

ALTRONIC III^{NG}

Ignition System for Industrial Engines

Up to 16 outputs per unit

Proven reliability and high temperature capability

Ease of maintenance with removable back cover

High output option

Long spark duration coil option

CSA-certified for Class I, Division 2, Group D hazardous areas

Altronic III^{NG} is a self-powered, low-tension, capacitor discharge ignition system for 3- to 16-cylinder, 2- or 4-cycle engines. Powered from a 12-pole permanent magnet alternator.

Altronic III^{NG} provides superior performance throughout the engine's operating range. Its basic design features—permanent magnet alternator; easily serviced, removable back cover containing all electronics; and simple, reliable electronic circuitry—have made Altronic III^{NG} the standard of the industry on medium-to-large industrial gas engines.

Altronic III^{NG}'s mechanical design matches the long life inherent in the electronic circuitry. Sealed ball bearings used throughout are large and underloaded. The alternator has a smooth rotating cycle—a characteristic which contributes to prolonged bearing

and gear life. Synthetic elastomer couplings ensure minimal wear while dampening engine drivetrain vibration.

Options for the Altronic III^{NG} ignition system include standard or long spark duration coils to satisfy the needs of any application. Altronic III^{NG} offers completely electronic control of ignition timing. A variety of shielded ignition components are available for Class I, Division 2, Group D hazardous areas.



Altronic, LLC – A Member of the Hoerbiger Group



CERTIFIED
CLASS 1, DIV 2
GROUP D

Superior Performance

Altronic III^{NG} provides strong performance over the entire engine operating range. A low starting speed capability—typically 30 RPM, 2-cycle or 60 RPM, 4-cycle—is made possible by the 12-pole permanent magnet alternator. Delivered spark duration at typical engine KV demand levels is a critical factor for smooth, consistent engine performance. Altronic III^{NG}, using 501061 standard coil gives excellent performance, and the 591010 long-duration coil provides the extended duration required for lean mixture or non-standard fuel applications.

STANDARD OUTPUT			HIGH OUTPUT	
IGNITION COIL	MAX. KV	SPARK DURATION	MAX. KV	SPARK DURATION
501061	34KV	250 usec @ 10KV	40KV	360 usec @ 10KV 200 usec @ 20KV
591010	34KV	450 usec @ 10KV	40KV	550 usec @ 10KV 360 usec @ 20KV

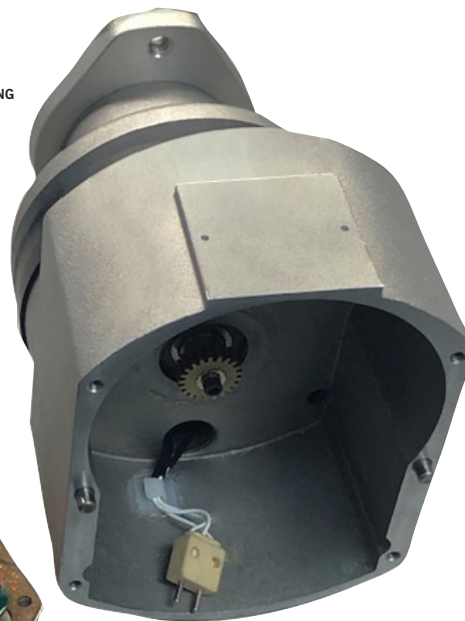
UNSHIELDED COILS
 501061 – Standard
 591010 – Long Duration



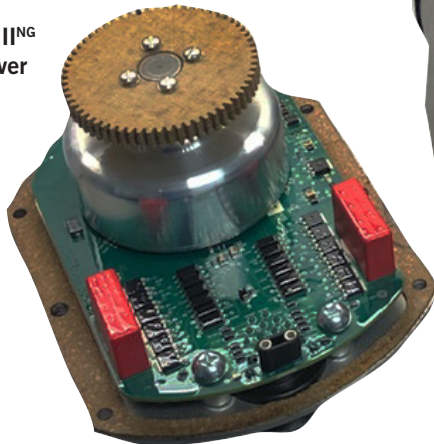
Low Maintenance Design and Ease of Service

Altronic III^{NG} has been designed to be as maintenance free as possible. Tens of thousands of Altronic III units in successful field operations since 1968 have resulted in a design evolution to the present field proven form. All bearings are sealed ball bearings. The internal gears are large and underloaded. When service is required, Altronic III^{NG} is designed to make it easy. All electronic components are mounted on the back cover assembly which is easily removed from the alternator section of the unit.

**Altronic III^{NG}
 Alternator
 Section**



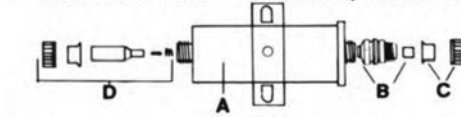
**Altronic III^{NG}
 Back Cover**



Shielded Components

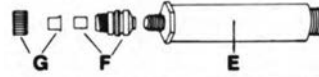
Shown below are the various shielded coil assembly and lead options. Altronic primary and spark plug cables are fabricated from Teflon® tubing covered with stainless steel braid. All components are CSA certified/FMS approved for Class I, Division 2, Group D hazardous locations.

SHIELDED COIL 501061*S, 591010-S



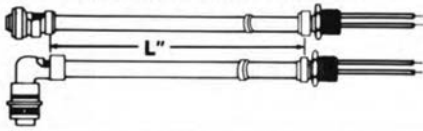
COIL NO.	DESCRIPTION	INCLUDES
501061-S 591010-S	Shielded Coil - Standard Shielded Coil - Long Duration	A
501061-S-2 591010-S-2	Coil w/Primary & Sec. Fittings	A + B + C + D
501061-S-5 591010-S-5	Coil w/Secondary Fittings	A + D

INTEGRAL COIL 591007, 591011A, 591011B



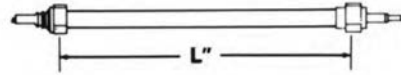
COIL NO.	DESCRIPTION	INCLUDES
591007 591011A 591011B	Coil 1"-20 x 5.6" long Coil 13/16"-20 x 6.1" long Coil 13/16"-20 x 10.8" long	E
591007-2 591011A-2 591011B-2	Coil with Primary Fittings	E + F + G

SHIELDED PRIMARY CABLE



PART NO.	CONNECTOR TYPE	LENGTH L*
593022-L*	Straight	6", 9", 12", 15", 18", 24", 30", 36", 42", 48", 54", 60", 72"
593027-L*	Right Angle	48", 54", 60", 72"

SHIELDED SPARK PLUG LEAD



PART NO.	SPARK PLUG-WELL DEPTH	LENGTH L*
593020-L*	3/4" - 20 1"	10", 13" 16", 18"
593030-L*	3/4" - 20 2"	16", 18"

Altronic Shielded Coils

Shielded coils cover all application requirements with external types (standard and long-duration) and integral coils mounting directly to either 1"-20 or 13/16"-20 thread spark plugs.

**591012
FLANGE-MOUNT
COIL**
Long-duration



**501061-S
SHIELDED COIL**
Standard

**591010-S
SHIELDED COIL**
Long-duration



591007 INTEGRAL COIL
1"-20 thread, 5.6" length



591011 A INTEGRAL COIL (not shown)
13/16"-20 thread, 6.1" length

591011 B INTEGRAL COIL
13/16"-20 thread, 10.8" length

Applications

AJAX*
BUDA
CATERPILLAR
CHICAGO PNEUMATIC
CLARK
CLIMAX
COOPER BESSEMER
CUMMINS*
DETROIT DIESEL*
DEUTZ*
DAIHATSU*
DORMAN*
FAIRBANKS MORSE
GANZ MAVAG*
INGERSOLL RAND
JENBACHER*
KOSAN FRICHS*
M.A.N.-BRONS*
M.E.P.
MWM*
NIIGATA*
ROILINE
SACM*
SUPERIOR*
WAUKESHA*
WORTHINGTON
YANMAR*

*Used on OEM basis by this engine manufacturer.

altronic
HOERBIGER Engine Division

712 Trumbull Avenue / Girard, Ohio 44420
(330) 545-9768 / Fax: (330) 545-3231
www.altronic-llc.com Email: sales@altronic-llc.com