

## Specifications

### Engine

STIHL single cylinder two-stroke engine

#### MS 231, MS 231 C

Displacement:	42.6 cc
Bore:	42.5 mm
Stroke:	30 mm
Engine power to ISO 7293:	2.0 kW (2.7 bhp) at 10,000 rpm
Idle speed: <sup>1)</sup>	2,800 rpm

#### MS 251, MS 251 C

Displacement:	45.6 cc
Bore:	44 mm
Stroke:	30 mm
Engine power to ISO 7293:	2.2 kW (3.0 bhp) at 10,000 rpm
Idle speed: <sup>1)</sup>	2,800 rpm

<sup>1)</sup> to ISO 11681 +/- 50 rpm

### Ignition System

Electronic magneto ignition

Spark plug (resistor type): NGK CMR6H, BOSCH USR 4 A C

Electrode gap: 0.5 mm

### Fuel System

All position diaphragm carburetor with integral fuel pump

Fuel tank capacity: 390 cc (0.39 l)

### Chain Lubrication

Fully automatic, speed-controlled oil pump with rotary piston

Oil tank capacity: 200 cc (0.2 l)

### Weight

dry, without bar and chain

MS 231: 4.8 kg

MS 231 C with ErgoStart and quick chain tensioner: 5.1 kg

MS 251: 4.8 kg

MS 251 C with ErgoStart and quick chain tensioner: 5.1 kg

### Cutting Attachment

Actual cutting length may be less than the specified length

#### .325" Rollomatic E guide bars

Cutting lengths: 35, 40, 45 cm

Pitch: .325" (8.25 mm)

Groove width: 1.6 mm

Nose sprocket: 11-tooth

#### 3/8" P Rollomatic E guide bars

Cutting lengths: 30, 35, 40, 45 cm

Pitch: 3/8" P (9.32 mm)

Groove width: 1.3 mm

Nose sprocket: 9-tooth

#### .325" chain

Rapid Micro 3 (26 RM3) Type 3634

Rapid Duro 3 (26 RD3) Type 3667

Pitch: .325" (8.25 mm)

Drive link gauge: 1.6 mm

#### 3/8" P chain

Picco Micro 3 (63 PM3) Type 3636

Picco Super 3 (63 PS3) Type 3616

Picco Duro 3 (63 PD3) Type 3612

Pitch: 3/8" P (9.32 mm)

Drive link gauge: 1.3 mm

### Chain sprocket

7-tooth for .325"

Max. chain velocity to ISO 11681: 25.6 m/s

Chain speed at maximum power output: 19.3 m/s

6-tooth for 3/8" P

Max. chain velocity to ISO 11681: 24.8 m/s

Chain speed at maximum power output: 18.6 m/s

### Noise and Vibration Data

For further details on compliance with Vibration Directive 2002/44/EC see [www.stihl.com/vib](http://www.stihl.com/vib).

#### Sound pressure level $L_p$ to ISO 22868

MS 231: 103 dB(A)

MS 231 C: 103 dB(A)

MS 251: 103 dB(A)

MS 251 C: 103 dB(A)

MS 231, MS 231 C, MS 251, MS 251 C

**Sound power level  $L_w$  to ISO 22868**

MS 231:	114 dB(A)
MS 231 C:	114 dB(A)
MS 251:	114 dB(A)
MS 251 C:	114 dB(A)

**Vibration measurement  $a_{hv, eq}$  to ISO 22867**

	Handle, left	Handle, right
MS 231:	3.9 m/s <sup>2</sup>	3.9 m/s <sup>2</sup>
MS 231 C:	3.9 m/s <sup>2</sup>	3.9 m/s <sup>2</sup>
MS 251:	3.9 m/s <sup>2</sup>	3.9 m/s <sup>2</sup>
MS 251 C:	3.9 m/s <sup>2</sup>	3.9 m/s <sup>2</sup>

The K-factor in accordance with Directive 2006/42/EC is 2.0 dB(A) for the sound pressure level and sound power level; the K-factor in accordance with Directive 2006/42/EC is 2.0 m/s<sup>2</sup> for the vibration level.

**REACH**

REACH is an EC regulation and stands for the Registration, Evaluation, Authorisation and Restriction of Chemical substances.

For information on compliance with the REACH regulation (EC) No. 1907/2006 see [www.stihl.com/reach](http://www.stihl.com/reach).

**Exhaust Emissions**

The CO<sub>2</sub> value measured in the EU type approval procedure is specified at [www.stihl.com/co2](http://www.stihl.com/co2).

The measured CO<sub>2</sub> value was determined on a representative engine in accordance with a standardized test procedure under laboratory conditions and does not represent either an explicit or implied guarantee of the performance of a specific engine.

The applicable exhaust emission requirements are fulfilled by the intended usage and maintenance described in this instruction manual. The type approval expires if the engine is modified in any way.

**Ordering Spare Parts**

Please enter your saw model, serial number as well as the part numbers of the guide bar and saw chain in the spaces provided. This will make re-ordering simpler.

The guide bar and saw chain are subject to normal wear and tear. When purchasing these parts, always quote the saw model, the part numbers and names of the parts.

Model

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Serial number

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Guide bar part number

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Chain part number

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