

nVent ERICO Cu-Bond Composite Cable



nVent ERICO Cu-Bond is a bare concentric stranded conductor that consists of peripheral tinned copper plated steel which protects and conceals the internal copper stranding.

This conductor is ideal for exposed electrical grounding applications where copper theft may occur due to its tinned outer strands. The conductor is difficult to cut with hand tools, but the copper core makes it easier to install than other theft deterrent conductors. The outer stranding is magnetic, which further deters thieves looking for copper.

The CC5A05CB (19 strand) is electrically equivalent to a 4 AWG (25 mm²), the CC5A20CB is electrically equivalent to a 2/0 AWG (70 mm²) and the CC5A40CB is electrically equivalent to a 4/0 AWG (120 mm²). These conductors are ideal for transmission tower, distribution pole and a wide range of above and below grade grounding applications.

FEATURES

Outer strands comprised of tinned copper-bonded steel for theft deterrence and improved corrosion resistance

Inner copper stranding is tinned for superior corrosion resistance

Copper stranding inside of conductor increases conductivity and conductor flexibility

Available in three sizes/configurations with electrical equivalency to 4 AWG, 2/0 and 4/0 AWG copper

Suitable for direct burial applications

More flexible and easier to work with than copper clad steel conductors

SPECIFICATIONS

Material: Copper;Copper-Bonded Steel

Finish: Tinned

Table 1/2

Catalog Number	Insulated	Stranding	Resistance	Fusing Capacity Equivalency	Cable Diameter Range	Cable Length
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CC5A40CB	NoEFS_CC5A40 CB	(161) Strands: (133) Tinned Copper, (27) Tinned Copper- Bonded Steel	0.18Ω/km	120mm ²	16.5 mm	61m
CC5A20CB	No	(154) Strands: (133) Tinned Copper, (21) Tin Plated Copper- Bonded Steel	0.28Ω/km	70mm ²	13.3 mm	61m
CC5A05CB	NoEFS_CC5A05 CB	(19) Strands: (3) Tinned Copper, (16) Tin Plated Copper- Bonded Steel	1.23 Ω/km	25mm ²	8.100 - 8.4 mm	76.2m

Table 2/2

Catalog Number	Conductor Code	nVent ERICO Hammerlock	Unit Weight
CC5A40CB	S7		79 kg
CC5A20CB	S5		51 kg
CC5A05CB	S1	EHL58C2G, EHL34C2G	28 kg

ADDITIONAL PRODUCT DETAILS

Weight does not include reel.

Please contact your nVent ERICO Customer Service Representative for other nVent ERICO Cadweld configurations.

ERICO CADWELD Connections for ERICO CU-BOND Composite Cable

Part Number	ERICO CU-BOND Composite Cable	ERICO CADWELD Welding Material	ERICO CADWELD PLUS Welding Material	ERICO CADWELD Connection Type	Connects To	Handle Clamp
SSCS1	CC5A05CB	32	32PLUSF20	SS	T1 Cable	L160
SSCS5	CC5A20CB	90	90PLUSF20	SS	T2 Cable	L160
SSCS7	CC5A40CB	150	150PLUSF20	SS	T3 Cable	L160
GRC16S1	CC5A05CB	65	65PLUSF20	GR	5/8" Copper-Bonded Ground Rod	L160
GRC16S5	CC5A20CB	90	90PLUSF20	GR	5/8" Copper-Bonded Ground Rod	L160
GRC16S7	CC5A40CB	115	115PLUSF20	GR	5/8" Copper-Bonded Ground Rod	L160
GRC18S1	CC5A05CB	90	90PLUSF20	GR	3/4" Copper-Bonded Ground Rod	L160
GRC18S5	CC5A20CB	90	90PLUSF20	GR	3/4" Copper-Bonded Ground Rod	L160
GRC18S7	CC5A40CB	115	115PLUSF20	GR	3/4" Copper-Bonded Ground Rod	L160
GLCCES1	CC5A05CB	32	32PLUSF20	GL	B121CE or B122CE Lug	L160
GLCCES5	CC5A20CB	45	45PLUSF20	GL	B121CE or B122CE Lug	L160
GLCCES7	CC5A40CB	65	65PLUSF20	GL	B121DE or B122DE Lug	L160
GTC16S1	CC5A05CB	90	90PLUSF20	GT	5/8" Copper-Bonded Ground Rod	L160
GTC16S5	CC5A20CB	115	115PLUSF20	GT	5/8" Copper-Bonded Ground Rod	L160
GTC16S7	CC5A40CB	200	200PLUSF20	GT	5/8" Copper-Bonded Ground Rod	L160
GTC18S1	CC5A05CB	90	90PLUSF20	GT	3/4" Copper-Bonded Ground Rod	L160
GTC18S5	CC5A20CB	115	115PLUSF20	GT	3/4" Copper-Bonded Ground Rod	L160
GTC18S7	CC5A40CB	200	200PLUSF20	GT	3/4" Copper-Bonded Ground Rod	L160
LACS1CE	CC5A05CB	45	45PLUSF20	LA	B101CEOL or B102CEOL Lug	L160
LACS5CE	CC5A20CB	65	65PLUSF20	LA	B101CEOL or B102CEOL Lug	L160
LACS7DE	CC5A40CB	90	90PLUSF20	LA	B101DEOL or B102DEOL Lug	L160

Conductor Sizes			
Cable	Diameter (Inches)	Diameter (mm)	Cross Sectional Area (mm²)
35 mm²	0.305	7.8	35
CCA05CB	0.32	8.1	33.2 (Steel) / 6.8 (Copper)
1 AWG	0.332	8.4	42.4
50 mm²	0.365	9.3	50
95 mm²	0.505	12.8	95
CC5A20CB	0.524	13.3	43.6 (Steel) / 49.9 (Copper)
4/0 AWG	0.528	13.4	107.2
120 mm²	0.567	14.4	120
300 kcmil	0.63	16	152.1
150 mm²	0.63	16	150
CC5A40CB	0.651	16.5	56.0 (Steel) / 86.9 (Copper)
350 kcmil	0.681	17.3	177.3
185 mm²	0.7	17.8	185

WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at www.nvent.com and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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