ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: BR700-715C1-30   BYPASS RATIO: 4.6
UNIQUE ID NUMBER: 4BR004   PRESSURE RATIO (π_{oo}):   32.0
COMBUSTOR:
ENGINE TYPE: MTF   RATED THRUST (F_{oo}) (kN):   95.3

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO_X	SMOKE NUMBER
D_p/F_{oo} (g/kN) or SN	0.4	34.1	64.6	5.1
AS % OF ORIGINAL LIMIT	1.8	28.9	62.1	21.3
AS % OF CAEP/2 LIMIT (NO_X)			77.6	
AS % OF CAEP/4 LIMIT (NO_X)			90.9	
AS % OF CAEP/6 LIMIT (NO_X)			102.5	
AS % OF CAEP/8 LIMIT (NO_X)			119.3	

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)

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

MEASURED DATA

MODE	POWER SETTING ($\%F_{oo}$)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO_X	
TAKE-OFF	100	0.7	0.980	0.00	0.75	31.39	4.0
CLIMB OUT	85	2.2	0.799	0.00	0.78	22.41	3.1
APPROACH	30	4.0	0.273	0.00	3.06	11.55	1.1
IDLE	7	26.0	0.101	0.14	14.86	5.72	0.9
LTO TOTAL FUEL (kg) or EMISSIONS (g)			370	22	2655	5314	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D_p/F_{oo} (g/kN) or AVERAGE SN (MAX)				0.2	27.8	55.7	4.0
SIGMA (D_p/F_{oo} in g/kN, or SN)							
RANGE (D_p/F_{oo} in g/kN, or SN)				0.17-0.29	27.22-28.85	55.26-56.04	3.61-4.26

ACCESSORY LOADS

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

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.3-101.9
TEMPERATURE (K)	288.8-294.4
ABS HUMIDITY (kg/kg)	0.0066-0.0079

FUEL

SPEC	AVTUR
H/C	1.89
AROM (%)	17.7

MANUFACTURER: Rolls-Royce Deutschland
TEST ORGANIZATION: BMW Rolls-Royce GmbH
TEST LOCATION: Dahlewitz
TEST DATES: 07/05/1998-08/05/1998

REMARKS

1. Data from Certification Report E-TR484/98 (FR) ISS00

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

This document was prepared on 22/01/2021
Check website for latest version