(N)TMCGEWÖU 3.6/6kV, 6/10kV and 8.7/15kV Cable

Eland Product Group: A7HT

APPLICATION

Medium voltage rubber sheathed flexible cable, single core, normally used for short-length connections of transformers and switchgears, as well as power cables on mining equipment and alongside conveyor belts. Suitable for indoor and outdoor applications.

CHARACTERISTICS

Voltage Rating (Uo/U)
3.6/6kV
6/10kV
8.7/15kV

Test Voltage
3.6/6kV: 11kV, 8.7/15kV
6/10kV: 17kV
8.7/15kV: 24kV

Ambient Temperature
Fixed: -40°C to +80°C

Maximum Short Circuit Temperature
+250°C

Minimum Bending Radius
Fixed: 6 x overall diameter

CONSTRUCTION

Phase Conductor
Class 5 flexible stranded tinned copper

Insulation
Rubber compound Type 3GI3

Semi-Conductive Layers
Semi-conductive tape over the conductor and inner and outer semi-conductive rubber layer on the insulation

Earth Conductor
Copper wire screen

Outer Sheath
Rubber compound Type 5GM5

Sheath Colour
Red

STANDARDS

VDE 0250 Part 812, VDE 0295, EN 60228

Flame Retardant according to IEC/EN 60332-1-2

THE CABLE LAB®

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.

SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability

REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.

DIMENSIONS

ELAND PART NO.	VOLTAGE kV	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²		CONDUCTOR DIAMETER mm	MINIMUM OVERALL DIAMETER mm	MAXIMUM OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
			Phase Conductor	Earth Conductor				
A7HT06KV1025RD	3.6/6	1	25	16E	6.8	19.3	20.3	730
A7HT06KV1035RD	3.6/6	1	35	16E	7.8	20.5	22.4	860
A7HT06KV1050RD	3.6/6	1	50	16E	9.4	22	23.9	1030
A7HT06KV1070RD	3.6/6	1	70	16E	11.2	23.8	25.7	1260
A7HT06KV1095RD	3.6/6	1	95	16E	12.7	26.4	28.3	1550
A7HT06KV1120RD	3.6/6	1	120	16E	14.4	28.2	30.2	1840
A7HT06KV1150RD	3.6/6	1	150	25E	16.3	30.6	32.6	2280
A7HT06KV1185RD	3.6/6	1	185	25E	17.6	32.5	34.5	2630
A7HT06KV1240RD	3.6/6	1	240	25E	20.6	35.6	37.6	3270
A7HT10KV1025RD	6/10	1	25	16E	6.8	19.3	20.9	770
A7HT10KV1035RD	6/10	1	35	16E	7.8	20.5	23	900
A7HT10KV1050RD	6/10	1	50	16E	9.4	22	24.5	1070
A7HT10KV1070RD	6/10	1	70	16E	11.2	23.8	26.3	1300
A7HT10KV1095RD	6/10	1	95	16E	12.7	26.4	28.9	1590
A7HT10KV1120RD	6/10	1	120	16E	14.4	28.2	30.9	1880
A7HT10KV1150RD	6/10	1	150	25E	16.3	30.6	33.3	2320
A7HT10KV1185RD	6/10	1	185	25E	17.6	32.5	35.2	2670
A7HT10KV1240RD	6/10	1	240	25E	20.6	35.6	38.3	3310
A7HT15KV1025RD	8.7/15	1	25	16E	6.8	21.2	23.1	820
A7HT15KV1035RD	8.7/15	1	35	16E	7.8	22.1	24	930
A7HT15KV1050RD	8.7/15	1	50	16E	9.4	23.6	25.5	1110
A7HT15KV1070RD	8.7/15	1	70	16E	11.2	26	27.9	1370
A7HT15KV1095RD	8.7/15	1	95	16E	12.7	27.6	29.5	1620
A7HT15KV1120RD	8.7/15	1	120	16E	14.4	29.4	31.4	1910
A7HT15KV1150RD	8.7/15	1	150	25E	16.3	32.8	34.8	2430
A7HT15KV1185RD	8.7/15	1	185	25E	17.6	33.8	35.8	2720
A7HT15KV1240RD	8.7/15	1	240	25E	20.6	37.8	39.8	3450

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA OF PHASE CONDUCTOR mm²	MAXIMUM TENSILE LOAD N
25	375
35	525
50	750
70	1050
95	1425
120	1800
150	2250
185	2775
240	3600

CURRENT CARRYING CAPACITY

NOMINAL CROSS SECTIONAL AREA mm²	LAYING ON THE FLOOR Amps	FREE IN AIR Amps	REELED Amps						
			1 Layer	2 Layer	3 Layer	4 Layer	5 Layer	6 Layer	7 Layer
25	131	138	105	80	64	55	50	35	29
35	162	170	130	99	79	68	62	44	36

UK T 020 7241 8787 | F 020 7241 8700 | sales@elandcables.com | www.elandcables.com
International T +44 20 7241 8740 | F +44 20 7241 8700 | international@elandcables.com

VOLTAGE DROP

NOMINAL CROSS SECTIONAL AREA mm²	POWER FACTOR			
	0.7	0.8	0.9	1
25	1.29	1.45	1.6	1.71
35	0.95	1.06	1.16	1.23
50	0.69	0.77	0.83	0.87
70	0.51	0.56	0.6	0.61
95	0.41	0.45	0.47	0.47
120	0.34	0.36	0.38	0.36
150	0.29	0.31	0.32	0.29
185	0.25	0.27	0.27	0.24
240	0.21	0.22	0.21	0.18

DE-RATING FACTORS

AMBIENT TEMPERATURE	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C
DE-RATING FACTOR	1.15	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58	0.50	0.41