

GTI TECHNICAL BULLETIN

GTI TB 100

OCTOBER 13, 2014

GTI EMISSIONS TEST RESULTS

As part of the process of obtaining aftermarket certification of the GTI Bi-Fuel® system with the Air Resources Board of the State of California (CARB), Altronic commissioned extensive emissions testing of the GTI system with two CARB approved, independent, third-party emissions test laboratories. These tests were conducted to ISO 8178 using stringent CARB and EPA standards and procedures. Following initial set up, Altronic and its representatives were not permitted to tamper with the system through a specified 125-hour continuous run period in bi-fuel operation and during the emissions sampling period immediately following. At the conclusion of the test period, the data was processed and submitted to CARB, independent of Altronic.

The results below illustrate the emissions from the two sample engines in both the 100% diesel baseline test and bi-fuel operation in the weighted average 5-mode test specified by ISO 8178. The results demonstrate a clear reduction in regulated emissions (NOx+NMHC, CO and PM) against both the baseline test and against EPA and CARB standards for these engines.

A copy of the GTI CARB certification containing these results is available upon request or it can be obtained directly from the CARB website.

MTU18V2000 - Tier II

g/kW-hr (weighted average)		NOx + NMHC	CO	PM	NOx	NMHC	CO2
EPA Standard		6.40	3.50	0.20			
CARB Cert		5.50	1.60	0.16			
Diesel Baseline		5.57	1.10	0.18	5.30	0.27	773.80
Bi-Fuel Operation	with DOC	3.62	0.30	0.11	3.50	0.12	578.60
Reduction in Bi-Fuel Mode		35.0%	72.7%	38.9%			25.20%

Weighted average of 5-mode test conducted to ISO 8178

Tests conducted by CARB approved third party

Detroit Diesel Series 60 - Tier III

g/kW-hr (weighted average)		NOx + NMHC	CO	PM	NOx	NMHC
EPA Standard		4.00	3.50	0.20		
CARB Standard		4.00	3.50	0.20		
CARB Cert		3.80	1.10	0.18		
Bi-Fuel Operation	with DOC	3.78	0.06	0.07	2.90	0.88
Reduction in Bi-Fuel Mode		0.5%	94.5%	60.0%		

Weighted average of 5-mode test conducted to ISO 8178

Tests conducted by CARB approved third party

CARB does not certify the GTI Bi-Fuel® system as an emissions reduction product.
CARB Certification does not represent a product endorsement.