



## ***European Aviation Safety Agency***

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**EASA**

**TYPE-CERTIFICATE  
DATA SHEET**

No.: EASA.A.096

**for**

**DORNIER 328 SERIES**

**Type Certificate Holder:**

**328 SUPPORT SERVICES GmbH**

P.O. Box 1252  
D-82231 Wessling,  
Germany

**Airworthiness Category: Large Aeroplanes**

For Models: Dornier 328-100  
Dornier 328-300

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The Contents of this TCDS are based on the previously issued JAA Data Sheet Nr. JAA/25/93-007 and the LBA attachments to its TCDS 2534 for 328-100 and 328-300 (all at Issue 20, 11 November 2003).

**SECTION 1: GENERAL (ALL MODELS)**

1. Data Sheet No.: TCDS EASA.A.096
2. Type: DORNIER 328
3. Airworthiness Category: Transport Category
4. Type Certificate Holder: 328 Support Services GmbH  
P.O. Box 1252  
D-82231 Wessling  
Federal Republic of Germany
- Contracted DOA Holder: 328 Design GmbH  
DOA Certificate No. EASA.21J.438  
Sonderflughafen Oberpfaffenhofen  
D-82234 Wessling  
Germany
5. Manufacturer: 328 Support Services GmbH  
POA Certificate No. : DE.21G.0002  
P.O. Box 1252  
D-82231 Wessling  
Federal Republic of Germany

## **SECTION 2: DORNIER 328-100**

### **I. General**

1. Type / Model: DORNIER 328-100
2. JAA Certification  
Application Date: November 9, 1987
3. EASA Certification Date: October 15, 1993  
(JAA Certification  
Recommendation Date: October 15, 1993)

### **II. Certification Basis**

1. Reference Application  
for National Certification: not applicable
2. National Certification  
Date: not applicable
3. National Certification  
Basis: not applicable
4. JAA Airworthiness  
Requirements: JAR 25, Large Aeroplanes  
Change 12, Amendment 88/1 (10.05.1988)  
JAR-AWO at Change1, (effective 11.29.1985)  
JAR 1, Definitions Change 4 (01.06.1987)
5. Special Conditions
- CRI B-1.1 Stalling Speeds
  - CRI B-1.2 Minimum Control Speeds
  - CRI B-1.3 Accelerate-Stop and related Performance
  - CRI B-1.5 Function and Reliability Testing
  - CRI C-1.1 Stalling Speeds for Structural Design
  - CRI C-1.2 Discrete Gust Requirements
  - CRI C-1.3 Interaction of Systems
  - CRI C-1.4 Improved Seat Safety
  - CRI C-1.5 Rapid Decompression
  - CRI C-1.6 Factors for Engine Torque
  - CRI D-1.1 Lightning Protection, Indirect Effects
  - CRI D-1.2 Landing Gear Warning
  - CRI D-1.3 Cargo and Service Doors
  - CRI D-1.4 Flap Gates
  - CRI D-7(PTC) Bullet Proof Cockpit Door
  - CRI E-1.1 Propeller Reversing System
  - CRI F-1.1 Electrical Standby Power
  - CRI F-1.2 High Intensity Radiated Fields (HIRF)
  - CRI F-1.3 Miscellaneous Electrical Requirements
  - CRI F-1.4 Barometric Scales
  - CRI K-1.1 All Weather Operations

CRI H-1 ICA for Electrical Wiring Interconnection System (EWIS)

Additional National Requirement for TC Issuance: none

Elect to comply with later effective JAR amendment: JAR 25, Large Aeroplanes, Change 12, Amendment 88/1 (18.10.1988)  
JAR 25.21 (b), Change 13, Amdt. 90/1  
JAR 25.253(a)(4), Change 13, Amdt. 90/1

Special Condition applied to post TC Modifications: CRI B-1.6 (PTC) Steep Approach Operation

Minimum Additional National Requirements for post TCUK Special Conditions Do 328-1, Modifications: Longitudinal, Directional and Lateral Trim  
For further details refer to CRI A-2.3, Issue 6

#### 6. JAA Exemptions:

CRI B-3.1 Exemption from JAR 25.205  
Stalls: Critical Engine Inoperative

CRI F-3.1 Temporary Exemption from JAR 25.1439 (b), 25.1441 (a), 25.1447 (b) and (c) Oxygen Requirements  
Note: Compliance has to be shown prior to national operational approvals.

CRI C-3.1 Exemption from JAR 25.562 (c)(5),  
HIC Values, Front Row Passenger Seats

#### 7. JAA Equivalent Safety Findings:

JAR 25.811 (e)(3) Type III Exit Handle/Illumination

JAR 25.811 (f)(3) Emergency Exit Marking  
(CRI D-5PTC)

(prior to incorp. of Mod 10): JAR 25.161 (d) Trim at One Engine Inoperative Climb (see Note 4 )

Agreement to the use of additional Acceptable Means of Compliance and Interpretations

Means of Compliance see CRI F-4.11, Issue 2  
Executive Power System  
JAA TGM/21/07 Electrical Wiring Policy  
JAA TGM/25/10 In Seat Power Supply System

8. JAA Environmental Standards:

Aircraft Noise: ICAO Annex 16, Volume I, Aircraft Noise,  
Second Edition, July 1988, Chapter 3

Aircraft Engine Emissions: ICAO Annex 16, Volume II, Aircraft Engine Emissions,  
First Edition, October 1981, Part II, Chapter 2

### III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Current issue of Type Design Definition Document  
No. TD-00300

2. Description: Standard Specification Document No.:  
AVS 001A 000 A0100 000D

3. Equipment: Equipment Register Document No. : TD-34000

4. Dimensions: Span: 20.976 m ( 68ft 9.86 in)  
Length: 21.284 m ( 69ft 9.95 in)  
Height: 7.234 m ( 23ft 8.82 in )  
Wing Area: 40.00 m<sup>2</sup> (430.50ft<sup>2</sup> ) (TOTAL AREA)

5. Engines:  
Type 1 2 Engines  
(for Mod. 00 and 10 only) Pratt & Whitney Canada Inc.  
Model: PW 119B  
JAA Data Sheet No.: JAA / E / 99-003  
Type 2 2 Engines  
(for Mod. 20 and 30 only) Pratt & Whitney Canada Inc.  
Model: PW 119C  
JAA Data Sheet No.: JAA / E / 99-003

5.1 Engine Limits: For details refer to AFM No.:  
AM-AFM-050893-ENV, Section 02-06-00, Page 1

6. Auxiliary Power Unit (APU): Allied Signal Engines (Garrett APU Div.)  
Model: 36-150 [DD], LBA TCDS 6605.  
For details refer to AFM No.: AM-AFM-050893-ENV,  
Supplement 001, Section 07-02-00, Page 1

7. Propellers: 2 Propellers,  
Hartzell Propeller Inc.  
LBA TCDS No. 32.130/87

(prior to incorp. of Mod 10) Propeller Assembly Model:  
HD-E6C-3A / E13482 ( ) K  
FAA TCDS No.: P34NE Date: 21.07.93  
(aircraft modified by  
Mod 10, 20 and Mod 30) HD-E6C-3B / E13890 ( ) K  
FAA TCDS No.: P34NE Date: 03.10.94

7.1 Propeller Limits: Max. Continuous Power: 2250 SHP  
Max. RPM: 1300 RPM

Ground Operating Limitations:

Max. Np with propeller feathered: 26.9%

Stabilised operation between: 26.9% Np and 46.2% Np – is prohibited,

Stabilised operation between: 57.7% Np and 71.2% Np – is prohibited  
whenever surface winds are from behind the propeller disc and are above 25 kts.

8. Fluids (Fuel/Oil/Additives): See Airplane Flight Manual  
AM-AFM-050893-ENV, Section 02-06-00, Pages 3 / 5

9. Fluid capacities:

| OIL CAPACITY PER ENGINE (incl. Propeller Oil System) |                |            |                  |
|--|----------------|------------|------------------|
| OIL TANK   | TOTAL OIL TANK | USABLE OIL | TOTAL OIL SYSTEM |
| LITERS   | 17.70          | 2.84       | 21.00            |
| US GALLONS   | 4.70           | 0.75       | 5.60             |

Fuel density: 0.796 Kg/L = 6.643 lb. per US gal, ISA

| MAX USABLE FUEL TANK CAPACITY |                 |                 |             |                            |  |                              |
|-------------------------------|-----------------|-----------------|-------------|----------------------------|--|------------------------------|
|                               | INNER WING TANK | OUTER WING TANK | FEEDER TANK | EACH WING TANK GROUP TOTAL | TOTAL FUEL QUANTITY                            |                              |
|                               |                 |                 |             |                            | Gravity Refuelled or Manual Pressure Refuelled | Automatic Pressure Refuelled |
| POUNDS                        | 2 182.6         | 1 395.5         | 187.4       | 3 765.5                    | 7 531.0  | 7 300.0                      |
| KILOGRAMS                     | 990.0           | 633.0           | 85.0        | 1 708.0                    | 3 416.0  | 3 311.3                      |
| US GALLONS                    | 328.5           | 210.1           | 28.2        | 566.8                      | 1 133.6  | 1 098.9                      |

For details see Maintenance Manual AM-AFM-050893-ENV, Section 02-06-00, Page 4 / 5

10. Air Speeds:

Design Speeds and Mach Numbers

Design Cruise Speed:  $V_c = 270$  KIAS from sea level to 20 000 ft  
and limiting Mach number above this altitude is  $M_c = 0.59$ .

Design Dive Speed:  $V_d = 324$  KIAS from sea level to 16 800 ft  
and the limiting Mach number above this altitude is  $M_d = 0.66$ .

Flap Design Speeds

| Flaps (degrees) | Design speed (KIAS) | Remarks                   |
|-----------------|---------------------|---------------------------|
| 12°             | 200                 | Take-off / Approach Climb |
| 20°             | 180                 | Landing / Approach Climb  |
| 32°             | 160                 | Landing                   |

Maximum Operating Limit Speeds  $V_{MO} / M_{MO}$

$V_{MO} = 270$  KIAS from sea level to 20 000 ft

$M_{MO} = 0.59$  from 20 000 ft to 31 000 ft



Manoeuvring Speed  $V_A$

$V_A = 180$  KIAS from sea level to 31 000 ft

Landing Gear Speeds

Landing gear operating speed  $V_{LO}$ :  $V_{LO} = 200$  KIAS

Landing gear extended speed  $V_{LE}$ :  $V_{LE} = 200$  KIAS

Rough Air Speeds  $V_{RA} / M_{RA}$

$V_{RA} = 185$  KIAS from sea level to 15 000 ft

$V_{RA} = 200$  KIAS from 15 000 ft to 22 000 ft

$M_{RA} = 0.46$  from 22 000 ft to 31 000 ft

Max Tire Speed

The maximum tire speed is 165 KTS ground speed (190 mph)

11. Maximum Operating

Altitude: 9 449 m ( 31 000 ft )

12. All-weather Capability: CAT II (see Note 5)

13. Maximum Weights:

(prior to incorp. of Mod 10)

|                       |                        |
|-----------------------|------------------------|
| Max Ramp Weight:      | 13 720 kg (30 247 lb.) |
| Max Takeoff Weight:   | 13 640 kg (30 071 lb.) |
| Max Landing Weight:   | 13 230 kg (29 167 lb.) |
| Max Zero Fuel Weight: | 12 260 kg (27 029 lb.) |

(after modification by Mod 10, 20 and Mod 30)

|                       |                        |
|-----------------------|------------------------|
| Max Ramp Weight:      | 14 070 kg (31 019 lb.) |
| Max Takeoff Weight:   | 13 990 kg (30 843 lb.) |
| Max Landing Weight:   | 13 230 kg (29 167 lb.) |
| Max Zero Fuel Weight: | 12 610 kg (27 800 lb.) |

14. Centre of Gravity Range:

For details refer to AFM No.: AM-AFM-050893-ENV, Section 02-03-00, pages 1/ 2

15. Datum:

For details refer to AFM No.: AM-AFM-050893-ENV, Section 01-02-00, Page 1

16. Mean Aerodynamic Cord:

MAC at Station 9378  
The MAC length is 2.037 m (80.20 in.)

17. Levelling Means:

Levelling means and measuring marks are provided at the aircraft. The details of these marks by special rivets or drillings are shown and described in the levelling drawing and Weight & Balance Manual, Doc. No. TM-WBM-190793-ENV.

18. Minimum Flight Crew:

2, (Pilot and Copilot)

19. Maximum Passenger Seating Capacity: 33 Passengers (see Note 1)

20. Exits:

| No | Type                        | Size  |
|----|-----------------------------|---|
| 1  | Entr. & Emerg. Exit Type II | 1.700m x 0.700m (5ft 6.93in. x 2ft 3.56in.) |
| 1  | Service Door                | 1.250m x 0.508m (4ft 1.21in. x 1ft 8.00in.) |
| 2  | Emerg. Exits Type III       | 0.916m x 0.508m (3ft 0.06in. x 1ft 8.00in.) |
| 1  | Emerg. Exit Top Hatch       | 0.494m x 0.522m (1ft 7.45in. x 1ft 8.55in.) |

21. Baggage / Cargo Compartments:

| Class                 | Volume                                      | Max. allowable load |
|-----------------------|---|---------------------|
| D (rear)              | 6.49 m <sup>3</sup> (229 ft <sup>3</sup> )  | 750 kg (1,653 lb.)  |
| Overhead Baggage Bins | 0.98 m <sup>3</sup> (34.6 ft <sup>3</sup> ) | 157 kg (347 lb.)    |

See Operating Instructions in Weight & Balance Manual, Document No. TM-WBM-190793-ENV

22. Wheels and Tyres:

|                    |   |
|--------------------|---|
| Main Landing Gear: | Each MLG incorporates twin 10 inch rims and 24 x 7.7 14 PR 190 mph bias ply tubeless tires    |
| Nose Landing Gear: | The NLG incorporates twin 8 inch rims and 19.5 x 6.75-8 10 PR 190 mph bias ply tubeless tires |

## IV. Operating and Service Instructions

(see Note 3)

1. Operating Instructions:

- a. Airplane Flight Manual, Document No. AM-AFM-050893-ENV
- b. Weight & Balance Manual, Document No. TM-WBM-190793-ENV
- c. Master Minimum Equipment List, Document No.: AM-MMEL-300993

2. Service Instructions:

- a. Aircraft Maintenance Manual, Document No. TM-AMM-190793-ENV
- b. Service Letters and Service Bulletins  
(see Publication Index Chapter 3, Document No. For each SB/SI etc.)
- c. Airworthiness Limitation, Document No. TM-ALD-010693-ALL
- d. Ground Handling Service Info. Manual, Document No. TM-GHSIM-301093-ALL
- e. Structural Repair Manual, Document No. TM-SRM-300493-ALL
- f. Aircraft Illustrated Parts Catalogue, Document No.: TM-AIPC-170993-ENV
- g. Wiring Manual, Document No. TM-WM-300493-ENV
- h. Maintenance Review Board Report, Document No. TM-MRB-010693-ALL
- i. Certification Maintenance Requirements, Document No. TM-CMR-010793-ALL

## II. Notes

### 1. Cabin Interior and Seating Configuration:

Approved cabin layouts might not include passenger provisions. Carriage of persons in the cabin is only permitted when an approved seating arrangement and related required passenger provisions are incorporated in accordance with the Joint Type Certification basis.

### 2. Ditching Provisions:

Compliance with operational ditching requirements of JAR 25.801, JAR 25.1411 and JAR 25.1415 has not been shown.

### 3. Current Issue of LBA/EASA Approved Documents:

The current issue of LBA/EASA approved documents, including applicable temporary AFM revisions, have to be used for safe operation of the airplane. Preceding issues of LBA approved documents become invalid with the approval date of a new issue, amendment, or revision.

### 4. JAA Equivalent Safety:

Direct compliance with JAR 25.161 (d) has been shown for aircraft modified by modifications summarized in Model Modification DO 328-100, Mod 10, 20 and Mod 30.

### 5. Airworthiness Approval for CAT II:

The airborne instruments and equipment meet the performance and design standards of the JAA Joint Certification basis as defined in CRI A-1.1, Issue 7.

Compliance with the standards referenced above, does not constitute approval to conduct CAT II operations.

### 6. Model Modification:

A Model Modification is identified by Dornier 328-100 Mod YY. A Mod identifies an aircraft model in which a specific number of dedicated type design changes, summarized in Change Notices, have been incorporated. A Mod is an engineering designation, also used to define effectivities within the operational documentation.

On request of the manufacturer, all information for operation of the Dornier 328-100, „Mod. 00“ airplanes have been removed from the LBA approved Flight Manual.

Therefore, the operation, production and modification into the model modification Dornier 328-100, „Mod. 00“ is no longer permitted.

Note: All delivered airplanes of model modification Dornier 328-100, „Mod. 00“ have been modified into airplanes of approved model modification Dornier 328-100, „Mod. 10“ or „Mod. 20“.

### 7. Applicable Serial Numbers:

The section A of this TCDS and related type certificate is applicable to all 328-100 aircraft serial numbers produced in accordance with the approved type design. The following serial numbers are declared Non-TC compliant aircraft and excluded from the TCDS due to production details and known non-conformities:

A. Former test aircraft S/No's.: 3001, 3002, 3003, 3004

B. Known destroyed aircraft: 3009, 3037, 3048, 3054, 3107

Note: Some Aircraft were involved in accidents or damaged beyond economical repair. Parts and appliances of those aircraft at the time of the accident must not be used on 328 aircraft that are released to service in accordance with this TCDS unless they receive a renewed airworthiness review certificate by the TC-holder.

### **SECTION 3: DORNIER 328-300**

#### **I. General**

1. Type / model: DORNIER 328-300
2. JAA Certification  
Application Date: 27 November 1996
3. EASA Certification Date: 6 July 1999  
(JAA Certification  
Recommendation Date: 6 July 1999)

#### **II. Certification Basis**

1. Reference Application  
for National Certification: not applicable
2. National Certification Date: not applicable
3. National Certification Basis: not applicable
4. JAA Airworthiness  
Requirements: JAR 25, Large Aeroplanes  
Change 14, Amendment 25/96/1 (27.11.1996)  
JAR-AWO at Change 2, (effective 01.08.96)  
JAR 1, Definitions Change 5 (15.07.1996)
5. Special Conditions
- |              |   |
|--------------|---|
| INT/POL/25/2 | Protection from Effects of HIRF                         |
| INT/POL/25/3 | Lightning Protection, Direct Effects                    |
| INT/POL/25/4 | Lightning Protection Indirect Effects                   |
| INT/POL/25/5 | Accelerate-Stop Distances and related Performances      |
| INT/POL/25/6 | Worn Brakes   |
| INT/POL/25/8 | Yawing Manoeuvring Conditions                           |
| INT/POL/25/9 | Fuel Tank Crashworthiness                               |
| CRI B-1.1    | Reference Stall Speed                                   |
| CRI B-1.3    | Accelerate-Stop Distance Criteria                       |
| CRI B-1.5    | Function and Reliability Testing                        |
| CRI B-1.6    | Steep Approach Landing                                  |
| CRI C-1.3    | Interaction of Systems and Structure                    |
| CRI D-1.4    | Flap Gates  |
| CRI D-4.2    | Aeroplane Wheels and Wheel-Brakes Assembly              |
| CRI D-7(PTC) | Bullet Proof Cockpit Door                               |
| CRI F-1.4    | Barometric Scales                                       |
| CRI H-1      | ICA for Electrical Wiring Interconnection System (EWIS) |
- Additional National Requirement  
for TC Issuance: CRI A-2 ANDRs and ANAR's for TC

6. JAA Exemptions: CRI F-3.1 Exemption from JAR 25.1439(b),  
25.1441 (a), 25.1447 (b)  
and (c) Oxygen Requirements
- Note: Compliance must be shown prior to  
national operational approvals.
7. JAA Equivalent Safety Findings:
- CRI D-2.1 Lavatory Fire Protection (JAR 25.854 (a))
  - CRI F-2.1 Hydraulic System Static Test,  
(JAR 25.1435 (b)(1))
  - CRI D-5 (PTC) Emergency Exit Marking  
JAR 25.811 (f)(3)
  - CRI E-4.4(PTC) Fuel Tank Expansion Space JAR 25.969

Agreement to the use of additional Acceptable Means of Compliance and Interpretations

Means Of Compliance see CRI F-4.11, Issue 2  
Executive Power System  
JAA TGM/21/07 Electrical Wiring Policy  
JAA TGM/25/10 In Seat Power Supply System

8. JAA Environmental Standards:

- Aircraft Noise: ICAO Annex 16, Volume I, Aircraft Noise,  
Third Edition, July 1993, Chapter 3
- Aircraft Engine Emissions: ICAO Annex 16, Volume II, Aircraft Engine Emissions,  
Second Edition, July 1993, Part III, Chapter 2

### III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Document No. TD-F0300  
plus Change Notice CN-F0038  
plus Change Notice CN-F0039
2. Description: Type Design Configuration Document No.:  
AVS 001D 000 A0110 000B
3. Equipment: Equipment Register Document No.: TD-34000-F0
4. Dimensions:
- Span: 20.976 m ( 68ft 10 in)
  - Length: 21.284 m ( 69ft 10 in)
  - Height: 7.239 m ( 23ft 09 in )
  - Wing Area: 40.00 m<sup>2</sup> (430.50 ft<sup>2</sup>) (TOTAL AREA)
5. Engines: 2 Engines  
Pratt & Whitney Canada Inc.  
Model: PW 306B  
JAA Data Sheet No.: JAA / E / 99-022

- 5.1 Engine Limits: For details refer to AFM No.:  
AM-AFM-050599-ENV, Section 02-06-00, Page 1
6. Auxiliary Power Unit (APU): Allied Signal Engines (Garrett APU Div.)  
Model: 36-150 [DD], LBA TCDS 6605.  
  
For details refer to AFM No.:  
AM-AFM-050599-ENV, Section 02-06-00, Page 6
7. Propellers: Not Applicable
8. Fluids (Fuel/Oil/Additives): See Maintenance Manual, Doc. No.:  
TM-AMM-010399-ENV and  
AM-AFM-050599-ENV, Section 02-06-00, Pages 5 / 8
8. Fluid capacities:

| OIL CAPACITY PER ENGINE |                |                  |
|-------------------------|----------------|------------------|
| OIL TANK                | TOTAL OIL TANK | MIN OIL TANK QTY |
| LITERS                  | 8.00           | 3.0              |
| US GALLONS              | 2.11           | 0.79             |

Fuel density: 0.796 Kg/L = 6.643 lb. per US gal, ISA

| MAX USABLE FUEL TANK CAPACITY |                 |                 |             |                            |  |                              |
|-------------------------------|-----------------|-----------------|-------------|----------------------------|--|------------------------------|
| Basic Version                 |                 |                 |             |                            |  |                              |
|                               | INNER WING TANK | OUTER WING TANK | FEEDER TANK | EACH WING TANK GROUP TOTAL | TOTAL FUEL QUANTITY                            |                              |
|                               |                 |                 |             |                            | Gravity Refuelled or Manual Pressure Refuelled | Automatic Pressure Refuelled |
| POUNDS                        | 2 349.6         | 1 447.5         | 187.9       | 3 985.0                    | 7 970.0  | 7 800.0                      |
| KILOGRAMS                     | 1 065.8         | 656.7           | 85.0        | 1 807.5                    | 3 615.0  | 3 538.0                      |
| US GALLONS                    | 353.7           | 217.9           | 28.3        | 599.9                      | 1 200.0  | 1 174.0                      |

| Extended Range Version |                |                 |                 |                      |                             |                     |
|------------------------|----------------|-----------------|-----------------|----------------------|-----------------------------|---------------------|
|                        | Front Aux Tank | LH Aft Aux Tank | RH Aft Aux Tank | Aux Tank Group Total | Both Wing Tank Groups Total | Total Fuel Quantity |
| POUNDS                 | 1052.9         | 1017.9          | 1017.9          | 3088.7               | 7 970.0                     | 11058.7             |
| KILOGRAMS              | 477.6          | 461.7           | 461.7           | 1401.0               | 3 615.0                     | 5016.0              |
| US GALLONS             | 158.5          | 153.2           | 153.2           | 464.9                | 1 200.0                     | 1664.9              |

For details see Maintenance Manual TM-AMM-010399-ENV and AM-AFM-050599-ENV, Section 02-06-00, Page 5 / 8, and AFM Supplement 10.

10. Air Speeds:

Design Speeds and Mach Numbers

Design Cruise Speed

$V_c = 270$  KIAS from sea level to 8 000 ft increasing linearly to 300 KIAS at 10 000 ft,

$V_c = 300$  KIAS from 10 000 ft to 20 700 ft,

and the limiting Mach number above this altitude (up to 35000ft, see Note 5)

is  $M_c = 0.66$ .

### Design Dive Speed

$V_d = 324$  KIAS from sea level to 5 000 ft increasing linearly to 354 KIAS at 7 000 ft,  
 $V_d = 354$  KIAS from 7 000 ft to 17 700 ft,  
 and the limiting Mach number above this altitude (up to 35000ft, see Note 5)  
 is  $M_d = 0.73$ .

### Maximum Flap Extended Speeds ( $V_{FE}$ )

| Flaps<br>(degrees) | Flap Speed<br>(KIAS) | Remarks           |
|--------------------|----------------------|-------------------|
| 12°                | 200                  | Take-off „Basis“  |
| 12°                | 205                  | Take-off „Mod 10“ |
| 20°                | 180                  | Approach          |
| 32°                | 160                  | Landing           |

### Maximum Operating Limit Speed $V_{MO}/M_{MO}$

$V_{MO} = 270$  KIAS from sea level to 8 000 ft increasing linearly to  
 $V_{MO} = 300$  KIAS at 10 000 ft  
 $V_{MO} = 300$  KIAS from 10 000 ft to 20 700 ft =  $V_C$   
 $M_{MO} = 0.66$  from 20 700 ft to 31 000 ft  
 $M_{MO} = 0.66$  at 31000 ft decreasing linearly to  
 $M_{MO} = 0.64$  at 35000 ft (see Note 5)

### Manoeuvring Speed $V_A$

$V_A = 190$  KIAS from sea level to 35 000 ft (see Note 5)

### Landing Gear Speeds

#### Landing gear operating speed $V_{LO}$ :

$V_{LO} = 200$  KIAS from sea level to 18 000 ft

#### Landing gear extended speed $V_{LE}$ :

$V_{LE} = 200$  KIAS from sea level to 18 000 ft

### Rough Air Speeds $V_{RA} / M_{RA}$

$V_{RA} = 200$  KIAS from sea level to 26 200 ft  
 $M_{RA} = 0.5$  from 26,200 ft to 35 000 ft (see Note 5)

### Max Tire Speed

The maximum tire speed is 180 KTS ground speed (210 mph)

### 11. Maximum Operating

Altitude: 9 449 m (31 000 ft)  
 10 668 m (35 000 ft) (see Note 5)

### 12. All-weather Capability:

CAT II  
 (see Note 6)

13. Maximum Weights: „Basic“ and *“Extended Range”*

|                       |                        |
|-----------------------|------------------------|
| Max Ramp Weight:      | 15 350 kg (33 841 lb.) |
| Max Takeoff Weight:   | 15 200 kg (33 510 lb.) |
| Max Landing Weight:   | 14 090 kg (31 063 lb.) |
| Max Zero Fuel Weight: | 12 610 kg (27 800 lb.) |

Maximum Weights: „Mod 10“ and *“Extended Range”*

|                       |                        |
|-----------------------|------------------------|
| Max Ramp Weight:      | 15 780 kg (34 789 lb.) |
| Max Takeoff Weight:   | 15 660 kg (34 524 lb.) |
| Max Landing Weight:   | 14 390 kg (31 724 lb.) |
| Max Zero Fuel Weight: | 13 070 kg (28 814 lb.) |

14. Centre of Gravity Range:

For details refer to AFM No.: AM-AFM-050599-ENV, Section 02-03-00, page 4.  
For *“Extended Range”* refer to AFM Supplement 010, Section 07-02-00, page 2.

15. Datum:

For details refer to AFM No.: AM-AFM-050599-ENV, Section 01-02-00, page 1.

16. Mean Aerodynamic Cord (MAC):

MAC at Station 9378  
The MAC length is 2.037 m (80.20 in.).

17. Levelling Means:

Levelling Means and the measuring marks are provided at the aircraft. The details of these marks by special rivets or drillings are shown and described in the levelling drawing and Weight & Balance Manual, Document No. TM-WBM-010399-ENV.

18. Minimum Flight Crew:

2, (Pilot and Copilot)

19. Maximum Passenger

Seating Capacity:

33 Passengers on approved seats + 3 infants younger than two years occupying a seat together with an adult (see Note 1 and Note 7).

20. Exits:

| No | Type                           | Size  |
|----|--------------------------------|---|
| 1  | Entrance & Emerg. Exit Type II | 1.700 m x 0.700 m (5ft 6.93 in. x 2ft 3.56 in.) |
| 1  | Service Door                   | 1.250 m x 0.508 m (4ft 1.21 in. x 1ft 8.00 in.) |
| 2  | Emerg. Exits Type III          | 0.916 m x 0.508 m (3ft 0.06 in. x 1ft 8.00 in.) |
| 1  | Emerg. Exit Top Hatch          | 0.494 m x 0.522 m (1ft 7.45 in. x 1ft 8.55 in.) |



## 21. Baggage / Cargo Compartments:

| Class                 | Volume                                      | Max. allowable Load |
|-----------------------|---|---------------------|
| D (rear)              | 6.49 m <sup>3</sup> (229 ft <sup>3</sup> )  | 750 kg (1,653 lb.)  |
| Overhead Baggage Bins | 0.98 m <sup>3</sup> (34.6 ft <sup>3</sup> ) | 157 kg (347 lb.)    |

See Operating Instructions in Weight & Balance Manual, Document No. TM-WBM-190793-ENV

## 22. Wheels and Tyres:

|                    |   |
|--------------------|---|
| Main Landing Gear: | Each MLG incorporates twin 14 inch rims and 25.75 x 6.75-14 210 mph bias ply tubeless tires |
| Nose Landing Gear: | The NLG incorporates twin 8 inch rims and 19.5x6.75-8 10PR 210 mph bias ply tubeless tires  |

## IV. Operating and Service Instructions

(see Note 3)

### 1. Operating Instructions

- a. Airplane Flight Manual, Document No. AM-AFM-050599-ENV
- b. Weight & Balance Manual, Document No. TM-WBM-010399-ENV
- c. Master Minimum Equipment List, Document No.: AM-MMEL-0505099-JAA

### 2. Service Instructions

- a. Aircraft Maintenance Manual, Document No. TM-AMM-010399-ENV
- b. Service Letters and Service Bulletins  
(see Publication Index Chapter 3, Document No. For each SB/SI etc.)
- c. Airworthiness Limitation Document No. TM-ALD-010599-ALL
- d. Ground Handling Service Info. Manual, Document No. TM-GHSIM-010399-ENV
- e. Structural Repair Manual, Document No. TM-SRM-010399-ENV
- f. Aircraft Illustrated Parts Catalogue, Document No.: TM-AIPC-010399-ENV
- g. Wiring Manual, Document No. TM-WM-010399-ENV
- h. Maintenance Review Board Report, Document No. TM-MRB-010599-ALL
- i. Certification Maintenance Requirements, Document No. TM-CMR-010599-ALL

## V. Notes

### 1. Cabin Interior and Seating Configuration

Approved cabin layouts might not include passenger provisions. Carriage of persons in the cabin is only permitted when an approved seating arrangement and related required passenger provisions are incorporated in accordance with the Joint Type Certification basis.

### 2. Ditching Provisions:

Compliance with operational ditching requirements of JAR 25.801, JAR 25.1411 and JAR 25.1415 has not been shown.

### 3. Current Issue of LBA Approved Documents:

The current issue of LBA/EASA approved documents, including applicable temporary revisions, have to be used for safe operation of the airplane. Preceding issues of LBA approved documents become invalid with the approval date of a new issue, amendment, or revision.

### 4. Model Modification:

A Model Modification is identified by Dornier 328-300 Mod YY. A Mod identifies an aircraft model in which a specific number of dedicated type design changes, summarized in Change Notices, have been incorporated. A Mod is an engineering designation, also used to define effectivities within the operational documentation.

Note: With Change Notice CN-F0053 a MTOW increase (referred to as „Mod 10“) of the Dornier 328-300 (referred to as „Basis“) has been introduced as Dornier 328-300 Mod 10. All data in this Data Sheet are valid for Dornier 328-300 as well as for the Dornier 328-300 Mod 10 unless otherwise stated.

Serial numbers for Mod. 10: 3145, 3147, 3149, 3150, 3155, 3156, 3157, 3160 and subsequent.

### 5. Extension of Max Operating Altitude

With Change Notice CN-F0004 the Option 020F005 (Extension of max. Operating Altitude from 31000 ft to 35000ft) under consideration of PTC CRI G-2.1 has been introduced.

### 6. Airworthiness Approval for CAT II:

With Change Notice CN-F0013 the Option 020F006 (Approach Mode ILS CATII) has been introduced. The airborne instruments and equipment meet the performance and design standards of the JAA Joint Certification basis.

Compliance with the standards referenced above, does not constitute approval to conduct CAT II operations.

### 7. Airworthiness Approval for Extended Range Operation:

With Change Notice CN-F0005 the Option 033F003 (Extended Range) and with CN-F0564 the Option 033F011 (Extended Range with Stand Alone Fuel Leveling and Gauging) have been introduced.

The extended range options are valid for 328-300 and 328-300 Mod 10.

### 8. Applicable Serial Numbers:

The section B of this TCDS and related type certificate is applicable to all 328-300 aircraft serial numbers produced in accordance with the approved type design. The following serial numbers are declared Non-TC compliant aircraft and excluded from the TCDS due to production details and known non-conformities:

A. Former test aircraft S/No's.: 3002, 3099, 3102

B. Known destroyed aircraft: 3105

Note: Some Aircraft were involved in accidents or damaged beyond economical repair. Parts and appliances of those aircraft at the time of the accident must not be used on 328 aircraft that are released to service in accordance with this TCDS unless they receive a renewed airworthiness review certificate by the TC-holder.

## **SECTION 4: ADMINISTRATIVE**

### **I. Acronyms and Abbreviations**

N/A

### **II. Type Certificate Holder Record**

|   |   |
|---|---|
|   | Dornier Luftfahrt GmbH<br>LBA Approved Design Organisation<br>Certificate No.: LBA.JA.002<br>D-82230 Wessling<br>Federal Republic of Germany    |
| <i>08<sup>th</sup> August 2000 –<br/>27<sup>th</sup> July 2003:</i> | Fairchild Dornier GmbH<br>LBA DOA Certificate No.: LBA.JA.002<br>D-82230 Wessling<br>Federal Republic of Germany                                |
| <i>28<sup>th</sup> July 2003 -<br/>06 June 2006:</i>                | AvCraft Aerospace GmbH<br>LBA DOA Certificate No.: LBA.JA.002<br>D-82231 Wessling<br>Federal Republic of Germany                                |
| <i>Since 07 June 2006:</i>  | 328 Support Services GmbH<br>P.O. Box 1252<br>D-82231 Wessling<br>Federal Republic of Germany   |
| <i>Contracted DOA Holder:</i>                                       |   |
| <i>Since 07 June 2006</i>   | GCT Design Organisation GmbH<br>DOA Certificate No. EASA.21J.033<br>Sonderflughafen Oberpfaffenhofen<br>Geb. 335<br>D-82234 Wessling<br>Germany |
| <i>Since 01 August 2011:</i>  | 328 Design GmbH<br>DOA Certificate No. EASA.21J.438<br>Sonderflughafen Oberpfaffenhofen<br>D-82234 Wessling<br>Germany                          |

### III. Manufacturer Record

|  |  |
|--|--|
|  | Dornier Luftfahrt GmbH<br>LBA Approved Production Organisation<br>Certificate No.: LBA.G.002<br>D-82230 Wessling<br>Federal Republic of Germany  |
| <i>08<sup>th</sup> August 2000 –<br/>30<sup>th</sup> June 2003</i> | Fairchild Dornier GmbH<br>LBA Approved Production Organisation<br>Certificate No.: LBA.G.0002<br>D-82230 Wessling<br>Federal Republic of Germany |
| <i>01<sup>st</sup> July 2003 -<br/>04 July 2006</i>                | AvCraft Aerospace GmbH<br>LBA Approved Production Organisation<br>Certificate No.: LBA.G.0002<br>D-82231 Wessling<br>Federal Republic of Germany |
| <i>Since 04 July 2006 :</i>  | 328 Support Services GmbH<br>POA Certificate No. : DE.21G.0002<br>P.O. Box 1252<br>D-82231 Wessling<br>Federal Republic of Germany               |

### III.Change Record

| <b>Issue</b> | <b>Date</b>     | <b>Changes</b>   | <b>TC issue</b>              |
|--------------|-----------------|--|------------------------------|
| Issue 01     | 07 June 2006    | Initial Issue  | Initial Issue,<br>18/03/2010 |
| Issue 02     | 18 March 2010   | CRIs inserted<br>Certain S/Ns removed  | 18/03/2010                   |
| Issue 03     | 26 January 2011 | CRI listing sorted D328-100 (page 8)<br>CRI H-1 added for D328-300 (page 17) | 18/03/2010                   |
| Issue 4      | 01 August 2011  | Contracted DOA Organisation Changed  | 18/03/2010                   |

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