



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW308A
UNIQUE ID NUMBER: 01P07PW145
COMBUSTOR: Annular
ENGINE TYPE: MTF
BYPASS RATIO: 4.1
PRESSURE RATIO (π_{00}): 20.4
RATED THRUST (F_{00}) (kN): 30.7

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	17.5	99.6	44.8	17.1
AS % OF ORIGINAL LIMIT	89.3	84.4	55.4	52.3
AS % OF CAEP/2 LIMIT (NO _x)			69.3	
AS % OF CAEP/4 LIMIT (NO _x)			70.2	
AS % OF CAEP/6 LIMIT (NO _x)			70.7	
AS % OF CAEP/8 LIMIT (NO _x)			74.9	

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

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

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	0.360	0.00	0.83	16.74	15.0
CLIMB OUT	85	2.2	0.299	0.00	1.06	14.06	15.0
APPROACH	30	4.0	0.124	0.02	4.08	8.03	2.5
IDLE	7	26.0	0.045	6.62	38.21	3.65	1.7
LTO TOTAL FUEL (kg) or EMISSIONS (g)			154	460	2828	1300	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				15.0	92.1	42.3	15.1
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)				14.4-15.88	87.17-98.01	41.21-42.94	15-15.3

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.4-103
TEMPERATURE (K)	280-296
ABS HUMIDITY (kg/kg)	0.0028-0.009

FUEL

SPEC	Jet A-1
H/C	1.85-1.87
AROM (%)	19.5-21.5

MANUFACTURER: Pratt & Whitney Canada
TEST ORGANIZATION: PW308 Development Engineering
TEST LOCATION: Mississauga, Ontario, Canada
TEST DATES: 15/04/2000-05/09/2000

NO_x REGULATION PARAGRAPH

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

REMARKS

1. P&WC ER 3967
2. Engines E9608/01, E9606/04, E9609/01
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. NO_x levels in accordance with Part III, Chapter 2, 2.3.2 d) (CAEP/6)

Compliance with Fuel Venting requirements:

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