ENVIROLEX® Flexible Single Core - 110°C

CU ENVIRO RHE-1-FLEX 95 BK 110

Contact

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Nexans Ref.: BZHX07AA001CXNA

Country Ref.: 7420

Plain Annealed Copper conductor (Flexible), X-110 (XLPE) insulation, Halogen Free Flame Retardant HFS-110-TP sheath. 0.6/1 kV. Made to AS/NZS 5000.1

DESCRIPTION

Applications

Envirolex Single Core cable has multiple applications including switchboard wiring, pumps, power supplies, transformer LV switches, battery connections.

Benefits

- Flame Retardant, Non Hazardous, No Heavy Metals, No Corrosive Emissions
- · Low Smoke, Low Calorific Value
- Halogen free, PVC Best Practice (As per Green Building Council requirements)
- Easy to handle and install; No Mica Tape
- 110°C continuous operating temperature.
- Flexible Conductor (to be used in fixed application).
- Submersible to 500m



STANDARDS

National AS/NZS 5000.1

CHARACTERISTICS

Construction characteristics Conductor material Copper Type of conductor Stranded flexible X-HF-110 Insulation Sheath colour Black Outer sheath HFS-110-TP Halogen free With Green/Yellow core No With smaller neutral conductor No **Dimensional characteristics** Conductor cross-section 95 mm² Maximum diameter of wires 0.31 mm Nominal overall diameter 18.3 mm 0.99 kg/m Approximate weight



Halogen free



Rated Voltage Uo/U (Um) 0.6/ 1 (1.2) kV



Cable flexibility Flexible



Mechanical resistance to impacts Very good



Flame retardant



Max.conductor temp.in service 110 °C

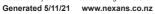


Smoke density



U.V resistance

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is







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D	Dimensional characteristics	
	Neutral conductor section (when smaller)	- mm²
	Number of cores	1
E	lectrical characteristics	
	Conductor AC resistance at 50 Hz	0.28 Ohm/km
	Inductive reactance at 50Hz - flat touching	0.1 Ohm/km
	Inductive reactance at 50Hz - trefoil	0.0849 Ohm/km
	Insulation resistance at 20°C	210 MOhm.km
	Max. DC resistance of the conductor at 20°C	0.206 Ohm/km
	Rated Voltage Uo/U (Um)	0.6/ 1 (1.2) kV
N	lechanical characteristics	
	Cable flexibility	Flexible
	Maximum Pulling Tension	6.65 kN
	Mechanical resistance to impacts	Very good
U	Isage characteristics	
	Flame retardant	Yes
	Max. conductor temperature in service	110 °C
	Smoke density	Low
	U.V resistance	Yes
	Minimum Bending Radius during installation	9 (xD)
	Bending factor when installed	D>25mm: 6 (xD); D<25mm: 4 (xD)
	Maximum operating temperature	110 °C
	Minimum operating temperature	-25 °C



Halogen free



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CURRENT CARRYING CAPACITIES SINGLE PHASE (IN AMPS) - SINGLE CORE CU ENVIROLEX 110°C

Copper conductor - Circular Flexible stranded conductor Insulation X-HF-110 - Max. Conductor Temperature 110C

Cond	ductor cross-section	∞	8	6	SH	\$ 9 \$			
	[mm²]	Cu	Cu	Cu	Cu	Cu	Cu	Cu	
	95	423	352	334	441	331	331	-	
00	Unenclosed spaced from surface			ed touching	Enclosed conduit in air				
	Buried direct	\$	Buried in	multi-way duct	7	Buried i	n single-way	duct	
	Cable surrounded by thermal insulation, unenclosed								

CURRENT CARRYING CAPACITIES THREE PHASE (IN AMPS) - SINGLE CORE CU ENVIROLEX 110°C

Copper conductor - Circular Flexible stranded conductor Insulation X-HF-110 Max. Conductor Temperature 110C

Conduct	or cross-section	3		*	0	\$	30	5, 756 7	
	[mm²]	Cu		Cu	Cu	Cu	Cu	Cu	Cu
	95	378		352	296	369	284	284	-
& Uner	closed spaced from sur	face	\$ €	Unenclos	ed touching		End	closed conduit ir	n air
Burie	d direct		5	Buried in	multi-way duct		Bui	ried in single-wa	y duct
Cable insul	e surrounded by thermal ation, unenclosed								







Rated Voltage Uo/U (Um) 0.6/ 1 (1.2) kV



Cable flexibility Flexible



Mechanica resistance to impacts Very good



Flame retardant



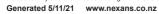
Max.conductor temp.in service



Smoke density



U.V resistance



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NOTE

- Content from AS/NZS 3008.1.2:2010 has been reproduced with the permission from Standards New Zealand under Copyright Licence 00926. Please see the standard for full details.
- The current ratings in the above tables are only for flexible cables installed in a fixed installation
- The values in the above table are based on typical New Zealand conditions of:-Ambient Air Temperature 30°C Soil Temperature 15°C Soil Thermal resistivity 1.2 K.m/W Depth of Burial 0.5 m

