



CONNECT AND PROTECT

Grounding, Bonding and nVent ERICO Cadweld

Solutions Guide


nvent

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As a trusted industry leader, our products and services are recognized for providing labor and cost-saving solutions for customers throughout the world, while also providing the unparalleled service our customers have come to expect.

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nVent ERICO Cadweld Welding Material, Tools and Accessories

nVENT ERICO CADWELD ONE SHOT, CABLE TO GROUND ROD



Mold Family



GR (ONE SHOT)



GT (ONE SHOT)



NT (ONE SHOT)



NX (ONE SHOT)

FEATURE

- Single use ceramic mold which eliminates the need for a graphite mold and handle clamp/frame
- Produces a permanent connection that will not loosen or corrode
- Fits plain copper-bonded, threaded copper-bonded, full-size galvanized and stainless steel ground rods
- NEC® compliant



Part Number	Article Number	Mold Family	Ground Rod Diameter, Nominal	Ground Rod Diameter, Actual	Connection, Solid	Connection, Stranded
Welding Material Type: nVent ERICO Cadweld Plus						
GR1141GPLUS	165750	GR (ONE SHOT)	1/2"	11.2 – 12.9 mm	10 mm ²	10 mm ²
GR1141LPLUS	165751	GR (ONE SHOT)	1/2"	11.2 – 12.9 mm		16 mm ²
GR1141VPLUS	165752	GR (ONE SHOT)	1/2"	11.2 – 12.9 mm	50 mm ²	25 mm ² , 35 mm ²
GR1161GPLUS	165753	GR (ONE SHOT)	5/8"	14.1 – 16.1 mm	10 mm ²	10 mm ²
GR1161LPLUS	165754	GR (ONE SHOT)	5/8"	14.1 – 16.1 mm		16 mm ²
GR1161VPLUS	165755	GR (ONE SHOT)	5/8"	14.1 – 16.1 mm	50 mm ²	25 mm ² , 35 mm ²
GR1162CPLUS	165756	GR (ONE SHOT)	5/8"	14.1 – 16.1 mm		50 mm ²
GR1162GPLUS	165757	GR (ONE SHOT)	5/8"	14.1 – 16.1 mm	70 mm ²	70 mm ²
GR1162QPLUS	165758	GR (ONE SHOT)	5/8"	14.1 – 16.1 mm		95 mm ²
GR1181GPLUS	165759	GR (ONE SHOT)	3/4"	17.1 – 19.4 mm	10 mm ²	10 mm ²
GR1181LPLUS	165760	GR (ONE SHOT)	3/4"	17.1 – 19.4 mm		16 mm ²
GR1181VPLUS	165761	GR (ONE SHOT)	3/4"	17.1 – 19.4 mm	50 mm ²	25 mm ² , 35 mm ²
GR1182CPLUS	165762	GR (ONE SHOT)	3/4"	17.1 – 19.4 mm		50 mm ²
GR1182GPLUS	165763	GR (ONE SHOT)	3/4"	17.1 – 19.4 mm	70 mm ²	70 mm ²
GR1182QPLUS	165764	GR (ONE SHOT)	3/4"	17.1 – 19.4 mm		95 mm ²
GT1141GPLUS	165765	GT (ONE SHOT)	1/2"	11.2 – 12.9 mm	10 mm ²	10 mm ²
GT1141LPLUS	165766	GT (ONE SHOT)	1/2"	11.2 – 12.9 mm		16 mm ²
GT1141VPLUS	165767	GT (ONE SHOT)	1/2"	11.2 – 12.9 mm	50 mm ²	25 mm ² , 35 mm ²
GT1142GPLUS	-	GT (ONE SHOT)	1/2"	11.2 – 12.9 mm	70 mm ²	70 mm ²
GT1161GPLUS	165768	GT (ONE SHOT)	5/8"	14.1 – 16.1 mm	10 mm ²	10 mm ²
GT1161LPLUS	165769	GT (ONE SHOT)	5/8"	14.1 – 16.1 mm		16 mm ²

Part Number	Article Number	Mold Family	Ground Rod Diameter, Nominal	Ground Rod Diameter, Actual	Connection, Solid	Connection, Stranded
GT1161VPLUS	165770	GT (ONE SHOT)	5/8"	14.1 – 16.1 mm	50 mm ²	25 mm ² , 35 mm ²
GT1162CPLUS	165771	GT (ONE SHOT)	5/8"	14.1 – 16.1 mm		50 mm ²
GT1162GPLUS	165772	GT (ONE SHOT)	5/8"	14.1 – 16.1 mm	70 mm ²	70 mm ²
GT1181GPLUS	165773	GT (ONE SHOT)	3/4"	17.1 – 19.4 mm	10 mm ²	10 mm ²
GT1181LPLUS	165774	GT (ONE SHOT)	3/4"	17.1 – 19.4 mm		16 mm ²
GT1181VPLUS	165775	GT (ONE SHOT)	3/4"	17.1 – 19.4 mm	50 mm ²	25 mm ² , 35 mm ²
GT1182CPLUS	165776	GT (ONE SHOT)	3/4"	17.1 – 19.4 mm		50 mm ²
GT1182GPLUS	-	GT (ONE SHOT)	3/4"	17.1 – 19.4 mm	70 mm ²	70 mm ²
NT1141GPLUS	165777	NT (ONE SHOT)	1/2"	11.2 – 12.9 mm	10 mm ²	10 mm ²
NT1141LPLUS	165778	NT (ONE SHOT)	1/2"	11.2 – 12.9 mm		16 mm ²
NT1141VPLUS	165779	NT (ONE SHOT)	1/2"	11.2 – 12.9 mm	50 mm ²	25 mm ² , 35 mm ²
NT1161G1TPLUS	-	NT (ONE SHOT)	5/8"	14.1 – 16.1 mm		10 mm ²
NT1161GPLUS	165780	NT (ONE SHOT)	5/8"	14.1 – 16.1 mm	10 mm ²	10 mm ²
NT1161LPLUS	165781	NT (ONE SHOT)	5/8"	14.1 – 16.1 mm		16 mm ²
NT1161VPLUS	165782	NT (ONE SHOT)	5/8"	14.1 – 16.1 mm	50 mm ²	25 mm ² , 35 mm ²
NT1181GPLUS	165783	NT (ONE SHOT)	3/4"	17.1 – 19.4 mm	10 mm ²	10 mm ²
NT1181LPLUS	165784	NT (ONE SHOT)	3/4"	17.1 – 19.4 mm		16 mm ²
NT1181VPLUS	165785	NT (ONE SHOT)	3/4"	17.1 – 19.4 mm	50 mm ²	25 mm ² , 35 mm ²
NX1141GPLUS	165786	NX (ONE SHOT)	1/2"	11.2 – 12.9 mm	10 mm ²	10 mm ²
NX1141LPLUS	165787	NX (ONE SHOT)	1/2"	11.2 – 12.9 mm		16 mm ²
NX1161G1TPLUS	-	NX (ONE SHOT)	5/8"	14.1 – 16.1 mm		10 mm ²
NX1161GPLUS	165788	NX (ONE SHOT)	5/8"	14.1 – 16.1 mm	10 mm ²	10 mm ²
NX1161LPLUS	165789	NX (ONE SHOT)	5/8"	14.1 – 16.1 mm		16 mm ²
NX1161VPLUS	165790	NX (ONE SHOT)	5/8"	14.1 – 16.1 mm	50 mm ²	25 mm ² , 35 mm ²
NX1181GPLUS	165791	NX (ONE SHOT)	3/4"	17.1 – 19.4 mm	10 mm ²	10 mm ²
NX1181LPLUS	165792	NX (ONE SHOT)	3/4"	17.1 – 19.4 mm		16 mm ²
NX1181VPLUS	165793	NX (ONE SHOT)	3/4"	17.1 – 19.4 mm	50 mm ²	25 mm ² , 35 mm ²

nVent ERICO Cadweld One Shot



PERMANENT EXOTHERMIC CONNECTIONS WITHOUT THE MOLD

Cadweld One Shot produces a permanent exothermic connection to a ground rod that will not loosen, corrode or increase in resistance for the life of the installation. The convenient single-use package makes the connection to the ground rod without a mold or starting material.

Thanks to the electronic Cadweld One Shot Control Unit, welds can now be completed up to 6 ft. (1.8 m) away, increasing weld flexibility in hard-to reach areas. The refractory ceramic body on the Cadweld One Shot is more durable than conventional ceramic and resists breaking.

INSTALLATION IS EASY!



1. After preparing the ground rod and wire, position the Cadweld One Shot and attach the lead to the control unit.



2. Ignite the Cadweld One Shot with the electronic Cadweld Plus Control Unit.



3. After one minute, break off the ceramic crucible. It can also be left in place, if desired.

FEATURES

- Easy-to-use electronic ignition. No starting material needed
- Extremely durable disposable ceramic outer body eliminates the graphite mold and frame
- Produces a permanent connection that will not loosen or corrode
- Fits both plain and threaded copper-bonded and full-size steel and stainless steel ground rods
- NEC® compliant
- cULus® Listed

Part Number	Article Number	Conductor Size	nVent ERICO Sleeve
Type: Signal			
SBD50	-	3/16" Bondstrand	SBS12C
SBD51	-	5/16" Bondstrand	SBS09C
SBD55	-	35 mm ² Concentric	S17F

MOLD SEALER

FEATURE

- Ideal for sealing hot or cold molds to retard leakage from large stranded conductors
- Prolongs useful mold life when the cable opening becomes worn
- Required on certain nVent ERICO Cadweld molds such as Types HA, HB, HC, VG and VN



Part Number	Article Number	Unit Weight
T403	165280	0.907 kg

NVENT ERICO CADWELD PLUS CONTROL UNIT

FEATURE

- Battery-powered controller box designed for 600 connections with one set of batteries
- Requires no special batteries or charger
- Comes standard with high temperature lead
- Connects to the welding material ignition strip with a custom made, purpose-designed termination clip
- Sends a predetermined voltage to the ignition strip and initiates the reaction
- The PBPLUSCU control unit electronic ignitor is primarily designed for ignition of nVent ERICO Cadweld Plus WELDING MATERIAL, F80
- PBPLUSCU meets AREMA[®] C&S Manual Recommendations; Part 8.1.34, 2013



Part Number	Article Number	Cable Length	Batteries	Working Temperature	Certifications
PBPLUSCU	-	1.8 m	8 Lithium AA Batteries	-40 to 60 °C	CE, ERICO PLUSCU, cURus, NOM
PLUSCU	165738	1.8 m	8 Standard AA Batteries	-18 to 55 °C	CE, ERICO PLUSCU, cURus

All nVent ERICO Cadweld Plus connections on rail properties must be installed using nVent ERICO Cadweld Plus Welding Material, F80.

BATTERY PACK

FEATURE

- Battery, charger, and carrying case required for the ignition of nVent ERICO Cadweld Exolon welding material
- Battery operates approximately 200 connections before requiring a recharge
- Charger, all electrical connections and instructions are included in the battery case



Part Number
XLB971A1

TORCH HEAD

FEATURE

- Self-igniting propane torch head
- Squeezing the control knob produces an instant flame; releasing it extinguishes the flame
- No flame adjusting
- Burn tip remains cool during normal use
- Operates on its side or upside down
- Can withstand 60 MPH (96 KPH) winds without flareout
- Fits all standard 14.1 and 16.4 ounce (400 and 465 gram) propane cylinders



Part Number	Article Number
T111	165170

CARD CLOTH BRUSH

FEATURE

- Aids in removing oxides from conductor surfaces
- Made of short, stiff bristles
- Generally preferred for cleaning concentric conductors and busbars which are not heavily oxidized



Part Number	Article Number
T313	165040

WIRE BRUSH

FEATURE

- Aids in removing oxides from conductor surfaces
- Useful for cleaning coarse or very dirty conductors



Part Number	Article Number	Product
T314	165130	Brush with Replaceable Brush Heads
T314A	165270	Replacement Brush Heads

MOLD CLEANING BRUSH

FEATURE

- Ideal for cleaning nVent ERICO Cadweld molds
- Soft bristles minimize wear of graphite during the cleaning process
- Removes slag and particles from mold cavity, tap hole, crucible and cover



Part Number	Article Number	Type
T302A	165260	Wide
T394	162427	Narrow

MOLD CLEANER

FEATURE

- Used to remove the slag from the crucible area of the mold after making a nVent ERICO Cadweld connection



Part Number	Article Number	Mold Type
B136A	182125	Most nVent ERICO Cadweld molds using #65 welding material and smaller
B136B	182130	Most nVent ERICO Cadweld molds using #90 welding material and larger
B136F	182135	Specific nVent ERICO Cadweld molds only (See mold requirements to determine need)

RASP

FEATURE

- Used to remove rust from steel surfaces or to remove galvanizing from hot dipped galvanized steel to expose the bare steel for welding
- Curved blade makes it an efficient tool for flat surfaces



Part Number	Article Number	Product
T321	162630	Rasp
T321A	162430	Replacement Blade

CANVAS GLOVE WITH LEATHER PALM

FEATURE

- Heavy canvas gloves with leather palms



Part Number	Article Number
T378L	162422

As with all tasks, it is recommended that users consider safety first when making nVent ERICO Cadweld connections and wear appropriate safety equipment.

SAFETY GLASSES

FEATURE

- Provides protection against moderate impact hazards
- May be worn separately or over prescription glasses



Material: Polycarbonate

Part Number	Article Number
T393	162421

As with all tasks, it is recommended that users consider safety first when making nVent ERICO Cadweld connections and wear appropriate safety equipment.

DISK CONTAINER

FEATURE

- Metal container for holding disks and small nVent ERICO Cadweld accessories



Part Number	Article Number	Diameter	Height
T328	162428	76.2 mm	25.4 mm

NVENT ERICO CADWELD TOOL KIT

FEATURE

- Convenient tool kits for nVent ERICO Cadweld connection installations



Part Number	Article Number	Product
T315A	162437	Complete Kit
T343	-	Heavy-Duty Kit

TOOL BOX

FEATURE

- Metal box with removable tote tray
- Recommended for carrying tools, molds, welding material and propane torch used to make nVent ERICO Cadweld connections

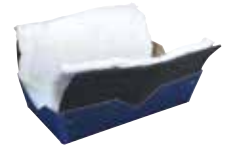


Part Number	Article Number	Length	Width	Height
T396	162436	482.6 mm	177.8 mm	190.5 mm

WELDING TRAY

FEATURE

- Recommended when using nVent ERICO Cadweld overhead or over expensive equipment
- Designed to contain a potential spill of molten weld metal



Part Number	Article Number	Height	Length	Width
XLB974B2	162435	82.55 mm	336.55 mm	177.8 mm

CERAMIC BLANKET

FEATURE

- Woven ceramic blanket that can be used to hold a hot mold or keep the work surface free of slag when cleaning the mold



Part Number	Article Number
T306	162431

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