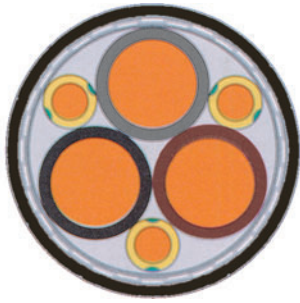


TOPFLEX®-EMV-UV-3 PLUS 2YSLCYK-J for power supply connections to frequency converters, double screened, 0,6/1kV, meter marking



Technical data

- Special motor power supply cable for frequency converters adapted to DIN VDE 0250
- **Temperature range**
flexing -5 °C bis +70 °C
fixed installation -40 °C bis +70 °C
- **Nominal voltage** U_0/U 600/1000 V
- **Operating voltage, max.**
A.C. and 3-phase 700/1200 V
DC operation 900/1800 V
- **Peak value** \hat{U} 1700 V
- **Test voltage** 2500 V
- **Insulation resistance**
min. 200 MΩm x km
- **Coupling resistance**
depending on the cross-section
max. 250 Ωm/km
- **Minimum bending radius**
fixed installation for outer \varnothing :
up to 12 mm: 5x cable \varnothing
>12 to 20 mm: 7,5x cable \varnothing
>20 mm: 10x cable \varnothing
free-movement for outer \varnothing :
up to 12 mm: 10x cable \varnothing
>12 to 20 mm: 15x cable \varnothing
>20 mm: 20x cable \varnothing
- **Radiation resistance**
up to 80×10^6 cJ/kg (up to 80 Mrad)

Cable structure

- Bare copper, fine wire conductor to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Polyethylene (PE) core insulation
- Core colour: black, brown, grey, green-yellow (earth core divided into 3)
- Cores stranded in concentric layers
- **3+3 core design**
- 1. screening with special aluminum foil
- 2. screening with copper braiding, tinned copper, coverage approx. 80%
- Special PVC outer sheath, schwarz (RAL 9005)
- with meter marking, change-over in 2011
- Pos.no. 22685 = capacitance
core/core 270 nF/km
core/screen 520 nF/km

Note

The current carrying capacity for permanent operation at ambient temperature of 30 °C. For deviating ambient temperatures the conversion factors should be used and for further see the indication in DIN VDE 0298 part 4

Properties

- Behavior in fire: Test according to VDE 0482-332-1-2, DIN EN 60332-1-2/IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- Low mutual capacitance, test according to DIN VDE 0472 part 504, test method B
- PE-insulation secures a lower dielectric loss, double potential strength, high longevity and low screen-interference currents
- Low mutual capacitance
- Meets EMC requirements according to EN 55011 and DIN VDE 0875 part 11
- Low coupling resistance for high electromagnetic compatibility
- Due to the optimal screening an interference-free operation of frequency converters is obtained
- The 3 Plus-construction of motor power supply cables features a symmetrical 3-core design, improved in terms of EMC characteristics comparing favorably with a 4-core version. The protective conductor PE, divided into 3 is uniformly stranded in the interstices. This enables an extremely concentric structure
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers
- The minimum cross-section of 0,75² meets the requirements of DIN EN 60204 part 1
- UV-resistant
- Outdoor application
- This screened motor supply cable with low mutual capacitance of the single cores because of the special PE core insulation and low screen capacitance enable a low-loss transmission of the power compared to PVC-sheathed connecting cables

Application

As a supply and connecting cable for medium mechanical stresses in fixed installations and forced movements in dry, moist and wet environments and for outdoor applications, possible for installation in underground at $3 \times 16 + 3 \times 2,5$ mm². Used in the automobile industry, food industry, environmental engineering, packaging industry, toolmaking machinery, handling equipment, for SIMOVERT drivers, they are particularly suitable for use with industrial pumps, ventilators, conveyor belts and air-conditioning installations and similar applications. Installation in hazardous areas.

EMC = Electromagnetic compatibility

The screen must be connected at both ends and ensure lare-area contact over the entire cable circumference for compliance with the functional interference requirements of EN 55011.

CE = The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

Continuation ▶

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Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Coupling resistance		Power ratings **) with 3 loaded cores in Amperes	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
			at 1 MHz Ohm/km	at 30 MHz Ohm/km				
22673	3 x 1,5 + 3 G 0,25	9,9			18	86,0	140,0	16
22674	3 x 2,5 + 3 G 0,5	11,3	18	210	26	144,0	220,0	14
22675	3 x 4 + 3 G 0,75	13,0	11	210	34	224,0	323,0	12
22676	3 x 6 + 3 G 1,0	14,9	6	150	44	298,0	420,0	10
22677	3 x 10 + 3 G 1,5	18,4	7	180	61	491,0	615,0	8
22678	3 x 16 + 3 G 2,5	21,5	9	190	82	723,0	819,0	6
22679	3 x 25 + 3 G 4,0	25,3	4	95	108	1138,0	1325,0	4
22680	3 x 35 + 3 G 6,0	27,8	3	85	135	1535,0	1718,0	2
22681	3 x 50 + 3 G 10,0	31,9	2	40	168	2208,0	2399,0	1
22682	3 x 70 + 3 G 10,0	36,8	2	45	207	2871,0	3056,0	2/0
22683	3 x 95 + 3 G 16,0	40,6	1	50	250	3953,0	4162,0	3/0
22684	3 x 120 + 3 G 16,0	45,9			292	4836,0	5075,0	4/0
22685	3 x 150 + 3 G 25,0	51,7			335	5412,0	6128,0	300 kcmil
22686	3 x 185 + 3 G 35,0	53,8			382	6969,0	7189,0	350 kcmil
22687	3 x 240 + 3 G 42,5	61,7				8540,0	9540,0	500 kcmil

Dimensions and specifications may be changed without prior notice. (RD01)

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Cable Glands

Cable glands for standard applications

- Plastic Glands
- Cable Glands of Brass
- Accessories

Cable glands for special application conditions

- for electromagnetic compatibility EMC
- for rugged applications and special chemical resistance
- for high temperature use
- for explosive areas
- for special mounting conditions
- for special pressure conditions



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