TYPE-CERTIFICATE DATA SHEET

No. E.210

for
Rotax 275 series engines

Type Certificate Holder
BRP-Rotax GmbH & Co KG

Rotaxstraße 1
A-4623 Gunskirchen
Austria

For Models:

Rotax 275

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I. General

1. Type/ Model

Rotax 275

2. Type Certificate Holder

BRP-Rotax GmbH & Co KG
Rotaxstraße 1
A-4623 Gunskirchen, Austria
DOA EASA.21J.048

3. Manufacturer

As above

4. Date of Application

Not known, before November 1988

5. EASA Type Certification Date

Rotax 275
09.11.1988

Note: EASA type certificate for all these models is granted in accordance with article 2 paragraph 3(a) of EU Commission Regulation 1702/2003 replacing the BAZ/ACG Austria certification of these products (Austrian Type Certification no. TW 7/88)

II. Certification Basis

1. EASA Certification Basis

1.1. Airworthiness Standards

JAR 22, airworthiness standards for aircraft engines of motor gliders

1.2. Special Conditions (SC)

none

1.3. Equivalent Safety Findings

none

1.4. Deviations

none

1.5. Environmental Protection

none

III. Technical Characteristics

1. Type Design Definition

As defined the type design definition number78.275.

2. Description

ROTAX 275 engine: 1 cylinder, two stroke engine, ram air cooling, mixture lubrication, single magneto ignition, diaphragm carburetor, gear driven propeller, manual starter, alternator, fuel pump

Weight (dry):	25 kg (with muffler and starter)
Bore:	72 mm
Stroke:	66 mm
Displacement:	268,7 cm^3
Compression Ratio:	11,8
Crankshaft drive rotation:	counter clockwise (viewed from front)
Drive rotation on propeller flange on gear:	clockwise (viewed from front)

3. Equipment

Carburetor:	Diaphragm carburetor type BN 38 main jet 7/8 turn open
Fuel pump:	electric pump Facet
Ignition system:	magneto ignition system (BOSCH SCP 1), 12 Volt, 75/23 Watt ignition point 2,28 mm BTC
Spark plugs:	B 8 ES, Bosch W3CC, W3CP
Starter:	manual starter
Power drive:	propeller flange
Revolution measurement:	supply for an electronic tachometer

4. Dimensions

Not determined

5. Dry Weight

25 kg (with muffler and starter)

6. Ratings

	kw	PS	1/min
Take off power:	17,6	24	7000
max. continous:	17,6	24	7000

7. Fluids (Fuel, Oil, Coolant, Additives)

7.1.Fuel

Fuel: 2 stroke mixture
super gasoline min 96 ROZ or AVGAS 100 LL

Description	German	English
See Operator's Manual	HB-275	OM-275
See Service Instruction	n.a.	n.a.

7.2. Oil

Lubrication: Mixture lubrication
mixing ratio 1:50
with super two stroke oil
Gear Oil: SAE 140, API GL5, ca. 300 cm^3

Description	German	English
See Operator's Manual	HB-275	OM-275
See Service Instruction	n.a.	n.a.

7.3 Coolant

Description	German	English
See Operator's Manual	HB-275	OM-275
See Service Instruction	n.a.	n.a.

8. Aircraft Accessory Drives

none

IV. Operating Limitations

1. Temperature Limits:

Cylinder head temperature	max. 250°C
measured with thermo couple under spark plug	

2. Speed Limits:

max. RPM	7200
recommended Cruising RPM:	6300
idling RPM:	approx. 3000

V. Operating and Service Instructions

Description	German	English
Operation- and Maintenance instruction	HB-275	OM-275
Installation Manual	EBHB-275	IM-275
Repair Manual	RHB-275	RM-275
Service Bulletins, Service Instructions and Service Letters	as issued	as issued

VI. Notes

Note 1: Fuel consumption
At 100 % power approx. 11,8 l/h (3,11 Gal/h) and at 75 % power approx. 8,5 l/h (2,25 Gal/h).

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

ACG	Austro Control GmbH
AS 8020	Aerospace Standard: General minimum performance standards for generators/starter-generators and associated voltage regulators for use in direct current (DC) electric systems for civil aircraft
AVGAS	Aviation Gasoline
CHT	Cylinder Head Temperature
CT	Coolant Temperature
CW	clockwise
CCW	counter-clockwise
CS-E	Certification Specifications Engines
EASA	European Aviation Safety Agency
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
HIRF	High Intensity Radiated Fields
IM	Installation Manual
IPC	Illustrated Parts Catalog
JAR	Joint Aviation Requirements
JAR-E	Joint Aviation Requirements Engines
MMH	Maintenance Manual Heavy
MML	Maintenance Manual Line
OM	Operators Manual
OHM	Overhaul Manual
OHMA	Overhaul Manual, Appendix
rpm	revolutions per minute
RTCA	Radio Technical Commission for Aeronautics
SB	Service Bulletin
SI	Service Instruction
TBO	Time between Overhaul
TCDS	Type Certificate Data Sheet
TCU	Turbo Control Unit

II. Type Certificate Holder Record

Before June 15, 2016	BRP-Powertrain GmbH & Co KG Rotaxstraße 1 A-4623 Gunskirchen Austria DOA EASA.21J.048
Before March 15, 2014	BRP-Powertrain GmbH & Co KG Welser Straße 32 A-4623 Gunskirchen, Austria DOA EASA.21J.048
Before February 3, 2009	BRP-Rotax GmbH & Co. KG Welser Straße 32 A-4623 Gunskirchen, Austria DOA EASA.21J.048
Before June 16, 2004	Bombardier-Rotax GmbH & Co. KG Welser Straße 32 A-4623 Gunskirchen, Austria
Before December 29, 2001	Bombardier-Rotax Gesellschaft mbH Welser Straße 32 A-4623 Gunskirchen, Austria

III. Change Record

Issue	Date	Changes	TC issue
Issue 01	26 February 2010	Initial Issue	26 February 2010 initial issue
Issue 02	15 March 2015	Change of Company Address	
Issue 03	05 September 2016	Name change to BRP-Rotax GmbH & Co KG as of June 15, 2016	05 September 2016

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