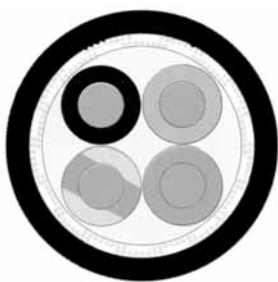


# TOPFLEX®-EMC\*-UV-2YSLCYK-J Motor power supply cable 0,6/1 kV for power supply connections to frequency converters, double screened



## Technical data

- Special motor power supply cable for frequency converters adapted to DIN VDE 0250
- **Temperature range**  
flexing - 5°C to +70°C  
fixed installation -40°C to +70°C
- **Nominal voltage**  
U<sub>0</sub>/U 600/1000 V
- **Max. operating voltage**  
A.C. and 3-phase 700/1200 V  
DC operation 900/1800 V
- **Test voltage**  
2500 V
- **Insulation resistance**  
min. 200 MOhm x km
- **Coupling resistance** according to different cross-sections  
max. 250 Ohm/km
- **Mutual capacitance** according to different cross-sections  
Core/core 70 to 250 nF/km  
Core/screen 110 to 410 nF/km
- **Minimum bending radius**
  - **fixed installation** for outer∅:  
up to 12 mm : approx. 5x cable∅  
> 12 to 20 mm : approx. 7,5x cable∅  
> 20 mm : approx. 10x cable∅
  - **free-movement** for outer∅:  
up to 12 mm : approx. 10x cable∅  
> 12 to 20 mm : approx. 15x cable∅  
> 20 mm : approx. 20x cable∅
- **Radiation-resistance**  
up to 80x10<sup>6</sup> cJ/kg (up to 80 Mrad)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Cable structure

- Bare copper, fine wire conductor to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and/or IEC 60228 cl. 5
- Polyethylene (PE) core insulation
- Core colours: black, brown, blue, green-yellow
- Cores stranded in concentric layers
- 1. screening with special aluminium film
- 2. screening with copper braiding, tinned copper, coverage approx. 80%
- Special PVC outer sheath, black (RAL 9005)

## Test

- Test according to DIN VDE 0482 Teil 265-2-1/EN 50265-2-1/IEC 60332-1 (entspricht DIN VDE 0472 Teil 804 Prüftart B)
- low mutual capacitance, to DIN VDE 0472 part 504, test method B

## Features

- PE-insulation secures a lower dielectric loss, double potential strength, high longevity and low screen-interference currents
- Installation in hazardous areas
- Low mutual capacitance
- Meets EMC requirements according to EN 55011 and DIN VDE 0875 part 11
- Low coupling resistance for high electromagnetic compatibility
- UV-resistant
- outdoor application

## Application

This TOPFLEX®-EMC-2YSLCY-J motor power supply cable for the frequency converters assures electromagnetic compatibility in plants and buildings, facilities with units and operating equipment where the fields of electromagnetic interference might cause adverse effects on the surroundings.

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. Direct underground installation is possible.

Used in the automotive and food industries, environmental technology, packaging industry, machine tools. Handling equipment, for SIMOVERT drives, they are particularly suitable for use with industrial pumps, ventilators, conveyor belts and air-conditioning installations and similar applications.

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.

Due to the optimal screening an interference-free operation of frequency converters is obtained.

\* **EMC** = Electromagnetic compatibility

**Note** The screen must be connected at both ends and ensure large-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 73/23/EEC and 93/68/EEC.

Part No.	No. of cores x cross-sec. mm <sup>2</sup>	Outer ∅ ca. mm	Mutual capacitance core / core ca. nF / km	Mutual capacitance core / screen ca. nF / km	Coupling resistance at 1 MHz Ohm / km	Coupling resistance at 30 MHz Ohm / km	Power ratings**) with 3 loaded cores in Ampere	Cop. weight kg / km	Weight ca. kg / km	AWG-no.**)
22234	4G1,5	10,6	70	110	-	-	18	95	230	16
22235	4G2,5	12,3	80	130	18	210	26	150	300	14
22236	4G4	14,5	90	150	11	210	34	235	485	12
22237	4G6	16,4	90	150	6	150	44	320	630	10
22238	4G10	20,1	120	200	7	180	61	533	860	8
22239	4G16	23,4	140	230	9	190	82	789	1290	6
22240	4G25	27,0	120	210	4	95	108	1236	1860	4
22241	4G35	30,7	150	260	3	85	135	1662	2610	2
22242	4G50	36,1	190	320	2	40	168	2345	2950	1
22243	4G70	42,3	190	320	2	45	207	3196	3950	2/0
22244	4G95	47,7	250	410	1	50	250	4316	5300	3/0
22245	4G120	51,9	-	-	-	-	292	5435	6600	4/0
22246	4G150	57,5	-	-	-	-	335	6394	7040	300 kcmil
22247	4G185	61,1	-	-	-	-	382	7639	8380	350 kcmil

## Note:

Design and structure: Siemens PROTOFLEX-EMV-4 PLUS-UV 2YSLCYK-J 600/1000 V

\*\*) 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.

G = with green-yellow earth core