ERICSSON

Internal Ericsson Wide
PRODUCT SPECIFICATION 1 (3)

Uppgjord (även faktaansvarig om annan) - *Prepared (also subject responsible if other)*		Nr - *No.*		
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Dokansv/Godk - *Doc respons/Approved*	Kontr - *Checked*	Datum - *Date*	Rev	File
ECA/T/TK (Mattias Andersson)		2004-10-18	B	=/LZB 101 01/10B

COMMUNICATIONS CABLE

1 GENERAL

1.1 PRODUCT IDENTIFICATION

Ericsson product code: *TZC 750 25*
Type designation: *KLQXBU HF 75 0.31/1.95*

1.2 FIELD OF APPLICATION

75 Ω single flexible halogen free coaxial cable intended for indoor installation.

1.3 SAFETY REQUIREMENTS

Product changes must not be introduced without previous confirmation by the subject responsible. The requirement for flame propagation characteristics according to UL 444 class CM must be fulfilled.

2 MATERIALS AND DIMENSIONS

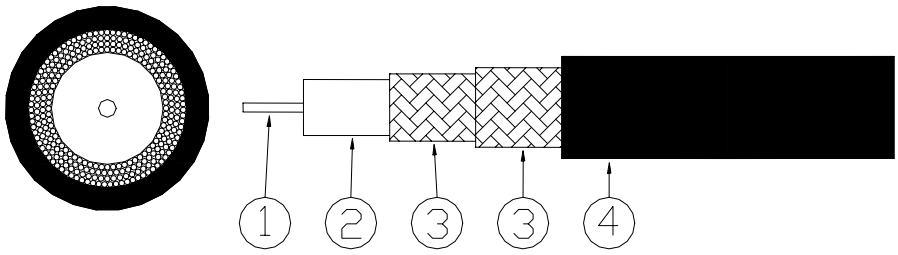

Figure 1.

Pos.	*Description*	*Material*	*Diameter*[1]
1	Inner conductor	Solid plain annealed copper wire	0.31 ± 0.005 mm
2	Insulation	Solid uncoloured polyethylene	1.95 ± 0.10 mm
3	Outer conductor	Double braid of tinned annealed copper wire	2.75 ± 0.15 mm
4	Sheath	Halogen free flame retardant black RAL 9005 polyethylene	3.55 ± 0.15 mm

[1]IEC 60189-1 clause 2.2.3

EN/FAD 109 251 R1B

3 MECHANICAL AND ENVIROMENTAL CHARACTERISTICS

All measurements are to be performed at 20 °C unless otherwise stated in the table below.

Object	*Characteristic*	*Test method*	*Clause*	*Limit value*
Insulation	Minimum thickness Mean thickness	IEC 60189-1 IEC 60189-1	2.2.1.1 2.2.2	min. 0.68 mm nom. 0.82 mm min. 0.80 mm
Outer conductor	Coverage factor, inner braid Coverage factor, outer braid	IEC 61196-1 IEC 61196-1	3.2.3.4 3.2.3.4	min. 87 % min. 83 %
Sheath	Minimum thickness Mean thickness	IEC 60189-1 IEC 60189-1	2.2.1.1 2.2.2	min. 0.30 mm nom. 0.40 mm
Finished Cable	Flame propagation characteristics Operating temperature Bending radius Weight	IEC 60332-3-24		Pass -20 to + 75°C min 35 mm nom. 2.4 kg/100 m

[1] Values according to figure 1

4 ELECTRICAL CHARACTERISTICS

All measurements are to be performed at 20 °C unless otherwise stated in the table below.

Characteristic	*Condition*	*Test method*	*Clause*	*Limit value*
Conductor resistance, inner conductor		IEC 61196-1	11.1	nom. 220 Ω/km max. 236 Ω/km
Conductor resistance, outer conductor		IEC 61196-1	11.1	nom. 12.0 Ω/km max. 19.5 Ω/km
Insulation resistance	500 V DC 1 min.	IEC 61196-1	11.2	min. 10 000 MΩkm
Capacitance		IEC 61196-1	11.3	nom. 67 pF/m
Withstand voltage of dielectric	2.4 kV AC/ 3.4 kV DC	IEC 61196-1	11.5	Pass
Withstand voltage of sheath	*	*	*	Pass
Mean characteristic impedance		IEC 61196-1	11.8.1	75 ± 3 Ω
Relative propagation velocity		IEC 61196-1	11.9	nom. 66 %
Attenuation constant[1]	1 MHz 4 MHz 17 MHz 70 MHz 200 MHz	IEC 61196-1	11.13	nom. 2.0 dB/100 m nom. 4.0 dB/100 m nom. 8.2 dB/100 m nom. 16.8 dB/100 m max. 32.0 dB/100 m
Transfer impedance	0-1 MHz 100 MHz 200 MHz	IEC 61196-1	12.1	min. 25 mΩ/m min. 70 mΩ/m min. 70 mΩ/m

5 SHEATH MARKING

The completed cable shall have the following text twice per metre if not otherwise stated below:

ERICSSON NETWORK TECHNOLOGIES XXXX YYWW **TZC 750 25 KLQXBU HF 75 0.31/1.95 CM c(UL)us 28 AWG Max 75°C** LLLL

XXXX = Identification code
YYWW = Year and week of manufacture, e.g. 0046, once per metre
LLLL = Sequential length markers once per metre, continuous length marking is allowed

6 REFERENCE STANDARDS

This specification is based on the following standards:

6.1 ERICSSON DOKUMENTS

6.1.1 ECA 105 49-001: Communications cable

6.2 IEC PUBLICATIONS

6.2.1 60096: Radio-frequency cables, Part 0: Guide to the design of detailed specifications, Part 1: General requirements and measuring methods

60189: Low-frequency cables and wires with PVC insulation and PVC sheath, Part 1: General test and measuring methods

61196-1: Radio-frequency cables, Part 1: Generic specification – General, definitions, requirements and test methods

6.3 UL STANDARDS

UL 444: Communications cable