

## Cablu de energie cu izolatie si manta de PVC; PVC insulated and sheathed power cable

Standard	Aprobari / Approvals	Ambalare / Packaging
SR HD 603 S1/4C; IEC 60502-1, ST104 Rev 2 :2016	Certificat de omologare tehnica feroviara Nr 183,184/2016 ,AFER Buc Railway Technical Approval Certificate No 183,184/2016 , AFER Buc Romania	Tambur/ drum

CARACTERISTICI		CHARACTERISTICS		
<b>Utilizare:</b> Cablurile sunt utilizate pentru transportul energiei electrice la statii de putere. Cablurile trebuie protejate impotriva agentilor corozivi si a solventilor chimici Cablurile sunt cu rezistenta la UV		<b>Applicability:</b> Power supply to power stations. The cables must be protected against: corozive chemicals and chemical solvents. UV resistant cables.		
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	4 kV ca sau 12 kV cc,5 min	Test voltage	4 kV ac or 12 kV dc,5 min	
Rezistivitatea de volum specifica, min,	la 20 °C-10 <sup>13</sup> la 70°C-10 <sup>10</sup>	Volume resistivity at, min	la 20 °C-10 <sup>13</sup> la 70°C-10 <sup>10</sup>	
Constanta rezistentei de izolatie	20 °C:min 3.67 MΩ*km 70 °C: min 0.037 MΩ*km	Insulation resistance constant at	20 °C:min 3.67 MΩ*km 70 °C: min 0.037 MΩ*km	
Rezistenta de izolatie	Min 50 MΩ*km	Insulation resistance	Min 50 MΩ*km	
Temperatura minima de instalare pe cablu	-5°C	The minim temperature of de cable during installation	-5°C	
Temperatura maxima de lucru	+70°C	Max. permissible operating temperature	+70°C	
Temperatura maxima de scurt-circuit	+160°C (max 5 sec)	Max. short-circuit temperature	+160°C (max 5 sec)	
Temperatura de utilizare normala	-40°C ÷ +70°C	Normal operational temperature range	-40°C ÷ +70°C	
Temperatura minima de montaj	-5°C	Temperature during installation	-5°C	
Temperatura masurata pe manta	-10°C ÷ +70°C	Temperature measured on the sheath	-10°C ÷ +70°C	
Conformitate RoHS	Da	RoHS compliancy	Yes	
Conformitate REACH	Da	REACH compliancy	Yes	
Conductor de cupru sau aluminiu	Conductor unifilar (re),conductor multifilar (rm) conf SR EN 60228	Aluminum or copper conductor	Monowire (re), multiwire (rm) according to SR EN 60228	
Izolatie	PVC tip DIV 10	Insulation	PVC type DIV 10	
Umplutura	PVC sau benzi din material plastic	Filling	PVC or plastic tape	
Manta exterioara	PVC tip DMV 17 negru (A/CYY) sau gri Cablurile sunt cu rezistenta sau rezistenta marita la propagarea flacarii conf SR EN 60332-1-2(A/ CYY) ,SR EN 60332-3-24 /cat C (A/CYY-F)	Outer sheath	PVC type DMV 17 black or gray The cables are flame retardant or extra flame retardant acc SR EN 60332-1-2(A/CYY) ,SR EN 60332-3-24 /cat C (A/CYY-F, )	
Marcaj pe manta	SC ELECTROPLAST SA ,simbol cablu ,tensiune de lucru, luna,an de fabricatie, marcaj de lungime Exemplu de marcaj : CYY-F 4x25 mm <sup>2</sup> 0.6/1 kV ELECTROPLAST SA 00/0000 0000	Sheath marking	SC ELECTROPLAST SA , cable symbol , operational voltage, months ,year of manufacture, mark length Example: CYY-F 4x25 mm <sup>2</sup> 0.6/1 kV ELECTROPLAST SA 00/0000 0000	
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

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Tipodimensiune cablu  Cable size	Tip conductor  Type of conductor	Grosime radiala izolatie  Radial thickness of insulation	Grosime radiala manta  Radial thickness of sheath	Rezistenta electrica max, la 20°C CU/AL Max. resistance at 20°C	Diametru exterior inf  Outer diameter inf
		mm	mm	Ω/km	mm
1x1.5	re	0.8	1.8	12.1	6.6
1x2.5	re	0.8	1.8	7.41	7.0
1x4	re	1.0	1.8	4.61	7.9
1x6	re	1.0	1.8	3.08	8.4
1x10	re	1.0	1.8	1.83/3.08	9.2
1x16	re	1.0	1.8	1.15/1.91	10.9
1x25	rm	1.2	1.8	0.727/1.20	12.6
1x35	rm	1.2	1.8	0.524/0.868	13.8
1x50	rm	1.4	1.8	0.387/0.641	15.6
1x70	rm	1.4	1.8	0.268/0.443	17.3
1x95	rm	1.6	1.8	0.193/0.320	19.7
1x120	rm	1.6	1.8	0.153/0.253	21.0
1x150	rm	1.8	1.8	0.124/0.206	23.1
1x185	rm	2.0	1.8	0.0991/0.164	25.5
1x240	rm	2.2	1.9	0.0754/0.124	30.2
1x300	rm	2.4	1.9	0.0601/0.100	31.3
1x400	rm	2.6	2.1	0.0470/0.0778	35.4
1x500	rm	2.8	2.2	0.0366/0.0605	38.8
2x1.5	re	0.8	1.8	12.1	9.8
2x2.5	re	0.8	1.8	7.41	10.6
2x4	re	1.0	1.8	4.61	12.3
2x6	re	1.0	1.8	3.08	13.5
2x10	re	1.0	1.8	1.83/3.08	15.1
2x16	re	1.0	1.8	1.15/1.91	18.8
2x25	rm	1.2	1.8	0.727/1.20	22.2
2x35	rm	1.2	1.8	0.524/0.868	24.6
2x50	rm	1.4	1.8	0.387/0.641	25.8
2x70	rm	1.4	1.9	0.268/0.443	29.2
2x95	rm	1.6	2.0	0.193/0.320	33.7
2x120	rm	1.6	2.1	0.153/0.253	36.9
2x150	rm	1.8	2.3	0.124/0.206	40.5
2x185	rm	2.0	2.4	0.0991/0.164	46.1
2x240	rm	2.2	2.6	0.0754/0.124	51.4
3x1.5	re	0.8	1.8	12.1	10.2
3x2.5	re	0.8	1.8	7.41	11.1
3x4	re	1.0	1.8	4.61	13.0
3x6	re	1.0	1.8	3.08	14.3
3x10	re	1.0	1.8	1.83/3.08	16.0
3x16	re	1.0	1.8	1.15/1.91	20.0
3x25	rm	1.2	1.8	0.727/1.20	23.6
3x25+16	rm/re	1.2;1.0	1.8	0.727;1.15 1.2/1.91	25.0
3x35	rm	1.2	1.8	0.524/0.868	26.2
3x35+16	sm/re	1.2;1.0	1.8	0.524;1.15 0.868/1.91	27.1
3x50	sm	1.4	1.8	0.387/0.641	25.0
3x50+25	sm/rm	1.4/1.2	1.9	0.387;0.727 0.641/1.20	29.0
3x70	sm	1.4	1.9	0.268/0.443	28.0
3x70+35	sm/rm	1.4/1.2	2.0	0.268;0.524 0.443/0.868	35.0
3x95	sm	1.6	2.1	0.193/0.320	30.0
3x95+50	sm/sm	1.6/1.4	2.2	0.193;0.387 0.320/0.641	41.0
3x120	sm	1.6	2.0	0.153/0.253	33.0
3x120+70	sm/sm	1.6/1.4	2.3	0.153;0.268 0.253/0.443	45.0
3x150	sm	1.8	2.2	0.124/0.206	36.9
3x150+70	sm/sm	1.8/1.4	2.4	0.124;0.268 0.206/0.443	49.0

# CYY(-F), ACYY(-F)

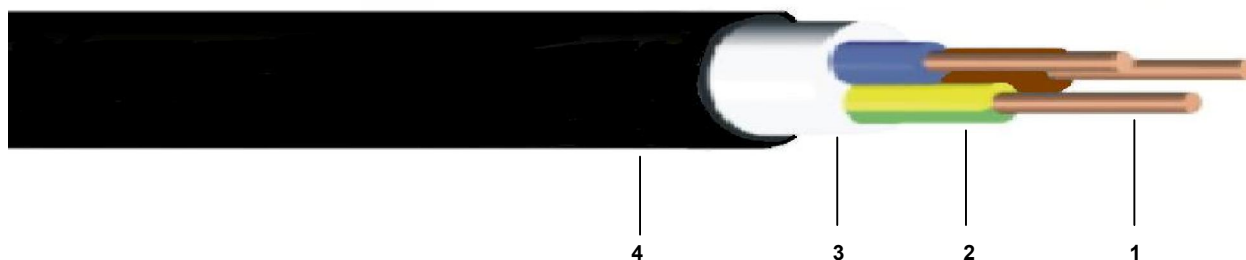
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Tipodimensiune cablu  Cable size	Tip conductor  Type of conductor	Grosime radiala izolatie  Radial thickness of insulation  mm	Grosime radiala manta  Radial thickness of sheath  mm	Rezistenta electrica max, la 20°C CU/AL Max. resistance at 20° C  Ω/km	Diametru exterior inf  Outer diameter inf  mm
3x185	sm	2.0	2.3	0.0991/0.164	40.9
3x185+95	sm/sm	2.0/1.6	2.6	0.0991;0.193 0.164/0.320	53.0
3x240	sm	2.2	2.5	0.0754/0.125	47.5
3x240+120	sm/sm	2.2/1.6	2.8	0.0754;0.153 0.125/0.253	60.0
4x1.5	re	0.8	1.8	12.1	11.0
4x2.5	re	0.8	1.8	7.41	12.0
4x4	re	1.0	1.8	4.61	14.1
4x6	re	1.0	1.8	3.08	15.5
4x10	re	1.0	1.8	1.83/3.08	17.5
4x16	re	1.0	1.8	1.15/1.91	21.9
4x25	rm	1.2	1.8	0.727/1.20	26.0
4x35	rm	1.2	1.8	0.524/0.868	29.3
4x50	sm	1.4	1.9	0.387/0.641	29.0
4x70	sm	1.4	2.0	0.268/0.443	33.2
4x95	sm	1.6	2.1	0.193/0.320	36.0
4x120	sm	1.6	2.3	0.153/0.253	40.0
4x150	sm	1.8	2.4	0.124/0.206	43.0
4x185	sm	2.0	2.5	0.0991/0.164	48.2
4x240	sm	2.2	2.7	0.0754/0.125	54.2
5x1.5	re	0.8	1.8	12.1	11.8
5x2.5	re	0.8	1.8	7.41	12.9
5x4	re	1.0	1.8	4.61	15.3
5x6	re	1.0	1.8	3.08	16.9
5x10	re	1.0	1.8	1.83/3.08	19.0
5x16	re	1.0	1.8	1.15/1.91	23.9
5x25	rm	1.2	1.9	0.727/1.20	28.7
5x35	rm	1.2	2.0	0.524/0.868	32.5
5x50	rm	1.4	2.1	0.387/0.641	34.1
5x70	rm	1.4	2.2	0.268/0.443	38.8
5x95	rm	1.6	2.4	0.193/0.320	44.4
5x120	rm	1.6	2.5	0.153/0.253	48.7
5x150	rm	1.8	2.9	0.124/0.206	60.0
7x1.5	re	0.8	1.8	12.1	12.7
7x2.5	re	0.8	1.8	7.41	13.9
9x1.5	re	0.8	1.8	12.1	15.5
9x2.5	re	0.8	1.8	7.41	17.0
10x1.5	re	0.8	1.8	12.1	16.1
10x2.5	re	0.8	1.8	7.41	17.7
12x1.5	re	0.8	1.8	12.1	16.6
12x2.5	re	0.8	1.8	7.41	18.3
14x1.5	re	0.8	1.8	12.1	17.3
14x2.5	re	0.8	1.8	7.41	19.1
16x1.5	re	0.8	1.8	12.1	18.2
16x2.5	re	0.8	1.8	7.41	20.1
19x1.5	re	0.8	1.8	12.1	19.1
19x2.5	re	0.8	1.8	7.41	21.1

# CYY(-F), ACYY(-F)

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## Forma constructiva:



1	Conductoare rotunde, unifilare sau multifilare, din cupru sau aluminiu	1	Monowire or multi wire copper or aluminium conductors
2	Conductoare izolate	2	Insulated conductors
3	Invelis comun extrudat sau din benzi	3	Filler
4	Manta exterioara	4	Outer sheath