

2YSLCYK-J 0,6/1 kV

Double screened cables for frequency converters, EMC*



Cable structure

- Stranded bare copper conductor according to DIN VDE 0295, IEC 60228 cl. 5
- Core insulation of polyethylene (PE)
- Core colors: black, brown, grey, green-yellow, cores stranded in concentric layers
- First screening with special aluminum foil
- Second screening with tinned copper braiding, coverage approx. 80%
- Special PVC sheath, black
- PVC self-extinguishing and flame retardant, according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1
- Low mutual capacitance according to DIN VDE 0472 part 504, test method B

Technical data

- Special flexible cables for frequency converters according to DIN VDE 0250
- **Temperature range:** flexing from -5 °C to +70 °C
fixed from -40 °C to +70 °C
- **Nominal voltage** U_0/U 600/1000 V
- **Test voltage a.c.** 4000 V
- **Insulation resistance** min. 200 M Ω × km
- **Radiation resistance** up to 80×106 cJ/kg (up to 80 Mrad)
- **Minimum bending radius**
fixed installation for outer diameter up to 12 mm – 5× cable diameter; 12 to 20 mm – 7,5× cable diameter; > 20 mm – 10× cable diameter
free-movement for outer diameter up to 12 mm – 10 × cable diameter;
12 to 20 mm – 15 × cable diameter; > 20 mm – 20 × cable diameter

Advantages

- PE core insulation ensures low dielectric loss, double potential strength, long durability and low level of interference
- Installation in hazardous areas, meets EMC requirements according to EN 55011
- Low coupling resistance due to high EMC compatibility
- Resistant to ultraviolet radiation

Application

This motor power supply cable for frequency converters ensures electromagnetic compatibility in industrial buildings, facilities with operating equipment where electromagnetic interference might negatively influence surroundings. The cable is also suitable as supply and connecting cable for medium mechanical stress in fixed installation and forced movements in dry, moist and wet environments. The cable is suitable for open-air use. The cable is used in automotive industry, food industry, packaging, tool making machinery, handling technics, as a connecting cable to industrial pumps, ventilators, conveyor belts and air-conditioning installation. The optimal screening of those cables ensures an interference-free operation of frequency converters.

Note

*EMC = Electromagnetic compatibility – recommended type

CE = the product is conformed with the EC Low-Voltage Directive 73/23/EEC. Conforms to RoHS.

Part No.	Number of cores × core cross-section [mm ²]	Approx. outer Ø [mm]	Mutual capacitance		Coupling resistance		Current carrying with 3 loaded cores [A]	Copper weight [kg/km]	Approx. cable weight [kg/km]
			core/core approx. [nF/km]	core/screen approx. [nF/km]	at 1 MHz [Ω /km]	at 30 MHz [Ω /km]			
0222234	4×1,5	10,6	70	110	-	-	18	95	230
0222235	4×2,5	12,3	80	130	18	210	26	150	300
0222236	4×4	14,5	90	150	11	210	34	235	485
0222237	4×6	16,4	90	150	6	150	44	320	633
0222238	4×10	20,1	120	200	7	180	61	533	863
0222239	4×16	23,4	140	230	9	190	82	789	1291
0222240	4×25	27,0	120	210	4	95	108	1236	1862
0222241	4×35	30,7	150	260	3	85	135	1662	2611
0222242	4×50	36,1	190	320	2	40	168	2345	2955
0222243	4×70	42,3	190	320	2	45	207	3196	3953
0222244	4×95	47,7	250	410	1	50	250	4316	5304
0222245	4×120	51,9	-	-	-	-	292	5435	6604
0222246	4×150	57,5	-	-	-	-	335	6394	7043
0222247	4×185	61,1	-	-	-	-	382	7639	8384
0222248	4×240	67,3	-	-	-	-	453	10013	11611

2YSLCYK-J 0,6/1 kV

Double screened cables for frequency converters, EMC*

Part No.	Number of cores × core cross-section [mm ²]	Approx. outer Ø [mm]	Mutual capacitance		Current carrying with 3 loaded cores [A]	Copper weight [kg/km]	Approx. cable weight [kg/km]
			core/core approx. nF/km	core/screen approx. nF/km			
0222673	3×1,5+3×0,25	10,2	70	110	18	91	212
0222674	3×2,5+3×0,5	11,9	80	130	26	152	276
0222675	3×4+3×0,75	13,7	90	150	34	224	446
0222676	3×6+3×1	15,3	110	170	44	298	582
0222677	3×10+3×1,5	19,2	120	190	61	491	794
0222678	3×16+3×2,5	22,3	130	220	82	723	1188
0222679	3×25+3×4	27,3	145	230	108	1138	1713
0222680	3×35+3×6	29,4	150	260	135	1535	2402
0222681	3×50+3×10	35,0	175	290	168	2208	2718
0222682	3×70+3×10	40,6	180	300	207	2871	3636
0222683	3×95+3×16	44,0	195	320	250	3953	4978
0222684	3×120+3×16	49,5	215	340	292	4836	6175
0222685	3×150+3×25	55,2	230	360	335	5421	6579
0222686	3×185+3×35	58,2	240	380	382	7041	8518
0222687	3×240+3×50	66,0	250	410	453	9148	11611