

# ALUMINIUM CONDUCTOR CABLES

## ◆ HIGH VOLTAGE POWER CABLE ◆

TIS 2341-2564 : ICEA S-66-524 | ICEA-93-639

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# SAC 25 KV-CC

TIS 2341-2564

ICEA S-66-524

ICEA-93-639

## 25 KV ALL ALUMINIUM CONDUCTOR SPACED AERIAL CABLE TIS 2341-2564 Table 1



CABLE STRUCTURE		TECHNICAL DATA	
<b>Conductor</b>	: Compacted round stranded hard drawn aluminium wires Single Core : Size 35 mm <sup>2</sup> up to 240 mm <sup>2</sup>	<b>Classification</b>	: Maximum conductor temperature 90°C : Circuit voltage not exceeding 25,000 Volts
<b>Insulation</b>	: Cross-linked Polyethylene (XLPE) Color : Natural	<b>Testing voltage</b>	: 38,000 Volts
<b>Sheath</b>	: Cross-linked polyethylene (XLPE) Color : Black	<b>Reference standard</b>	: ICEA S-66-524, ICEA S-93-639 TIS 2341-2564 Table 1
<b>APPLICATION</b>			
Aerial distribution cable (installed with pin insulator or spacer)			

Number of core	Nominal cross sectional area (mm <sup>2</sup> )	Number of stranded (No.)	Diameter of conductor approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20° C maximum (Ω/km)	Insulation resistance at 15.6° C minimum (Ω/km)	Continuous current rating in free air maximum (A)	Breaking Strength (N)	Cable weight approx. (kg/km)	Standard length (m)
1	35	6	7.05	3.18	3.18	21	0.868	2,500	165	5,591	400	500/D
	50	6	8.11	3.18	3.18	23	0.641	2,250	199	7,313	460	500/D
	70	12	9.73	3.18	3.18	25	0.443	2,050	250	10,420	550	500/D
	95	15	11.43	3.18	3.18	26	0.320	1,850	305	14,098	650	500/D
	120	15	13.05	3.18	3.18	28	0.253	1,700	353	18,518	750	500/D
	150	15	14.37	3.18	3.18	29	0.206	1,600	402	22,457	850	500/D
	185	30	16.08	3.18	3.18	31	0.164	1,450	464	28,974	1,000	500/D
	240	30	18.57	3.18	3.18	33	0.125	1,300	553	37,506	1,200	500/D

D: Packing in drum

# SAC 25 KV-CC



TIS 2341-2564

ICEA S-66-524

ICEA-93-639

## 25 kV ALL ALUMINIUM CONDUCTOR SPACED AERIAL CABLE TIS 2341-2564 Table 2



CABLE STRUCTURE		TECHNICAL DATA	
<b>Conductor</b>	:Compacted round stranded hard drawn aluminium wires Single Core : Size 35 mm <sup>2</sup> up to 240 mm <sup>2</sup>	<b>Classification</b>	: Maximum conductor temperature 90°C : Circuit voltage not exceeding 25,000 Volts
<b>Insulation</b>	: Cross-linked Polyethylene (XLPE) Color : Natural	<b>Testing voltage</b>	: 38,000 Volts
<b>Sheath</b>	: Cross-linked polyethylene (XLPE) Color : Black	<b>Reference standard</b>	: ICEA S-66-524, ICEA S-93-639 : TIS 2341-2564 Table 2
<b>APPLICATION</b>			
Aerial distribution cable (installed with pin insulator or spacer)			

Number of core	Nominal cross sectional area (mm <sup>2</sup> )	Number of stranded (No.)	Diameter of conductor approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter approx. (mm)	Conductor resistance at 20° C maximum (Ω/km)	Insulation resistance at 15.6° C maximum (Ω/km)	Coninuous current rating in free air maximum (A)	Breaking Strength (N)	Cable weight approx. (kg/km)	Standard length (m)
1	35	7	7.05	4.85	1.75	21	0.868	2,500	165	5591	400	500/D
	50	7	8.00	4.85	1.75	22	0.641	2,250	199	7,313	460	500/D
	70	19	9.75	4.85	1.75	24	0.443	2,050	250	10,420	550	500/D
	95	19	11.45	4.85	1.75	26	0.320	1,850	305	14,098	650	500/D
	120	19	12.95	4.85	1.75	28	0.253	1,700	353	18,518	750	500/D
	150	19	14.5	4.85	1.75	150	0.206	1,600	420	22,457	850	500/D
	185	37	15.98	4.85	1.75	31	0.164	1,450	464	28,974	1,000	500/D
	240	37	18.5	4.85	1.75	31	0.125	1,300	55	28,974	1,000	500/D

D: Packing in drum

# SAC 35 KV-CC



TIS 2341-2564

ICEA S-66-524

ICEA S-93-639

## 35 kV ALL ALUMINIUM CONDUCTOR SPACED AERIAL CABLE TIS 2341-2564 Table 3



CABLE STRUCTURE		TECHNICAL DATA	
<b>Conductor</b>	: Compacted round stranded hard drawn aluminium wires Single Core : Size 50 mm <sup>2</sup> up to 240 mm <sup>2</sup>	<b>Classification</b>	: Maximum conductor temperature 90°C : Circuit voltage not exceeding 35,000 Volts
<b>Insulation</b>	: Cross-linked Polyethylene (XLPE) Color : Natural	<b>Testing voltage</b>	: 49,000 Volts
<b>Sheath</b>	: Cross-linked polyethylene (XLPE) Color : Black	<b>Reference standard</b>	: ICEA S-66-524, ICEA S-93-639 TIS 2341-2564 Table 3
APPLICATION			
Aerial distribution cable (installed with pin insulator or spacer)			

Number of core	Nominal cross sectional area (mm <sup>2</sup> )	Number of stranded (No.)	Diameter of conductor approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Approx. Overall diameter (mm)	Conductor resistance at 20° C maximum (Ω/km)	Insulation resistance at 15.6° C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Breaking Strength (N)	Cable weight approx. (kg/km)	Standard length (m)
1	50	7	8.11	4.45	3.18	26	0.641	2,500	200	7,313	550	500/D
	70	19	9.73	4.45	3.18	27	0.443	2,300	251	10,420	650	500/D
	95	19	11.43	4.45	3.18	29	0.320	2,100	306	14,098	750	500/D
	120	19	13.05	4.45	3.18	31	0.253	1,950	355	18,518	900	500/D
	150	19	14.37	4.45	3.18	32	0.206	1,800	403	22,457	1,000	500/D
	185	37	16.08	4.45	3.18	34	0.164	1,690	464	28,974	1,100	500/D
	240	37	18.57	4.45	3.18	36	0.125	1,500	552	37,506	1,400	500/D

D: Packing in drum



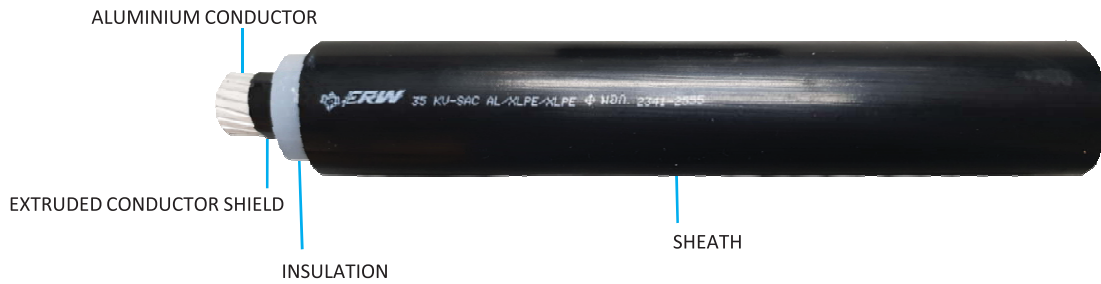
# SAC 33 KV-CC

TIS 2341-2564

ICEA S-66-524

ICEA S-93-639

## 33 kV ALL ALUMINIUM CONDUCTOR SPACED AERIAL CABLE TIS 2341-2564 Table 4



CABLE STRUCTURE		TECHNICAL DATA	
<b>Conductor</b>	: Compacted round stranded hard drawn aluminium wires Single Core : Size 50 mm <sup>2</sup> up to 185 mm <sup>2</sup>	<b>Classification</b>	: Maximum conductor temperature 90°C : Circuit voltage not exceeding 35,000 Volts
<b>Insulation</b>	: Cross-linked Polyethylene (XLPE) Color : Natural	<b>Testing voltage</b>	: 49,000 Volts
<b>Sheath</b>	: Cross-linked polyethylene (XLPE) Color : Black	<b>Reference standard</b>	: ICEA S-66-524, ICEA S-93-639 : TIS 2341-2564 Table 4
APPLICATION			
Aerial distribution cable (installed with pin insulator or spacer)			

Number of core	Nominal cross sectional area (mm <sup>2</sup> )	Number of stranded (No.)	Diameter of conductor approx. (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Approx. Overall diameter (mm)	Conductor resistance at 20° C maximum (Ω/km)	Insulation resistance at 15.6° C minimum (MΩ-km)	Continuous current rating in free air maximum (A)	Breaking Strength (N)	Cable weight approx. (kg/km)	Standard length (m)
1	50	7	8.11	7.18	1.75	27	0.641	2,500	200	7,313	550	500/D
	70	19	9.73	7.18	1.75	29	0.443	2,300	251	10,420	650	500/D
	95	19	11.43	7.18	1.75	31	0.320	2,100	306	14,098	750	500/D
	120	19	13.05	7.18	1.75	32	0.253	1,950	355	18,518	900	500/D
	150	19	14.37	7.18	1.75	34	0.206	1,800	403	22,457	1,000	500/D
	185	37	16.08	7.18	1.75	35	0.164	1,690	464	28,974	1,100	500/D
	240	37	18.57	7.18	1.75	38	0.125	1,500	552	37,506	1,400	500/D

D: Packing in drum