

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



HELUKABEL® TRAYCONTROL 600-C P/N 63069 12 AWG (3.31mm²)4C (UL) TC-ER 90C DRY / 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

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 according 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
- Direct burial rated

Tests

- **UL:**
TC-ER, PLTC-ER (AWG 18 - AWG 12), ITC-ER (AWG 18 - AWG 12), 2277(WTTC), MTW or AWM or DP-1, NFPA 79 2012, OIL RES I & II, 90°C dry / wet, Class 1 Div. 2 per NEC Art. 336, 392, 501, -40°C Cold Bend
- **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
- Torsion resistant for wind power application

Application

NFPA 79 Edition 2012 compliant, screened, flexible power cable to 600 V (WTTC 1000 V), for all machinery in new plant construction, Torsion resistant, exceptional flexibility and abrasion resistance. Suitable for installation in dry, humid and damp environments, outdoors and pipes. For underground installation and for open, unprotected installation from the cable rack to machines in 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
710465	0,963	2 x 18	7,8	32,0	89,0
63049	0,963	3 x 18	8,2	43,9	106,0
63050	0,963	4 x 18	8,8	54,9	126,0
63051	0,963	5 x 18	9,4	66,3	149,0
63052	0,963	7 x 18	10,1	86,0	179,0
63053	0,963	12 x 18	12,8	150,9	275,0
63054	0,963	18 x 18	15,6	215,2	402,0
63055	0,963	25 x 18	18,0	280,7	543,0
59855	1,31	2 x 16	8,4	40,2	100,0
62997	1,31	3 x 16	8,7	52,8	124,0
63056	1,31	4 x 16	9,4	65,9	149,0
63057	1,31	5 x 16	10,1	81,4	173,0
63058	1,31	7 x 16	10,9	106,6	216,0
63059	1,31	12 x 16	14,7	193,5	365,0
63060	1,31	18 x 16	16,8	285,3	499,0
63061	1,31	25 x 16	19,5	371,4	662,0
63062	2,08	3 x 14	9,8	76,5	161,0

Part no.	Cross-section mm ² x AWG-No.	No.cores	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
63063	2,08	4 x 14	10,6	102,7	195,0
63064	2,08	5 x 14	11,5	124,4	231,0
63065	2,08	7 x 14	12,1	162,8	275,0
63066	2,08	12 x 14	13,4	309,0	504,0
63067	2,08	18 x 14	18,9	448,0	673,0
63068	2,08	25 x 14	22,9	632,0	966,0
63069	3,31	4 x 12	12,2	163,3	265,0
63070	3,31	5 x 12	13,4	202,2	313,0
63071	3,31	7 x 12	15,5	298,0	418,0
63072	5,26	4 x 10	15,5	258,0	417,0
63073	5,26	5 x 10	16,8	320,0	521,0
63074	5,26	7 x 10	18,2	430,0	420,0
63075	8,37	4 x 8	19,9	397,2	670,0
63076	13,3	4 x 6	23,3	595,1	975,0
63077	21,2	4 x 4	28,6	910,8	1406,0
63078	33,6	4 x 2	33,2	1413,8	2076,0
63330	42,3	4 x 1	36,4	2154,9	2626,0
710467	106,7	4 x 4/0	57,2	4166,9	5618,0

Dimensions and specifications may be changed without prior notice. (RN10)



Suitable accessories can be found in Chapter X.

- Cable Gland - HELUTOP® HT-MS-EP4