

TRAYCONTROL® 600-C flexible, oil-resistant, screened, EMC-preferred type, open installation (TC-ER), NFPA 79 Edition 2012



HELUKABEL® TRAYCONTROL 600-C P/N 63069 12 AWG (3.31mm²)4C (UL) TC-ER 90C DRY 75C WET 600V SUN RES DIR BUR OIL RES I/II E330430 OR MTW "FLEXING" OR WTTC 1000V OR c(UL) CIC-TC PVC/N FT4 — LL257839 CSA AWM I/II A/B 90C 600V FT4 CE ROHS



Technical data

- PVC power cable acc. to UL-Std.1277 and UL-Std.2277
- **Temperature range**
UL+CSA TC -40°C to +90°C
AWM -40°C to +90°C
- **Nominal voltage**
TC 600 V
AWM 1000 V
WTTC 1000 V
- **Test voltage** 3000 V
- **Coupling resistance**
max. 250 Ohm/km
- **Minimum bending radius**
6x cable Ø
- **Insulation resistance**
min. 20 MOhm x km
- **Radiation resistance**
up to 80x10⁶ cJ/kg (up to 80 Mrad)

Cable structure

- Bare copper conductor, fine wire with AWG dimensions
- Core insulation of special PVC with transparent nylon skin
- Core identification to DIN VDE 0293 black cores with continuous white numbering
- GN-YE conductor, 3 cores and above in the outer layer
- Cores stranded in layers with optimal lay-lengths
- Separating foil
- Braided screening of tinned copper wires, coverage approx. 85%
- Separator
- Outer sheath of special PVC
- Sheath colour - black (RAL 9005)
- 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**
- **UL:**
TC-ER, PLTC-ER (AWG 18 - AWG 12), ITC-ER (AWG 18 - AWG 12), UL Type WTTC, UL Type MTW
NFPA 79 2012, Oil Res I & II
90°C dry / 75°C wet,
Class 1 Div. 2 per NEC Art. 336, 392, 501
- **CSA:**
c (UL) CIC-TC FT4,
CSA AWM I/II A/B FT4

Note

- **Advantages**
- TC-ER, Tray Cable Exposed Run
- Simple installation
- Outstanding flexibility

Application

USA NFPA 79 edition 2012 compliant, screened, flexible power cable to 600 V (WTTC 1000 V), for all tool and plant construction machinery, suitable for installation in dry, damp and wet environments, outdoors and in pipes. For underground installation and for open, unprotected installation from the cable tray to the machine and industrial plants.

EMC = Electromagnetic compatibility

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

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

Part no.	Cross-section mm ² x AWG-No.	No.cores	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
63049	0,963	3 x 18	8,2	31,0	118,0
63050	0,963	4 x 18	8,8	52,0	136,0
63051	0,963	5 x 18	9,4	62,0	149,0
63052	0,963	7 x 18	10,1	83,0	193,0
63053	0,963	12 x 18	12,9	143,0	328,0
63054	0,963	18 x 18	15,7	207,0	431,0
63055	0,963	25 x 18	17,7	284,0	569,0
62997	1,31	3 x 16	8,9	57,0	144,0
63056	1,31	4 x 16	9,6	72,0	172,0
63057	1,31	5 x 16	10,3	84,0	186,0
63058	1,31	7 x 16	11,3	124,0	243,0
63059	1,31	12 x 16	15,1	199,0	421,0
63060	1,31	18 x 16	17,3	290,0	510,0
63061	1,31	25 x 16	19,6	384,0	704,0
63062	2,08	3 x 14	9,8	85,0	178,0
63063	2,08	4 x 14	10,7	115,0	220,0

Part no.	Cross-section mm ² x AWG-No.	No.cores	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
63064	2,08	5 x 14	11,6	139,0	264,0
63065	2,08	7 x 14	12,5	185,0	325,0
63066	2,08	12 x 14	16,9	309,0	591,0
63067	2,08	18 x 14	19,5	448,0	780,0
63068	2,08	25 x 14	23,3	632,0	1041,0
63069	3,31	4 x 12	12,2	179,0	313,0
63070	3,31	5 x 12	13,4	223,0	384,0
63071	3,31	7 x 12	15,5	298,0	492,0
63072	5,26	4 x 10	15,5	256,0	547,0
63073	5,26	5 x 10	16,8	312,0	608,0
63074	5,26	7 x 10	18,2	430,0	850,0
63075	8,37	4 x 8	19,9	426,0	851,0
63076	13,3	4 x 6	23,3	657,0	1197,0
63077	21,2	4 x 4	28,6	1026,0	1970,0
63078	33,6	4 x 2	33,2	1412,0	2874,0
63330	42,3	4 x 1	36,4	1748,0	2671,0
710467	106,7	4 x 4/0	57,2	3919,0	5988,0

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



Suitable accessories can be found in Chapter X.

- Cable Gland - HELUTOP® HT-MS-EP4