



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW815GA
UNIQUE ID NUMBER: 01P22PW142
COMBUSTOR: TALON X
ENGINE TYPE: MTF

BYPASS RATIO: 5.7
PRESSURE RATIO (π_{00}): 34.6
RATED THRUST (F_{00}) (kN): 71.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.2	27.7	48.2	0.3
AS % OF ORIGINAL LIMIT	1.0	23.5	44.1	1.3
AS % OF CAEP/2 LIMIT (NO _x)			55.1	
AS % OF CAEP/4 LIMIT (NO _x)			60.6	
AS % OF CAEP/6 LIMIT (NO _x)			65.3	
AS % OF CAEP/8 LIMIT (NO _x)			72.6	

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	0.701	0.09	0.01	23.63	0.3
CLIMB OUT	85	2.2	0.579	0.05	0.00	18.74	0.2
APPROACH	30	4.0	0.204	0.03	2.23	11.24	0.2
IDLE	7	26.0	0.071	0.06	15.90	5.46	0.2
LTO TOTAL FUEL (kg) or EMISSIONS (g)			266	14	1870	3284	-
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	26.1	46.1	0.3
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.2	3.2	2.2	0.1
RANGE (D _p /F ₀₀ in g/kN, or SN)				0-0.5	22-29.6	42.3-47.8	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)