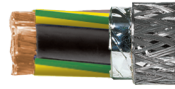


TOPFLEX®-EMV-UV-3-PLUS-2YSLCYK-J UL/



CSA

double screened, EMC-preferred type



HELUKABEL® TOPFLEX®-EMV-UV-3-PLUS-2YSLCYK-J UL/CSA 3x50 + 3G10 QMM
E170315 AWM STYLE 2570 AWM I/II A/B 80°C 1000V FT1 CE

TECHNICAL DATA

Motor connection cable for frequency converters acc. to UL-Std. 758 (AWM) Style 2570, in alignment with DIN VDE 0250

Temperature range	flexible -5°C to +80°C fixed -40°C to +80°C
Nominal voltage	UL (AWM) AC 1000 V
Test voltage core/core	4000 V
Coupling resistance	see table
Minimum bending radius	flexible < 12 mm: 10x Outer-ø 12-20 mm: 15x Outer-ø > 20 mm: 20x Outer-ø fixed < 12 mm: 5x Outer-ø 12-20 mm: 7,5x Outer-ø > 20 mm: 10x Outer-ø

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: PE
- Core identification: brown, black, grey, green-yellow (divided into thirds)
- Protective conductor: GN-YE divided into thirds (3+3-core structure)
- Cores stranded with optimal lay lengths
- 1. Screen: plastic-coated aluminium foil (St)
- 2. Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: Special-PVC
- Sheath colour: black (RAL 9005)
- Length marking: in metres

PROPERTIES

- resistant to: UV radiation
- for outdoor use
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers
- symmetrical 3-PLUS-composition (protective conductor divided into thirds and stranded uniformly in the interstices) with improved EMC properties in comparison to 4-core-composition
- optimal screening enables interference-free operation of frequency converters
- low coupling resistance ensures good electromagnetic compatibility
- low mutual capacitance of the individual cores due to PE core insulation and low screen capacity, enable low-loss power transmission

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, CSA FT1
- electromagnetic compatibility acc. to DIN VDE 0875-11 / DIN EN 55011

APPLICATION

Motor connection cable for fixed installations and applications with occasional free movement involving medium mechanical stress in dry, damp and wet rooms as well as outdoors. For use in the automotive, food processing and packaging industry, in transport belts, machine tools, handling equipment, pumps, as well as in fans and air condition systems. EMC= Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Coupling resistance at 30 MHz in Ohm/km	Current carrying capacity*	Cu-weight kg/km	Weight kg/km, approx.
22193	3 x 1.5 + 3 G 0.25	16	9.2		18	86.0	140.0
22194	3 x 2.5 + 3 G 0.5	14	10.8	210	26	144.0	220.0
22195	3 x 4 + 3 G 0.75	12	12.3	210	34	224.0	323.0
22196	3 x 6 + 3 G 1	10	14.0	150	44	298.0	420.0
22197	3 x 10 + 3 G 1.5	8	17.6	180	61	491.0	615.0
22198	3 x 16 + 3 G 2.5	6	21.2	190	82	723.0	819.0
22199	3 x 25 + 3 G 4	4	24.5	95	108	1138.0	1325.0
22223	3 x 35 + 3 G 6	2	26.9	85	135	1535.0	1718.0
22224	3 x 50 + 3 G 10	1	32.5	40	168	2208.0	2399.0
22225	3 x 70 + 3 G 10	2/0	35.5	45	207	2871.0	3056.0
22226	3 x 95 + 3 G 16	3/0	39.9	50	250	3953.0	4162.0
22227	3 x 120 + 3 G 16	4/0	44.4		292	4836.0	5075.0
22228	3 x 150 + 3 G 25	300 kcmil	49.3		335	5412.0	6128.0
22229	3 x 185 + 3 G 35	350 kcmil	55.6		382	6969.0	7189.0
22230	3 x 240 + 3 G 42.5	500 kcmil	60.0		453	8540.0	9540.0

*) Current carrying capacity with 3 loaded cores in amperes for permanent operation up to 30°C ambient temperature. For deviating ambient temperatures, the conversion factors and specifications from DIN VDE 0298-4 apply.