



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-1B67/P2  
UNIQUE ID NUMBER: 07P27GE233  
COMBUSTOR: TAPS  
ENGINE TYPE: TF

BYPASS RATIO: 9.0  
PRESSURE RATIO ( $\pi_{oo}$ ): 42.0  
RATED THRUST ( $F_{oo}$ ) (kN): 308.7

### REGULATORY DATA

| CHARACTERISTIC VALUE:                        | HC  | CO   | NO <sub>x</sub> | SMOKE NUMBER |
|--|-----|------|-----------------|--------------|
| D <sub>p</sub> /F <sub>oo</sub> (g/kN) or SN | 1.2 | 21.0 | 36.9            | 1.2          |
| AS % OF ORIGINAL LIMIT                       | 6.0 | 17.8 | 29.8            | 7.1          |
| AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )      |     |      | 37.2            |              |
| AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )      |     |      | 40.6            |              |
| AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )      |     |      | 44.6            |              |
| AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )      |     |      | 49.9            |              |

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>oo</sub> ) | TIME (minutes) | FUEL FLOW (kg/s) | EMISSIONS INDICES (g/kg) |             |                 | SMOKE NUMBER |
|--|-----------------------------------|----------------|------------------|--------------------------|-------------|-----------------|--------------|
|  |                                   |                |                  | HC                       | CO          | NO <sub>x</sub> |              |
| TAKE-OFF   | 100                               | 0.7            | 2.396            | 0.02                     | 0.10        | 27.07           | 0.3          |
| CLIMB OUT  | 85                                | 2.2            | 1.966            | 0.01                     | 0.27        | 15.79           | 0.3          |
| APPROACH   | 30                                | 4.0            | 0.625            | 0.05                     | 1.85        | 10.10           | 0.5          |
| IDLE   | 7                                 | 26.0           | 0.212            | 0.68                     | 14.86       | 4.51            | 0.5          |
| LTO TOTAL FUEL (kg) or EMISSIONS (g)                               |                                   |                | 842              | 237                      | 5280        | 9832            | -            |
| NUMBER OF ENGINES  |                                   |                |                  | 1                        | 1           | 1               | 1            |
| NUMBER OF TESTS  |                                   |                |                  | 3                        | 3           | 3               | 3            |
| AVERAGE D <sub>p</sub> /F <sub>oo</sub> (g/kN) or AVERAGE SN (MAX) |                                   |                |                  | 0.8                      | 17.1        | 31.8            | 1.0          |
| SIGMA (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)             |                                   |                |                  | 0.1                      | 0.3         | 0.6             | 0.3          |
| RANGE (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)             |                                   |                |                  | 0.7-0.81                 | 16.79-17.33 | 31.44-32.5      | 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)