



## AIR/FUEL RATIO CONTROL FOR CARBURETED ENGINES AccuNOx™ SERIES

- OPTIMIZES PERFORMANCE OF 3-WAY CATALYTIC CONVERTERS
- DESIGNED FOR COST-SENSITIVE, LOWER HORSEPOWER APPLICATIONS
- SINGLE AND DUAL BANK MODELS AVAILABLE
- SIMPLE INSTALLATION:
  - NO MODIFICATIONS TO FUEL LINE OR AIR INDUCTION SYSTEM
  - NO AIR/GAS SUPPLY LINE REQUIRED
- BUILT-IN CATALYTIC CONVERTER OVER-TEMPERATURE PROTECTION
- MULTIPLE LED'S FOR SYSTEM STATUS
- CSA-CERTIFIED, CLASS I, DIVISION 2, GROUP D
- WEATHER-RESISTANT NEMA-4X ENCLOSURE

The Altronic AccuNOx air/fuel ratio controllers are designed for application to both naturally-aspirated and turbocharged, carbureted gas engines. They operate in conjunction with a 3-way catalytic converter to control exhaust emissions to very low levels. Their moderate cost and simple installation make them ideal choices for all applicable gas engines, particularly lower horsepower models.

Model 691301 has one output and can be applied to any engine having one carburetor. Model 691302 has dual input/output channels for use on engines with two carburetors.

The system operates by biasing the fuel pressure regulator with air manifold vacuum or pressure, utilizing a hazardous area approved AccuNOx control valve. Closed-loop control of the air/fuel ratio is achieved by raising and lowering fuel pressure to a value where the exhaust oxygen level matches the controller setpoint. No modifications to the existing fuel or air system are required. The engine's air/fuel ratio is maintained in a very narrow range allowing proper operation of a 3-way catalytic converter. Simple operator controls, along with an LCD display for each carburetor, permit easy on-site adjustment and monitoring.

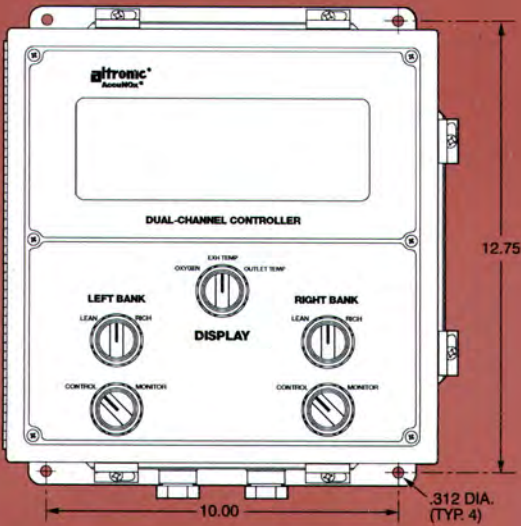
The AccuNOx controllers are equipped for temperature monitoring of exhaust and converter inlet/outlet temperatures; additionally, an over-temperature protection alarm is included for the converter outlet point. LCD readout(s) provide display of oxygen sensor levels and monitored temperatures. Additionally, there are LED's for indication of system status. The AccuNOx system is certified by Canadian Standards Association for use in Class I, Division 2, Group D areas.



CERTIFIED  
CLASS I, DIVISION 2, GROUP D

# DIMENSIONS

12.0" W. X 13.5" H. X 4.00" D.



NOTE: OUTSIDE ENCLOSURE DIMENSIONS: 12.0" X 12.0"

# SPECIFICATIONS

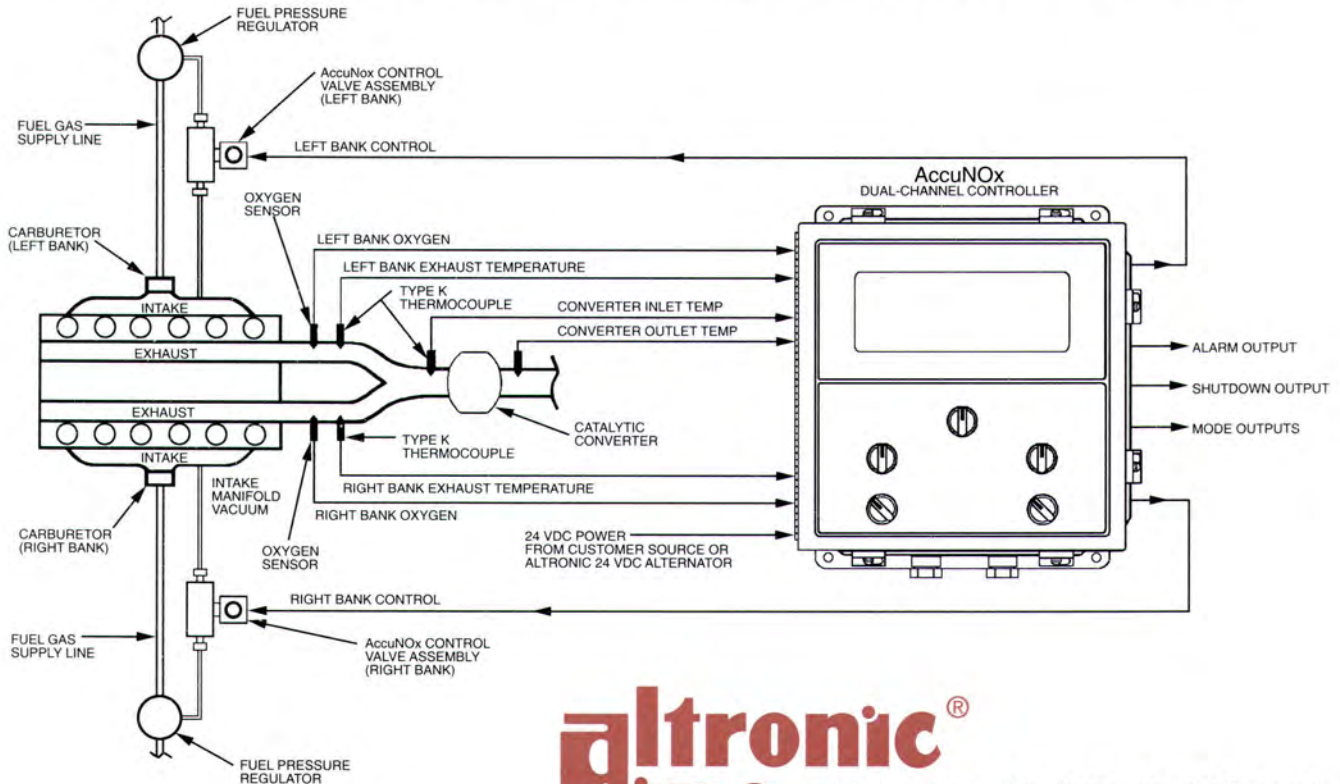
MODEL	SINGLE CHANNEL	DUAL CHANNEL
<b>PART NO.</b>	<b>691301</b>	<b>691302</b>
Oxygen Sensor Inputs	1	2
Optional Type K Thermocouple Inputs		
Exhaust Manifold Converter Inlet	1	2
Converter Inlet	-	1
Converter Outlet	1	1
Control Valve Outputs	1	2
Alarm Outputs	1	1
Display	1 LCD	2 LCD
Power Requirement	18-30 Vdc, 5 Amps	
Temperature Range	-40° F. to +158° F. / -40° C. to +70° C.	

# ORDERING INFORMATION

		NUMBER OF CARBURETORS	
		SINGLE	DUAL
691301	Controller, Single	1	-
691302	Controller, Dual	-	1
690185-KT	Control Valve Kit	1	2
610621	Oxygen Sensor	1	2

NOTE: Optional type K ungrounded thermocouples are purchased separately

# TYPICAL INSTALLATION – NORMALLY ASPIRATED “V” ENGINE



**altronic<sup>®</sup>**  
**inc.**

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