



## ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B64/P1  
UNIQUE ID NUMBER: 12GE150  
COMBUSTOR: TAPS  
ENGINE TYPE: TF

BYPASS RATIO: 9.0  
PRESSURE RATIO ( $\pi_{00}$ ): 40.5  
RATED THRUST ( $F_{00}$ ) (kN): 298.0

## REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	1.2	28.8	35.2	9.8
AS % OF ORIGINAL LIMIT	5.9	24.4	29.1	55.8
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			36.4	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			40.0	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			44.0	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			49.5	

## DATA STATUS

- PRE-REGULATION  
x CERTIFICATION  
- REVISED (SEE REMARKS)

## TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
x DEDICATED ENGINES TO PRODUCTION STANDARD  
- OTHER (SEE REMARKS)

## EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
(ANNEX 16 VOLUME II)

## CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)

x OUT OF PRODUCTION (DATE: - )  
- OUT OF SERVICE (DATE: - )

## MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
TAKE-OFF	100	0.7	2.278	0.02	0.18	25.74	0.0
CLIMB OUT	85	2.2	1.876	0.02	0.36	15.36	0.0
APPROACH	30	4.0	0.618	0.06	2.91	9.11	4.3
IDLE	7	26.0	0.210	0.64	19.73	4.37	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			819	224	7003	9049	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				0.8	23.5	30.4	7.6
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.0	0.5	0.1	2.0
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.72-0.8	23.07-23.99	30.21-30.46	5.26-8.96

## ACCESSORY LOADS

POWER EXTRACTION 0 (kW)  
STAGE BLEED 0 (% CORE FLOW)

AT All POWER SETTINGS  
AT All POWER SETTINGS

## ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.4-98.6
TEMPERATURE (K)	280.5-299
ABS HUMIDITY (kg/kg)	0.00345-0.00716

## FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	15.3

MANUFACTURER: General Electric Company  
TEST ORGANIZATION: General Electric Company  
TEST LOCATION: PTO, Ohio  
TEST DATES: 29/09/2009-03/10/2009

NO<sub>x</sub> REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

## REMARKS

1. Ref. GE REPORT R2010AE595
2. Engine S/N 956-108/2
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. NO<sub>x</sub> levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements:

x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)