

SERIES
8160

Power and Control Tray Cable, TC-ER/CIC/MTW/WTTC Nylon (THHN), Sun Res



Posa fissa, non schermati - Fixed application, unshielded



Impiego - Use

Cavi UL Listed non schermati costruiti per gli usi specificati dall'ANSI/NFPA 79, dagli articoli 336, 392, 501 del ANSI/NFPA 70 "National Electrical Code" (NEC) e dal CSA C22.1 (CE Code), anche per applicazioni in Hazardous Locations in Class I, Division 2. Possono essere impiegati per impiego fisso e mobile occasionale e non ciclico. I cavi identificati con Type TC-ER (Exposed Run) possono essere installati negli impianti industriali per le connessioni tra le canaline posa cavi (cable tray) e l'apparecchiatura senza l'impiego di condotti metallici (metal conduits) o cavi armati Type MC (Metal Clad Cable); tale tipo di connessioni viene definito Open Wiring. I cavi Type TC-ER / MTW devono rispondere ai requisiti di resistenza all'impatto richiesti per i cavi Type MC, sono oil resistant e sun resistant. Questi cavi sono certificati anche Flexible Motor Supply Cable per azionamenti a velocità variabile e Wind Turbine Tray Cable (WTTC) per applicazioni eoliche dove sono in grado di sopportare le sollecitazioni di torsione dovute al loop tra navicella e torre.

Unshielded UL Listed cables built for the uses specified by ANSI/NFPA 79, by Art. 336, 392, 501 of ANSI/NFPA 70 "National Electrical Code" (NEC) and by CSA C22.1 (CE Code), also for applications in Hazardous Locations in Class I, Division 2. They can be used for fixed and occasional and non-cyclical mobile use. The cables identified with Type TC-ER (Exposed Run) can be installed in the industrial plants for the connections between the cable trays and the equipment without the employment of metal conduits or reinforced cables Type MC (Metal Clad Cable); this type of connection is called Open Wiring. The TC-ER / MTW type cables must comply with the impact resistance requirements required for MC type cables, they are oil resistant and sun resistant. These cables are also certified Flexible Motor Supply Cable for variable speed drives and Wind Turbine Tray Cable (WTTC) for wind turbine applications where they are able to withstand the torsional stresses due to the loop between the nacelle and the tower.

Informazione. Si effettua, su richiesta, un servizio aggiuntivo di taglio a misura certificato UL ("Processed Wire").

Information. An additional UL certified cut-to-length service is carried out on request ("Processed Wire").

Dati tecnici - Technical data

Caratteristica - Characteristics	Valore/proprietà - Value/property
Conduttore Conductor	Trefolo flessibile in rame, ASTM B3, ASTM B174 Flexible copper strand, ASTM B3, ASTM B174
Isolamento Insulation	PVC/Nylon (THHN)
Distinzione conduttori Conductor distinction	Neri numerati + giallo/verde (a partire dai 3 conduttori) Black numbered + yellow/green (beginning from 3 conductors)
Riempitivi Fillers	Eventuali riempitivi centrali o laterali Central or side fillers, if any
Guaina Jacket	Miscela di PVC antiolio, colore nero oppure, su richiesta, grigio RAL 7001. Marcatura metrica. PVC compound, oil-resistant, black color or, on request, RAL 7001 gray color. Metric marking.
Temperatura di esercizio Temperature range	+90°C (dry conditions), +75°C (wet conditions) -40°C (posa fissa); -5°C (posa mobile non ciclica) -40°C (fixed); -5°C (not fixed)
Tensione nominale Voltage rating	600 V (TC/CIC/MTW), 1000 V (WTTC), 600/1000 V (IEC)
Spark test	6000 V
Raggio di curvatura Bending radius	4 volte diametro esterno del cavo (15 volte diametro esterno del cavo per movimentazioni non continue) 4 x cable outer diameter (15 x cable outer diameter for non-cyclical mobile uses)
Movimenti torsionali Torsion movements	±150° / 1 m
Riferimenti normativi costruttivi Standards of construction	UL/CSA approvals: (UL) Type TC-ER (18 AWG-1000 kcmil), MTW, WTTC, Sun Res, Oil Res I, Oil Res II, c(UL) TC-ER (18 AWG-1000 kcmil), CIC (18 AWG-4/0 AWG), Sun Res, Oil Res I, Oil Res II; Class 1, Div.2 NEC Art. 336, 392, 501; CSA C22.1 Tab.19; UL 1581, UL 1277, UL 1063, UL 2277, CSA C22.2 No.230-09 e No. 239-09 Flame res.: FT4, IEEE 1202 Other: Low Voltage Directive (LVD) 2014/35/EU
Riferimenti normativi d'impiego Standards of use	NFPA 79, NFPA 70 (NEC), UL 508a, CSA C22.1 (CE Code), CSA C22.2 No.286

Marcatura - Marking

TEKIMA 81600 – CE 4G2,08 mm² (UL) E361258 TC-ER 4x14 AWG SUN RES OIL RES I OIL RES II 600V THHN 90°C Dry / 75°C Wet FT4/IEEE 1202 -40°C or WTTC or FLEXIBLE MOTOR SUPPLY CABLE 1000V 90°C Dry or MTW 600V c(UL) CONTROL CABLE CIC/TC-ER SUN RES OIL RES I OIL RES II 600V 90°C Dry / 75°C Wet PVC/Nylon FT4 14 AWG – (prod.reference) = (metric) =

Codifiche e dimensioni - Coding and dimensions

Codice Code	Numero di conduttori Number of conductors	Sezione Size [AWG/kcmil]	Sezione Size [mm²]	Diametro Diameter [mm (inch)]	Peso Weight [kg/km (lb/mft)]
CV03GW18_81600_□□	3	18	0,823	7,3 (0.286)	77 (52)
CV03GW16_81600_□□	3	16	1,31	8,1 (0.317)	102 (69)
CV03GW14_81600_□□	3	14	2,08	9,1 (0.357)	138 (93)
CV03GW12_81600_□□	3	12	3,31	10,2 (0.400)	189 (127)
CV03GW10_81600_□□	3	10	5,26	11,9 (0.469)	277 (186)

Codice <i>Code</i>	Numero di conduttori <i>Number of conductors</i>	Sezione <i>Size [AWG/kcmil]</i>	Sezione <i>Size [mm²]</i>	Diametro <i>Diameter [mm (inch)]</i>	Peso <i>Weight [kg/km (lb/mft)]</i>
CV03GW08_81600_□□	3	8	8,37	15,9 (0.624)	471 (316)
CV03GW06_81600_□□	3	6	13,3	18,0 (0.709)	664 (446)
CV03GW04_81600_□□	3	4	21,2	22,9 (0.902)	1050 (706)
CV03GW02_81600_□□	3	2	33,6	26,8 (1.056)	1552 (1043)
CV04GW18_81600_□□	4	18	0,823	7,9 (0.309)	92 (62)
CV04GW16_81600_□□	4	16	1,31	8,7 (0.343)	123 (83)
CV04GW14_81600_□□	4	14	2,08	9,9 (0.388)	170 (114)
CV04GW12_81600_□□	4	12	3,31	11,1 (0.437)	236 (159)
CV04GW10_81600_□□	4	10	5,26	13,1 (0.514)	348 (234)
CV04GW08_81600_□□	4	8	8,37	17,4 (0.684)	589 (396)
CV04GW06_81600_□□	4	6	13,3	19,8 (0.779)	836 (562)
CV04GW04_81600_□□	4	4	21,2	25,2 (0.991)	1320 (887)
CV04GW02_81600_□□	4	2	33,6	29,5 (1.162)	1966 (1321)
CV04GW/1_81600_□□	4	1/0	53,5	36,3 (1.429)	3020 (2029)
CV04GW/2_81600_□□	4	2/0	67,4	40,2 (1.582)	3778 (2539)
CV04GW/3_81600_□□	4	3/0	85,0	42,6 (1.677)	4533 (3046)
CV04GX25_81600_□□	4	250	127	53,9 (2.122)	6928 (4655)
CV04GX35_81600_□□	4	350	177	60,9 (2.398)	9262 (6224)
CV04GX50_81600_□□	4	500	253	67,7 (2.665)	12553 (8435)
CV05GW18_81600_□□	5	18	0,823	8,5 (0.334)	110 (74)
CV05GW16_81600_□□	5	16	1,31	9,4 (0.372)	149 (100)
CV05GW14_81600_□□	5	14	2,08	10,7 (0.422)	205 (138)
CV05GW12_81600_□□	5	12	3,31	12,1 (0.476)	285 (192)
CV05GW10_81600_□□	5	10	5,26	15,0 (0.592)	448 (301)
CV05GW08_81600_□□	5	8	8,37	19,0 (0.748)	714 (480)
CV05GW06_81600_□□	5	6	13,3	22,7 (0.895)	1063 (714)
CV05GW04_81600_□□	5	4	21,2	27,6 (1.086)	1607 (1080)
CV05GW02_81600_□□	5	2	33,6	32,4 (1.277)	2397 (1611)
CV07GW18_81600_□□	7	18	0,823	9,2 (0.364)	132 (89)
CV07GW16_81600_□□	7	16	1,31	10,3 (0.406)	181 (122)
CV07GW14_81600_□□	7	14	2,08	11,7 (0.462)	253 (170)
CV07GW12_81600_□□	7	12	3,31	13,3 (0.522)	356 (239)
CV07GW10_81600_□□	7	10	5,26	16,5 (0.648)	561 (377)
CV09GW18_81600_□□	9	18	0,823	10,8 (0.425)	180 (121)
CV12GW18_81600_□□	12	18	0,823	11,8 (0.465)	221 (149)
CV12GW16_81600_□□	12	16	1,31	14,1 (0.554)	329 (221)
CV12GW14_81600_□□	12	14	2,08	16,0 (0.631)	462 (310)
CV12GW12_81600_□□	12	12	3,31	18,1 (0.715)	649 (436)
CV12GW10_81600_□□	12	10	5,26	22,5 (0.887)	1022 (687)
CV16GW18_81600_□□	16	18	0,823	13,8 (0.542)	308 (207)
CV16GW16_81600_□□	16	16	1,31	15,5 (0.609)	423 (284)
CV18GW18_81600_□□	18	18	0,823	14,4 (0.569)	328 (220)
CV18GW16_81600_□□	18	16	1,31	16,2 (0.639)	455 (306)
CV18GW14_81600_□□	18	14	2,08	18,6 (0.732)	643 (432)
CV18GW12_81600_□□	18	12	3,31	22,2 (0.872)	961 (646)
CV18GW10_81600_□□	18	10	5,26	26,2 (1.032)	1439 (967)
CV19GW18_81600_□□	19	18	0,823	14,4 (0.569)	347 (233)
CV19GW16_81600_□□	19	16	1,31	16,2 (0.639)	481 (323)
CV25GW18_81600_□□	25	18	0,823	17,0 (0.670)	458 (308)
CV25GW16_81600_□□	25	16	1,31	19,2 (0.757)	638 (429)
CV25GW14_81600_□□	25	14	2,08	23,1 (0.911)	957 (643)
CV25GW12_81600_□□	25	12	3,31	26,3 (1.035)	1351 (908)
CV25GW10_81600_□□	25	10	5,26	31,3 (1.231)	2034 (1367)
CV34GW18_81600_□□	34	18	0,823	18,9 (0.743)	595 (400)
CV34GW16_81600_□□	34	16	1,31	22,4 (0.883)	883 (593)
CV41GW18_81600_□□	41	18	0,823	22,1 (0.871)	775 (521)
CV41GW16_81600_□□	41	16	1,31	25,0 (0.984)	1079 (725)
CV50GW18_81600_□□	50	18	0,823	23,1 (0.908)	909 (611)
CV50GW16_81600_□□	50	16	1,31	26,1 (1.027)	1270 (853)

Composizione del codice - Code composition

Numero conduttori <i>Number of conductors</i>		Inserire <i>To be inserted</i>		Sezione <i>Size</i>		Inserire <i>To be inserted</i>		Colore <i>Color</i>		Inserire <i>To be inserted</i>	
2		02X		1,00 mm ² , ..., 6,00 mm ²		100, ..., 600		Grigio - <i>Gray</i>		GR	
3, ..., 25		03G, ..., 25G		10,0 mm ² , ..., 95,0 mm ²		B10, ..., B95		Nero - <i>Black</i>		NE	
				120 mm ² , ..., 185 mm ²		L12, ..., L18					
				1, 2, ..., 26 AWG		W01, W02, ..., W26					
				1/0, ..., 4/0 AWG		W/1, W/2, ..., W/4					
				250, 300, ..., 550 kcmil		X25, X30, ..., X55					