neutral</u>			
Material		Aluminum	
Cross section	mm ²	95	
Class		2	
Cross section shape		circular	
		compacted	
Number of wires		≥15	
Diameter of wires	mm	To be specified	
Diameter of conductor	mm	11.4	
Maximum conductor DC resistance at 20 °C	ohm/km	0.320	
Insulation Material		Black XLPE	
Insulation thickness	Mm	1.7	
Breaking load of single core, min.	KN	15	
Breaking load of complete cable, min.	KN	53.2	
<u>Technical Characteristics</u>			
Outer diameter of bundle (D)	mm	35.3	
Weight of conductor	kg/km	1350	
Minimum bending radius	mm	15 D	
Maximum lay of cores			
Current rating /ambient 40 °C	A	250	
Maximum conductor temperature/normal operation	°C	90	
Maximum conductor temperature/short circuit	°C	250	
Rated short circuit /phase	kA	6.8	
Length of conductor drum	m	To be specified	
Gross weight of loaded drum	kg	To be specified	
Standard		IEC 60502 NFA2X (VDE 0276 - 626 4F-1), AsXS (n) (PL WT92/K396), 1-AES (CSN 34761-4F) AS/NZS 3560.1	

Make By:
DECON

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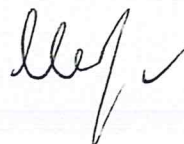
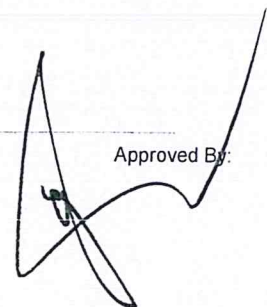



Table: Technical Data for ABC Low Voltage Cables LV ABC 4 x 70 mm²

Description	Unit	Required	Offered
Manufacturer			
Rated Voltage	kV	0.6/1	
Phases and Neutral			
Material		Aluminum	
Cross section	mm ²	70	
Class		2	
Cross section shape		Circular compacted	
Number of wires		≥12	
Diameter of wires	mm	To be specified	
Diameter of conductor	mm	9.7	
Maximum conductor DC resistance at 20 °C	ohm/km	0.443	
Insulation Material		Black XLPE	
Insulation thickness	Mm	1.5	
Breaking load of single core, min.	KN	11	
Breaking load of complete cable, min.	KN	39.2	
Technical Characteristics			
Outer diameter of bundle (D)	mm	31.3	
Weight of conductor	kg/km	960	
Minimum bending radius	mm	12 D	
Maximum lay of cores			
Current rating /ambient 40 °C	A	205	
Maximum conductor temperature/normal operation	°C	90	
Maximum conductor temperature/short circuit	°C	250	
Rated short circuit /phase	kA	5.0	
Length of conductor drum	m	To be specified	
Gross weight of loaded drum	kg	To be specified	
Standard		IEC 60502 NFA2X (VDE 0276 - 626 4F-1), AsXS (n) (PL WT92/K396), 1-AES (CSN 34761-4F) AS/NZS 3560.1	

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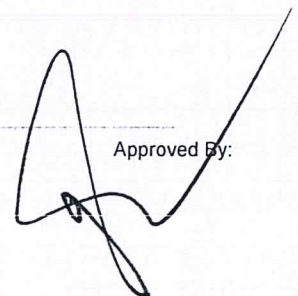



Table: Technical Data for ABC Low Voltage Cables LV ABC 4 x 50 mm²

Description	Unit	Required	Offered
Manufacturer			
Rated Voltage	kV	0.6/1	
<u>Phases and Neutral</u>			
Material		Aluminum	
Cross section	mm ²	50	
Class		2	
Cross section shape		circular compacted	
Number of wires		≥6	
Diameter of wires	mm	To be specified	
Diameter of conductor	mm	8.1	
Maximum conductor DC resistance at 20 °C	ohm/km	0.641	
Insulation Material		Black XLPE	
Insulation thickness	Mm	1.5	
Breaking load of single core, min.	KN	8.4	
Breaking load of complete cable, min.	KN	28	
<u>Technical Characteristics</u>			
Outer diameter of bundle (D)	mm	27.3	
Weight of conductor	kg/km	715	
Minimum bending radius	mm	12 D	
Maximum lay of cores			
Current rating /ambient 40 °C	A	165	
Maximum conductor temperature/normal operation	°C	90	
Maximum conductor temperature/short circuit	°C	250	
Rated short circuit /phase	kA	3.6	
Length of conductor drum	m	To be specified	
Gross weight of loaded drum	kg	To be specified	
Standard		IEC 60502 NFA2X (VDE 0276 - 626 4F-1), AsXS (n) (PL WT92/K396), 1-AES (CSN 34761-4F) AS/NZS 3560.1	

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Table: Technical Data for ABC Low Voltage Cables LV ABC 4 x 35 mm²

Description	Unit	Required	Offered
Manufacturer			
Rated Voltage	kV	0.6/1	
<u>Phases and Neutral</u>			
Material		Aluminum	
Cross section	mm ²	35	
Class		2	
Cross section shape		circular compacted	
Number of wires		≥6	
Diameter of wires	mm	To be specified	
Diameter of conductor	mm	6.9	
Maximum conductor DC resistance at 20 °C	ohm/km	0.868	
Insulation Material		Black XLPE	
Insulation thickness	Mm	1.3	
Breaking load of single core, min.	KN	5.5	
Breaking load of complete cable, min.	KN	19.6	
<u>Technical Characteristics</u>			
Outer diameter of bundle (D)	mm	23.2	
Weight of conductor	kg/km	510	
Minimum bending radius	mm	12 D	
Maximum lay of cores			
Current rating /ambient 40 °C	A	132	
Maximum conductor temperature/normal operation	°C	90	
Maximum conductor temperature/short circuit	°C	250	
Rated short circuit /phase	kA	2.5	
Length of conductor drum	m	To be specified	
Gross weight of loaded drum	kg	To be specified	
Standard		IEC 60502 NFA2X (VDE 0276 - 626 4F-1), AsXS (n) (PL WT92/K396), 1-AES (CSN 34761-4F) AS/NZS 3560.1	

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