



## ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4077D  
UNIQUE ID NUMBER: 3PW064  
COMBUSTOR:  
ENGINE TYPE: TF

BYPASS RATIO: 6.6  
PRESSURE RATIO ( $\pi_{oo}$ ): 32.8  
RATED THRUST ( $F_{oo}$ ) (kN): 343.0

## REGULATORY DATA

\*\* DATA SUPERSEDED \*\*

SEE FOLLOWING UID FOR REVISED DATA:

10PW097

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>oo</sub> (g/kN) or SN	8.1	45.2	72.8	4.8
AS % OF ORIGINAL LIMIT	41.3	38.3	68.9	28.4
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			86.1	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			100.2	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			112.7	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			130.5	

## 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)

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

## MEASURED DATA

MODE	POWER SETTING (%F <sub>oo</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
TAKE-OFF	100	0.7	3.082	0.03	0.22	44.74	3.8
CLIMB OUT	85	2.2	2.507	0.04	0.25	35.82	2.9
APPROACH	30	4.0	0.835	0.07	0.60	12.10	0.9
IDLE	7	26.0	0.244	4.66	32.62	3.83	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1041	1805	12648	21528	-
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)				5.3	36.8	62.8	3.8
SIGMA (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)							
RANGE (D <sub>p</sub> /F <sub>oo</sub> in g/kN, or SN)							

## ACCESSORY LOADS

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

AT - POWER SETTINGS  
AT - POWER SETTINGS

## ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.1-101.6
TEMPERATURE (K)	292.8-302.6
ABS HUMIDITY (kg/kg)	0.0097-0.0112

## FUEL

SPEC	Jet A
H/C	1.92
AROM (%)	

MANUFACTURER: Pratt & Whitney  
TEST ORGANIZATION: Pratt & Whitney  
TEST LOCATION: East Hartford, CT  
TEST DATES: 15/06/1996-16/06/1996

## REMARKS

1. Data from Report PWA-6678

Compliance with Fuel Venting requirements:

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