

TRAYCONTROL® 600-C flexible, oil-resistant, shielded, EMC- preferred type, exposed run TC-ER, PLTC-ER, ITC-ER, NFPA 79, torsion rated



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 III E330430 OR MTW "FLEXING" OR WTTTC 1000V OR c(UL) CIC-TC PVC/N FT4 --- LL257839 CSA AWM III A/B 90C 600V FT4 CE

Technical data

- Shielded, PVC control and power cable acc. to UL Std. 1277 and 2277
- **Temperature range**
UL/CSA TC -40°C to +90°C
flexing +5°C to +50°C
static -40°C to +105°C
- **Nominal voltage**
UL/CSA TC 600 V
UL WTTTC 1000 V
- **Test voltage** 3000 V
- **Coupling resistance**
max. 250 Ohm/km
- **Minimum bending radius**
flexing 6x cable Ø
- **Insulation resistance**
min. 20 MOhm x km
- **Radiation resistance**
up to 80x10⁶ cJ/kg (up to 80 Mrad)

Cable structure

- Finely stranded (Cl. K), bare copper acc. to AWG standards
- Special PVC conductor insulation with transparent nylon coating
- Conductor identification to DIN VDE 0293 black conductors with continuous white numbering
- GN-YE conductor, 3 conductors and above in the outer layer
- Conductors stranded in layers with optimal lay length
- Foil separator
- Braided, tinned copper shield, approx. 85% coverage
- Separator
- Special PVC outer jacket
- Black (RAL 9005) jacket
- With length marking in feet

Properties

- Self-extinguishing and flame retardant acc. to CSA FT4
- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers
- UV-resistant
- Direct burial rated
- Resistant to cleaning and disinfecting agents acc. to



Tests

- **UL:**
TC-ER (1277), WTTTC (2277) & DP-1 - (18 AWG-500 kcmil), ITC-ER & PLTC-ER - (20-12 AWG), MTW, NFPA 79, Class I Div. 2 per NEC Art. 501, NEC Art. 336 & 392, Oil Res I/II, 90°C Dry/Wet, -40°C Cold Bend
- **CSA:**
C22.2 No. 230 & 239 - c(UL) CIC-TC FT4 (18-4/0 AWG), C22.2 No. 210 - 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 conformant, shielded, flexible control and power cable up to 600 V (WTTTC 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 tray 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 conforms to EC Low-Voltage Directive 2006/95/EC.

Part no.	Cross section mm ²	No. conductors x AWG No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
11009462	0,507	2 x 20	7,3	26,6	76,0
11009463	0,507	3 x 20	7,6	33,3	88,0
11009464	0,507	4 x 20	8,1	40,8	103,0
11009465	0,507	5 x 20	8,7	48,2	118,0
11009466	0,507	7 x 20	9,3	61,5	143,0
11009467	0,507	9 x 20	10,5	76,9	174,0
11009468	0,507	12 x 20	11,6	97,3	213,0
11009469	0,507	18 x 20	13,6	136,8	284,0
11009470	0,507	25 x 20	16,2	182,9	405,0
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
11009471	0,963	9 x 18	11,6	110,3	222,0
11009472	0,963	10 x 18	12,4	122,0	244,0
63053	0,963	12 x 18	12,8	150,9	275,0
11009473	0,963	15 x 18	14,9	172,5	359,0
11009474	0,963	16 x 18	14,9	181,4	372,0
63054	0,963	18 x 18	15,6	201,8	402,0
11009475	0,963	19 x 18	15,6	210,7	420,0
63055	0,963	25 x 18	18,0	280,7	543,0

Part no.	Cross section mm ²	No. conductors x AWG No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
11009476	0,963	27 x 18	18,4	307,6	576,0
11009477	0,963	34 x 18	19,7	369,9	662,0
11009478	0,963	37 x 18	20,3	406,1	734,0
11009479	0,963	41 x 18	22,7	448,8	865,0
11009480	0,963	50 x 18	24,5	537,4	1013,0
11009481	0,963	61 x 18	26,0	665,7	1205,0
59855	1,31	2 x 16	8,4	43,0	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
11009482	1,31	6 x 16	10,9	100,0	196,0
63058	1,31	7 x 16	10,9	106,6	216,0
11009483	1,31	8 x 16	11,7	121,7	240,0
11009484	1,31	9 x 16	12,5	141,8	265,0
11009485	1,31	10 x 16	14,3	157,2	323,0
63059	1,31	12 x 16	14,7	193,5	365,0
11009486	1,31	14 x 16	15,3	209,4	405,0
11009487	1,31	15 x 16	16,1	223,8	430,0
11009488	1,31	16 x 16	16,1	236,2	448,0
63060	1,31	18 x 16	16,8	285,3	499,0
11009489	1,31	19 x 16	16,8	289,9	524,0
11009490	1,31	20 x 16	17,8	305,5	552,0

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Part no.	Cross section mm²	No. conductors x AWG No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
63061	1,31	25 x 16	19,5	371,4	662,0
11009491	1,31	27 x 16	19,9	400,0	699,0
11009492	1,31	30 x 16	20,6	439,5	759,0
11009493	1,31	34 x 16	23,1	494,7	908,0
11009494	1,31	40 x 16	23,9	571,3	1022,0
11009495	1,31	41 x 16	24,7	586,9	1052,0
11009496	1,31	50 x 16	26,8	729,4	1263,0
11009497	1,31	61 x 16	28,3	871,6	1476,0
11009498	2,08	2 x 14	9,4	60,4	129,0
63062	2,08	3 x 14	9,8	76,5	161,0
63063	2,08	4 x 14	10,6	102,7	195,0
63064	2,08	5 x 14	11,5	124,4	231,0
11009499	2,08	6 x 14	12,5	147,2	263,0
63065	2,08	7 x 14	12,5	162,8	290,0
11009500	2,08	9 x 14	15,2	211,0	390,0
11009501	2,08	10 x 14	16,3	233,6	432,0
63066	2,08	12 x 14	16,9	288,7	504,0
11009502	2,08	15 x 14	18,6	353,6	603,0
11009503	2,08	16 x 14	18,6	372,8	628,0
63067	2,08	18 x 14	19,5	415,2	689,0
11009504	2,08	19 x 14	19,5	434,4	716,0
63068	2,08	25 x 14	23,7	563,6	997,0
11009505	3,31	2 x 12	10,3	86,3	165,0
11009506	3,31	3 x 12	10,8	118,6	208,0
63069	3,31	4 x 12	11,8	163,3	265,0
63070	3,31	5 x 12	12,8	202,2	313,0
11009507	3,31	6 x 12	14,7	220,4	384,0
63071	3,31	7 x 12	14,7	251,1	418,0
11009508	3,31	9 x 12	16,8	319,5	525,0
11009509	3,31	12 x 12	18,8	434,2	680,0
11009510	3,31	15 x 12	20,8	534,5	820,0
11009511	3,31	16 x 12	20,8	565,2	857,0
11009512	3,31	18 x 12	22,8	631,1	1006,0
11009513	3,31	19 x 12	22,8	661,8	1045,0

Part no.	Cross section mm²	No. conductors x AWG No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
11009514	3,31	20 x 12	23,9	697,2	1100,0
11009515	3,31	25 x 12	26,5	884,7	1354,0
11009516	5,26	2 x 10	12,3	130,1	232,0
11009517	5,26	3 x 10	13,0	181,7	299,0
63072	5,26	4 x 10	15,0	258,0	412,0
63073	5,26	5 x 10	16,3	320,0	506,0
63074	5,26	7 x 10	17,8	407,0	640,0
11009518	5,26	9 x 10	20,6	517,7	798,0
11009519	5,26	12 x 10	24,0	676,1	1013,0
11009520	5,26	18 x 10	27,9	1013,9	1530,0
11009521	5,26	19 x 10	27,9	1063,3	1591,0
11009522	5,26	25 x 10	32,4	1383,5	2034,0
11009523	8,37	3 x 8	18,1	299,6	525,0
63075	8,37	4 x 8	19,9	397,2	670,0
11009524	8,37	5 x 8	22,6	472,8	838,0
11009525	8,37	7 x 8	24,5	639,0	1074,0
11009526	13,3	3 x 6	20,1	445,1	701,0
63076	13,3	4 x 6	23,2	595,1	975,0
11009527	13,3	5 x 6	25,1	711,5	1128,0
11009528	13,3	7 x 6	27,5	994,8	1496,0
11009529	21,2	3 x 4	25,2	685,9	1101,0
63077	21,2	4 x 4	27,8	910,8	1406,0
11009530	21,2	5 x 4	30,4	1133,5	1702,0
11009531	33,6	3 x 2	29,3	1071,2	1565,0
63078	33,6	4 x 2	32,3	1413,8	2076,0
11009532	33,6	5 x 2	35,4	1729,4	2411,0
63330	42,4	4 x 1	36,4	1622,1	2626,0
11009533	53,5	4 x 1/0	37,8	2152,3	2973,0
11009534	67,4	4 x 2/0	41,1	2716,8	3628,0
11009535	84,7	4 x 3/0	43,3	3365,8	4342,0
710467	107,0	4 x 4/0	47,4	4166,9	5618,0
11009536	127,0	4 x 250 kcmil	54,9	4885,6	6503,0
11009537	175,0	4 x 350 kcmil	60,1	6769,7	8650,0
11009538	256,0	4 x 500 kcmil	70,7	9637,3	11790,0

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