

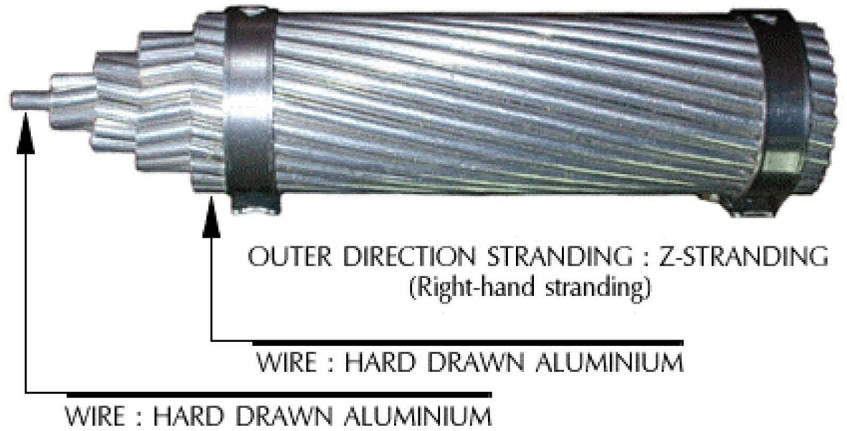
Application :

Aerial power transmission line.

Reference standard :

TIS 85-2522

PHELPS DODGE CONDUCTOR TYPE AAC ALL ALUMINIUM STRANDED CONDUCTOR



Construction :

Conductor : Concentric stranded hard drawn aluminium wire.
size 16 mm² up to 1000 mm²

Nominal sectional area mm ²	Actual Area mm ²	Conductor Number & diameter of wires NO/mm	Overall diameter mm	Maximum DC. Resistance of Cdr. at 20 °C Ω / km	Ultimate strength N (kg.)	Cable weight (approx) kg/km	Allowable ampacities in free air A	Standard Packing m
16	15.89	7/1.70	5.10	1.8018	2,844(290)	44	110	1,000/R
25	25.18	7/2.14	6.42	1.1371	4,315(440)	69	145	1,000/R
35	34.91	7/2.52	7.56	0.8200	5,737(585)	96	180	1,000/R
50	50.14	7/3.02	9.06	0.5709	7,894(805)	137	225	1,000/R
50	49.97	19/1.83	9.15	0.5757	8,727(890)	137	225	1,000/R
70	68.98	19/2.15	10.75	0.4170	11,816(1,205)	190	270	1,000/R
95	94.76	19/2.52	12.60	0.3036	15,543(1,585)	261	340	1,000/R
120	121.21	19/2.85	14.25	0.2373	19,416(1,980)	333	390	1,000/R
150	147.12	37/2.25	15.75	0.1960	25,201(2,570)	406	455	1,000/R
185	184.54	37/2.52	17.64	0.1562	30,252(3,085)	509	550	1,000/R
240	242.54	61/2.25	20.25	0.1191	39,371(4,015)	670	625	1,000/R
300	304.24	61/2.52	22.68	0.0949	47,265(4,820)	840	710	1,000/R
400	389.14	61/2.85	25.65	0.0758	59,081(6,025)	1,075	855	1,000/R
500	506.04	61/3.25	29.25	0.0571	78,105(7,695)	1,398	990	1,000/R
625	626.20	91/2.95	32.56	0.0462	95,060(6,694)	1,735	1,140	500/R
800	802.08	91/3.35	36.85	0.0360	118,211(12,055)	2,222	1,340	500/R
1000	999.71	91/3.74	41.14	0.0289	145,570(14,845)	2,769	1,540	500/R

R = Packing in reel

Revision : 0 Dated July 31, 2000

Aluminium Cables

Phelps Dodge Thailand Limited

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Fax : (66 2) 255 6821, 254 8264 Export Fax : (66 2) 652 0572 Website : www.pdwc.com

Application :

For use above ground overhead distribution.

Classification :

Maximum conductor temperature 70 °C Circuit voltage does not exceed 750 volts.

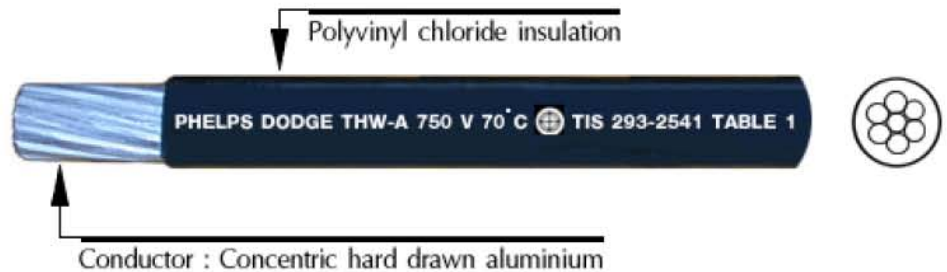
Testing voltage :

2,500 V

Reference standard :

TIS 293-2541 Table 1

PHELPS DODGE CONDUCTOR TYPE THW-A WEATHER-PROOF OR WEATHER-RESISTANCE CABLE (CONCENTRIC)



Construction :

- Conductor : Solid or stranded hard drawn aluminium wire.
size 10 mm² up to 500 mm²
- Insulation : Polyvinyl chloride (70 °C)

Nominal sectional area mm ²	Actual sectional area mm ²	Number & diameter of wire No./mm	Thickness of insulation mm	Overall diameter (max) mm/ km	Maximum DC. Resistance of Cdr. at 20 °C Ω / km	Breaking strength of conductor N	Cable weight (approx.) kg / km	Allowable ampacities in free air 40 °C (PVC 70 °C) A	Standard packing m
10	9.54	1/3.49	1.1	7	3.08	1562	49	54	1,000/R
10	9.64	7/1.32	1.1	8	3.08	1769	55	54	1,000/R
16	15.39	1/4.43	1.1	8	1.91	2445	70	73	1,000/R
16	15.55	7/1.68	1.1	9	1.91	2781	79	73	1,000/R
25	24.75	7/2.12	1.3	11	1.20	4241	120	97	1,000/R
35	34.21	7/2.49	1.3	12	0.868	5703	157	121	1,000/R
50	46.32	7/2.90	1.5	14	0.641	7423	221	147	1,000/R
50	46.32	19/1.76	1.5	14	0.641	8114	214	147	1,000/R
70	67.03	19/2.12	1.5	15	0.443	11487	277	189	1,000/R
95	92.79	19/2.49	1.7	18	0.320	15470	380	231	1,000/R
120	117.37	19/2.80	1.7	19	0.253	18810	468	268	1,000/R
120	117.37	37/2.01	1.7	19	0.253	20114	458	268	1,000/R
150	144.15	37/2.23	1.9	21	0.206	24704	565	310	1,000/R
185	181.06	37/2.50	2.1	23	0.164	30187	705	354	1,000/R
240	237.55	61/2.23	2.3	26	0.125	38568	909	419	1,000/R
300	296.94	61/2.49	2.5	29	0.100	46901	1,131	485	1,000/R
400	381.67	61/2.82	2.7	33	0.0778	57948	1,429	584	1,000/R
500	490.81	61/3.20	3.1	37	0.0605		1,861	674	500/R

R = Packing in reel

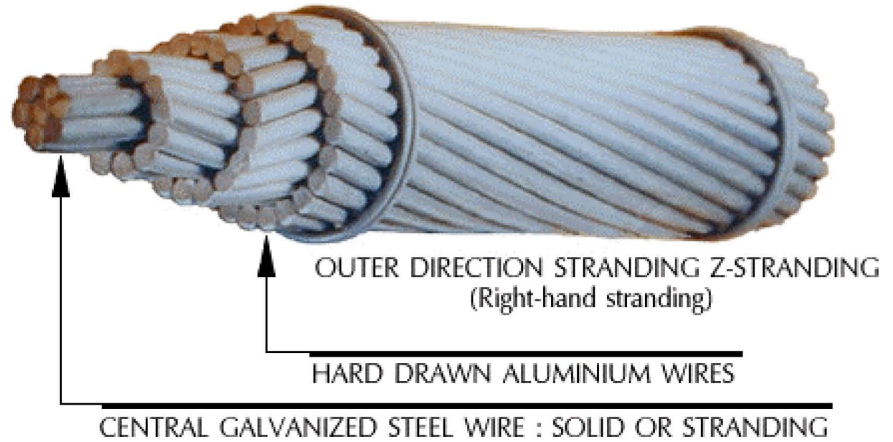
Application :

Aerial power transmission line and distribution.

Reference standard :

TIS 86-2522

PHELPS DODGE CONDUCTOR TYPE ACSR ALUMINIUM CONDUCTOR STEEL REINFORCED



Construction :

- Conductor : Hard drawn aluminium wires
size 16 mm² up to 680 mm²
- Steel core : Galvanized steel (Zinc coated), solid or
concentric stranded.
size 2.5 mm² up to 85 mm²

Nominal cross sectional area Al/stl. mm ²	ALUMINIUM		STEEL WIRE		Overall diameter mm	Maximum DC. Resistance of Cdr. at 20 °C Ω / km	Breaking strength kgf.	Allowable ampacities in free air A	Cable weight (approx.) kg / km	Standard packing m
	Number & diameter of wires No/mm	Cross sectional area mm ²	Number & diameter of wires No/mm	Cross sectional area mm ²						
185/30	26/3.00	183.8	7/2.33	29.80	19.0	0.1571	6,618	535	741	1,000/R
210/35	26/3.20	209.1	7/2.49	34.10	20.3	0.1381	7,7489	590	844	1,000/R
210/50	30/3.00	212.1	7/3.00	49.50	21.0	0.1363	9,390	610	979	1,000/R
230/30	24/3.50	230.9	7/2.33	29.80	21.0	0.1250	7,313	630	871	1,000/R
240/40	26/3.45	243.0	7/2.68	39.50	21.9	0.1188	8,640	645	981	1,000/R
265/35	24/3.74	263.7	7/2.49	34.10	22.4	0.1095	8,307	680	995	1,000/R
300/50	26/3.86	304.3	7/3.00	49.50	24.5	0.0949	10,702	740	1,228	1,000/R
305/40	54/2.68	304.6	7/2.68	39.50	24.1	0.0949	9,942	740	1,152	1,000/R
380/50	54/3.00	382.0	7/3.00	49.50	27.0	0.0758	12,312	840	1,443	1,000/R
435/55	54/3.20	434.3	7/3.20	56.30	28.8	0.0666	13,673	900	1,642	1,000/R
490/65	54/3.40	490.3	7/3.40	63.60	30.6	0.0590	15,343	960	1,853	1,000/R
550/70	54/3.60	550.0	7/3.60	71.30	32.4	0.0526	17,096	1,020	2,078	1,000/R
680/85	54/4.00	678.8	19/2.40	89.00	36.0	0.0426	21,040	1,150	2,552	1,000/R

R = Packing in reel

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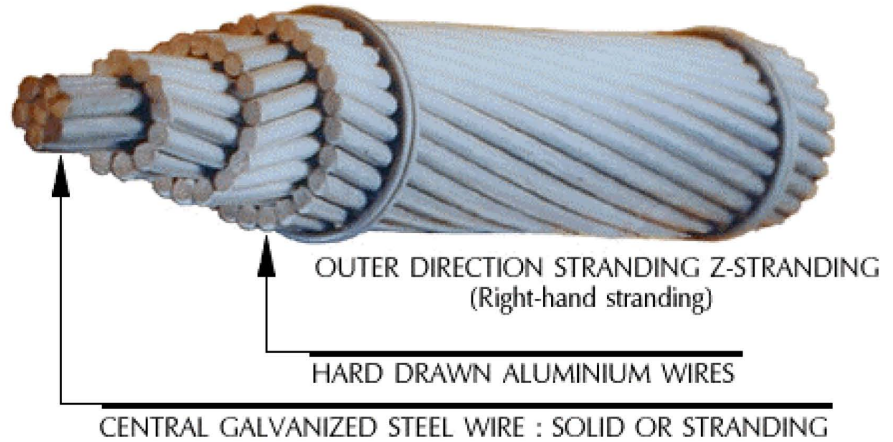
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PHELPS DODGE CONDUCTOR TYPE ACSR ALUMINIUM CONDUCTOR STEEL REINFORCED



Construction :

- Conductor : Hard drawn aluminium wires size 16 mm² up to 680 mm²
- Steel core : Galvanized steel (Zinc coated), solid or concentric stranded. size 2.5 mm² up to 85 mm²

Nominal cross sectional area Al/stl. mm ²	ALUMINIUM		STEEL WIRE		Overall diameter mm	Maximum DC. Resistance of Cdr. at 20 °C Ω / km	Breaking strength kgf.	Allowable ampacities in free air A	Cable weight (approx.) kg / km	Standard packing m
	Number & diameter of wires No/mm	Cross sectional area mm ²	Number & diameter of wires No/mm	Cross sectional area mm ²						
16/2.5	6/1.80	15.3	1/1.80	2.55	5.4	1.8800	592	90	62	1,000/R
25/4	6/2.25	23.8	1/2.25	4.00	6.8	1.2030	916	125	97	1,000/R
35/6	6/2.70	34.3	1/2.70	5.70	8.1	0.8353	1,265	145	139	1,000/R
50/8	6/3.20	48.3	1/3.20	8.00	9.6	0.5947	1,716	170	195	1,000/R
50/30	12/2.33	51.2	7/2.33	29.80	11.7	0.5611	4,380	170	375	1,000/R
70/12	26/1.85	69.9	7/1.44	11.40	11.7	0.4131	2,676	290	282	1,000/R
95/15	26/2.15	94.4	7/1.67	15.30	13.6	0.3058	3,565	350	381	1,000/R
95/55	12/3.20	96.5	7/3.20	56.30	16.0	0.2993	7,965	350	708	1,000/R
120/20	26/2.44	121.6	7/1.90	19.80	15.5	0.2375	4,555	410	491	1,000/R
120/70	12/3.60	122.0	7/3.60	71.30	18.0	0.2365	10,034	410	896	1,000/R
125/30	30/2.33	127.9	7/2.33	29.80	16.1	0.2259	5,759	425	587	1,000/R
150/25	26/2.70	148.9	7/2.10	24.20	17.1	0.1939	5,513	470	601	1,000/R
170/40	30/2.70	171.8	7/2.70	40.10	18.9	0.1683	7,675	520	789	1,000/R

R = Packing in reel