

Standard	Aprobari / Approvals	Ambalare / Packaging	
SR HD 603 S1/5G; IEC 60502-1, ST163	Certificat de omologare tehnica feroviara Nr 26, 27/2016, AFER Buc Railway Technical Approval Certificate No 26, 27/2016, AFER Buc Romania	Tambur/ drum	

CARACTERISTICI		CHARACTERISTICS		
<b>Utilizare:</b> Cabluurile sunt utilizate pentru transportul energiei electrice la statii de putere. Cabluurile trebuie protejate impotriva agentilor corozivi si a solventilor chimici Cabluurile sunt cu rezistenta la UV		<b>Applicability:</b> Power supply to power stations. The cables must be protected against: corozive chemicals and chemical Cables are UV resistant		
Tensiune nominala U <sub>0</sub> /U	0.6/1 kV	Rated voltage U <sub>0</sub> /U	0.6/1 kV	
Tensiune de incercare	3.5 kV ca sau 8.4 kV cc,5 min	Test voltage	3.5 kV ac or 8.4 kV dc,5 min	
Rezistivitatea de volum specifica, min,	la 20 °C-1x10 <sup>15</sup> la 90°C-1x10 <sup>12</sup>	Volume resistivity at , min	la 20 °C-10 <sup>15</sup> la 90°C-10 <sup>12</sup>	
Rezistenta de izolatie la 20 °C	Min. 50 MΩ*km	Insulation resistance at 20 °C	Min. 50 MΩ*km	
Constanta rezistentei de izolatie	90 °C:min 3.67 MΩ*km	Insulation resistance constant at	90 °C:min 3.67 MΩ*km	
Temperatura minima de instalare pe cablu	-5°C	The minim temperature of de cable during installation	-5°C	
Temperatura maxima de lucru	+90°C	Max.permmissible operating temperature	+90°C	
Temperatura maxima de scurt-circuit	+250°C (max 5 sec)	Max. short-circuit temperature	+250°C (max 5 sec)	
Temperatura de utilizare normala	-40°C ÷ +90°C	Normal operational temperature range	-40°C ÷ +90°C	
Temperatura minima de montaj	-5°C	Temperature during installation	-5°C	
Temperatura masurata pe manta	-10°C ÷ +90°C	Temperature measured on the sheath	-10°C ÷ +90°C	
Conformitate RoHS	Da	RoHS compliancy	Yes	
Conformitate REACH	Da	REACH compliancy	Yes	
Conductor de cupru sau aluminiu	Conductor unifilar (re), conductor multifilar (rm,sm) conf SR EN 60228	Copper,aluminum conductor	Monowire (re), multiwire (rm, sm) according to SR EN 60228	
Izolatia	XLPE	Insulation	XLPE	
Umplutura	PVC sau benzi din material plastic	Filling	PVC or plastic tape	
Manta interioara	PE tip ST7 negru (A/C2XAb2Y, A/C2XAbz2Y)	Inner sheath	PE type ST7 black (A/C2XAb2Y, A/C2XAbz2Y)	
Armatura	Banda de otel laminata la rece nezincata (A/C2XAb2Y, sau zincata (A/C2XAbz2Y, de grosime 0.2 sau 0.5 mm.	Armor	Blank (A/C2XAb2Y, or zinc-plated cold-rolled (A/C2XAbz2Y) steel tape 0.2 or 0.5 mm thick	
Manta exterioara	PE tip ST7 negru (A/C2XAb2Y, A/C2XAbz2Y) Cabluurile sunt cu rezistenta sau rezistenta marita la propagarea flacarii conf SR EN 60332-1-2(C2XAb2Y-Fr1, C2XAbz2Y-Fr1), SR EN 60332-3-24 /cat 3 (C2XAb2Y-Fr3, C2XAbz2Y-Fr3)	Outer sheath	PVC type ST7 black or gray The cables are flame retardant or extra flame retardant acc SR EN 60332-1-2(C2XAb2Y-Fr1, C2XAbz2Y-Fr1), SR EN 60332-3-24 /cat 3 (C2XAb2Y-Fr3, C2XAbz2Y-Fr3)	
Marcaj pe manta	SC ELECTROPLAST SA ,simbol cablu ,tensiune de lucru, luna,an de fabricatie, marcaj de lungime Exemplu de marcaj : C2XAb2Y 4x25 mm <sup>2</sup> 0.6/1 kV ELECTROPLAST SA 03/2016 0030	Sheath marking	SC ELECTROPLAST SA , cable symbol , operational voltage, months ,year of manufacture, mark length Example: C2XAb2Y 4x25 mm <sup>2</sup> 0.6/1 kV ELECTROPLAST SA 03/2016 0030	
Raza minima de curbura la instalare	Min. 12 x diametrul cablului	Min. bending radius at installation	Min. 12 x cable diameter	
Forta maxima de tractiune la pozare	Max -50 N/mm <sup>2</sup> ptr cab cu cond Cu -30 N/mm <sup>2</sup> ptr cab cu cond Al	Max. tensile strain during installation	Max- 50 N/mm <sup>2</sup> for copper conductor cable -30 N/mm <sup>2</sup> for aluminum conductor cable	
Cod de culori conf SR HD 308 S2 (nr. de conductoare)	1	negru / galben-verde	1	black / yellow-green
	2	albastru, maro / galben-verde,negru, pt sect >10mm <sup>2</sup>	2	blue,brown yellow-green,black for sect>10 mm <sup>2</sup>
	3	maro,negru,gri / galben-verde,albastru,maro	3	brown,black,grey yellow-green, blue,brown
	4	albastru,maro,negru,gri / galben-verde,maro,negru,gri	4	blue, brown, black,grey yellow-green, brown,black,grey
	5	albastru,maro,negru,,gri,negru / galben-verde,albastru,maro,negru,gri	5	blue, brown, black, grey, black yellow-green, blue, brown,black,grey
	>5	conductoare negre numerotate sau galben-verde si conductoare numerotate	>5	numbered black conductors or yellow-green and numbered conductors

Tipodimensiune cablu  Cable size	Tip conductor  Type of conductor	Grosime radiala izolatii  Insulation radial thickness  mm	Grosime radiala manta interna nom  Inner sheath radial thickness min.  mm	Grosime radiala nom/min manta exterioara  Outer sheath radial thickness nom/min  mm	Rezistenta electrica max, la 20°C Cu / Al Max. resistance at 20°C  Ω/km	Diametru exterior inf  Outer diameter Inf  mm
1x16	re	0.7	1.2	1.8/1.24	1.15/1.91	12.5
1x25	rm	0.9	1.2	1.8/1.24	0.727/1.20	14.4
1x35	rm	0.9	1.2	1.8/1.24	0.524/0.868	15.4
1x50	rm	1.0	1.2	1.8/1.24	0.387/0.641	16.8
1x70	rm	1.1	1.2	1.8/1.24	0.268/0.443	18.6
1x95	rm	1.1	1.2	1.8/1.24	0.193/0.320	20.3
1x120	rm	1.2	1.2	1.8/1.24	0.153/0.253	22.0
1x150	rm	1.4	1.2	1.8/1.24	0.124/0.206	23.8
1x185	rm	1.6	1.2	1.8/1.24	0.0991/0.164	27.0
1x240	rm	1.7	1.2	1.8/1.24	0.0754/0.125	29.4
1x300	rm	1.8	1.2	1.8/1.24	0.0601/0.100	32.4
1x400	rm	2.0	1.2	2.2/1.52	0.0470/0.0778	37.7
1x500	rm	2.2	1.2	2.3/1.64	0.0366/0.0605	41.3
2x1.5	re	0.7	1.2	1.8/1.24	12.1	12.4
2x2.5	re	0.7	1.2	1.8/1.24	7.41	13.2
2x4	re	0.7	1.2	1.8/1.24	4.61/-	14.1
2x6	re	0.7	1.2	1.8/1.24	3.08/-	15.1
2x10	re	0.7	1.2	1.8/1.24	1.83/3.08	16.7
2x16	re	0.7	1.2	1.8/1.24	1.15/1.91	18.5
2x25	rm	0.9	1.2	1.8/1.24	0.727/1.20	22.3
2x35	rm	0.9	1.2	1.8/1.24	0.524/0.868	24.3
2x50	rm	1.0	1.2	1.8/1.24	0.387/0.641	27.1
2x70	rm	1.1	1.2	1.9/1.32	0.268/0.443	30.9
2x95	rm	1.1	1.2	2.0/1.4	0.193/0.320	34.5
2x120	rm	1.2	1.2	2.2/1.56	0.153/0.253	39.2
2x150	rm	1.4	1.3	2.3/1.64	0.124/0.206	42.3
2x185	rm	1.6	1.4	2.5/1.8	0.0991/0.164	48.8
2x240	rm	1.7	1.5	2.7/1.96	0.0754/0.125	54.0
3x1.5	re	0.7	1.2	1.8/1.24	12.1	12.7
3x2.5	re	0.7	1.2	1.8/1.24	7.41	13.5
3x4	re	0.7	1.2	1.8/1.24	4.61/-	14.4
3x6	re	0.7	1.2	1.8/1.24	3.08/-	15.5
3x10	re	0.7	1.2	1.8/1.24	1.83/3.08	17.2
3x16	re	0.7	1.2	1.8/1.24	1.15/1.91	19.1
3x25	rm	0.9	1.2	1.8/1.24	0.727/1.2	23.1
3x25+16	rm	0.9	1.2	1.8/1.24	0.727;1.15 1.20/1.91	24.4
3x35	rm	0.9	1.2	1.8/1.24	0.524/0.868	23.0
3x35+16	rm	0.9/0.7	1.2	1.8/1.24	0.524;1.15 0.868/1.91	26.2
3x50	sm	1.0	1.2	1.8/1.24	0.387/0.641	25.5
3x50+25	sm/rm	1.0/0.9	1.2	1.8/1.24	0.387;0.727 0.641/1.2	27.2
3x70	sm	1.1	1.2	1.9/1.32	0.268/0.443	29.0
3x70+35	sm/rm	1.1/0.9	1.2	1.9/1.32	0.268;0.524 0.443/0.868	30.6
3x95	sm	1.1	1.2	2.0/1.40	0.193/0.320	32.1
3x95+50	sm/sm	1.1/1.0	1.2	2.0/1.40	0.193;0.387	33.6

Tipodimensiune cablu  Cable size	Tip conductor  Type of conductor	Grosime radiala izolatie  Insulation radial thickness  mm	Grosime radiala manta interna nom  Inner sheath radial thickness min.  mm	Grosime radiala nom/min manta exterioara  Outer sheath radial thickness nom/min  mm	Rezistenta electrica max, la 20°C Cu / Al Max. resistance at 20°C  Ω/km	Diametru exterior inf  Outer diameter Inf  mm
					0.320/1.2	
3x120	sm	1.2	1.2	2.1/1.48	0.153/0.253	36.0
3x120+70	sm/sm	1.2/1.1	1.2	2.2/1.56	0.153/0.268 0.253/0.443	38.5
3x150	sm	1.4	1.2	2.2/1.56	0.124/0.206	39.6
3x150+70	sm/sm	1.4/1.1	1.3	2.3/1.64	0.124/0.268 0.206/0.443	42.6
3x185	sm	1.6	1.3	2.4/1.72	0.0991/0.164	43.9
3x185+95	sm/ sm	1.6/1.1	1.3	2.5/1.80	0.0991;0.193 0.164/0.320	46.5
3x240	sm	1.7	1.4	2.5/1.80	0.0754/0.125	50.0
3x240+120	sm/sm	1.7/1.2	1.5	2.7/1.96	0.0754/0.153 0.125/0.253	52.4
4x1.5	re	0.7	1.2	1.8/1.24	12.1	13.6
4x2.5	re	0.7	1.2	1.8/1.24	7.41	14.5
4x4	re	0.7	1.2	1.8/1.24	4.61/-	15.6
4x6	re	0.7	1.2	1.8/1.24	3.08/-	16.8
4x10	re	0.7	1.2	1.8/1.24	1.83/3.08	18.8
4x16	re	0.7	1.2	1.8/1.24	1.15/1.91	21.0
4x25	rm	0.9	1.2	1.8/1.24	0.727/1.20	25.6
4x35	sm	0.9	1.2	1.8/1.24	0.524/0.868	25.2
4x50	sm	1.0	1.2	1.9/1.32	0.387/0.641	27.7
4x70	sm	1.1	1.2	2.0/1.40	0.268/0.443	31.8
4x95	sm	1.1	1.2	2.1/1.48	0.193/0.320	35.4
4x120	sm	1.2	1.2	2.3/1.64	0.153/0.253	40.0
4x150	sm	1.4	1.3	2.3/1.64	0.124/0.206	44.1
4x185	sm	1.6	1.4	2.5/1.8	0.0991/0.164	48.5
4x240 (AL)	sm	1.7	1.5	2.7/1.96	0.125	54.3
5x1.5	re	0.7	1.2	1.8/1.24	12.1	14.3
5x2.5	re	0.7	1.2	1.8/1.24	7.41	15.4
5x4	re	0.7	1.2	1.8/1.24	4.61/-	16.6
5x6	re	0.7	1.2	1.8/1.24	3.08/-	18.0
5x10	re	0.7	1.2	1.8/1.24	1.83/3.08	20.2
5x16	re	0.7	1.2	1.8/1.24	1.15/1.91	22.6
5x25	rm	0.9	1.2	1.8/1.24	0.727/1.20	27.9
5x35	rm	0.9	1.2	1.8/1.24	0.524/0.868	30.6
5x50	rm	1.0	1.2	2.3/1.64	0.387/0.641	34.8
5x70	rm	1.1	1.2	2.4/1.72	0.268/0.443	40.0
5x95	rm	1.1	1.3	2.4/1.72	0.193/0.320	45.9
5x120	rm	1.2	1.4	2.6/1.88	0.153/0.253	51.1
5x150	rm	1.4	1.5	2.8/2.04	0.124/0.206	56.6
7x1.5	re	0.7	1.2	1.8/1.24	12.1	15.2
7x2.5	re	0.7	1.2	1.8/1.24	7.41	16.3
9x1.5	re	0.7	1.2	1.8/1.24	12.1	17.6
9x2.5	re	0.7	1.2	1.8/1.24	7.41	19.0
12x1.5	re	0.7	1.2	1.8/1.24	12.1	18.4
12x2.5	re	0.7	1.2	1.8/1.24	7.41	19.9
14x1.5	re	0.7	1.2	1.8/1.24	12.1	19.0

**Cablu de energie armat, cu izolatie de polietilena reticulata**

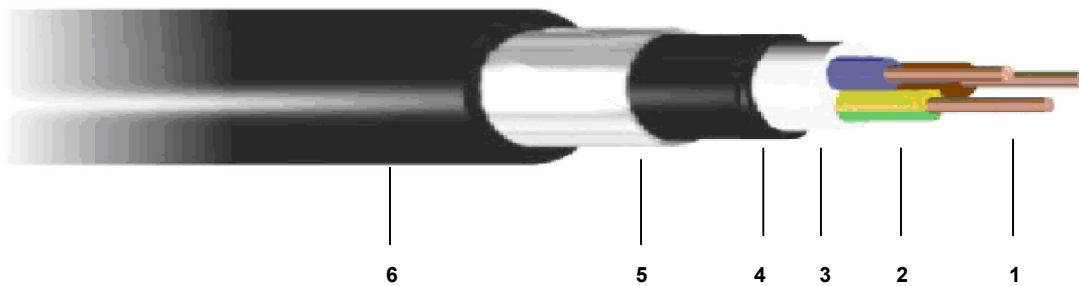
*Crosslinked polyethylene insulated and polyethylene*

**si manta de polietilena**

*sheathed power cable, steel tape armored*

Tipodimensiune cablu  Cable size	Tip conductor  Type of conductor	Grosime radiala izolatii  Insulation radial thickness  mm	Grosime radiala manta interna nom  Inner sheath radial thickness min.  mm	Grosime radiala nom/min manta exterioara  Outer sheath radial thickness nom/min  mm	Rezistenta electrica max, la 20°C Cu / Al Max. resistance at 20°C  Ω/km	Diametru exterior inf  Outer diameter Inf  mm
14x2.5	re	0.7	1.2	1.8/1.24	7.41	20.7
16x1.5	re	0.7	1.2	1.8/1.24	12.1	20.0
16x2.5	re	0.7	1.2	1.8/1.24	7.41	21.2
19x1.5	re	0.7	1.2	1.8/1.24	12.1	20.7
19x2.5	re	0.7	1.2	1.8/1.24	7.41	22.6

**Forma constructiva**



1	Conductoare rotunde, unifilare sau multifilare, din cupru sau aluminiu	1	Monowire or multi wire copper ,aluminium conductors
2	Conductoare izolate	2	Insulated conductors
3	Invelis comun extrudat sau din benzi	3	Filler
4	Manta interna	4	Inner sheath
5	Armatura din banda de otel sau otel zincat	5	Blank or zinc-plated cold-rolled
6	Manta exterioara	8	Outer sheath