

# **Disc sanding machine CB 400\_600\_800** /- 1 (2)



# translation of the original Service instructions handbook updated 04 / 2016

ROJEK

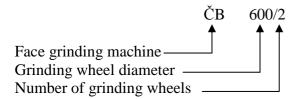
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#### 1. GENERAL

#### 1.1 Grinding machine identification Grinding machines are identified as follows:



#### 1.2 Application

Face grinding machines of following models: ČB 400/1(2), ČB 600/1(2) and ČB 800/1(2) are designed for grinding of wood, aluminium alloys and all types of plastic. High-quality grounded surface, accurate and quick adjustment of the table allows reducing the number of faulty products and raising the labour productivity.

#### 1.3 Used signs

Below you can find signs shown in the manual and placed on the machine. There is a short description stated for each sign.



WARNING (black sign on the yellow background)
Refers to general hazards. A failure to comply with specified procedure may result in personal injury or property damage



(Black sign on the yellow background) Warns of high voltage



(Black sign on the white background plus red signal) Prohibits using water for fire-fighting purposes.



(White sign on the blue background)

Refers to duty of operating personnel to shut down power supply before commencing specific activities.



(Black sign on the yellow background)

Refers to duty of operating personnel to find out respective information in the manual before commencing any activities using the machine.



(White sign on the blue background) Instruction to wear goggles.

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#### 2. WORK SAFETY

This service manual contains some basic instruction that shall be observed at installation, operation and maintenance of the face grinding machine.



Caution.

It is necessary that all competent personnel be thoroughly familiarized with the text.

It is necessary to comply not only with above general safety instructions (mentioned in this section) but even other specific safety instructions stated in other sections.

Safety instructions for operator and operating personnel.



#### WARNING

Never repair the grinding machine when in operation.

Protection covers over moving parts must not be uncovered when the machine is in operation.



#### WARNING

Only competent and certified person may carry out any activities related to the electrical equipment. Danger voltage.



#### WARNING

Never use water to extinguish fire near the switchboard.



#### WARNING

Special care shall be taken to prevent an unauthorized person from switching on the driving motor of the grinding machine. Take out the plug and lock the main switch.



#### DIRECTION

Always wear goggles when operating the grinding machine.

Safety instructions for maintenance and installation



#### WARNING

Operator shall ensure that competent and certified persons thoroughly familiarized with the service manual carry out all maintenance, control and installation activities.

#### 3. TECHNICAL DATA

	model CB 400/1(2)	model CB 600/1(2)	model CB 800/1(2)
machine length	550 (800) mm	640 (1100) mm	740(1300) mm
machine width	500 mm	700 mm	900 mm
machine height	700 mm	1285 mm	1385 mm
table dimensions	500 x 250 mm	700 x 300 mm	900 x 400 mm
height of the table	475 mm	900 mm	900 mm
grinding wheel diameter	400 mm	600 mm	800 mm
number of grinding wheels	1(2)	1 (2)	1(2)
grinding wheel rpm	910/ min	940/ min.	700/ min.
motor output	1,1 (1,5) kW	1,5 (2,2) kW	2,2 (3) kW
weight	45 (65) kg	110 (180) kg	180 (250) kg
environment	AA4, AB4, AD1	AA4, AB4, AD1	AA4, AB4, AD1

Sound level at work place of the machine measured is 78,3 dB. according to EN ISO 11202: 1997.

Following standards and regulations were used at construction of the machine:

EN 60204-1, EN 292-2, EN 294, EN 418, EN 953, EN 1050.

#### 4. DESCRIPTION AND FUNCTION

The machine consists of the frame, table, and tilting device, grinding wheels, exhaustion and electric equipment. The frame of the machine is covered with metal plate. Motor is fixed at upper section of the frame. Exhaust pipe is situated inside the frame. Aluminium wheel, with following diameters:  $\emptyset$  400, 600 and 800 mm, is fastened to the flange with four M16 set screws. An emery cloth is bonded to the wheel. Cast iron table is attached to the grinding machine on the swivel arm. Controls available are the motor starter with a function of central STOP button and the mechanical brake.

Sending machine is equipped with an electronic brake. Machine operator must respect producer's instructions, mentioned at the machine. ATTENTION! START AGAIN ONLY AFTER BRAKED DISC STOPS!!!

In case of an electronic motor brake failure, it is possible to disconnect the brake from the electric circuit. Only a skilled, qualified person is allowed to disconnect it!

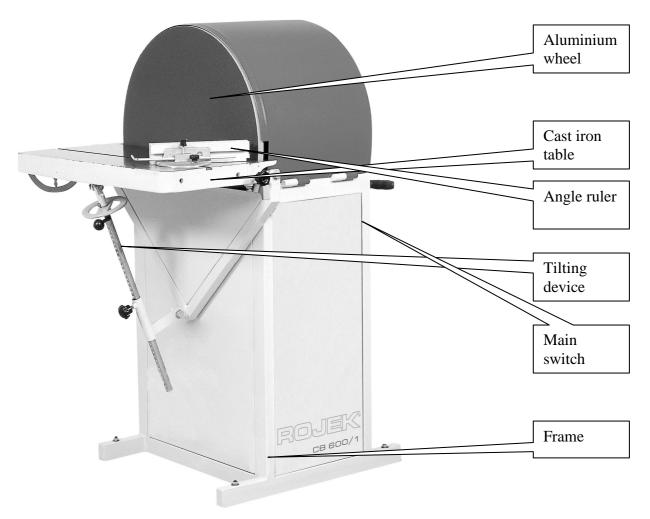
Using an adjustable rod set up the table into the required angle and then uses the control wheel for fine adjustment. The angle ruler ( $\pm 60$  degrees) is fixed to the cast iron table in the T groove. Special dust and sawdust exhausters R 200 A or R 2000 may be connected to the exhaust pipe with the diameter of Ø 95 mm. This exhauster is not supplied with the machine.

WARNING



In the event of sand paper replacement or machine failure an authorized person may uncover the upper cover of the grinding machine.

This may only be done when the grinding machine is not in operation!



#### 5. INSTALLATION

The grinding machine models ČB 600/1(2) and ČB 800/1(2) shall be anchored to the ground using four (4) M12 screws. Connection of the grinding machine is made via the cable CGSG 4C 1,5mm with the 16A, 400V plug. Socket shall be protected against overcurrent 3 16A.

After the initial connection the direction of rotation is to be checked. This shall be as indicated by an arrow shown on upper side of the cover. In the event of contrariwise rotation the two-phase wires at motor starter shall be interconnected.



#### WARNING

Only a competent person with electrotechnical qualification is allowed to carry out these works.

#### 6.OPERATION

- Trained persons may only operate face grinding machine.
- Always use a facial shield or goggles when operating the grinding machine.
- Use protective gloves and apron depends on nature of works to be performed.
- Operator must not leave the machine until the wheel stops after turning off.
- When the work on the grinding machine is interrupted or completed, it is necessary to turn the switch off.
- It is forbidden to repair malfunctions when the machine is in operation or the wheel is not standing after turning the machine off.

#### 7. MAINTENANCE

Once a month it is necessary to re-fasten motor starter clamps. Motor protection against overloading is set up to the rated current of the motor by the manufacturer and it is forbidden to change this value. These works may only be carried out by the person with appropriate electrotechnical qualification. Function and effectiveness of the brake system needs to be checked on a regular basis. All maintenance works may only be performed by certified and competent person after the machine is disconnected from mains.

#### 8. ABRASIVE CLOTH REPLACEMENT

When you decide to replace the emery cloth, proceed as follows. Loosen upper cover and uncover it. Loosen the M12 nut of the swivel arm and remove the table from the grinding machine. Pull the aluminium wheel off the motor flange. Moisten the cloth bonded to the wheel (use water for this purpose) and after about 2 hours remove the cloth from the wheel.

Clean the wheel up and remove the grease from the wheel using the C6000 diluter. Using a spatula prepared for this purpose apply the layer (0,5 mm thick) of the DIVALEP FORTE adhesive. Stick the cloth on. When sticking a special care must be taken to prevent from air bubbles remaining between the cloth and the wheel. Cloth glued on in this manner is to be pressed and let to get dry (10 hrs). After then cut the cloth off. Wheel contact-surface and flange contact-surface must be cleaned up. Mount the grinding wheel on the motor flange. Tighten nuts gently. Put the table back into its position and adjust the distance of the table from the wheel to 3 up to 5mm.

#### 9. STORAGE

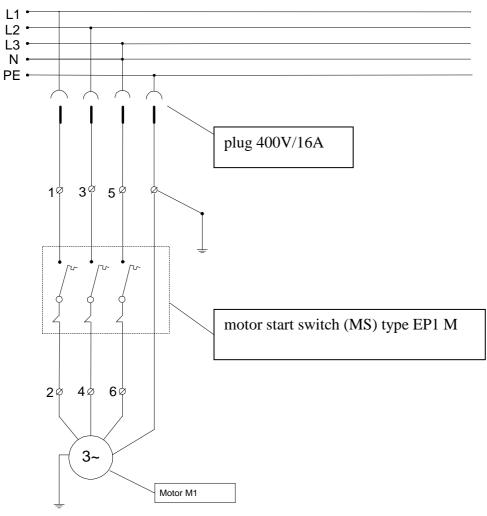
Grinding machines must be stored in dry premises where no great temperature changes occur. Preservation shall be checked at least once a year at long-term storage.

#### **10.GUARANTEE**

Guarantee period and conditions are stated in the guarantee certificate.

#### 11. Grinding machine WIRING DIAGRAM

Voltage system: 3x230V/400V AC 3P+N 50Hz AC 400V/TN-S

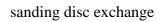


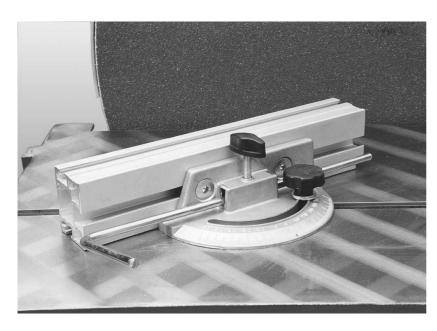
MODEL	CB 400/1	CB 400/2	CB 600/1	CB 600/2	CB 800/1	CB 800/2
M1	1,1kW	1,5kW	1,5kW	2,2kW	2,2kW	3kW
	910 rpm	910 rpm	940 rpm	940 rpm	700 rpm	700 rpm
MS	EP1 M4	EP1 M4	EP1 M4	EP1 M6,3	EP1 M10	EP1 M10
	3,0A	3,9A	3,9A	5,2A	6,2A	7,7A

The grinding machine connected via the cable CGSG 4C x 1,5 mm<sup>2</sup> with the plug 16A, 400 V. On the front side there is a motor starter: type EP1 M (4; 6,3; 10), which provides overcurrent protection and is used to turn on/off the motor. Protection of this starter is IP55 and the starter is equipped with undervoltage protection against unexpected start up of the grinding machine after outage. Interconnection of the machine is realized by the cable CGSG 4C 1,5mm<sup>2</sup>. Protective clamp of the motor starter is connected via the wire CY 6mm<sup>2</sup> to the outside protective clamp of the machine frame.

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angle ruler





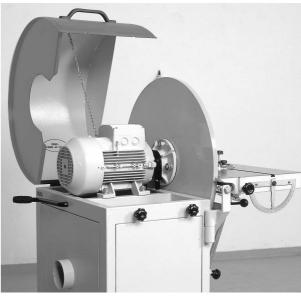


table adjusting

table tilting









## **EU Conformity Declaration**

Producer: Rojek dřevoobráběcí stroje a.s. woodworking machines

business place: Masarykova 16, 517 50 Častolovice, Česká Republika~Czech Republic

product term:

panel saw

type designation:

**KDR 103N** 

product specification: circular dimension saw for length- and cross-sawing of solid timber, wood, laminated chipboards (laminated wood-chips)

We, at own exclusive responsibility, declare that the explicit product was produced in accordance with following regulations and norms:

Directive 2006/42/EC stating technical requirements on machinery

Directive 2006/95/EC stating technical requirements on electric appliances of low voltage

Directive 2004/108/EC stating technical requirements on electromagnetic compatibility

### applied norms:

EN ISO 12100-1:2004, EN ISO 12100-2:2004, EN 294:1994, EN 349:1994, EN ISO 13 850:2007, EN 614-1:2006, EN 953:1998, EN ISO 13 849-1:2007, EN 1870-1:2008 (EN 1870-1:2007), EN 1037:1997, EN 1088:1999, EN 60204-1 ed. 2:2007, ISO 3864:1995

The conformity was reviewed in cooperation with a notified body, the test facility: **TÜV Rheinland** Product Safety GmbH - Am Grauen Stein - D-51105 Köln. notified under No. 0197 to the E.U. Commission

EU certificate type: BM 501666400001; AN 501610400001

The last 2 figures of calendary year nr., the electric device was granted the mark CE in: 09.

Častolovice

Evžen Rojek

1. 1. 2010

executive director

signature