



TYPE-CERTIFICATE DATA SHEET FOR NOISE

No. EASA.IM.A.023

for

CL-600 Challenger 600 Series

Type Certificate Holder:

Bombardier Inc.

800 Boul. René-Lévesque Ouest

Montreal, QC, Canada

H3B 1Y8

For models: CL-600-1A11
CL-600-2A12
CL-600-2B16



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Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-1A11**
 (Commercial Designation) **Challenger 600)**

Engine Manufacturer¹ **Avco Lycoming** Engine Type Designation¹ **ALF502L-2**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A19284	18,711	16,329	89.5	94.0	84.8	89.0	91.6	98.0	-
A19282	18,643	16,329	89.5	94.0	84.7	89.0	91.6	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-1A11**
(Commercial Designation) **Challenger 600)**

Engine Manufacturer¹ **Avco Lycoming** Engine Type Designation¹ **ALF502L-2C**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A19285	18,711	16,329	89.5	94.0	84.8	89.0	91.6	98.0	-
A19283	18,643	16,329	89.5	94.0	84.7	89.0	91.6	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2A12**
(Commercial Designation) **Challenger 601)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-1A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A1924	20,457	16,329	83.7	94.0	81.1	89.0	91.2	98.0	-
A1925	20,230	16,329	83.7	94.0	80.8	89.0	91.2	98.0	-
A1926	19,550	16,329	83.8	94.0	80.3	89.0	91.2	98.0	-
A1927	19,096	16,329	83.9	94.0	79.8	89.0	91.2	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2A12**
(Commercial Designation) **Challenger 601)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-1A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **SB 601-0638 (Recertification to Chapter 4)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A19082	20,457	16,329	83.7	94.0	81.1	89.0	91.2	98.0	-
A19083	20,230	16,329	83.7	94.0	80.8	89.0	91.2	98.0	-
A19084	19,550	16,329	83.8	94.0	80.3	89.0	91.2	98.0	-
A19085	19,096	16,329	83.9	94.0	79.8	89.0	91.2	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2A12**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A9030	20,457	16,329	84.3	94.0	80.2	89.0	91.2	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2A12**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **SB 601-0638 (Recertification to Chapter 4)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A19086	20,457	16,329	84.3	94.0	80.2	89.0	91.2	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2B16**
(Commercial Designation) **Challenger 601-3A)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A1929	20,570	17,236	84.3	94.0	80.3	89.0	91.3	98.0	-
A1928	20,457	17,236	84.3	94.0	80.2	89.0	91.3	98.0	-
A1931	20,230	16,329	84.4	94.0	80.0	89.0	91.2	98.0	-
A2034	19,550	16,329	84.5	94.0	79.7	89.0	91.2	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2B16**
(Commercial Designation) **Challenger 601-3A)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **SB 601-0638 (Recertification to Chapter 4)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A19087	20,570	17,236	84.3	94.0	80.3	89.0	91.3	98.0	-
A19088	20,457	17,236	84.3	94.0	80.2	89.0	91.3	98.0	-
A19089	20,230	16,329	84.4	94.0	80.0	89.0	91.2	98.0	-
A19090	19,550	16,329	84.5	94.0	79.7	89.0	91.2	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2B16**
(Commercial Designation) **Challenger 601-3R)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3A1**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A1933	20,457	17,236	84.3	94.0	80.2	89.0	91.3	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2B16**
(Commercial Designation) **Challenger 601-3R)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3A1**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **SB 601-0638 (Recertification to Chapter 4)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A19091	20,457	17,236	84.3	94.0	80.2	89.0	91.3	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2B16**
(Commercial Designation) **Challenger 601-3A)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3A2**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A1930	20,570	17,236	84.3	94.0	80.3	89.0	91.3	98.0	-
A5838	20,457	16,329	84.3	94.0	80.2	89.0	91.2	98.0	-
A1932	20,230	16,329	84.4	94.0	80.0	89.0	91.2	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2B16**
(Commercial Designation) **Challenger 601-3A)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3A2**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **SB 601-0638 (Recertification to Chapter 4)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A19092	20,570	17,236	84.3	94.0	80.3	89.0	91.3	98.0	-
A19093	20,457	16,329	84.3	94.0	80.2	89.0	91.2	98.0	-
A19094	20,230	16,329	84.4	94.0	80.0	89.0	91.2	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2B16**
(Commercial Designation) **Challenger 604, 605)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3B**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A1934	21,863	17,236	84.6	94.0	81.2	89.0	91.3	98.0	-
A1935	21,591	17,236	84.6	94.0	80.9	89.0	91.3	98.0	-
A1936	17,236	17,236	85.3	94.0	76.8	89.0	91.3	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2B16**
(Commercial Designation) **Challenger 650)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3B**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A19161	21,863	17,236	84.6	94.0	81.2	89.0	91.3	98.0	-

¹ See Note 1.



Type Certificate Holder ¹	Bombardier Inc.	Aircraft Type Designation ¹ (Commercial Designation)	CL-600-2B16 Challenger 650)
Engine Manufacturer ¹	General Electric	Engine Type Designation ¹	CF34-3B
Additional modifications essential to meet the requirements or needed to attain the certificated noise levels ¹		SB 650-34-012 (for S/N 6050-6131) or modsum 600-6421 (for S/N 6132 and up) (MTO Take-off Mode capability)	
Noise Certification Basis	ICAO Annex 16, Volume I	Edition / Amendment	Edition 6 / Amendment 10 Chapter ¹ 4

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A19220	21,863	17,236	85.6	94.0	79.0	89.0	91.3	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **Bombardier Inc.** Aircraft Type Designation¹ **CL-600-2B16**
(Commercial Designation) **Challenger 604, 605)**

Engine Manufacturer¹ **General Electric** Engine Type Designation¹ **CF34-3B**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **SB 604-11-016 or SB 605-11-003 (Recertification to Chapter 4)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment **Edition 6 / Amendment 10** Chapter¹ **4**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A19095	21,863	17,236	84.6	94.0	81.2	89.0	91.3	98.0	-
A19096	21,591	17,236	84.6	94.0	80.9	89.0	91.3	98.0	-
A19097	17,236	17,236	85.3	94.0	76.8	89.0	91.3	98.0	-

¹ See Note 1.



TCDSN EASA.IM.A.023 Notes

1. In cases where it is appropriate to issue a noise certificate, items so marked shall be included on EASA Form 45.

Change Record

Issue	Date	Changes
Issue 1	08 January 2007	Initial Issue
Issue 2	21 February 2007	Revised
Issue 3	30 April 2007	Revised
Issue 4	15 January 2008	Revised record A5838
Issue 5	21 July 2010	Revised
Issue 6	08 November 2010	Added CL-600-2E25 (CRJ1000): Records A15227 to 15256
Issue 7	19 January 2011	Deleted CL-600-2B19 records linked to Chapter 3; Remove "Chapter 4 option" from CL-600-2B19 records
Issue 8	27 April 2015	Added "Conical Nozzle" installation : Records A19034 - A19057
Issue 9	11 August 2015	Records A19082 - A19097 added
Issue 10	10 February 2017	Record A19161 added for Challenger 650
Issue 11	20 February 2019	Record A19220 added
Issue 12	06 March 2020	New revision due to move of CL-600-2B19, CL-600-2C10, CL-600-2D15, CL-600-2D24 and CL-600-2E25 to TCDS EASA IM.A.673; Added model CL-600-1A11

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