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## TYPE-CERTIFICATE DATA SHEET

### **DORNIER 228 Series**

**Type Certificate Holder:**  
**General Atomics AeroTec Systems GmbH**  
Claude-Dornier-Strasse 1  
D-82234 Wessling  
Germany

**For Models:** DORNIER 228-100  
DORNIER 228-200  
DORNIER 228-101  
DORNIER 228-201  
DORNIER 228-202  
DORNIER 228-212

**Issue 6, 11 May 2021**

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## **General for all Models**

1. Data Sheet No.: TCDS A.359
2. Type: **Dornier 228** (renamed, previously Do 28)
3. Type Certificate Holder: Dornier Luftfahrt GmbH  
LBA Approved Design Organisation  
Certificate No.: LBA.JA.002  
D-82230 Wessling  
Federal Republic of Germany
- 01 June 2000 –  
27 July 2003:* Fairchild Dornier GmbH  
LBA DOA Certificate No.: LBA.JA.002  
D-82230 Wessling  
Federal Republic of Germany
- 28 July 2003 –  
14 March 2021:* RUAG Aerospace Services GmbH  
DOA Certificate No: EASA.21J.038  
Oberpfaffenhofen Airfield  
P.O. Box 1253  
D-82231 Wessling  
Federal Republic of Germany
- Since 15 March 2021:* General Atomics AeroTec Systems GmbH  
DOA Certificate No: EASA.21J.038  
Claude-Dornier-Strasse 1  
D-82234 Wessling  
Federal Republic of Germany
4. Manufacturer: Dornier Luftfahrt GmbH  
LBA Approved Production Organisation  
Certificate No.: LBA.G.002  
D-82230 Wessling  
Federal Republic of Germany
- 01 June 2000 –  
30 June 2003* Fairchild Dornier GmbH  
LBA Approved Production Organisation  
Certificate No.: LBA.G.002  
D-82230 Wessling  
Federal Republic of Germany
- 27 August 2004 –  
15 March 2021:* RUAG Aerospace Services GmbH  
Oberpfaffenhofen Airfield  
POA Certificate Holder No.: DE.21G.0176  
P.O. Box 1253  
D-82231 Wessling  
Federal Republic of Germany
- Since 16 March 2021:* General Atomics AeroTec Systems GmbH  
POA Certificate Holder No.: DE.21G.0176  
Claude-Dornier-Strasse 1  
D-82234 Wessling  
Federal Republic of Germany
5. Remarks: Models are named Dornier 228-XXX.  
Older documents also may use the Model name Do 228-XXX.  
Both names are equivalent.

## **SECTION A: Model Dornier 228-100**

### **A.I. General**

1. a) Type Dornier 228  
b) Model Dornier 228-100
2. Airworthiness Category Normal
3. Certification Application Date: ---
4. LBA Certification Date: 18 December 1981
5. The EASA TCDS is based on the LBA TCDS No. 2031A/SA (at Issue 24, dated 8 April 2005)

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

1. Reference Date for determining the applicable requirements: ---
2. (reserved)
3. (reserved)
4. Airworthiness Requirements:
  - Federal Aviation Regulations (FAR) Part 23 dated 1 February 1965 including Amendment 23-1 to 23-23 except for Para 23.1 which is based on Amendment 23-6.
  - Appendix A to FAR Part 135 dated 1 December 1978 except for operating definition included in item 7 (b) (required by LBA telex dated 24 February 1984).
5. Requirements elected to comply: None
6. LBA Special Conditions:
  - Special Conditions for STOL Operation according to LBA-Letter I 22-2031a/84 dated 30 April 1984 (BCAR, Section K, Light Aeroplanes).
7. EASA Exemptions: None
8. EASA Equivalent Safety Findings:
  - FAR Part 135, Appendix A, § 32(c)(2)
9. LBA Environmental Standards: ICAO Annex 16

### **A.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition:

Definition of the aircraft is established in the documents pursuant to Lists of Manufacturing Documents including their subsequent amendments as follows:

- a. KZA-007 001 B00F as of 30 June 1985 for aircraft production number 1001 according to Dornier Concession No. 629.
- b. KZA-007 000 B00D as of 5 July 1982 for aircraft production number 1002 to 1010
- c. KZA-007 000 C00D as of 25 June 1983 for aircraft production number 1011 to 1035
- d. KZA-007 000 D00D as of 2 April 1984 for aircraft production number 1036 to 1168

Except the following aircraft production numbers:

1052, 1055, 1060, 1064, 1067, 1072, 1075, 1081, 1082, 1089, 1090, 1098, 1099, 1105, 1106, 1113, and 1114.

2. Description:

Landplane with two turboprops. Cantilever high-wing aircraft of all-metal construction with retractable landing gear in nose wheel arrangement.

3. Equipment:

Refer to Equipment List of POH and LBA-approved "Summary of Basic Aircraft Modifications Dornier 228 MZ6" as amended.

4. Dimensions:

Wing Span	16.97m	(55ft 8in)
Length	15.04m	(49ft 4in)
Height	4.86m	(15ft 11in)
Total Wing Area	32.0 m <sup>2</sup>	(344 ft <sup>2</sup> )

5. Engines: No. 2

Manufacturer	Honeywell (previous AlliedSignal, Garrett AiResearch)
Type 1:	TPE 331-5-252D
Type 2:	TPE 331-5B-252D
Type Certificate:	LBA TCDS No. 7015 / EN

## 5.1. Engine Limits

Takeoff (5 min.) and Max. Continuous

- Power at max. continuous speed 533 KW
- Max. continuous speed 1607 min<sup>-1</sup>

Max interstage turbine temperatures

- Takeoff (5 min) 923°C
- Continuous 923°C
- Start (1 sec.) 1149°C

Engine 1 and 2 are to each other compatible.

6. Propellers: No. 2
- Manufacturer: Hartzell Propeller Inc.
- Type Propeller 1: HC-B4TN-5ML/LT10574 FNS  
Propeller 2: HC-B4TN-5ML/LT10574 FNSB  
Propeller 3: HC-B4TN-5ML/LT10574 FS  
Propeller 4: HC-B4TN-5ML/LT10574 FSB
- Type Certificate: LBA TCDS No.: 32.130/37 / PR
- Number of blades: 4
- Manufacturer: MT-Propeller Entwicklung GmbH
- Type Propeller 5: MTV-27-1-E-C-F-R(G)/CFRL250-55b
- Type Certificate: TCDS EASA P.104  
Installed with STC EASA.A.S.02755
- Number of blades: 5
- 6.1. Nominal Diameter (Propeller 1, 2, 3, 4) 2692 mm  
Nominal Diameter (Propeller 5) 2500 mm (98.4 inch)
- 6.2. Additional Information concerning Powerplant Installation (Propeller 1, 2, 3, 4)
- Propeller blades of an aircraft must be of one type only
  - Exceptions for blades where "N" is included in the code number are defined on LBA Propeller TCDS No. 32.130/37 / PR.
7. Fluids (Fuel/Oil/Additives):
- 7.1. Fuel
- Refer also to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).
- Fuel System Icing Inhibitor compliant with Specification MIL-I-27686E must be used.
- 7.2. Oil
- Refer to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).
8. Fluid capacities
- 8.1. Fuel:
- Fuel max 2441 liters (4251 lb)
- Consumable fuel 2386 liters (4156 lb)
- 8.2. Oil:
- Total: 2 x 5.9 liters (6.25 US qts)

9. Air Speeds:

VMO (maximum operating speed) - up to 15 000 ft	200 KIAS
MM0 (maximum operating speed) - 25 000 ft – Mach N.	0.40
VA (maneuvering speed)	140 KIAS
VFE (max. flap extended speed)	
Flap pos. 1. 5°:	150 KIAS
Flap pos. 2. 20°:	130 KIAS
Flap pos. DN 30°:	130 KIAS
VLO (maximum landing gear operating speed) respectively for A/C Serial Number 1035 and down, where SB-228-012 has not been carried out:	160 KIAS 135 KIAS
VLE (maximum landing gear extended speed) respectively for A/C Serial Number 1035 and down, where SB-228-012 has not been carried out:	160 KIAS 135 KIAS
Max tire speed	140 KIAS
Max crosswind component proven	30 kts
VMC (minimum control speed with critical engine inoperative) - flaps UP	81 KIAS

10. Maximum Operating Altitude:

Maximum	4572 m / 15 000 ft
respectively if SCN No. D08 is installed (Maximum Allowable Airspeed Indicator)	7620 m / 25 000 ft

11. All-weather Capability:

Category 1

Approved for flights in regions with known icing conditions if the following special equipment is installed:

- Control surface deicing (wing-empennage)	SCN No. R01
- Propeller deicing	SCN No. R05/R02
- Fuselage deicing protection	SCN No. R03
- Windshield deicing	SCN No. V07/V03



Maximum Weight:

- Max Taxi and Ramp weight	5730 kg (12 632 lb)
- Max Takeoff weight	5700 kg (12 566 lb)
- Max Landing weight	5700 kg (12 566 lb)
Flap in Position UP (0°) respectively for A/C serial No. 1035 and down, if landing gear not modified to P/N: A-510 000 C00D, A-520 000 C00D or higher modification index:	5500 kg (12 125 lb)
- Max Zero Fuel weight	5540 kg (12 214 lb)

12. Centre of Gravity Range:  
Refer to Pilot's Operating Handbook Dornier 228-100, Section 2
13. Datum:  
Refer to Pilot's Operating Handbook Dornier 228-100, Section 2
14. Mean Aerodynamic Cord (MAC)  
2.046 m (80.55")
15. Leveling Means:  
Refer to Airplane Maintenance Manual (Chapter 08 – Leveling and Weighing)
16. Minimum Flight Crew: 1 (Pilot)
17. Maximum Passenger Seating Capacity  
  
Maximum Number 20  
18 Passenger and 2 Crew seats
18. Exit: No. Type  
  
3 exits (two on left cabin side and one on right cabin side).
19. Baggage / Cargo Compartments  
  
Forward baggage compartment:  
- Maximum loading weight 90 kg (198 lb)  
- Maximum loading weight: and/or for aircraft serial numbers from 1146 and/or with reinforced floor of nose baggage compartment (SCN No. 2152): 120 kg (265 lb)  
  
Rear baggage compartment:  
- Maximum loading weight 150 kg (330 lb)

## 20. Wheels and Tires

Main Landing Gear:	Goodyear 8.50 -10/10 PRTL Goodyear 25.5x8.75 -10/12 PRTL
Nose Landing Gear:	Goodyear 6.00 – 68 PRTT

### **A.IV. Operating and Service Instructions**

#### 1. Operating Instructions:

- a. Pilot's Operating Handbook (POH) Dornier 228-100, Edition dated 1 January 1987, LBA-approved on 11 February 1988 including abbreviated Checklist , Weighing Report and related approved supplements with effective revision status.

#### 2. Service Instructions:

- a. List of Applicable Publications (LOAP), latest revision. The LOAP lists the publications applicable to operation, maintenance, time limits and repair of the Dornier 228 Airplane and the installed equipment.

### **A.V. Notes**

#### 1. Eligible Serial Numbers

without limitations

#### 2. Other

- a. Data on this TCDS refer to aircraft Model Dornier 228-100 in the respective standard configurations as well as options:
  - Reinforced floor of nose baggage compartment SCN No. 2152
  - MAAS-Indicator SCN No. D08 (max. operating altitude 25 000 ft)
- b. Customized Cabin Interior and Seating Configuration must be approved.

- c. Aircraft Model Dornier 228-100 may be converted into aircraft Model Dornier 228-101 according to this TCDS Section, if they correspond to the definition for Model -101 of the TCDS Section C. Hereof except A/C Serial No. 7001 (-100 Prototype). Such conversion shall be made in accordance with manufacturer specifications (refer to SB-228-168).
- d. Aircraft Model Dornier 228-101 may be converted into Model Dornier 228-100 according to this TCDS Section. Conversion shall be accomplished by the manufacturer in accordance with an individual Engineering Order prepared for the aircraft affected.
- e. The MTOW for Aircraft Model Dornier 228-100 exported to Japan is 5699 kg. The POH Supplement No. 1122 "Maximum Takeoff and Landing Weight of 5699 kg (12 564 lb) should be taken into account.
- f. Aircraft manufactured by Hindustan Aeronautics Ltd. (HAL) with S/Ns 8I-xxxx are not covered by this TCDS. This applies also to S/N's 8052, 8055, 8060, 8064, 8067, 8072, 8075, 8081, 8082, 8089, 8090, 8098, 7099, 7105, 7106, 7113, and 7114.
- g. The use of parts including spare parts from the Indian licence production (HAL) is not permissible for Dornier 228 aircraft with certification of airworthiness on the basis of this TCDS. Those parts have part number with the letter "I" or "H" as a prefix (e.g. IA-xxxxxxAxxA or HA-xxxxxxAxxA).
- h. Aircrafts of license or substitute license production should be operated according to the operating and maintenance instructions (refer to A.IV.) Operating and Service Instructions) that were approved by their Authority.

## **SECTION B: Model Dornier 228-200**

### **B.I. General**

1. a) Type Dornier 228  
b) Model Dornier 228-200
2. Airworthiness Category Normal
3. Certification Application Date: ---
4. LBA Certification Date: 07 September 1982
5. The EASA TCDS is based on the LBA TCDS No. 2031A/SA (at Issue 24, dated 8 April 2005)

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

1. Reference Date for determining the applicable requirements: ---
2. (reserved)
3. (reserved)
4. Airworthiness Requirements:
  - Federal Aviation Regulations (FAR) Part 23 dated 1 February 1965 including Amendment 23-1 to 23-23 except for Para 23.1 which is based on Amendment 23-6.
  - Appendix A to FAR Part 135 dated 1 December 1978 except for operating definition included in item 7(b) (required by LBA telex dated 24 February 1984).
5. Requirements elected to comply: None
6. LBA Special Conditions:
  - Special Conditions for STOL Operation according to LBA-Letter I 22-2031a/84 dated 30 April 1984 (BCAR, Section K, Light Aeroplanes)
7. EASA Exemptions: None
8. EASA Equivalent Safety Findings: None
9. LBA Environmental Standards: ICAO Annex 16

### **B.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition:

Definition of the aircraft is established in the documents pursuant to Lists of Manufacturing Documents including their subsequent amendments as follows:

- a. KZB-008 000 A00D as of 17 August 1982 for aircraft production number 1002 to 1010.
- b. KZB-008 000 B00D as of 24 May 1983 for aircraft production number 1011 to 1035
- c. KZB-008 000 C00D as of 2 April 1984 for aircraft production number 1036 to 1175

Except the following aircraft production numbers:  
1052, 1055, 1060, 1064, 1067, 1072, 1075, 1081, 1082, 1089, 1090, 1098, 1099, 1105, 1106, 1113 and 1114.

2. Description:

Landplane with two turboprops. Cantilever high-wing aircraft of all-metal construction with retractable landing gear in nose wheel arrangement.

3. Equipment:

Refer to Equipment List of POH and LBA-approved  
"Summary of Basic Aircraft Modifications Dornier 228 MZ6" as amended.

4. Dimensions:

Wing Span	16.97m	(55ft 8in)
Length	16.56m	(54ft 4in)
Height	4.86m	(15ft 11in)
Total Wing Area	32.0 m <sup>2</sup>	(344 ft <sup>2</sup> )

5. Engines: No. 2

Manufacturer Honeywell  
(previous AlliedSignal, Garrett AiResearch)  
Type Certificate: LBA TCDS No. 7015 / EN

Type 1: TPE 331-5-252D  
Type 2: TPE 331-5B-252D  
Type 3: TPE 331-10T-511D  
Type 4: TPE 331-10P-511D

Type 3 and Type 4: Installation according to LBA EMZ Nr. 0735/2031a, 0735/2031b, 0735/2031c based on FAA STC ST329CH-D

## 5.1 Engine Limits

### Takeoff (5 min.) and Max. Continuous

- Power at max. continuous speed 533 KW
- Max. continuous speed 1607 min<sup>-1</sup>

### Max interstage turbine temperature (ITT)

- Takeoff (5 min) 923°C
- Continuous 923°C
- Start (1 sec.) 1149°C

Engine 1 and 2 are to each other compatible.

### Type 3 and Type 4:

#### Takeoff (5 min.) and Max Continuous

- Power at max. continuous speed 533 KW
- Max. continuous speed 1607 min<sup>-1</sup>

### Max exhaust gas temperature (EGT)

- Takeoff (5 min) depending on OAT (refer to POH)
- Continuous depending on OAT (refer to POH)
- Start (1 sec.) 770°C

Engine 3 and 4 are compatible to each other.

6. Propellers: No. 2
- Manufacturer: Hartzell Propeller Inc.
- Type Propeller 1: HC-B4TN-5ML/LT10574 FNS  
Propeller 2: HC-B4TN-5ML/LT10574 FNSB  
Propeller 3: HC-B4TN-5ML/LT10574 FS  
Propeller 4: HC-B4TN-5ML/LT10574 FSB
- Type Certificate: LBA TCDS No.: 32.130/37 / PR
- Number of blades: 4
- Manufacturer: MT-Propeller Entwicklung GmbH
- Type Propeller 5: MTV-27-1-E-C-F-R(G)/CFRL250-55b
- Type Certificate: TCDS EASA P.104  
Installed with STC EASA.A.S.02755
- Number of blades: 5

- 6.1 Nominal Diameter (Propeller 1, 2, 3, 4) 2692 mm  
Nominal Diameter (Propeller 5) 2500 mm (98.4 inch)

### 6.2 Additional Information concerning Powerplant Installation (Propeller 1, 2, 3, 4)

- Propeller blades of an aircraft must be of one type only
- Exceptions for blades where „N“ is included in the code number are defined on Propeller TCDS No. 32.130/37.

7. Fluids (Fuel/Oil/Additives):

7.1 Fuel

Refer also to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).

Fuel System Icing Inhibitor compliant with Specification MIL-I-27686E must be used.

7.2 Oil

Refer to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).

8. Fluid capacities

8.1 Fuel:

Fuel max	2441 liters (4251 lb)
Consumable fuel	2386 liters (4156 lb)

8.2 Oil:

Total:	2 x 5.9 liters (6.25 US qts)
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9. Air Speeds:

VMO (maximum operating speed) - up to 15 000 ft	200 KIAS
MM0 (maximum operating speed) - 25 000 ft – Mach N.	0.40
VA (maneuvering speed)	140 KIAS
VFE (max. flap extended speed)	
Flap pos. 1. 5°:	150 KIAS
Flap pos. 2. 20°:	130 KIAS
Flap pos. DN 30°: (only with trim coupling per SCN No. C01)	130 KIAS
VLO (maximum landing gear operating speed) respectively for A/C Serial Number 1035 and down, which have not complied with SB-228-012 :	160 KIAS 135 KIAS
VLE (maximum landing gear extended speed) respectively for A/C Serial Number 1035 and down, which have not complied with SB-228-012 :	160 KIAS 135 KIAS
Max tire speed	140 KIAS
Max crosswind component proven	30 kts
VMC (minimum control speed with critical engine inoperative) - flaps UP	81 KIAS

10. Maximum Operating Altitude:  
Maximum 4572 m / 15 000 ft  
respectively if SCN No. D08 is installed 7620 m / 25 000 ft  
(Maximum Allowable Airspeed Indicator)

11. All-weather Capability:

Category 1

Approved for flights in regions with known icing conditions if the following special equipment is installed:

- Control surface deicing (wing-empennage) SCN No. R01
- Propeller deicing SCN No. R05/R02
- Fuselage deicing protection SCN No. R03
- Windshield deicing SCN No. V07/V03

12. Maximum Weight:

- Max Taxi and Ramp weight 5730 kg (12 632 lb)
- Max Takeoff weight 5700 kg (12 566 lb)
- Max Landing weight 5700 kg (12 566 lb)

Flap in Position UP (0°) respectively for A/C serial No. 1035 and down, if landing gear not modified to P/N: A-510 000 C00D, A-520 000 C00D or higher modification index: 5500 kg (12 125 lb)

- Max Zero Fuel weight 5540 kg (12 214 lb)

13. Centre of Gravity Range:

Refer to Pilot's Operating Handbook Dornier 228-200, Section 2

14. Datum:

Refer to Pilot's Operating Handbook Dornier 228-200, Section 2

15. Mean Aerodynamic Cord (MAC)

2.046 m (80.55")

16. Leveling Means:

Refer to Airplane Maintenance Manual (Chapter 08 – Leveling and Weighing)

17. Minimum Flight Crew:

1 (Pilot)

18. Maximum Passenger Seating Capacity

Maximum Number 22  
20 Passenger and 2 Crew seats

19. Exit: No. Type

3 exits (two on left hand side and one on right hand side).



## 20. Baggage / Cargo Compartments

Forward baggage compartment:

- Maximum loading weight 90 kg (198 lb)
- Maximum loading weight: and/or for aircraft serial numbers from 1146 and/or with reinforced floor of nose baggage compartment (SCN No. 2152): 120 kg (265 lb)

Rear baggage compartment:

- Maximum loading weight 150 kg (330 lb)

## 21. Wheels and Tires

- Main Landing Gear: Goodyear 8.50 -10/10 PRTL  
Goodyear 25.5x8.75 -10/12 PRTL
- Nose Landing Gear: Goodyear 6.00 – 68 PRTT

## **B.IV. Operating and Service Instructions**

### 1. Operating Instructions:

- a. Pilot's Operating Handbook (POH) Dornier 228-200, Edition dated 1 January 1987, LBA-approved on 11 February 1988 including abbreviated Checklist , Weighing Report and related approved supplements with effective revision status.

### 2. Service Instructions:

- a. List of Applicable Publications (LOAP), latest revision. The LOAP lists the publications applicable to operation, maintenance, time limits and repair of the Dornier 228 Airplane and the installed equipment.

## **B.V. Notes**

### 1. Eligible Serial Numbers

without limitations

## 2. Other

- a. Data on this TCDS refer to aircraft Model Dornier 228-200 in the respective standard configurations as well as options:
  - Reinforced floor of nose baggage compartment SCN No. 2152
  - MAAS-Indicator SCN No. D08 (max. operating altitude 25 000 ft)
  - Trim coupling SCN No. C01
- b. Customized Cabin Interior and Seating Configuration must be approved.
- c. Aircraft Model Dornier 228-200 may be converted into aircraft Model Dornier 228-201 according to this TCDS Section D, if they correspond to the definition for Model -201 of TCDS Section.  
Such conversion shall be made in accordance with manufacturer specifications (refer SB-228-168).
- d. Aircraft Model Dornier 228-200 may be converted into aircraft Model Dornier 228-202 according to this TCDS Section E, if they correspond to the definition for Model -202 TCDS Section E.  
Such conversion shall be made in accordance with manufacturer specifications (refer to SB-228-088 and SB-228-168).
- e. Aircraft Model Dornier 228-201 and Dornier 228-202 may be converted into Model Dornier 228-200 according to this TCDS Section B.  
Conversion shall be accomplished by the manufacturer in accordance with an individual Engineering Order prepared for the aircraft affected.
- f. The MTOW for Aircraft Model Dornier 228-200 exported to Japan is 5699 kg. The POH Supplement No. 1122 "Maximum Takeoff and Landing Weight of 5699 kg (12 564 lb) should be taken into account.
- g. Aircraft manufactured by Hindustan Aeronautics Ltd. (HAL) with S/Ns 8I-xxxx are not covered by this TCDS. This applies also to S/N's 8052, 8055, 8060, 8064, 8067, 8072, 8075, 8081, 8082, 8089, 8090, 8098, 7099, 7105, 7106, 7113, and 7114.
- h. The use of parts including spare parts from the Indian licence production (HAL) is not permissible for Dornier 228 aircraft with certification of airworthiness on the basis of this TCDS. Those parts have part number with the letter "I" or "H" as a prefix (e.g. IA-xxxxxxAxxA or HA-xxxxxxAxxA).
- i. Aircrafts of license or substitute license production should be operated according to the operating and maintenance instructions (refer to B.IV.) Operating and Service Instructions) that were approved by their Authority.
- j. FAA STC ST329CH-D  
The FAA changed the way they nominated STC's. During amendment of this STC they issued ST329CH-D instead of SA329CH-D. Both nominations were used.  
SA329CH-D is the current nomination of the STC.

## **SECTION C: Model Dornier 228-101**

### **C.I. General**

- |    |   |                 |
|----|---|-----------------|
| 1. | a) Type   | Dornier 228     |
|    | b) Model  | Dornier 228-101 |
| 2. | Airworthiness Category  | Normal          |
| 3. | Certification Application Date:   | ---             |
| 4. | LBA Certification Date:   | 31 August 1984  |
| 5. | The EASA TCDS is based on the LBA TCDS No. 2031B/SA (at Issue 11, dated 8 April 2005) |                 |

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

- |    |   |               |
|----|---|---------------|
| 1. | Reference Date for determining the applicable requirements:   | ---           |
| 2. | (reserved)  |               |
| 3. | (reserved)  |               |
| 4. | Airworthiness Requirements:   |               |
|    | - Federal Aviation Regulations (FAR) Part 23 dated 1 February 1965 including Amendment 23-1 to 23-23 except for Para 23.1 which is based on Amendment 23-6. |               |
|    | - Appendix A to FAR Part 135 dated 1 December 1978 except for operating definition included in item 7 (b) (required by LBA telex dated 24 February 1984).   |               |
|    | - SFAR 41C (ICAO Annex 8) of 13 September 1982  |               |
| 5. | Requirements elected to comply:   | None          |
| 6. | LBA Special Conditions:   |               |
|    | - Special Conditions for STOL Operation according to LBA-Letter I 22-2031a/84 dated 30 April 1984 (BCAR, Section K, Light Aeroplanes)                       |               |
| 7. | EASA Exemptions:  | None          |
| 8. | EASA Equivalent Safety Findings:  |               |
|    | - FAR Part 135, Appendix A, § 32(c)(2)  |               |
| 9. | EASA Environmental Standards:   | ICAO Annex 16 |

### **C.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition:

Definition of the aircraft is established in the documents pursuant to Lists of Manufacturing Documents including their subsequent amendments as follows:

- a. KZA-017 000 B00D as of 1 August 1984 for aircraft production number 1002 to 1010.
- b. KZA-017 000 C00D as of 1 August 1984 for aircraft production number 1011 to 1035
- c. KZA-017 000 D00D as of 3 December 1984 for aircraft production number 1036 to 1168

Except the following aircraft production numbers:  
1052, 1055, 1060, 1064, 1067, 1072, 1075, 1081, 1082, 1089, 1090, 1098, 1099, 1105, 1106, 1113, and 1114.

2. Description:

Landplane with two turboprops. Cantilever high-wing aircraft of all-metal construction with retractable landing gear in nose wheel arrangement.

3. Equipment:

Refer to Equipment List of POH and LBA-approved "Summary of Basic Aircraft Modifications Dornier 228 MZ6" as amended.

4. Dimensions:

Wing Span	16.97m	(55ft 8in)
Length	15.04m	(49ft 4in)]
Height	4.86m	(15ft 11in)
Total Wing Area	32.0 m <sup>2</sup>	(344 ft <sup>2</sup> )

5. Engines: No. 2

Manufacturer	Honeywell (previous AlliedSignal, Garrett AiResearch)
Type Certificate:	LBA TCDS No. 7015 / EN
Type 1:	TPE 331-5-252D
Type 2:	TPE 331-5B-252D

5.1 Engine Limits

Type 1 and Type 2:	
Takeoff (5 min.) and Max.Continuous	
- Power at max.continuous speed	533 KW
- Max.continuous speed	1607 min <sup>-1</sup>

Max interstage turbine temperature (ITT)	
- Takeoff (5 min)	923°C
- Continuous	923°C
- Start (1 sec.)	1149°C

Engine 1 and 2 are compatible to each other.

6. Propellers: No. 2
- |                   |  |
|-------------------|--|
| Manufacturer:     | Hartzell Propeller Inc.  |
| Type              | Propeller 1: HC-B4TN-5ML/LT10574<br>Propeller 2: HC-B4TN-5ML/LT10574 FNSB<br>Propeller 3: HC-B4TN-5ML/LT10574 FS<br>Propeller 4: HC-B4TN-5ML/LT10574 FSB |
| Type Certificate: | LBA TCDS No.: 32.130/37 / PR   |
| Number of blades: | 4  |
| Manufacturer:     | MT-Propeller Entwicklung GmbH  |
| Type              | Propeller 5: MTV-27-1-E-C-F-R(G)/CFRL250-55b   |
| Type Certificate: | TCDS EASA P.104<br>Installed with STC EASA.A.S.02755   |
| Number of blades: | 5  |
- 6.1 Nominal Diameter (Propeller 1, 2, 3, 4) 2692 mm  
Nominal Diameter (Propeller 5) 2500 mm (98.4 inch)
- 6.2 Additional Information concerning Powerplant Installation (Propeller 1, 2, 3, 4)
- Propeller blades of an aircraft must be of one type only
  - Exceptions for blades where „N“ is included in the code number are defined on LBA Propeller TCDS No. 32.130/37 / PR.
7. Fluids (Fuel/Oil/Additives):
- 7.1 Fuel  
Refer also to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).  
Fuel System Icing Inhibitor compliant with Specification MIL-I-27686E must be used.
- 7.2 Oil  
Refer to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).
8. Fluid capacities
- 8.1 Fuel:
- |                 |                       |
|-----------------|-----------------------|
| Fuel max        | 2441 liters (4251 lb) |
| Consumable fuel | 2386 liters (4156 lb) |
- 8.2 Oil:
- |        |                              |
|--------|------------------------------|
| Total: | 2 x 5.9 liters (6.25 US qts) |
|--------|------------------------------|

9. Air Speeds:

VMO (maximum operating speed) - up to 15 000 ft	200 KIAS
MM0 (maximum operating speed) - 25 000 ft – Mach N.	0.40
VA (maneuvering speed)	144 KIAS
VFE (max. flap extended speed)	
Flap pos. 1. 5°:	150 KIAS
Flap pos. 2. 20°:	130 KIAS
Flap pos. DN 30°:	130 KIAS
VLO (maximum landing gear operating speed) respectively for A/C Serial Number 1035 and down, which have not complied with SB-228-012:	160 KIAS 135 KIAS
VLE (maximum landing gear extended speed) respectively for A/C Serial Number 1035 and down, which have not complied with SB-228-012:	160 KIAS 135 KIAS
Max tire speed	140 KIAS
Max crosswind component proven	30 kts
VMC (minimum control speed with critical engine inoperative) - flaps UP	81 KIAS

10. Maximum Operating Altitude:

Maximum	4572 m / 15 000 ft
respectively if SCN No. D08 is installed (Maximum Allowable Airspeed Indicator)	7620 m / 25 000 ft

11. All-Weather Capability:

Category 1

Approved for flights in regions with known icing conditions if the following special equipment is installed:

- Control surface deicing (wing-empennage)	SCN No. R01
- Propeller deicing	SCN No. R05/R02
- Fuselage deicing protection	SCN No. R03
- Windshield deicing	SCN No. V07/V03

12. Maximum Weight:

- Max Taxi and Ramp weight 6010 kg (13 250 lb)
  - Max Takeoff weight 5980 kg (13 184 lb)
  - Max Landing weight 5700 kg (12 566 lb)
  - Flap in Position UP (0°) respectively for A/C serial No. 1035 and down, if landing gear not modified to P/N: A-510 000 C00D, A-520 000 C00D or higher modification index: 5500 kg (12 125 lb)
  - Max Zero Fuel weight 5540 kg (12 214 lb)
13. Centre of Gravity Range:  
Refer to Pilot's Operating Handbook Dornier 228-100, Section 2
14. Datum:  
Refer to Pilot's Operating Handbook Dornier 228-100, Section 2
15. Mean Aerodynamic Cord (MAC)  
2.046 m (80.55")
16. Leveling Means:  
Refer to Airplane Maintenance Manual (Chapter 08 – Leveling and Weighing)
17. Minimum Flight Crew: 1 (Pilot)
18. Maximum Passenger Seating Capacity  
Maximum Number 20  
18 Passenger and 2 Crew seats
19. Exit: No. Type  
3 exits (two on left cabin side and one on right cabin side).
20. Baggage / Cargo Compartments  
Forward baggage compartment:  
- Maximum loading weight 90 kg (198 lb)  
- Maximum loading weight: and/or for aircraft serial numbers from 1146 and/or with reinforced floor of nose baggage compartment (SCN No. 2152): 120 kg (265 lb)  
Rear baggage compartment:  
- Maximum loading weight 150 kg (330 lb)
21. Wheels and Tires  
Main Landing Gear: Goodyear 8.50 -10/10 PRTL

Nose Landing Gear: Goodyear 25.5x8.75 -10/12 PRTL  
Goodyear 6.00 – 68 PRTT

#### **C.IV. Operating and Service Instructions**

1. Operating Instructions:

- a. Pilot's Operating Handbook (POH) Dornier 228-101, Edition dated 1 January 1987, LBA-approved on 11 February 1988 including abbreviated Checklist , Weighing Report and related approved supplements with effective revision status.

2. Service Instructions:

- a. List of Applicable Publications (LOAP), latest revision. The LOAP lists the publications applicable to operation, maintenance, time limits and repair of the Dornier 228 Airplane and the installed equipment.

#### **C.V. Notes**

1. Eligible Serial Numbers

without limitations

2. Other

- a. Data on this TCDS refer to aircraft Model Dornier 228-101 in the respective standard configurations as well as options:
  - Reinforced floor of nose baggage compartment SCN No. 2152
  - MAAS-Indicator SCN No. D08 (max. operating altitude 25 000 ft)
- b. Customized Cabin Interior and Seating Configuration must be approved.



- c. Operation of this Model according to SFAR 41B without meeting the requirements pursuant to ICAO Annex 8 abroad:  
For the export of this aircraft Model to countries which for their internal operation do not call for meeting the requirements pursuant to ICAO Annex 8 the Production and/or Airworthiness Inspection Certificate as well as the Export Certificate of Airworthiness shall have the following entry (definition pursuant to SFAR 41C (Sect. 4.(b))): "This airplane at weight in excess of 5700 kg does not meet the airworthiness requirements of ICAO, as prescribed by Annex 8 of the Convention on International Civil Aviation".
- d. Aircraft Model Dornier 228-100 according to TCDS Section A may be converted into aircraft Model Dornier 228-101, if they correspond to the definition for Model - 101 of TCDS Section C. Hereof except A/C Serial No. 7001 (-100 Prototype). Such conversion shall be made in accordance with manufacturer specifications (refer to SB-228-168).
- e. Aircraft Model Dornier 228-101 may be converted into Model Dornier 228-100 according to TCDS Section A. Conversion shall be accomplished by the manufacturer in accordance with an individual Engineering Order prepared for the aircraft affected.
- f. Aircraft Model 228-101 of the license and substitute license production, which complies with the type definition in KZA-017 000 E00D, dated 2 February 1992 instead of as defined in Item III.(C) of this TCDS, is LBA-certified according to the Commuter Rule (CR) in the Commuter Category (C.C.), i.e. this Model complies with FAR Part 23 Amendment 23-1 to 23-34.  
This C.C.-aircraft additionally complies with the Requirements according to:  
- FAA Advisory Circular Nr. AC 20-53A for Lightning  
- FAR 23.1457 Amendment 23-35 for the Cockpit Voice Recorder  
- FAR 23.1459 Amendment 23-35 for the Flight Data Recorder
- g. The special equipment like air-traffic control equipment, cabin equipment etc. for license and substitute license production is listed in document:  
"Summary of Basic Aircraft Modifications Dornier 228 MZ 6 Part B"
- h. Aircraft manufactured by Hindustan Aeronautics Ltd. (HAL) with S/Ns 8I-xxxx are not covered by this TCDS. This applies also to S/N 8052, 8055, 8060, 8064, 8067, 8072, 8075, 8081, 8082, 8089, 8090, 8098, 7099, 7105, 7106, 7113, and 7114.
- i. The use of parts including spare parts from the Indian licence production (HAL) is not permissible for Dornier 228 aircraft with certification of airworthiness on the basis of this TCDS. Those parts have part number with the letter "I" or "H" as a prefix (e.g. IA-xxxxxxAxxA or HA-xxxxxxAxxA).
- j. Aircrafts of license or substitute license production should be operated according to the operating and maintenance instructions (refer to C.IV Operating and Service Instructions) that were approved by their Authority.

## **SECTION D: Model Dornier 228-201**

### **D.I. General**

- |  |                 |
|--|-----------------|
| 1. a) Type   | Dornier 228     |
| b) Model   | Dornier 228-201 |
| 2. Airworthiness Category  | Normal          |
| 3. Certification Application Date:   | ---             |
| 4. LBA Certification Date:   | 13 August 1984  |
| 5. The EASA TCDS is based on the LBA TCDS No. 2031B/SA (at Issue 11, dated 8 April 2005) |                 |

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

1. Reference Date for determining the applicable requirements: ---
2. (reserved)
3. (reserved)
4. Airworthiness Requirements:
  - Federal Aviation Regulations (FAR) Part 23 dated 1 February 1965 including Amendment 23-1 to 23-23 except for paragraph 23.1 which is based on Amendment 23-6.
  - Appendix A to FAR Part 135 dated 1 December 1978 except for operating definition included in item 7(b) (required by LBA telex dated 24 February 1984).
  - SFAR 41C (ICAO Annex 8) of 13 September 1982
5. Requirements elected to comply: None
6. EASA Special Conditions:
  - Special Conditions for STOL Operation according to LBA-Letter I 22-2031a/84 dated 30 April 1984
7. EASA Exemptions: None
8. EASA Equivalent Safety Findings:
9. EASA Environmental Standards: ICAO Annex 16

### **D.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition:

Definition of the aircraft is established in the documents pursuant to Lists of Manufacturing Documents including their subsequent amendments as follows:

- a. KZB-018 000 A00D as of 1 August 1984 for aircraft production number 1002 to 1010.
- b. KZB-018 000 B00D as of 1 August 1984 for aircraft production number 1011 to 1035.
- c. KZB-018 000 C00D as of 3 December 1984 for aircraft production number 1036 to 1175

Except the following aircraft production numbers:

1052, 1055, 1060, 1064, 1067, 1072, 1075, 1081, 1082, 1089, 1090, 1098, 1099, 1105, 1106, 1113 and 1114.

2. Description:

Landplane with two turboprops. Cantilever high-wing aircraft of all-metal construction with retractable landing gear in nose wheel arrangement.

3. Equipment:

Refer to Equipment List of POH and LBA-approved "Summary of Basic Aircraft Modifications Dornier 228 MZ6" as amended.

4. Dimensions:

Wing Span	16.97m	(55ft 8in)
Length	16.56m	(54ft 4in)
Height	4.86m	(15ft 11in)
Total Wing Area	32.0 m <sup>2</sup>	(344 ft <sup>2</sup> )

5. Engines: No. 2

Manufacturer Honeywell  
(previous AlliedSignal, Garrett AiResearch)  
Type Certificate: LBA TCDS No. 7015 / EN

Type 1: TPE 331-5-252D  
Type 2: TPE 331-5B-252D  
Type 3: TPE 331-10T-511D  
Type 4: TPE 331-10P-511D

Type 3 and Type 4: Installation according to LBA EMZ Nr. 0735/2031a, 0735/2031b, 0735/2031c based on FAA STC ST329CH-D

## 5.1 Engine Limits

Type 1 and Type 2:

Takeoff (5 min.) and Max.Continuous

- Power at max.continuous speed 533 KW
- Max.continuous speed 1607 min<sup>-1</sup>

Max interstage turbine temperature (ITT)

- Takeoff (5 min) 923°C
- Continuous 923°C
- Start (1 sec.) 1149°C

Engine 1 and 2 are compatible to each other.

Type 3 and Type 4:

Takeoff (5 min.) and Max. Continuous

- Power at max.continuous speed 533 KW
- Max.continuous speed 1607 min<sup>-1</sup>

Max exhaust gas temperature (EGT)

- Takeoff (5 min) depending on OAT (refer to POH)
- Continuous depending on OAT (refer to POH)
- Start (1 sec.) 770°C

Engine 3 and 4 are compatible to each other.

6. Propellers: No. 2
- Manufacturer: Hartzell Propeller Inc.
- Type Propeller 1: HC-B4TN-5ML/LT10574 FNS  
Propeller 2: HC-B4TN-5ML/LT10574 FNSB  
Propeller 3: HC-B4TN-5ML/LT10574 FS  
Propeller 4: HC-B4TN-5ML/LT10574 FSB
- Type Certificate: LBA TCDS No.: 32.130/37 / PR
- Number of blades: 4
- Manufacturer: MT-Propeller Entwicklung GmbH
- Type Propeller 5: MTV-27-1-E-C-F-R(G)/CFRL250-55b
- Type Certificate: TCDS EASA P.104  
Installed with STC EASA.A.S.02755
- Number of blades: 5

- 6.1 Nominal Diameter (Propeller 1, 2, 3, 4) 2692 mm  
Nominal Diameter (Propeller 5) 2500 mm (98.4 inch)

- 6.2 Additional Information concerning Powerplant Installation (Propeller 1, 2, 3, 4)
- Propeller blades of an aircraft must be of one type only
  - Exceptions for blades where „N“ is included in the code number are defined on LBA Propeller TCDS No. 32.130/37 / PR.

7. Fluids (Fuel/Oil/Additives):

7.1 Fuel

Refer also to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).

Fuel System Icing Inhibitor compliant with Specification MIL-I-27686E must be used.

7.2 Oil

Refer to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).

8. Fluid capacities

8.1 Fuel:

Fuel max 2441 liters (4251 lb)

Consumable fuel 2386 liters (4156 lb)

8.2 Oil:

Total: 2 x 5.9 liters (6.25 US qts)

9. Air Speeds:

VMO	(maximum operating speed) - up to 15 000 ft	200 KIAS
MM0	(maximum operating speed) - 25 000 ft – Mach N.	0.40
VA	(maneuvering speed)	144 KIAS
VFE	(max. flap extended speed)	
	Flap pos. 1. 5°:	150 KIAS
	Flap pos. 2. 20°:	130 KIAS
	Flap pos. DN 30°: (only with trim coupling per SCN No. C01)	130 KIAS
VLO	(maximum landing gear operating speed) respectively for A/C Serial Number 1035 and down, which have not complied with SB-228-012:	160 KIAS 135 KIAS
VLE	(maximum landing gear extended speed) respectively for A/C Serial Number 1035 and down, which have not complied with SB-228-012	160 KIAS 135 KIAS
	Max tire speed	140 KIAS
	Max crosswind component proven	30 kts
VMC	(minimum control speed with critical engine inoperative) - flaps UP	81 KIAS

10. Maximum Operating Altitude:  
Maximum 4572 m / 15 000 ft  
respectively if SCN No. D08 is installed 7620 m / 25 000 ft  
(Maximum Allowable Airspeed Indicator)

11. All-weather Capability:

Category 1

Approved for flights in regions with known icing conditions if the following special equipment is installed:

- Control surface deicing (wing-empennage) SCN No. R01
- Propeller deicing SCN No. R05/R02
- Fuselage deicing protection SCN No. R03
- Windshield deicing SCN No. V07/V03

12. Maximum Weight:

- Max Taxi and Ramp weight 6010 kg (13 250 lb)
- Max Takeoff weight 5980 kg (13 148 lb)
- Max Landing weight 5900 kg (13 007 lb)

Flap in Position UP (0°) respectively for A/C serial No. 1035 and down, if landing gear not modified to P/N: A-510 000 C00D, A-520 000 C00D or higher modification index: 5750 kg (12 676 lb)

- Max Zero Fuel weight 5590 kg (12323 lb)

13. Centre of Gravity Range:

Refer to Pilot's Operating Handbook Dornier 228-200, Section 2

14. Datum:

Refer to Pilot's Operating Handbook Dornier 228-200, Section 2

15. Mean Aerodynamic Cord (MAC)

2.046 m (80.55")

16. Leveling Means:

Refer to Airplane Maintenance Manual (Chapter 08 – Leveling and Weighing)

17. Minimum Flight Crew:

1 (Pilot)

18. Maximum Passenger Seating Capacity

Maximum Number 21  
19 Passenger and 2 Crew seats

19. Exit: No. Type

4 exits (two on left cabin side and two on right cabin side).

## 20. Baggage / Cargo Compartments

### Forward baggage compartment:

- Maximum loading weight 90 kg (198 lb)
- Maximum loading weight: and/or for aircraft serial numbers from 1146 and/or with reinforced floor of nose baggage compartment (SCN No. 2152): 120 kg (265 lb)

### Rear baggage compartment:

- Maximum loading weight 210 kg (463 lb)

## 21. Wheels and Tires

- |                    |   |
|--------------------|---|
| Main Landing Gear: | Goodyear 8.50 -10/10 PRTL<br>Goodyear 25.5x8.75 -10/12 PRTL |
| Nose Landing Gear: | Goodyear 6.00 – 68 PRTT                                     |

## **D.IV. Operating and Service Instructions**

### 1. Operating Instructions:

- a. Pilot's Operating Handbook (POH) Dornier 228-201, Edition dated 1 January 1987, LBA-approved on 11 February 1988, respectively for aircrafts with keels (version -201(k)), Edition dated 1 January 1988, LBA-approved on 4 May 1988, including abbreviated Checklist , Weighing Report and related approved supplements with effective revision status.

### 2. Service Instructions:

- a. List of Applicable Publications (LOAP), latest revision. The LOAP lists the publications applicable to operation, maintenance, time limits and repair of the Dornier 228 Airplane and the installed equipment.

## **D.V. Notes**

### 1. Eligible Serial Numbers

without limitations

### 2. Other

a. Data on this TCDS refer to aircraft Model Dornier 228-201 in the respective standard configurations as well as options:

- Trim coupling SCN No. C01
- Reinforced floor of nose baggage compartment SCN No. 2152
- MAAS-Indicator SCN No. D08 (max. operating altitude 25 000 ft) and keels, SCN-No. 2148, for versions equipped with keels -201(K)

b. Customized Cabin Interior and Seating Configuration must be approved.

c. Operation of this Model according to SFAR 41B without meeting the requirements pursuant to ICAO Annex 8 abroad:

For the export of this aircraft Model to countries which for their internal operation do not call for meeting the requirements pursuant to ICAO Annex 8 the Production and/or Airworthiness Inspection Certificate as well as the Export Certificate of Airworthiness shall have the following entry (definition pursuant to SFAR 41C (Sect. 4.(b)): "This airplane at weight in excess of 5700 kg does not meet the airworthiness requirements of ICAO, as prescribed by Annex 8 of the Convention on International Civil Aviation".

d. Aircraft Model Dornier 228-200 according to aircraft TCDS Section B may be converted into aircraft Model Dornier 228-201 if they correspond to the definition for Model -201 of this TCDS.

Aircraft Model Dornier 228-201 according Item D.III.1 of this TCDS may be converted into aircraft Model Dornier 228-202 if they correspond to the definition for Model -202 of this TCDS

Such conversion shall be made in accordance with manufacturer specifications (refer to SB-228-088 and SB-228-168).

e. Aircraft Model Dornier 228-201 may be converted into Model Dornier 228-200 according to TCDS Section B. Conversion shall be accomplished by the manufacturer in accordance with an individual Engineering Order prepared for the aircraft affected.

f. Aircraft Model Dornier 228-201 may be equipped with keel kit per SCN No. 2148 for enhancement of aircraft performance and extension of rear center-of-gravity range. Delivered aircraft may be retrofitted per Service Bulletin No. SB-228-135. This version shall be operated using POH Dornier 228-201 "equipped with keel (k)".

g. Aircraft Model 228-201 of the license and substitute license production, which complies with the type definition in KZB-018 000 D00D, dated 3 February 1992 instead of as defined in Item D.III.1 of this TCDS, is LBA-certified according to the Commuter Rule (CR) in the Commuter Category (C.C.), i.e. this Model complies with FAR Part 23 Amendment 23-1 to 23-34.

This C.C.-aircraft additionally complies with the Requirements according to:

- FAA Advisory Circular Nr. AC 20-53A for Lightning
- FAR 23.1457 Amendment 23-35 for the Cockpit Voice Recorder
- FAR 23.1459 Amendment 23-35 for the Flight Data Recorder

h. The special equipment like air-traffic control equipment, cabin equipment etc. for license and substitute license production is listed in document:

"Summary of Basic Aircraft Modifications Dornier 228 MZ 6 Part B"

i. Aircraft manufactured by Hindustan Aeronautics Ltd. (HAL) with S/Ns 81-xxxx are not covered by this TCDS. This applies also to S/N 8052, 8055, 8060,



8064, 8067, 8072, 8075, 8081, 8082, 8089, 8090, 8098, 7099, 7105, 7106, 7113, and 7114.

- j. The use of parts including spare parts from the Indian licence production (HAL) is not permissible for Dornier 228 aircraft with certification of airworthiness on the basis of this TCDS. Those parts have part number with the letter "I" or "H" as a prefix (e.g. IA-xxxxxxAxxA or HA-xxxxxxAxxA).
- k. Aircrafts of license or substitute license production should be operated according to the operating and maintenance instructions (refer to D.IV). Operating and Service Instructions) that were approved by their Authority.
- l. FAA STC ST329CH-D  
The FAA changed the way they nominated STC's. During amendment of this STC they issued ST329CH-D instead of SA329CH-D. Both nominations were used.  
SA329CH-D is the current nomination of the STC.

## **SECTION E: Model Dornier 228-202**

### **E.I. General**

- |  |                 |
|--|-----------------|
| 1. a) Type   | Dornier 228     |
| b) Model   | Dornier 228-202 |
| 2. Airworthiness Category  | Normal          |
| 3. Certification Application Date:   | ---             |
| 4. LBA Certification Date:   | 6 August 1986   |
| 5. The EASA TCDS is based on the LBA TCDS No. 2031B/SA (at Issue 11, dated 8 April 2005) |                 |

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

- |   |               |
|---|---------------|
| 1. Reference Date for determining the applicable requirements:  | ---           |
| 2. (reserved)   |               |
| 3. (reserved)   |               |
| 4. Airworthiness Requirements:  |               |
| - Federal Aviation Regulations (FAR) Part 23 dated 1 February 1965 including Amendment 23-1 to 23-23 except for Para 23.1 which is based on Amendment 23-6. |               |
| - Appendix A to FAR Part 135 dated 1 December 1978 except for operating definition included in item 7 (b) (required by LBA telex dated 24 February 1984).   |               |
| - SFAR 41C (ICAO Annex 8) of 13 September 1982.   |               |
| 5. Requirements elected to comply:  | None          |
| 6. EASA Special Conditions:   |               |
| - Special Conditions for STOL Operation according to LBA-Letter I 22-2031a/84 dated 30 April 1984   |               |
| 7. EASA Exemptions:   | None          |
| 8. EASA Equivalent Safety Findings:   | None          |
| 9. EASA Environmental Standards:  | ICAO Annex 16 |

### **E.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition:

Definition of the aircraft is established in the documents pursuant to Lists of Manufacturing Documents including their subsequent amendments as follows: KZB-028 000 A00D as of 17 July 1986 for aircraft production numbers 1134 up to 1175

Except the following aircraft production numbers:

1052, 1055, 1060, 1064, 1067, 1072, 1075, 1081, 1082, 1089, 1090, 1098, 1099, 1105, 1106, 1113, 1114 and 1155.

2. Description:

Landplane with two turboprops. Cantilever high-wing aircraft of all-metal construction with retractable landing gear in nose wheel arrangement.

3. Equipment:

Refer to Equipment List of POH and LBA-approved "Summary of Basic Aircraft Modifications Dornier 228 MZ6" as amended.

4. Dimensions:

Wing Span	16.97m	(55ft 8in)
Length	16.56m	(54ft 4in)
Height	4.86m	(15ft 11in)
Total Wing Area	32.0 m <sup>2</sup>	(344 ft <sup>2</sup> )

5. Engines: No. 2

Manufacturer Honeywell  
(previous AlliedSignal, Garrett AiResearch)  
Type Certificate: LBA TCDS No. 7015 / EN

Type 1: TPE 331-5-252D  
Type 2: TPE 331-5B-252D  
Type 3: TPE 331-10T-511D  
Type 4: TPE 331-10P-511D

Type 3 and Type 4: Installation according to LBA EMZ Nr. 0735/2031a, 0735/2031b, 0735/2031c based on FAA STC ST329CH-D

## 5.1 Engine Limits

### Type 1 and Type 2:

#### Takeoff (5 min.) and Max.Continuous

- Power at max.continuous speed 533 KW
- Max.continuous speed 1607 min<sup>-1</sup>

#### Max interstage turbine temperature (ITT)

- Takeoff (5 min) 923°C
- Continuous 923°C
- Start (1 sec.) 1149°C

Engine 1 and 2 are compatible to each other.

### Type 3 and Type 4:

#### Takeoff (5 min.) and Max. Continuous

- Power at max.continuous speed 533 KW
- Max.continuous speed 1607 min<sup>-1</sup>

#### Max exhaust gas temperature (EGT)

- Takeoff (5 min) depending on OAT(refer to POH)
- Continuous depending on OAT(refer to POH)
- Start (1 sec.) 770°C

Engine 3 and 4 are compatible to each other.

6. Propellers: No. 2
- Manufacturer: Hartzell Propeller Inc.
  - Type
    - Propeller 1: HC-B4TN-5ML/LT10574 FNS
    - Propeller 2: HC-B4TN-5ML/LT10574 FNSB
    - Propeller 3: HC-B4TN-5ML/LT10574 FS
    - Propeller 4: HC-B4TN-5ML/LT10574 FSB
  - Type Certificate: LBA TCDS No.: 32.130/37 / PR
  - Number of blades: 4
  
  - Manufacturer: MT-Propeller Entwicklung GmbH
  - Type
    - Propeller 5: MTV-27-1-E-C-F-R(G)/CFRL250-55b
  - Type Certificate: TCDS EASA P.104  
Installed with STC EASA.A.S.02755
  - Number of blades: 5

- 6.1. Nominal Diameter (Propeller 1, 2, 3, 4) 2692 mm  
Nominal Diameter (Propeller 5) 2500 mm (98.4 inch)

- 6.2. Additional Information concerning Powerplant Installation (Propeller 1, 2, 3, 4)
- Propeller blades of an aircraft must be of one type only
  - Exceptions for blades where „N“ is included in the code number are defined on LBA Propeller TCDS No. 32.130/37 / PR.

7. Fluids (Fuel/Oil/Additives):

7.1. Fuel

Refer also to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).

Fuel System Icing Inhibitor compliant with Specification MIL-I-27686E must be used.

7.2. Oil

Refer to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).

8. Fluid capacities

8.1. Fuel:

Fuel max	2441 liters (4251 lb)
Consumable fuel	2386 liters (4156 lb)

8.2. Oil:

Total:	2 x 5.9 liters (6.25 US qts)
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9. Air Speeds:

VMO (maximum operating speed) - up to 15 000 ft	200 KIAS
MM0 (maximum operating speed) - 25 000 ft – Mach N.	0.40
VA (maneuvering speed at 5239 Kg (11550 lb))	147 KIAS
VFE (max. flap extended speed)	
Flap pos. 1. 5°:	150 KIAS
Flap pos. 2. 20°:	130 KIAS
Flap pos. DN 30°: (only with trim coupling per SCN No. C01)	130 KIAS
VLO (maximum landing gear operating speed)	160 KIAS
VLE (maximum landing gear extended speed)	160 KIAS
Max tire speed	140 KIAS
Max crosswind component proven	30 kts
VMC (minimum control speed with critical engine inoperative)	
- flaps UP	81 KIAS
- with keel per SCN No. 2148 and flaps in position UP	79 KIAS

10. Maximum Operating Altitude:  
Maximum 4572 m / 15 000 ft  
respectively if SCN No. D08 is installed 7620 m / 25 000 ft  
(Maximum Allowable Airspeed Indicator)
11. All-weather Capability:  
  
Category 1  
Approved for flights in regions with known icing conditions if the following special equipment is installed:  
- Control surface deicing (wing-empennage) SCN No. R01  
- Propeller deicing SCN No. R05/R02  
- Fuselage deicing protection SCN No. R03  
- Windshield deicing SCN No. V07/V03
12. Maximum Weight:  
  
- Max Taxi and Ramp weight 6230 kg (13735 lb)  
  
- Max Takeoff weight 6200 kg (13669 lb)  
  
- Max Landing weight  
Position UP (0°) 5900 kg (13007 lb)  
Position 1 (5°) 6100 kg (13448 lb)  
Position 2 (20°) 6100 kg (13448 lb)  
Position DN (30°) 6100 kg (13448 lb)  
(only with trim coupling SCN-No. C01)  
  
- Max Zero Fuel weight 5590 kg (12324 lb)
13. Centre of Gravity Range:  
Refer to Pilot's Operating Handbook Dornier 228-202, Section 2
14. Datum:  
Refer to Pilot's Operating Handbook Dornier 228-202, Section 2
15. Mean Aerodynamic Cord (MAC) 2,046 m (80.55")
16. Leveling Means:  
Refer to Airplane Maintenance Manual (Chapter 08 – Leveling and Weighing)
17. Minimum Flight Crew: 1 (Pilot)
18. Maximum Passenger Seating Capacity  
Maximum Number 21  
19 Passenger and 2 Crew seats
19. Exit: No. Type  
4 exits (one main door and 3 emergency exits, two on each side).

## 20. Baggage / Cargo Compartments

Forward baggage compartment:

- Maximum loading weight 90 kg (198 lb)
- Maximum loading weight: and/or for aircraft production numbers from 1146 and/or with reinforced floor of nose baggage compartment (SCN No. 2152): 120 kg (265 lb)

Rear baggage compartment:

- Maximum loading weight 210 kg (463 lb)

## 21. Wheels and Tires

- Main Landing Gear: Goodyear 8.50 -10/10 PRTL  
Goodyear 25.5x8.75 -10/12 PRTL
- Nose Landing Gear: Goodyear 6.00 – 68 PRTT

## **E.IV. Operating and Servicing Instructions**

### 1. Operating Instructions:

- a. Pilot's Operating Handbook (POH) Dornier 228-202, Edition dated 1 January 1987, LBA-approved on 11 February 1988 and/or for aircraft equipped with keel (-202 (k)), Edition of 1 January 1988, LBA-approved on 4 May 1988 including abbreviated Checklist , Weighing Report and related approved supplements with effective revision status.

### 2. Service Instructions:

- a. List of Applicable Publications (LOAP), latest revision. The LOAP lists the publications applicable to operation, maintenance, time limits and repair of the Dornier 228 Airplane and the installed equipment.

## **E.V. Notes**

### 5. Eligible Serial Numbers

without limitations

### 6. Other

- a. Data on this TCDS refer to aircraft Model Dornier 228-202 in the respective standard configurations as well as options:
  - Trim coupling SCN No.C01
  - Reinforced floor of nose baggage compartment SCN No.2152
  - MAAS-Indicator SCN No. D08 (max. operating altitude 25 000 ft) and keel per SCN No.2148 for the version equipped with keel -202 (k).
- b. Customized Cabin Interior and Seating Configuration must be approved.
- c. Data on this TCDS refer to aircraft Model Dornier 228-202 in the respective standard configurations as well as options:
  - Trim coupling SCN No. C01
  - Reinforced floor of nose baggage compartment SCN No. 2152
- d. Operation of this Model according to SFAR 41B without meeting the requirements pursuant to ICAO Annex 8 abroad:  
For the export of this aircraft Model to countries which for their internal operation do not call for meeting the requirements pursuant to ICAO Annex 8 the Production and/or Airworthiness Inspection Certificate as well as the Export Certificate of Airworthiness shall have the following entry (definition pursuant to SFAR 41C (Sect. 4.(b))): "This airplane at weight in excess of 5700 kg does not meet the airworthiness requirements of ICAO, as prescribed by Annex 8 of the Convention on International Civil Aviation".
- e. Aircraft Model Dornier 228-200 according to aircraft TCDS Section B and aircraft Model Dornier 228-201, Item D.III.1 of this TCDS may be converted into aircraft Model Dornier 228-202 if they correspond to the definition for Model - 202 of this TCDS.  
Such conversion shall be made in accordance with manufacturer specifications (refer to SB-228-088 and SB-228-168).
- f. Aircraft Model Dornier 228-202 may be converted into Model Dornier 228-200 according to Aircraft TCDS Section B. Conversion shall be accomplished by the manufacturer in accordance with an individual Engineering Order prepared for the aircraft affected.
- g. Aircraft Model Dornier 228-202 may be equipped with keel kit per SCN No. 2148 for enhancement of aircraft performance and extension of rear center-of-gravity range. Delivered aircraft may be retrofitted per Service Bulletin No. SB-228-135. This version shall be operated using POH Dornier 228-202 "equipped with keel (k)". The keel kit per SCN No. 2148 must be installed if aircraft Model Dornier 228-202 is to be operated with flap position DN (30°), i.e. with trim coupling kit per SCN-No. C01.
- h. Aircraft manufactured by Hindustan Aeronautics Ltd. (HAL) with S/Ns 8I-xxxx are not covered by this TCDS. This also applies to S/N 8052, 8055, 8060, 8064, 8067, 8072, 8075, 8081, 8082, 8089, 8090, 8098, 7099, 7105, 7106, 7113, and 7114.



- i. The use of parts including spare parts from the Indian licence production (HAL) is not permissible for Dornier 228 aircraft with certification of airworthiness on the basis of this TCDS. Those parts have part number with the letter “I” or “H” as a prefix (e.g. IA-xxxxxxAxxA or HA-xxxxxxAxxA).
- j. There is no license or substitute license production for aircraft Model Dornier 228-202.  
The conversion of Dornier 228-201 from license production to Dornier 228-202 using SB-228-088 is not included in this TC.
- k. FAA STC ST329CH-D  
The FAA changed the way they nominated STC’s. During amendment of this STC they issued ST329CH-D instead of SA329CH-D. Both nominations were used.  
SA329CH-D is the current nomination of the STC.

## **SECTION F: Model Dornier 228-212**

### **F.I. General**

1. a) Type Dornier 228  
b) Model Dornier 228-212
2. Airworthiness Category: Commuter
3. Certification Application Date: ---
4. LBA Certification Date: 28 July 1989
5. The EASA TCDS is based on the LBA TCDS No. 2031C/SA (at Issue 9, dated 8 April 2005)

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

1. Reference Date for determining the applicable requirements: ---
2. (reserved)
3. (reserved)
4. Airworthiness Requirements:
5. Federal Aviation Regulations (FAR) Part 23 dated 1 February 1965 including Amendment 23-1 to 23-34 (including Commuter Category) including CRI A-01 (Major Change CN-228-247).
6. Requirements elected to comply: None
7. EASA Special Conditions:  
- Special Conditions for STOL Operation according to LBA-Letter I 22-2031a/84 dated 30 April 1984 (BCAR, Section K, Light Aeroplanes)
8. EASA Exemptions: None
9. EASA Equivalent Safety Findings: None
10. EASA Environmental Standards: ICAO Annex 16
11. Operational Suitability Data (OSD) certification basis
  - 11.1. Master Minimum Equipment List (MMEL)

CRI A-MMEL Issue 1 (10 June 2016)  
Any further changes to the MMEL due to configuration changes and/or Operator requests will have a certification basis defined by the applicable Certification Specifications Master Minimum Equipment List (CS-MMEL Initial Issue 31 January 2014).
  - 11.2. Flight Crew Data (FCD)

Certification Specifications for Operational Suitability Data (OSD)  
Flight Crew Data (CS-FCD Initial Issue 31 January 2014).

### **F.III. Technical Characteristics and Operational Limitations**

1. Type Design Definition:

Definition of the aircraft is established in the documents pursuant to Lists of Manufacturing Documents including their subsequent amendments as follows:

- a) KZB-038 000 A00D as of 17 August 1988 for aircraft production numbers 1155 (additional Change Note A228-212, approved on 28 June 1997 by LBA), 1176 up to 1190.
- b) KZB-038 000 B00D as of 4 August 1989 for aircraft production numbers 1191 and up.

2. Description:

Landplane with two turboprops. Cantilever high-wing aircraft of all-metal construction with retractable landing gear in nose wheel arrangement.

3. Equipment:

Refer to Equipment List of POH and LBA-approved "Summary of Aircraft Modifications" Dornier 228 Commuter Category, MZ6 C.R. as amended.

4. Dimensions:

Wing Span	16.97m	(55ft 8in)
Length	16.56m	(54ft 4in)
Height	4.86m	(15ft 11in)
Total Wing Area	32.0 m <sup>2</sup>	(344 ft <sup>2</sup> )

5. Engines: No. 2

Manufacturer Honeywell  
(previous AlliedSignal, Garrett AiResearch)  
Type Certificate: LBA TCDS No. 7015 / EN

Type 1: TPE 331-5A-252D  
Type 2: TPE 331-5AB-252D  
Type 3: TPE 331-10GT-511D  
Type 4: TPE 331-10GP-511D

Type 3 and Type 4: Installation according to LBA EMZ Nr. 0735/2031a, 0735/2031b, 0735/2031c based on FAA STC ST329CH-D

## 5.1 Engine Limits

Type 1 and Type 2:

Takeoff (5 min.) and Max.Continuous

- Power at max.continuous speed 579 KW
- Max.continuous speed 1607 min<sup>-1</sup>

Max interstage turbine temperature (ITT)

- Takeoff (5 min) 923°C
- Continuous 923°C
- Start (1 sec.) 1149°C

Engine 1 and 2 are compatible to each other.

Type 3 and Type 4:

Takeoff (5 min.) and Max. Continuous

- Power at max.continuous speed 579 KW
- Max.continuous speed 1607 min<sup>-1</sup>

Max exhaust gas temperature (EGT)

- Takeoff (5 min) depending on OAT (refer to POH)
- Continuous depending on OAT (refer to POH)
- Start (1 sec.) 770°C

Engine 3 and 4 are compatible to each other.

6. Propellers: No. 2
- Manufacturer: Hartzell Propeller Inc.
- Type Propeller 1: HC-B4TN-5ML/LT10574 FNS  
Propeller 2: HC-B4TN-5ML/LT10574 FNSB  
Propeller 3: HC-B4TN-5ML/LT10574 FS  
Propeller 4: HC-B4TN-5ML/LT10574 FSB
- Type Certificate: LBA TCDS No.: 32.130/37 / PR
- Number of blades: 4
- Manufacturer: MT-Propeller Entwicklung GmbH
- Type Propeller 5: MTV-27-1-E-C-F-R(G)/CFRL250-55b
- Type Certificate: TCDS EASA P.104  
Installed with STC EASA.A.S.02755
- Number of blades: 5

- 6.1 Nominal Diameter (Propeller 1, 2, 3, 4) 2692 mm  
Nominal Diameter (Propeller 5) 2500 mm (98.4 inch)

- 6.2 Additional Information concerning Powerplant Installation (Propeller 1, 2, 3, 4)
- Propeller blades of an aircraft must be of one type only
  - Exceptions for blades where „N“ is included in the code number are defined on LBA Propeller TCDS No. 32.130/37 / PR.

7. Fluids (Fuel/Oil/Additives):

7.1 Fuel

Refer also to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).

Fuel System Icing Inhibitor compliant with Specification MIL-I-27686E must be used.

7.2 OIL

Refer to the Section Limitations and Section 8 of the Pilot's Operating Handbook (latest revision).

8. Fluid capacities

8.1 Fuel:

for aircraft production numbers: 8176 up to 8190

Fuel max 2441 liters (4251 lb)

Consumable fuel 2386 liters (4156 lb)

for aircraft production numbers: 8155 and 8191 and up

Fuel max 2417 liters (4210 lb)

Consumable fuel 2386 liters (4156 lb)

8.2 Oil:

Total: 2 x 5.9 liters (6.25 US qts)

9. Air Speeds:

for aircraft production numbers: 8155 and 8176 up to 8190

VMO	(maximum operating speed)	
	- up to 15 000 ft	200 KIAS
MM0	(maximum operating speed)	
	- 25 000 ft – Mach N.	0.40
VA	(maneuvering speed)	150 KIAS
VFE	(max. flap extended speed)	
	Flap pos. 1. 5°:	150 KIAS
	Flap pos. 2. 20°:	130 KIAS
	Flap pos. DN 30°:	130 KIAS
	(only with trim coupling per SCN No. C01)	
VLO	(maximum landing gear operating speed)	160 KIAS
VLE	(maximum landing gear extended speed)	160 KIAS
	Max tire speed	140 KIAS
	Max crosswind component proven	30 kts
VMC	(minimum control speed with critical engine inoperative)	
	- flaps UP	79 KIAS

for aircraft production numbers: 8191 and up

VMO (maximum operating speed) - up to 15 000 ft	223 KIAS
MM0 (maximum operating speed) - 25 000 ft – Mach N.	0.44
VA (maneuvering speed)	150 KIAS
VFE (max. flap extended speed) Flap pos. 1. 5°:	160 KIAS
Flap pos. 2. 20°:	130 KIAS
Flap pos. DN 30°:	130 KIAS
VLO (maximum landing gear operating speed)	160 KIAS
VLE (maximum landing gear extended speed)	160 KIAS
Max tire speed	140 KIAS
Max crosswind component proven	30 kts
VMC (minimum control speed with critical engine inoperative) - flaps UP	79 KIAS

10. Maximum Operating Altitude:

Maximum	4572 m / 15 000 ft
respectively if SCN No. D08 is installed (Maximum Allowable Airspeed Indicator)	7620 m / 25 000 ft

11. All-weather Capability:

Category 1

Approved for flights in regions with known icing conditions if the following special equipment is installed:

- Control surface deicing (wing-empennage)	SCN No. R01
- Propeller deicing	SCN No. R05 / 3060A
- Fuselage deicing protection	SCN No. R03
- Windshield deicing	SCN No. V07

12. Maximum Weight:

for aircraft production numbers: 8155 and 8176 up to 8190:

- Max Taxi and Ramp weight	6430 kg (14 176 lb)
- Max Takeoff weight	6400 kg (14 110 lb)
- Max Landing weight	6100 kg (13 448 lb)
- Max Zero Fuel weight up to 6200 kg TOW	5590 kg (12 324 lb)
- Max Zero Fuel weight up to 6400 kg TOW	5400 kg (11 905 lb)

for aircraft production numbers: 8191 and up:

- Max Taxi and Ramp weight	6430 kg (14 176 lb)
- Max Takeoff weight	6400 kg (14 110 lb)
- Max Landing weight	6100 kg (13 448 lb)
- Max Zero Fuel weight	5940 kg (13 095 lb)

13. Centre of Gravity Range:  
Refer to Pilot's Operating Handbook Dornier 228-212, Section 2
14. Datum:  
Refer to Pilot's Operating Handbook Dornier 228-212, Section 2
15. Mean Aerodynamic Cord (MAC)  
2.046 m (80.55")
16. Leveling Means:  
Refer to Airplane Maintenance Manual (Chapter 08 – Leveling and Weighing)
17. Minimum Flight Crew: 1 (Pilot)
18. Maximum Passenger Seating Capacity
- |                               |    |
|-------------------------------|----|
| Maximum Number                | 21 |
| 19 Passenger and 2 Crew seats |    |
19. Exit: No. Type  
4 exits (one main door and 3 emergency exits, two on each side).
20. Baggage / Cargo Compartments
- |  |                 |
|--|-----------------|
| Forward baggage compartment:<br>- Maximum loading weight | 120 kg (265lb)  |
| Rear baggage compartment:<br>- Maximum loading weight    | 210 kg (464 lb) |
21. Wheels and Tires
- |                    |  |
|--------------------|--|
| Main Landing Gear: | Goodyear 25.5x8.75 -10/12 PRTL or 10/14 PRTL |
| Nose Landing Gear: | Goodyear 6.00 – 68 PRTT                      |

## **F.IV Operating and Servicing Instructions**

### 1. Operating Instructions:

- a. Pilot's Operating Handbook (POH) Dornier 228-212, for aircraft production numbers: 8155 and 8176 up to 8190, 8191 and up, 8300 and up:

Edition dated 1 January 1989, LBA-approved on 21 July 1989 ( for S/N 8155, 8176 to 8190 excluding Airplane modified according to CN-228-247), including POH Supplement "Weight and Fuel Limitations", LBA-approved on 28 June 1997, and LBA-approved on 17 November, 1989 (for Serial Number 8191 and up excluding Airplane modified according to CN-228-247) including Weighing and Balance and related approved supplements with effective revision status.

Edition 1, dated 15 July 2010 (for S/N 8206, 8300 and up and other Airplane Serial No. modified according to CN-228-247), including Weighing and Balance and related approved supplements with effective revision status.

### 2. Service Instructions:

- a. List of Applicable Publications (LOAP), latest revision. The LOAP lists the publications applicable to operation, maintenance, time limits and repair of the Dornier 228 Airplane and the installed equipment.

## **F.V OPERATIONAL SUITABILITY DATA (OSD)**

The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.359 as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

### 1. Master Minimum Equipment List (MMEL)

The Master Minimum Equipment List has been approved in accordance with the defined Operational Suitability Data certification basis and as documented in the European Aviation Safety Agency Master Minimum Equipment List, Master Minimum Equipment List MMEL-228-EASA, Revision E dated 29.04.2021, or later EASA approved revisions.

### 2. Flight Crew Data

The Flight Crew Data have been approved in accordance with the defined Operational Suitability Data certification basis and as documented in "Operational Suitability Data (OSD) Flight Crew Data 228-212 / 228-212 NG. Report ref. 228-212-FCD, Rev. B, dated 29.04.2021, or later EASA approved revisions.



## **F.VI Notes**

### 1. Eligible Serial Numbers

Serial-No. 8155, 8176 to 8190 as well as Serial-No. 8191 and up.

### 2. Other

a. Data on this TCDS refer to aircraft Model Dornier 228-212 Serial Number 8155, 8176 to 8190, 8191 and up in the respective standard configurations as well as options:

- Trim coupling SCN No. C01 (only for Serial No. 8155, 8176 to 8190) and
- MAAS-Indicator SCN No. D08 (max. operating altitude 25 000 ft)

b. Customized Cabin Interior and Seating Configuration must be approved.

c. Aircraft manufactured by Hindustan Aeronautics Ltd. (HAL) with S/Ns 8I-xxxx are not covered by this TCDS.

d. The use of parts including spare parts from the Indian licence production (HAL) is not permissible for Dornier 228 aircraft with certification of airworthiness on the basis of this TCDS. Those parts have part number with the letter "I" or "H" as a prefix (e.g. IA-xxxxxxAxxA or HA-xxxxxxAxxA).

e. Suffix "NG" (New Generation) is a marketing abbreviation for the nomination of the Dornier 228-212 equipped with a Flight Deck Upgrade together with the Propeller MTV-27-1-E-C-F-R(G)/CFRL250-55b installed in accordance with STC EASA.A.S.02755 (STC-Holder: MT-Propeller Entwicklung GmbH) and Engine TPE331-10GT-511D, TPE331-10GP-511D installed in accordance with FAA STC ST329CH-D (STC-Holder: Garrett Aviation Services).  
The Flight Deck Upgrade is introduced in production line from S/N 8300 and up and can be retrofitted according to approved Major Change CN-228-247 (EASA Major Change Approval 10031465).  
The AFM Supplement Doc No. E-1435 (STC EASA.A.S.02755) and the POH Supplement issued in 19 April, 1995 and up (FAA STC ST329CH-D ) are incorporated in POH Dornier 228-212, Edition 1, dated 15 July 2010, Doc. No.: TM-POH-228-00003-150710.

f. FAA STC ST329CH-D

The FAA changed the way they nominated STC's. During amendment of this STC they issued ST329CH-D instead of SA329CH-D. Both nominations were used.

SA329CH-D is the current nomination of the STC.

## **ADMINISTRATIVE SECTION**

### **I Acronyms**

N/A

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

Until 01 June 2000	Dornier Luftfahrt GmbH LBA Approved Design Organisation Certificate No.: LBA.JA.002 D-82230 Wessling Federal Republic of Germany
01 June 2000 – 27 July 2003:	Fairchild Dornier GmbH LBA DOA Certificate No.: LBA.JA.002 D-82230 Wessling Federal Republic of Germany
28 July 2003 – 14 March 2021:	RUAG Aerospace Services GmbH DOA Certificate No: EASA.21J.038 Oberpfaffenhofen Airfield P.O. Box 1253 D-82231 Wessling Federal Republic of Germany
Since 15 March 2021:	<u>General Atomics AeroTec Systems GmbH</u> DOA Certificate No: EASA.21J.038 Claude-Dornier-Strasse 1 D-82234 Wessling Federal Republic of Germany

### **III Change Record**

Issue 1	Initial issue, dated 24 July 2009
Issue 2	23 August 2010: revised Sections B, D, E, F to record the Modification to the Type Design related to the Flight Deck Upgrade, approved with CN-228-247 (EASA Major Change Approval 10031465).
Issue 3	15 December 2010: revised Sections A, B, C, D, E, F.
Issue 4	06 May 2013: revised Section F to correct the Airworthiness Category
Issue 5	04 January 2017: revised Sections A, B, C, D, E, F – Editorial corrections. Section F, Page 42: Subparagraphs added to define OSD Certification Basis for MMEL and Flight Crew Data. Section F, Page 49 New Section F.V for Operational Suitability Data. Section F, Page 50: Former Section F.V Change record renumbered Section F.VI.
Issue 6	11 May 2021: revised Cover Sheet and Admin Section Page 50 to reflect Change in Company name, General for all Models. Section FV Page 48 OSD data references updated.