



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B54/P2  
UNIQUE ID NUMBER: 07P27GE230  
COMBUSTOR: TAPS  
ENGINE TYPE: TF

BYPASS RATIO: 9.5  
PRESSURE RATIO ( $\pi_{00}$ ): 35.4  
RATED THRUST ( $F_{00}$ ) (kN): 255.3

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	2.5	31.5	25.5	1.2
AS % OF ORIGINAL LIMIT	12.6	26.7	23.0	6.7
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			28.8	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			32.8	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			36.6	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			41.9	

For non-volatile particulate matter (nvPM) emissions, please refer to the ICAO Engine nvPM Emissions Data Sheet.

### DATA STATUS

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

### TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
- 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)  
- OUT OF PRODUCTION (DATE: - )  
- OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	1.903	0.01	0.35	14.59	0.3
CLIMB OUT	85	2.2	1.576	0.02	2.10	10.20	0.3
APPROACH	30	4.0	0.522	0.06	2.73	8.72	0.4
IDLE	7	26.0	0.192	1.33	19.22	4.16	0.5
LTO TOTAL FUEL (kg) or EMISSIONS (g)			713	410	6562	5627	-
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)				1.6	25.7	22.0	1.0
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.2	0.5	0.6	0.3
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				1.42-1.73	25.1-26.12	21.67-22.72	0.74-1.34

### ACCESSORY LOADS

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

AT All POWER SETTINGS  
AT All POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.9
TEMPERATURE (K)	293.4
ABS HUMIDITY (kg/kg)	0.007

### FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	16.33

MANUFACTURER: General Electric Company  
TEST ORGANIZATION: GE Aerospace  
TEST LOCATION: PTO, Ohio, USA  
TEST DATES: 24/05/2023-31/05/2023

### 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

- Engine S/N 958-859/1
- Ref. GE Report R2022AE169/Rev.0

Compliance with Fuel Venting requirements:

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