



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW1215G
UNIQUE ID NUMBER: 01P22PW168
COMBUSTOR: TALON X, Block-C
ENGINE TYPE: TF

BYPASS RATIO: 8.6
PRESSURE RATIO (π_{00}): 29.4
RATED THRUST (F_{00}) (kN): 67.7

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.1	32.1	38.4	3.9
AS % OF ORIGINAL LIMIT	0.5	27.0	39.0	15.0
AS % OF CAEP/2 LIMIT (NO _x)			49.0	
AS % OF CAEP/4 LIMIT (NO _x)			55.0	
AS % OF CAEP/6 LIMIT (NO _x)			59.0	
AS % OF CAEP/8 LIMIT (NO _x)			66.0	

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	0.551	0.03	0.40	20.00	3.0
CLIMB OUT	85	2.2	0.461	0.02	0.40	15.80	1.8
APPROACH	30	4.0	0.166	0.02	3.00	8.30	0.4
IDLE	7	26.0	0.065	0.02	16.00	4.80	0.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			225	4	1768	2244	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.1	26.1	33.2	3.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)				0.06-0.07	24.4-27.5	32.8-33.7	3-3.1

ACCESSORY LOADS

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

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.2-102.2
TEMPERATURE (K)	276.5-293.2
ABS HUMIDITY (kg/kg)	0.00108-0.00576

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	18-18.7

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: Pratt & Whitney
TEST LOCATION: East Hartford, CT
TEST DATES: 28/03/2019-01/04/2019

NO_x REGULATION PARAGRAPH

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

REMARKS

1. Data from certification report PWA-12113
2. Block C Combustor
3. Certification in accordance with ICAO Annex 16 Vol. II. 4th Edition, Part III, Chapter 2.

Compliance with Fuel Venting requirements:

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