

CONTEC

ALPHA

Floor Grinder

Instruction manual



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CONTEC GmbH

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57518 Alsdorf

1 EU-Declaration of Conformity

According to the Machine Directive 98/37/EC (89/392/EWG), Appendix II A

We hereby declare that the machine

Type: Floor Grinder
Name: Alpha

conforms with the following standards which have been valid at the date written below:

EC-Machinery Directive 98/37/EC (89/392/EEC), in its current wording
EC-Directive 89/336/EEC on electromagnetic compatibility, in its current wording
EC-Directive 73/23/EWG (89/392/EEC) on low voltage equipment, in its current wording

List of the essential harmonised standards:

EN 12100	„Safety of machinery”
EN 418	„Emergency-Stop-Equipment, functional aspects“
EN 953	„Guards, general requirements for the design and construction of fixed and movable guards“
EN 60204 Part 1	„Electric equipment of machines, general requirements“
EN 1050	„Principles for risk assessment“

Alsdorf, 10.04.2004

(Place and date)



(Authorized signature)

J. Greb – Construction department

(Name and function of the authorized person)

2 Technical data

Grinding width	230 mm
Width	30 cm
Length	60 cm
Height	51 cm
Weight	42 kg
Speed of grinding head	1500 rpm
Hose Ø	50 mm
Average value of acceleration a_{hv} *	9.6 m/s ²
Noise level L_{wa} *	100 dB(A)
Noise level Leq *	90 dB(A)

* Data: VÜA Verein zur Überwachung technischer Anlagen e.V.

3 Application of tools

3.1 General applications

Application	Tool	Diamond	Tungsten carbide grit	Cutters
Grinding of plain floors, - Smooth surface - Semi rough surface - Rough surface		A	C	C
		A	B	C
		A	A	C
Levelling of uneven surfaces - Smooth surface - Semi rough surface - Rough surface		A	A	C
		A	A	C
		B	A	C
Levelling of Steps, corners, joints etc.		B	A	C
Renovation		A	B	A
Repair		A	B	A
Faults in concrete		A	B	A
Grinding of - Hard concrete - Oily and greasy floors - Painted floors - Epoxy coatings		A	C	B
		A	B	A
		A	A	A
		A	A	A
Removal of floor surfaces up to 5 mm		A	C	A
Removal of carpet and tile glue		C	A	A
Grinding of asphalt		B	B	A
A Suitable B Less suitable C Unsuitable				

3.2 Application of diamond discs

Grinding of:	Description:	Colour:
Hard floors	CS16	silver
Normal concrete	CS40	blue
Aggressive concrete	CA1	brown
Terrazzo	MBC1	purple
Epoxy / PU glue	CS06	red

4 Safety rules for the operation of the floor grinder

Attention! The ALPHA floor grinders are constructed according to existing safety rules and regulations. These technical precautions should not be removed or changed under any circumstances. While operating the machines the following points should also be kept in mind:

1. The grinders should always be operated with all safety covers and technical precautions.
2. During transport, cleaning, repair or maintenance the grinder must be disconnected from the mains. That also applies to the changing of tools.
3. The safety ring (Diagram No. 17) can only be removed while operating the machine directly against the wall. While operating the machine without the safety ring dust can be generated. In this case the operator must wear a mask. In all other cases the grinder must be operated with the safety ring.
4. The operator should never leave the machine unattended during operation.
5. Before leaving the machine all rotary parts should be brought to a stand still. Electric models must be disconnected from the mains. Make sure that the machine cannot roll or move by itself.
6. After any maintenance and adjustment all safety covers must be reattached.
7. Ear protectors must be worn.
8. Eye protectors must be worn.
9. Safety shoes with steel caps must be worn.

10. In the event of a large amount of dust during operation, connect a dust collector to the grinder.
11. Depending on the floor (floor coating) grinding can produce gases. The operator must be held responsible if these generated gases are dangerous and if protection is necessary. Grinding floors containing asbestos is especially dangerous and can cause health problems. Special masks must be worn which keep the breathing air clean. A dust collector must be used and should be equipped with filters suitable for asbestos dust.
12. The floor must be brushed before grinding because loose material could get into the tools and fly away. Anchor screws and bolts coming out of the floor can also be seen better if the floor is clean. If the grinding head hits an anchor screw or bolt then serious damage can be caused to the machine or grinding head.

5 Operating

Disconnect the grinder from the power supply!

After mounting the appropriate tools, the operation of the grinder can begin.

Adjust the grinder by loosening the screws of the rear wheel swing (Appendix diagram No. 3) and changing its position in the slots so that the motor axis is 90° level to the floor. Tighten the screws again. Connect the grinder to the mains. Lift the tool from the floor by tilting the machine onto its back wheels. Switch the motor on.

Attention, when switching on the motor, beware the machine jumps slightly.

After the motor has reached full speed, place the grinding head carefully on the floor. If the machine is correctly adjusted (see above) it is easy to move across the floor. If the machine pulls to the left or right, the machine has to be re-adjusted by changing the position of the rear wheel swing (see above).

Attention: Never switch the motor on while the grinding head is on the floor.

Dust emission should be prevented by connecting a dust collector.

Before finishing the grinding process the machine must be switched off and the tools have to be brought to a stand still by letting them touch the floor. Disconnect from the power supply.

6 Changing of the tools

Attention: Before working on the grinder bring the motor to a total stand still and disconnect from the power supply.

Achtung: Tools can be hot after use.

- Tilt the machine onto the back wheels and rest it on the handlebar.
- All tools or tool brackets are fixed with two Allen screws to the flexible coupling on the motor shaft. Appendix „Alpha tools“ No. 9.
- Remove the screws with an 8mm Allen key.
- Check the grinding tool for wear and tear for the next application.
- Fix new tools according to the appendix „Alpha tools“.
- Adjust the different heights of the tools by changing the position of the rear wheel swing (see chapter 5 Operating). The motor axis of the grinder has to be 90° level to the floor.

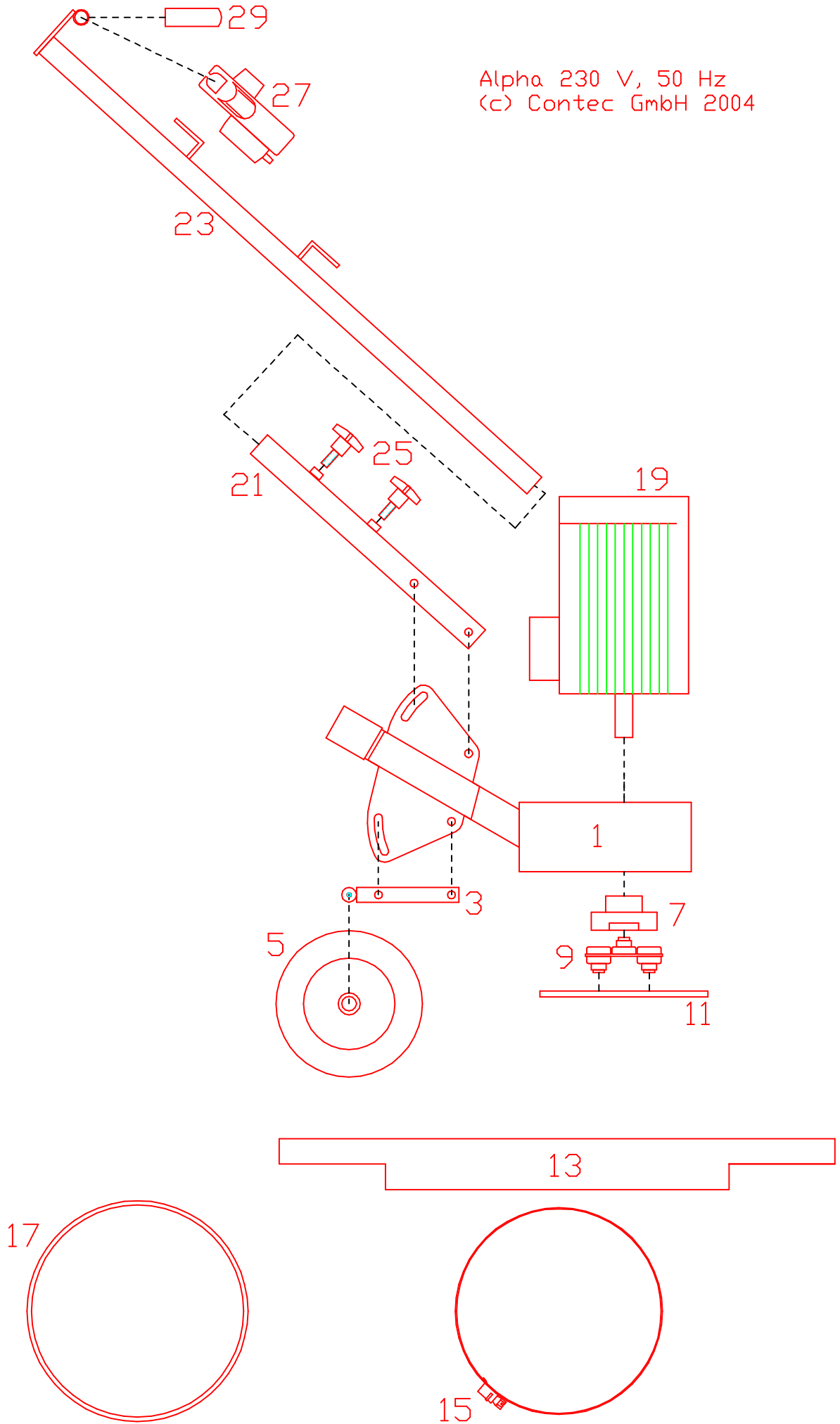
7 Appendix

Diagrams

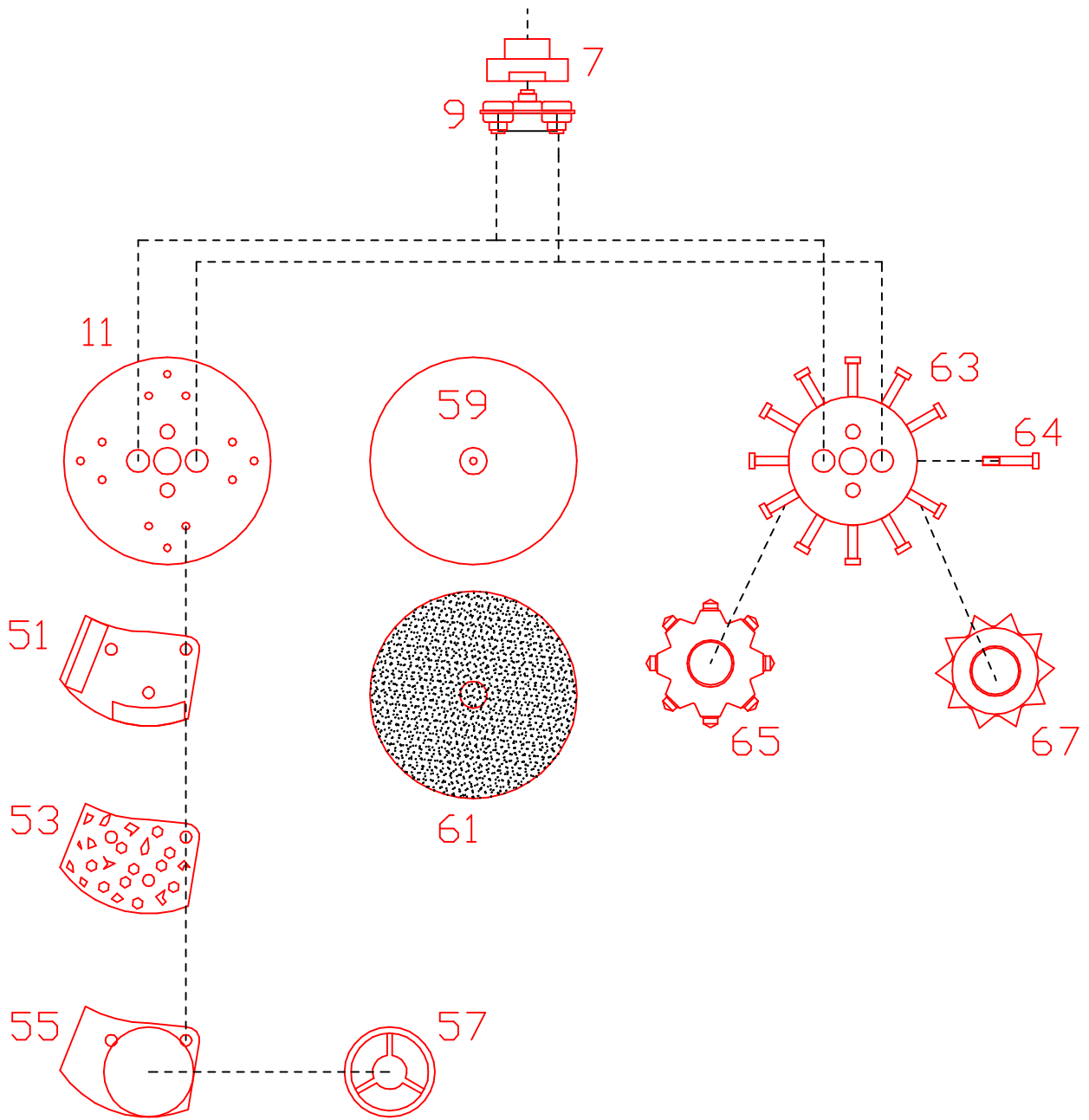
Tools

Part list

Alpha 230 V, 50 Hz
(c) Contec GmbH 2004



Alpha Werkzeuge
Alpha Tools
Alpha Outillages
(c) Contec GmbH 2004



ALPHA Stückliste / Parts List

Artikel-Nr. / Part-No.	Description 1	Description 2	Nr-No	Weight KG
04-10-01-00	Grinding Head Frame Alpha		1	6,1
04-10-04-01	Rear Swing Arm Alpha		3	1
80-20-52-22	Rear Wheel Alpha		5	1,45
18-17-06-01	Bracket for Coupling Alpha		7	1,12
90-25-10-01	Rubber Coupling For Drive Alpha		9	0,5
04-10-05-01	Bracket for Plates Alpha		11	2,4
70-23-76-70	Rubber Sealing Alpha		13	0,35
90-27-03-01	Clamp Alpha		15	0,21
70-23-81-50	Dustring Alpha		17	0,2
55-03-02-18	Motor 1,8 KVA, 230 Volt, 50 HZ, Omega		19	23,8
55-03-11-15	Motor 1,5 KVA, 110 Volt, 50 HZ Omega		19	15
04-10-02-01	Bottom Handle Alpha		21	0,75
04-10-03-00	Top Handle Alpha		23	2,1
60-30-10-30	Handle screw M10-25 Alpha		25	0,05
50-20-203-742	Switch for Alpha		27	0,85
70-21-120-90	Rubber Grip Alpha		29	0,03
18-21-MBC1	Diamond Plate MBC1 Black round		51	0,26
18-21-MBC2	Diamond Plate MBC2 Green round		51	0,26
18-21-MBC3	Diamond Plate MBC3 Blue round		51	0,26
18-21-MBC4	Diamond Plate MBC4 Yellow round		51	0,26
18-21-PKD-S	Diamond Plate PCD in Segment		51	0,26
18-21-CS06	Diamond Plate CS06 Red		51	0,26
18-21-CA1	Diamond Plate CA1 Brown		51	0,26
18-21-C1	Diamond Plate C1 Yellow		51	0,26
18-21-CS40	Diamond Plate CS40 Blue		51	0,26
18-21-C2	Diamond Plate C2 Aubergine		51	0,26
18-21-MBC0	Diamond Plate MBC0 Brown round		51	0,26
18-21-CS6/16	Diamond Plate CS6/16 Gold		51	0,26
18-21-CA2	Diamond Plate CA2 Green		51	0,26
18-21-MBC0+	Diamond Plate MBC0+ Silver round		51	0,26
18-21-CS16	Diamond Plate CS16 Silver		51	0,26
18-10-29-11	Plate for polishing Dotts		55	0,2
18-21-1800-N	Resignbond Wet Grid 1800 Blue		57	0,09
18-21-400-N	Resignbond Wet Grid 400 Yellow		57	0,09
18-21-120-T	Resignbond Dry Grid 120 Black		57	0,09

ALPHA Stückliste / Parts List

18-21-400-T	Resignbond Dry Grid 400 Yellow		57	0,09
18-21-1800-T	Resignbond Dry Grid 1800 Blue		57	0,09
18-21-120-N	Resignbond Wet Grid 120 Black		57	0,09
18-21-60-N	Resignbond Wet Grid 60 Green		57	0,09
18-21-60-T	Resignbond Dry Grid 60 Green		57	0,09
18-21-800-N	Resignbond Wet Grid 800 White		57	0,09
18-21-800-T	Resignbond Dry Grid 800 White		57	0,09
18-21-5000-N	Resignbond Wet Grid 5000 Pink		57	0,09
18-21-30-N	Resignbond Wet Grid 30 Brown		57	0,09
18-21-30-T	Resignbond Dry Grid 30 Brown		57	0,09
18-21-3000-N	Resignbond Wet Grid 3000 Grey		57	0,09
18-21-220-N	Resignbond Wet Grid 220 Red		57	0,09
18-21-3000-T	Resignbond Dry Grid 3000 Grey		57	0,09
18-21-220-T	Resignbond Dry Grid 220 Red		57	0,09
04-10-05-02	Bracket for Sandpaper Alpha		59	2,6
23-16-01-08	Flails for Grinder Head Tipped Tungston	Carbide Omega/Alpha	65	0,03
23-16-02-08	Flails for Grinder Head Full Tungston	Carbide Omega/Alpha	67	0,04
543-204	Cable Ring 6 mm Alpha			0
04-10-01-01	Dustring Alpha			0
04-10-01-02	Dustring Alpha			0
04-10-01-03	Dustring Alpha			0
04-10-03-03				0
04-17-06-01	Bracket for Coupling Alpha			1,12
04-10-06-00	Grinder Head for Flails for 12 Axis	Alpha		0
55-03-11-11-US	Motor 1,1 KVA, 115 Volt, 60 HZ ALPHA US			15
51-20-30-05	Undervoltage Switch 110 V 50 HZ Alpha	England		0
51-10-0-25-US	Switch Motor Protective Alpha 110 Volt	England		0
51-10-10-00	Switch Box For Motor Protective Alpha	110 Volt England		0