

1 Application

For used in power transmission and distribution system, suitable for outdoor use at temperature range from -52°C to +80°C. For VSD system application.

2 Standard & specification

Cable design comply with IEC 60502-1, IEC 60228, GOST 31996-2012, GOST 22483-2012, IEC 60332-3-22, IEC 60331, IEC 61034, IEC 60754-2, GOST 31565-2012

3 Design

3.1 Conductor

Up to 25mm²: Plain annealed stranded circular non-compacted copper conductor in accordance with IEC 60228 Class 2

Above 25mm²: Plain annealed stranded circular compacted copper conductor in accordance with IEC 60228 Class 2

3.2 Fire resistance

Mica Glass tape overlapped around the conductor

3.3 Insulation

Extruded XLPE compound comply with IEC 60502-1

Color: 3C: Black, Brown, Grey

3.4 Earth conductor

Three earth insulation conductors (color: Yellow/Green) arranged in 360°symmetrical configuration

3.5 Assembly and filler(optional)

The interstices between cores filled with non-hygroscopic polypropylene rope to form substantially circular shape with a suitable binder tape

3.6 Metallic screen

A layer of copper tape helically overlap applied on the assembly core

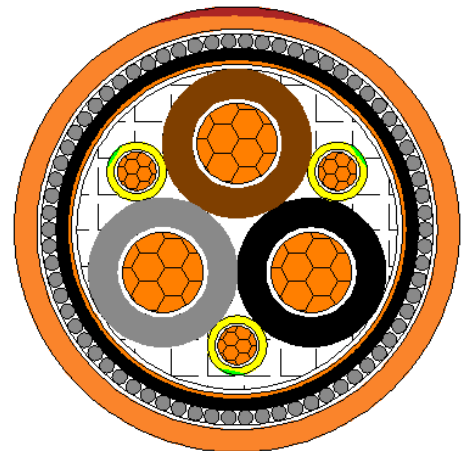
3.7 Separation sheath

Extruded LSZH ST8 compound comply with IEC 60502-1

Color: Black

3.8 Metal amour

A layer of galvanize steel wires with suitable binder tape helically



Cable Drawing for Reference



Conductor flexibility
 Class 2



Lead free



Rated Voltage
 U₀/U (U_m)
 0.6/1 (1.2)



Max. conductor temp.in service
 90°C



Flame retardant
 IEC 60332-3-22



Smoke density
 IEC 61034



Halogen free
 IEC 60754-2

applied on the separation sheath

3.9 Outer sheath

Extruded LSZH ST8 compound comply with IEC 60502-1
 Color: Orange with a red strip

4 Cable marking-Inkjet

EAC YANGER® IEC 60331 CU/MGT/XLPE/OA.SCR/LSZH/SWA/LSZH 3C×10+3E×1.5 SQMM 0.6/1kV Н Г (А) - FRHF -52° C~+40° C 2020 ****M

Note: “****M” meter marking by inkjet with increased sequence with numbering
 “Н Г (А) - FRHF” at least every 1 metre appear on the cable

5 Operation condition

Rated voltage, U0/U(Um), kV	0.6/1(1.2)
Rated, operating temperature range, °C	-52~+80
Min. installation temperature without preheating, °C	-20
Max. conductor temperature in service, °C	90
Max. permissible short-circuit temperature,5 sec, °C	250
Min. bending radius, D overall diameter of cable	12D
Flame retardant	IEC 60332-3-22
Fire resistant	IEC60331(2 h)
Halogen Gas Emission	IEC 60754-1, < 0.5%
Low Smoke Emission	IEC 61034-1/2
UV resistant	UL 1581
Oil resistant	IEC60811(IRM 902 - 4h at 70°C, variation ±40%)
Oxygen Index (Sheath)	ASTM D 2863
Cold bend	IEC 60811-1-4, -35°C
Cold impact	IEC 60811-1-4 & CSA C22.2 No.38-10, -35°C
Chemical resistance	Accidental



Conductor flexibility
 Class 2



Lead free



Rated Voltage
 U0/U (Um)
 0.6/1 (1.2)



Max. conductor temp.in service
 90°C



Flame retardant
 IEC 60332-3-22



Smoke density
 IEC 61034



Halogen free
 IEC 60754-2

YANGER®

0.6/1kV
 CU/MGT/XLPE/
 OA.SCR/LSZH/SWA/LSZH
 Power Cable

Page 3 of 3

CABLE TYPE:0.6/1kV CU/MGT/XLPE/OA.SCR/LSZH/SWA/LSZH

No.	Cable Size	Nom. cross section (Phase)	Insulation		Nom. Cross-section (Earth)	Insulation		Separation Sheath	Under armour Dia. (+/- 10%)	Steel wire		Outer Sheath	Overall Dia(+/- 10%)	Approx. Weight	DC Resistance at 20°C		Reactance	Capacitance	Short-circuit withstand capacity(1s)	Voltage drop	Test Voltage		Max. allowable Pulling tension	Current Rating		Insulation Core Color	Outer Sheath Color				
			Nom. Thick.	Min. Thick.		Nom. Thick.	Min. Thick.			Nom. Dia.	Nom. Thick.				Phase / Earth	Ω/km					Ω/km	µF/km		kA	V/m			V	KN	A	A
			mm ²	mm		mm	mm ²			mm	mm				mm	mm					mm	mm		mm	kg/km			Ω/km	Ω/km	µF/km	kA
1	3C10+3E	10	0.7	0.53	1.5	0.7	0.53	1.2	15.8	1.25	1.8	22.5	1124	1.83/12.1	0.2704	0.4628	1.53	0.176	3500	2.1	75	65	Black, Brown, Grey, Green/Yellow	Orange with a red strip							