TECHNICAL DATA SHEET

ELECTRIC SUPER™ COAL

Electric Millisecond Delay Detonator - New Series

Properties

SDS #1178

Shell Material	Copper
Shell Length	60.9 to 73.6 mm
	2.4 to 2.9 in
Legwire Material	Copper Clad Steel
Maximum Water Pressure	60 PSI 8 hrs
Shelf Life Maximum	5 years (from date of production)
Maximum Usage Temperature	66°C (150°F)
Total Resistance (Ω)	3.9*
*Includes fuse head resistance of 0.9 ± 0.1 Ω	
Net Explosive Content per 100 units	0.10 kg / 0.22 lbs

Delay Period	Nominal Firing Time (msec)	Delay Period	Nominal Firing Time (msec)
1	25	6	275
2	75	7	325
3	125	8	375
4	175	9	425
5	225	10	475

Hazardous Shipping Description

- Detonator, Electric, 1.4B, UN 0255 EX–2010080268

PRODUCT DESCRIPTION

ELECTRIC SUPER COAL is a high strength, static resistant, electric detonator designed to provide precision and accuracy in all delay periods with no overlap. The copper-clad steel legwires allow for magnetic separation. The legwires on each delay period are easy-to-read tag displays the delay period and nominal firing time. The wire is HDPE insulation for added protection from extraneous currents. The copper shell reduces the possibility of water hammer effect. The detonator has a 900 mg RDX and/or PETN base charge.

ELECTRIC SUPER COAL detonators are specifically designed for the underground coal industry, meeting all requirements of the Mine Safety and Health Administration found in CFR 30, Parts 7.69(f) and 75.1310.

APPLICATION RECOMMENDATIONS

- Recommended firing current:
  - Series wiring: a minimum of 3 amps AC or 1.5 amps DC
  - Parallel wiring: a minimum of 1 amp AC or DC per detonator
  - Series-in-parallel wiring: a minimum of 2 amps AC or DC per series
- The maximum recommended continuous firing current is 10 amps per detonator.
- NEVER use the ELECTRIC SUPER COAL with other types of Dyno Nobel electric detonators or electric detonators from another manufacturer. Wiring different brand electric detonators together in a blast circuit may result in misfires and is in violation of federal regulations. Even though some types of Dyno Nobel electric detonators are electrically compatible, they should never be planned to be used together as a standard blasting practice. Where special circumstances demand a larger number of standard delay periods, always contact a Dyno Nobel representative for specific recommendations before planning the blast design.
- NEVER use electric detonators near radio frequency transmitters unless in accordance with IME SLP 20.

Product Disclaimer: Please see reverse side.

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Properties Cont.

Packaging

Length		Case Weight		Wire Configuration	Quantity per		Product Code
m	ft	lb	kg		Case	NEQ (g)	
4.9	16	6.1	2.8	Short Fold	40	40	ECCLxxxx016

Case Dimensions

286 x 194 x 127 mm 11¼ x 7⅝ x 5 in

Electrical Data		Electrostatic Sensitivity	
No Fire Current	0.25 amps	Double Wire to Shell	10 kV/300 pF/15 mJ
All Fire Current	1.00 amps	Pin to Pin	10 kV/300 pF/15 mJ
Series Ignition Current	1.50 amps		
No Fire Impulse	2.5 mJ/ohms		
All Fire Impulse	5.5 mJ/ohms		

RADIO FREQUENCY HAZARD ALERT

- When blasting with electric detonators, no personal communication equipment of any type should be on the blast site regardless of whether it is on or off. This includes but is not limited to: portable / hand held radios, radio modems, pagers, mobile and cell phones.
- Radio-Frequency (RF) transmitters include but are not limited to: AM and FM radio; television, radar; cellular phones and other devices that are cellular based (i.e., on-board vehicle systems like “On Star”); wireless data acquisition systems; personal data devices such as “Palm Pilots” and “Pocket PCs” with built-in cellular phones or communication systems; Pagers; and Global Positioning Systems (GPS) base stations.
- Refer to the Institute of Makers of Explosives Safety Library Publication #20 for distance / wattage parameters and guidance when using two-way radios and cell phones near electric detonators.

TRANSPORTATION, STORAGE AND HANDLING

- ELECTRIC SUPER COAL must be transported, stored, handled and used in conformity with all federal, state, provincial and local laws and regulations.
- For maximum shelf life (5 years), ELECTRIC SUPER COAL must be stored in a cool, dry, well ventilated magazine. Explosive inventory should be rotated. Avoid using new materials before the old. For recommended good practices in transporting, storing, handling and using this product, see the booklet “Prevention of Accidents in the Use of Explosive Materials” packed inside each case and the Safety Library Publications of the Institute of Makers of Explosives.
- The disposable shipping tray is not part of the legal shipping package and is used only to prevent “relative motion” while in transit. If the tray is not used, it is mandatory that all explosives shipments are properly blocked and braced.

ADDITIONAL INFORMATION – Visit **dynonobel.com** for Brochures and Case Studies related to this product.

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