



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW814GA
UNIQUE ID NUMBER: 01P22PW141
COMBUSTOR: TALON X
ENGINE TYPE: MTF

BYPASS RATIO: 5.7
PRESSURE RATIO (π_{00}): 33.6
RATED THRUST (F_{00}) (kN): 68.6

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.2	29.5	46.5	0.3
AS % OF ORIGINAL LIMIT	0.8	25.0	43.4	1.3
AS % OF CAEP/2 LIMIT (NO _x)			54.2	
AS % OF CAEP/4 LIMIT (NO _x)			59.7	
AS % OF CAEP/6 LIMIT (NO _x)			64.1	
AS % OF CAEP/8 LIMIT (NO _x)			71.2	

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

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
x 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)
- 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	0.672	0.05	0.01	22.21	0.3
CLIMB OUT	85	2.2	0.556	0.04	0.00	18.01	0.2
APPROACH	30	4.0	0.198	0.03	2.48	11.20	0.2
IDLE	7	26.0	0.070	0.07	16.67	5.34	0.2
LTO TOTAL FUEL (kg) or EMISSIONS (g)			258	13	1929	3061	-
NUMBER OF ENGINES				5	5	5	5
NUMBER OF TESTS				9	9	9	9
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.2	27.8	44.5	0.3
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.2	3.5	2.2	0.1
RANGE (D _p /F ₀₀ in g/kN, or SN)				0-0.3	23.3-31.7	40.8-46.3	0.2-0.5

ACCESSORY LOADS

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

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.1-101.7
TEMPERATURE (K)	253-303
ABS HUMIDITY (kg/kg)	0.0005-0.0149

FUEL

SPEC	Jet A-1
H/C	1.89-1.91
AROM (%)	15.6-20.1

MANUFACTURER: Pratt & Whitney Canada
TEST ORGANIZATION: PW800 Development Engineering, Production
TEST LOCATION: Longueuil & Mirabel, Quebec, Canada
TEST DATES: 23/06/2014-18/07/2019

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. P&WC ER 7572 Rev. D, includes CO-0003044 and CO-0005972.
2. Engines tested: 5738B01, GA0008B01, GA0009B01, GA0011B01, GA0020B19.
3. Export classification: EIPA NSR, DPA No, US-I 9E991, OUS-I NSR.

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)