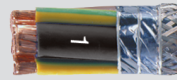
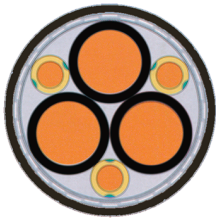


# TOPFLEX® 1000 VFD

EMC-preferred type, motor power supply cable, NFPA 79



HELUKABEL TOPFLEX 1000 VFD P/N 59406 4/0 AWG (107,2mm<sup>2</sup>) /3C + 6 AWG (13,3 mm<sup>2</sup>) /3C (UL) TC-ER 90 DRY 75C WET 600V SUN RES OIL RES I / II E330430 OR WTTC 1000V FLEXIBLE MOTOR SUPPLY CABLE 1000V OR c(UL) CIC-TC FT4 C€

## Technical data

- Motor power supply cable for VFDs acc. to UL Std. 1277 and 2277
- **Temperature range**  
flexing +5°C to +50°C  
fixed installation -25°C to +90°C
- **Nominal voltage**  
UL 1277 - TC 600 V  
UL 2277 - WTTC 1000 V
- **Test voltage**  
2500 V
- **Minimum bending radius**  
flexing 15x cable Ø  
fixed installation 7,5x cable Ø
- **Coupling resistance**  
max. 250 Ohm/km

## Cable structure

- Bare copper conductor, fine wire with AWG dimensions
- Core insulation of special PVC with clear nylon coating
- Core identification black cores with continuous white numbering
- GN-YE conductor (divided into 3)
- Cores stranded in concentric layers
- 3 power + 3 ground conductor design
- 1. Screen with special aluminium film
- 2. Tinned copper braided screen, coverage approx. 80%
- Outer sheath of special TPE
- Sheath colour: black (RAL 9005)
- With length marking in feet

## Properties

- Resistant to oil and sunlight
- Due to the optimal screening an interference-free operation of frequency container is obtained
- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

## Tests

- 90°C Dry/Wet  
UL Type TC-ER (1277)  
UL Type WTTC (2277)  
Flexible Motor Supply Cable (8 - 4/0 AWG)  
UL Type MTW  
C(UL) CIC-TC FT4 (8 - 4/0 AWG)  
AWM 21 270 (250 kcmil - 500 kcmil)  
CSA AWM I/II A/B FT4  
Oil Res I/II  
SUN RES, DIR BUR  
Class 1 Div 2 per NEC Art. 501  
NEC Articles 336 & 392

## Note

- VFD = Variable Frequency Drive

## Application

It is used as a power supply cable under average mechanical stress for fixed installation and occasional free movement in dry, moist and wet areas and outside installations. It is used in the automotive industry, food processing industry, transfer streets, packaging industry, machine tools, handling equipment. Other industrial uses include pumps, fans, conveyor belts and air conditioning systems.

**EMC** = Electromagnetic compatibility

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

**C€** = Product conforms with Low-Voltage Directive 2014/35/EU.

Part no.	No. power cores x AWG-No.	No. ground cores x AWG-No.	No. cores x cross-section mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
59398	3x AWG 8 +	3x AWG 14	(3x 8,37 + 3x 2,08)	18,3	447,0	649,0
59399	3x AWG 6 +	3x AWG 12	(3x 13,3 + 3x 3,3)	19,3	666,0	872,0
59400	3x AWG 4 +	3x AWG 12	(3x 21,2 + 3x 3,3)	25,4	998,0	1354,0
59401	3x AWG 2 +	3x AWG 10	(3x 33,6 + 3x 5,26)	30,5	1512,0	1908,0
59402	3x AWG 1 +	3x AWG 8	(3x 42,4 + 3x 8,37)	33,0	1940,0	2473,0
59403	3x AWG 1/0 +	3x AWG 8	(3x 53,4 + 3x 8,37)	35,6	2328,0	2866,0
59404	3x AWG 2/0 +	3x AWG 8	(3x 67,5 + 3x 8,37)	38,1	2816,0	3391,0
59405	3x AWG 3/0 +	3x AWG 6	(3x 85 + 3x 13,3)	40,6	3598,0	4110,0
59406	3x AWG 4/0 +	3x AWG 6	(3x 107,2 + 3x 13,3)	45,7	4313,0	4960,0
59407	3x AWG 250 kcmil +	3x AWG 6	(3x 127 + 3x 13,3)	50,8	5019,0	5759,0
59408	3x AWG 300 kcmil +	3x AWG 4	(3x 152 + 3x 21,2)	61,0	6131,0	6607,0
59409	3x AWG 350 kcmil +	3x AWG 2	(3x 178 + 3x 33,6)	63,5	7472,0	8272,0
59410	3x AWG 400 kcmil +	3x AWG 2	(3x 203 + 3x 33,6)	66,0	8261,0	9487,0
59411	3x AWG 500 kcmil +	3x AWG 2	(3x 254 + 3x 33,6)	68,6	9976,0	10543,0

Dimensions and specifications may be changed without prior notice. (RN07)