

TOPSERV® 600 VFD EMC-preferred type, high flexible motor

power supply cable, oil-resistant, NFPA 79 Edition 2012



Technical data

- TPE motor supply cable acc. to UL-Std.1277 and UL-Std.2277
- **Temperature range**
-25°C to +90°C
- **Nominal voltage**
TC 600 V
WTTC 1000 V
- **Test voltage** 4000 V
- **Minimum bending radius**
flexing 5x cable Ø
permanently flexing 7,5 cable Ø
- **Coupling resistance**
max. 250 Ohm/km

Cable structure

- Tinned copper conductor, extra fine wire with AWG dimensions
- Core insulation of special PVC with transparent nylon skin
- Black cores with continuous white numbering
- GN-YE conductor in the outer layer
- Cores stranded in layers with optimal lay-length
- Fleece
- 1. Screening with special aluminium foil
- 2. Screening with braid of tinned copper wires, optimal coverage approx. 85%
- Separator
- Outer sheath of special TPE
- Sheath colour black (RAL 9005) or orange (RAL 2003)
- with length marking in feet

Properties

- self-extinguishing and flame retardant acc. to CSA FT4
 - The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers
 - UV-resistant
- Tests**
- **UL:**
TC-ER, WTTC 1000 V, MTW, NFPA 79 2012, PLTC-ER (AWG 18 - AWG 12), ITC-ER (AWG 18 - AWG 12) OIL RES I & II, 90°C dry / 75°C wet, Cold Bend Test -40°C Class 1 Div. 2 per NEC Art. 336, 392, 501
- CSA:**
c (UL) CIC-TC FT4
AWM I/II A/B FT4

Note

- VFD = Variable Frequency Drive

Application

Highly-flexible, extremely oil-resistant motor supply cable for modern servomotors; the double-screening with special aluminium foil (100% coverage) and tinned copper braid (approx. 85% coverage) provides effective protection against electrical disturbance and the resultant failures. Approved to NFPA 79 edition 2012 for open, unprotected installation on cable trays and from cable trays to the machine. The special TPE sheath is extremely resistant to oil, coolants and solvents and hence the perfect solution for industrial applications with open installation, installation in pipes and in the earth.

EMC = Electromagnetic compatibility

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

☞ The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

Sheath colour black

| Part no. | No. cores x AWG-No. | Cross-section mm² | Outer Ø app. mm | Cop. weight kg / km | Weight app. kg / km |
|----------|---------------------|-------------------|-----------------|---------------------|---------------------|
| 62607 | 4 x 18 | 0,963 | 9,9 | 38,0 | 163,0 |
| 62608 | 4 x 16 | 1,31 | 11,4 | 51,0 | 184,0 |
| 62609 | 4 x 14 | 2,08 | 12,5 | 80,0 | 197,0 |
| 62610 | 4 x 12 | 3,31 | 14,0 | 127,0 | 266,0 |
| 62611 | 4 x 10 | 5,26 | 17,1 | 230,0 | 401,0 |
| 62612 | 4 x 8 | 8,37 | 22,3 | 384,0 | 669,0 |
| 62613 | 4 x 6 | 13,31 | 25,4 | 614,0 | 917,0 |
| 62614 | 4 x 4 | 21,21 | 30,1 | 960,0 | 1364,0 |
| 62615 | 4 x 2 | 33,6 | 35,3 | 1344,0 | 1990,0 |

Sheath colour orange

| Part no. | No. cores x AWG-No. | Cross-section mm² | Outer Ø app. mm | Cop. weight kg / km | Weight app. kg / km |
|----------|---------------------|-------------------|-----------------|---------------------|---------------------|
| 62616 | 4 x 18 | 0,963 | 9,9 | 38,0 | 163,0 |
| 62617 | 4 x 16 | 1,31 | 11,4 | 51,0 | 184,0 |
| 62618 | 4 x 14 | 2,08 | 12,5 | 80,0 | 197,0 |
| 62619 | 4 x 12 | 3,31 | 14,0 | 127,0 | 266,0 |
| 62620 | 4 x 10 | 5,26 | 17,1 | 230,0 | 401,0 |
| 62621 | 4 x 8 | 8,37 | 22,3 | 384,0 | 669,0 |
| 62622 | 4 x 6 | 13,31 | 25,4 | 614,0 | 917,0 |
| 62623 | 4 x 4 | 21,21 | 30,1 | 960,0 | 1364,0 |
| 62624 | 4 x 2 | 33,6 | 35,3 | 1344,0 | 1990,0 |

Dimensions and specifications may be changed without prior notice. (RN01)