

NORTH AMERICA

CONTEC

BARTELL GLOBAL

FLOOR GRINDER

OMEGA

OWNER'S MANUAL AND PARTS BOOK



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CONTEC GmbH

Hauptstrasse 146
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: Omega

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

EC-Directive 98/37/EC (89/392/EEC), in its current wording
EC-Directive 89/336/EEC, in its current wording
EC-Directive 73/23/EWG (89/392/EEC), in its current wording

List of the essential harmonised standards:

EN 12100	„Safety of machines
EN 418	„Emergency-Stop-Devices“
EN 953	„Separating safety devices“
EN 60204 Part 1	„Electric equipment of machinery, general requirements“
EN 1050	„Guiding principles for the risk judgement“

Alsdorf, 10.04.2004

(Place and date)



(Authorized signature)

J. Greb – Construction department

(Name and function of the authorized person)

2 Technical Data

Width of grinding	290 mm	
Width	33 cm	
Length	75 cm	
Height	95 cm	
Weight 230 V, 1 phase	55 kg	
Weight 400 V, 3 phases	65 kg	
Hose \varnothing	50 mm	
Height adjustment	Hand wheel	
Power	Europe	USA
	230 V, 2.0 kW, 50 Hz 400 V, 3.0 kW, 50 Hz	115 V, 1.5 hp, 60 Hz 230 V, 5.0 hp, 60 Hz
Average value of acceleration a_{hv} *	10.2 m/s ²	
Noise level L_{wa} *	105 dB(A)	
Noise level Leq *	95 dB(A)	

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

3 Tool applications

3.1 General Applications

Application	Tool	Diamond	Tungsten Carbide	Sand Paper	Cutters
Grinding of plain floors, - Smooth surfaces - Semi rough surfaces - Rough surfaces		A	C	C	
		A	B	C	
		A	A	C	
Levelling of uneven surfaces - Smooth surfaces - Semi rough surfaces - Rough surfaces		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 Not suitable	

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	CS06	red

4 Safety rules for the operation of the OMEGA floor grinder

Intended application and operation:

Grinding of flat, horizontal, dry surfaces that are typically concrete, asphalt or steel and with or without a coating. For optimum performance and compatibility always use tools supplied by CONTEC. Operation of the grinder outdoors is only permitted if the weather is dry.

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

1. The floor grinder may only be operated by trained professionals. The operators have read and be familiar the contents of this manual.
2. The floor grinder must not be operated in areas where the hazard of explosion or fire exists.
3. The floor grinder can only be started when the tools are not in contact with the floor. Do always start the machine in a tipped position.
4. The tools and discs may be hot after use. Take care when changing them.
5. Never operate the floor grinder on a sloping surface.
6. Take care when moving the machine on a sloping surface, substantial rolling forces can be produced.
7. The machine should always be stored in a warm, dry place when not in use.
8. The floor grinder may only be operated with the dust guard (Appendix diagram No.3).
9. Only CONTEC original tools and spare parts are to be used.
10. The grinder should only be operated with all safety guards in position.
11. When changing tools, during transportation, cleaning, repair or maintenance the grinder must be disconnected from the mains.
12. The operator must never leave the machine unattended during operation.

13. Before leaving the machine all rotary parts must be brought to a standstill. Electric models must be disconnected from the power supply. Ensure the machine cannot roll or move by itself.
14. After any maintenance and adjustment all safety guards must be refitted.
15. Ear protectors must be worn.
16. Eye protectors must be worn.
17. Safety shoes with steel caps must be worn.
18. When operating the grinder produces large volumes of dust the grinder should be connected to a suitable dust collector.
19. Depending on the floor (floor coating) grinding can produce gases. The operator must be held responsible if the gases generated are hazardous and whether 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.
20. The floor must be brushed before grinding to prevent loose material collecting in the tools and then being thrown out with force. Anchor screws and bolts in the floor can also be seen better if the area is clean. If the grinding head strikes an anchor screw or bolt then serious damage can be caused to the machine and grinding head.

5 Operating

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

Connect the hose of the dust collector to the hose port of the grinder.

Adjust the grinder by turning the hand wheel of the height adjustment (see diagram No. 35/36) so that the motor axis is 90° level to the floor. Lift the tool from the floor by tilting the machine onto its back wheels. Switch the motor on.

Attention ! When switching on the motor the machine jumps slightly.

After the motor has reached full rotation place the tools carefully on to the floor. If the machine is correctly adjusted (see above) it is easier to move across the floor. If the machine pulls to the left or right, the machine has to be re-adjusted with the hand wheel of the height adjustment.

Attention ! Never switch the motor on while the tools still touch the floor.

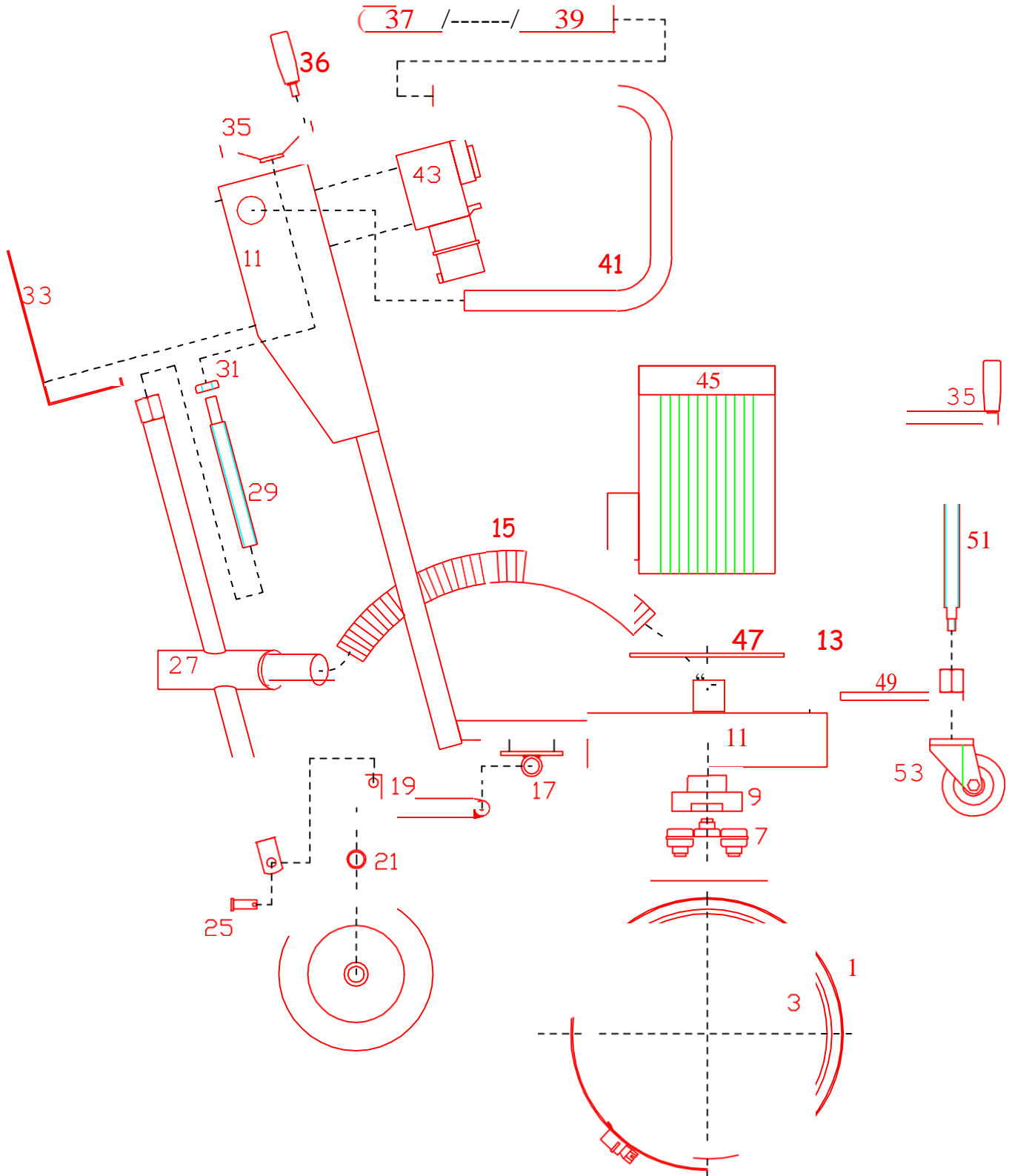
6 Changing and replacing of the tools

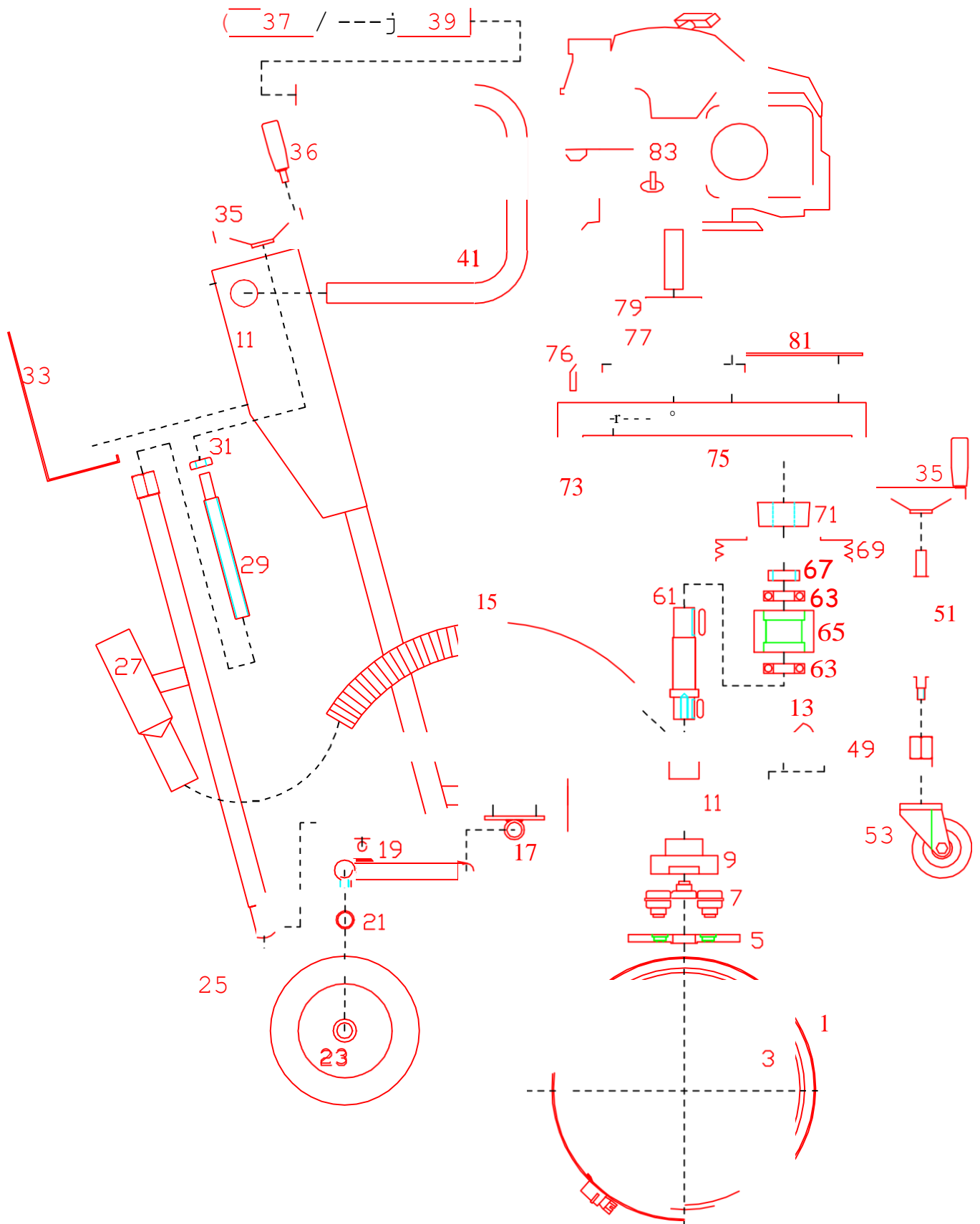
Attention ! Before working on the grinder allow the motor to come to a complete stand still and disconnect from the mains.

- Tilt the machine onto the back wheels and rest it on the handlebar.
- All tools are fixed with 3 screws on the tool bracket.
- Loosen and remove the screws with a 6 mm Alan key.
- Check the grinding tool for wear and tear for the next application.
- Fix a new tool with the 3 screws on the tool bracket.
- Adjust the different heights of the tools with the hand wheel of the height adjustment. The motor axis of the grinder has to be 90° level to the floor.
- Different tools need different heights for the rubber sealing around the discs.

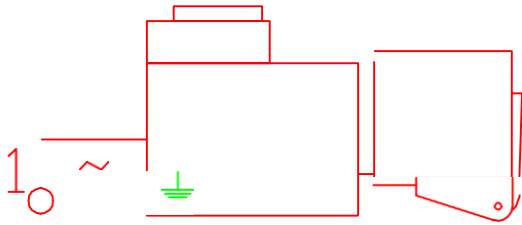
7 Appendix

Diagrams
Wire diagram
Tools
Part list

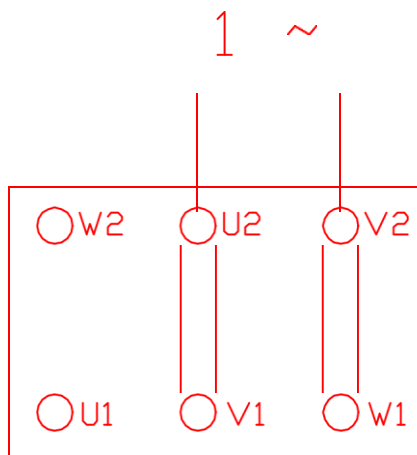
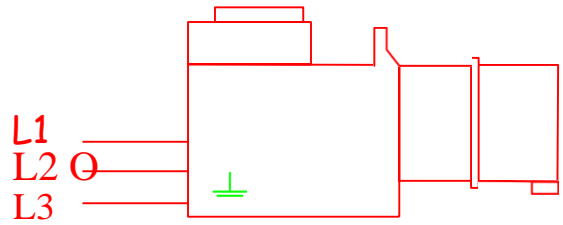




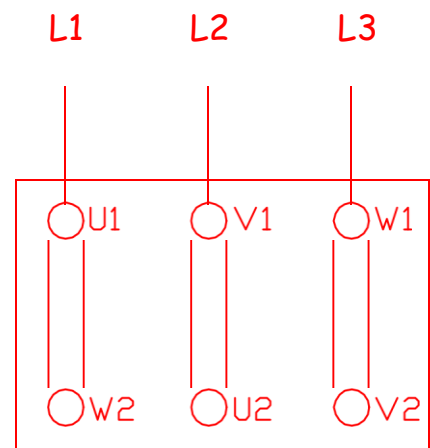
EIHEGA 230 V, U0 Hz



EIHEGA 400 V, 3 Phasen, U0 Hz
EIHEGA 400 V, 3 phase, U0 Hz



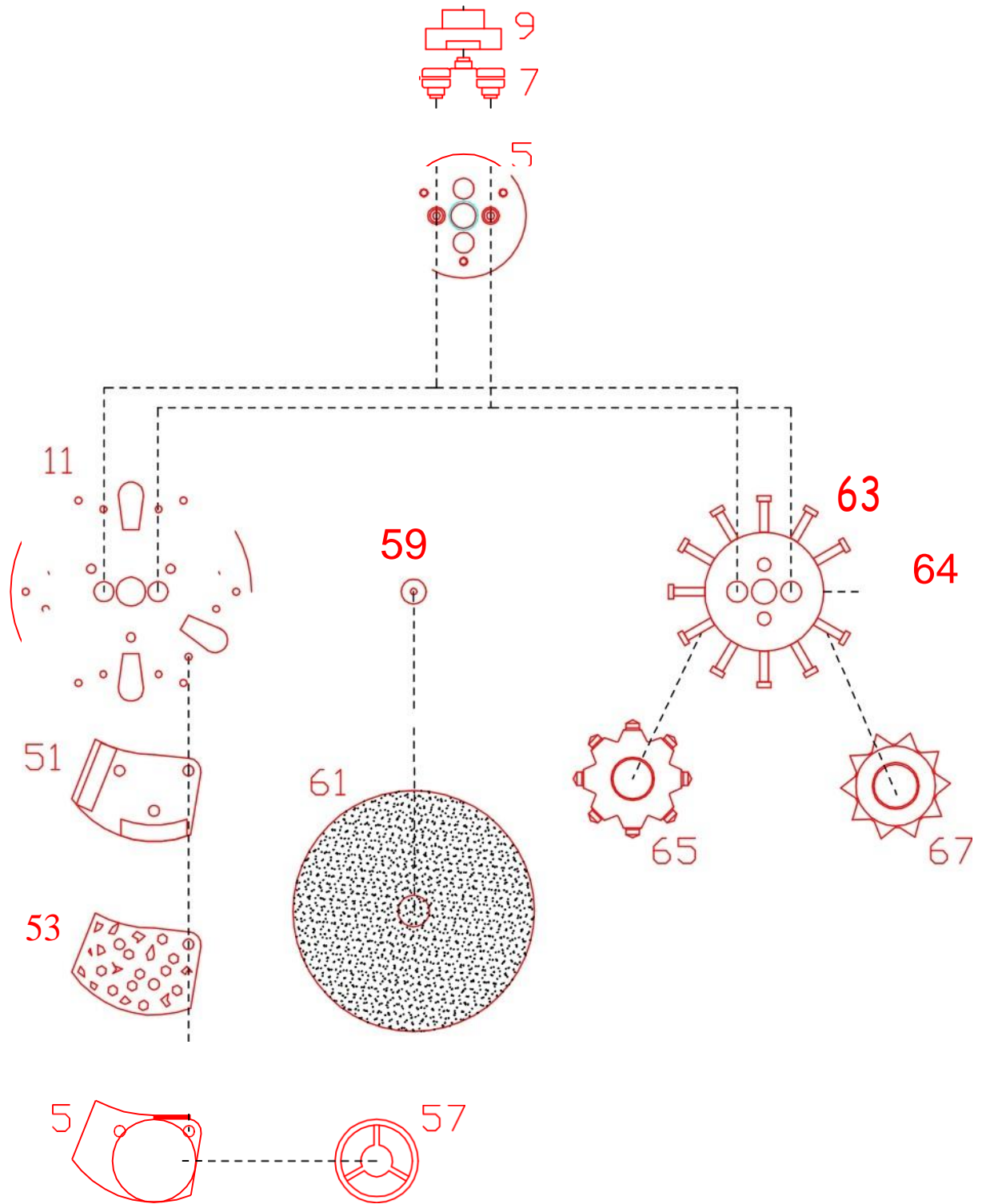
MotorKlemmkasten
Motor Connection Board



MotorPtemmPosten
Motor Connection Board

Verwendungsbereich EIHEGA 230 / 400 V, 50 Hz			(ZuLAbw)	(Oberfl)	Moss ob	(Gewicht)	
					Werkstoff		
				Da tun	Name	fBenennungJ	
			Beor.	13.1103	Greb	<h1>Verdrahtung</h1>	
			Gepr.				
			Norm				
			Firma			eZeichnungsnummerJ	Blatt
			CONTEC GmbH				
			57518 Ais doc F-				Bl.
Zust.	Anderung	Datum	am	(Ursp.:J	(Ers.f.:)	(Ers.d.:)	

Omega Werkzeuge
Omega Tools
Omega Outillages
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OMEGA Stückliste / Parts List

Artikel-Nr. / Part-No.	Bezeichnung 1	Bezeichnung 2	D-Nr	Weight KG
90-27-03-00	Schraubchelle Omega		1	240,00
70-23-96-00	Schleiffeldabdichtung Omega		3	720,00
70-23-96-01	Schleiffeldabdichtung für Fräskopf Omega		3	0,90
14-17-10-05	Werkzeugaufnahme Omega/Delta		5	1,22
90-25-10-01	Werkzeugkupplung Flexibel Omega/Delta		7	0,50
18-17-06-01	Kupplungsaufnahme Omega		9	1,12
18-10-01-00	Maschinenrahmen Omega		11	12,00
18-10-29-06	Scheibenaufnahme Schleifschuh Omega		11	3,35
90-21-50-17	Bügelgriff schräg vorne Omega		13	114,00
18-10-04-01	Achsträger (Aufnahme Wippe) Omega		17	212,00
18-10-04-02	Achsschenkel (Wippe) Omega		19	1,40
30-10-08-04	Achsbolzen Hinterrad Omega		21	324,00
80-20-52-22	Hinterrad mit blau-grauem Reifen Omega		23	1,45
60-33-12-25	Splintbolzen für Gabelgelenk Omega		25	0,00
18-10-05-01	Rohrträger mit Spindelaufnahme Omega		27	1,60
18-10-05-01-H	Rohrträger mit Spindelaufnahme Omega	mit Honda Motor	27	1,70
18-10-05-02	Gewindespindel Omega/Delta II		29	0,33
14-10-09-03	Spindel Ring zum Unterlegen Omega/Delta		31	0,05
18-10-01-05	Gehäusedeckel Rückseitig Omega/CT200		33	0,88
90-21-95-50	Handrad Omega		35	0,38
90-21-95-51	Drehberer Zylindergriff Handrad Omega		36	80,00
70-21-26-11	Griffgummi offen Omega/CT200		39	60,00
18-10-07-01	Griffrohr Omega/CT200		41	1,40
50-20-10-20-K	Schalter-Stecker-Kombination Omega/CT200	für Motor 2 KW, 230 Volt, 50 HZ	43	0,50
50-20-10-30-K	Schalter-Stecker-Kombination Omega/CT200	für Motor 3 KW, 400 Volt, 50 HZ	43	0,63
55-03-01-22	Motor 2,2 KW, 230 Volt Omega AEG neue	Version ab 03/2004	45	24,30
55-03-01-50	Motor 5 HP USA Version Omega		45	24,30
55-03-02-22	Motor 2,2 KW, 230 Volt, 50 HZ, Omega	ADDA	45	18,00
55-03-03-20	Motor 1,8 KW, 230 Volt, 60 HZ, Omega	Version Korea	45	24,30
55-14-00-30	Motor Omega 3 KW, 400 Volt		45	22,20
55-15-00-30	Motor Omega 3 KW, 200 Volt Japan		45	17,80
18-10-02-01	Distanzscheibe Motor Omega		47	0,68
18-10-02-02	Motor Distanzscheibe 110 Volt Omega	Englische Version	47	0,83
18-10-08-02	Vorderrad Grundplatte für Fräskopf Omega		49	1,10

OMEGA Stückliste / Parts List

18-10-08-01	Gewindespindel für Vorderrad Omega/Delta		51	0,33
18-21-C1	Schleifschuh Diamant C1 Gelb		51	0,26
18-21-C2	Schleifschuh Diamant C2 Aubergine		51	0,26
18-21-CA1	Schleifschuh Diamant CA1 Braun		51	0,26
18-21-CA2	Schleifschuh Diamant CA2 Grün		51	0,26
18-21-CS06	Schleifschuh Diamant CS06 Rot		51	0,26
18-21-CS16	Schleifschuh Diamant CS16 Silber		51	0,26
18-21-CS40	Schleifschuh Diamant CS40 Blau		51	0,26
18-21-CS6/16	Schleifschuh Diamant CS6/16 Gold		51	0,26
18-21-MBC0	Schleifschuh Diamant MBC0 Braun rund		51	0,26
18-21-MBC0+	Schleifschuh Diamant MBC0+ Silber rund		51	0,26
18-21-MBC1	Schleifschuh Diamant MBC1 Schwarz rund		51	0,26
18-21-MBC2	Schleifschuh Diamant MBC2 Grün rund		51	0,26
18-21-MBC3	Schleifschuh Diamant MBC3 Blau rund		51	0,26
18-21-MBC4	Schleifschuh Diamant MBC4 Gelb rund		51	0,26
80-20-62-80	Vorderrad Stützrad für Fräskopf Omega/	Delta	53	0,77
18-21-120-N	Schleifdotts Nassschliff Korn 120 Schwarz		57	0,09
18-21-120-T	Schleifdotts Trockenschliff Korn 120	Schwarz	57	0,09
18-21-1800-N	Schleifdotts Nassschliff Korn 1800 Blau		57	0,09
18-21-1800-T	Schleifdotts Trockenschliff Korn 1800	Blau	57	0,09
18-21-220-N	Schleifdotts Nassschliff Korn 220 Rot		57	90,00
18-21-220-T	Schleifdotts Trockenschliff Korn 220 Rot		57	0,09
18-21-3000-N	Schleifdotts Nassschliff Korn 3000 Grau		57	0,09
18-21-3000-T	Schleifdotts Trockenschliff Korn 3000	Grau	57	0,09
18-21-30-N	Schleifdotts Nassschliff Korn 30 Braun		57	0,09
18-21-30-T	Schleifdotts Trockenschliff Korn 30 Braun		57	0,09
18-21-400-N	Schleifdotts Nassschliff Korn 400 Gelb		57	0,09
18-21-400-T	Schleifdotts Trockenschliff Korn 400Gelb		57	0,09
18-21-5000-N	Schleifdotts Nassschliff Korn 5000 Rosa		57	0,09
18-21-60-N	Schleifdotts Nassschliff Korn 60 Grün		57	0,09
18-21-60-T	Schleifdotts Trockenschliff Korn 60 Grün		57	0,09
18-21-800-N	Schleifdotts Nassschliff Korn 800 Weiss		57	0,09
18-21-800-T	Schleifdotts Trockenschliff Korn 800	Weiss	57	0,09
18-10-29-02	Scheibenaufnahme Sandpapier Omega	Scheibe Grundkörper	59	6,00
18-17-10-02-US	Lagerwelle Omega 110 Volt US Version		61	0,79
18-22-00-12	Sandpapier 300 mm beidseitig Korn 12	Bohrung 25 mm Omega	61	0,29

OMEGA Stückliste / Parts List

18-22-00-16	Sandpapier 300 mm beidseitig Korn 16	Bohrung 25 mm Omega	61	0,29
18-22-00-24	Sandpapier 300 mm beidseitig Korn 24	Bohrung 25 mm Omega	61	0,23
18-22-00-24-ST	Sandpapier 300 mm beidseitig Korn 24	Bohrung 25 mm Omega für Stahl	61	0,23
18-22-00-40	Sandpapier 300 mm beidseitig Korn 40	Bohrung 25 mm Omega	61	0,18
18-22-00-60	Sandpapier 300 mm beidseitig Korn 60	Bohrung 25 mm Omega	61	0,16
18-22-00-60-ST	Sandpapier 300 mm beidseitig Korn 60	Bohrung 25 mm Omega für Stahl	61	0,16
18-22-00-80	Sandpapier 300 mm beidseitig Korn 80	Bohrung 25 mm Omega	61	0,15
18-22-01-20	Sandpapier 300 mm beidseitig Korn 120	Bohrung 25 mm Omega	61	0,14
18-22-02-20	Sandpapier 300 mm beidseitig Korn 220	Bohrung 25 mm Omega	61	0,13
18-10-29-07	Schleifscheibe Fräskopf für 12 Achsen		63	4,50
61-20-60-06	Lager für Lagergehäuse Omega US Version	und Benzinversion	63	0,13
23-16-01-10	Scheibenaufnahme Achse für Fräskopf 12	Wellen Omega	64	0,05
18-17-10-01-US	Lagergehäuse Omega 110 Volt US Version		65	1,27
23-16-01-08	Schleifscheibe Fräslamellen Omega/Alpha	mit Hartmetallspitzen	65	0,03
18-17-10-03-US	Stelling für Lagerwelle Omega 110 Volt	US Version	67	0,07
23-16-02-08	Schleifscheibe Fräslamellen Omega/Alpha	Vollhartmetall	67	0,04
90-24-01-80-2-US	Riemenscheibe auf Lagerbock Omega US	Version 230 Volt und Benzin Honda	69	2,91
90-24-01-80-1-US	Riemenscheibe auf Lagerbock Omega US	Version 110 Volt	70	2,07
18-10-09-00-US	Riementrieb Gehäuse für Omega US Version	und Honda Motor	73	5,80
70-24-10-762-US	Riementrieb Keilriemen Omega US Version		75	0,07
18-10-21-00	Motorspannblech Omega für Honda Motor		76	2,05
18-10-21-00-110-US	Motorspannblech 110 V US Version	Omega	76	0,88
18-10-21-00-US	Motorspannblech 230V US Version	Omega	76	1,84
90-24-20-12-28	Taberbuchse für Riemenscheibe Omega	US Version 230 V / Benzin Honda	77	0,70
90-24-56-1-US	Riemenscheibe Motor 110 Volt US Version	Omega	79	0,45
90-24-75-2-US	Riemenscheibe Motor Omega US Version	230 Volt und Benzin Honda	79	0,44
18-10-09-04-US	Riementrieb Deckel 110 Volt US Version	Omega	81	0,83
56-GXV-160-K1	Motor Otto 4-Takt 5,5 PS für Omega		83	18,00
90-24-10-08-US	Riemenscheibe Taperlock 110 V Motor US	Version Omega	93	0,13
90-24-12-10-P	Riemenscheibe Taperlock Omega Benzin	Motor Honda	93	0,22
90-24-12-10-US	Riemenscheibe Taperlock 230 V Motor US	Version Omega	93	0,20
90-24-16-10-28	Riemenscheibe Taperlock für Lagerbock	Omega US Version	93	0,33
51-10-10-01	Motorschutzschaltergehäuse Omega Einbau		111	0,00
51-20-30-01-US	Unterspannungsauslöser Omega US- Version	120 Volt, 60 HZ	113	0,00
51-10-0-20-US	Motorschutzschalter für Omega US Version	230 Volt 3 HP	115	0,00
51-10-0-20-US	Motorschutzschalter für Omega US Version	110 Volt 1,5 HP	115	0,00

OMEGA Stückliste / Parts List

18-10-01-08	Verschlußdeckel 110 V Schalter Omega			286,00
18-10-08-00	Vorderrad zum Anbau für Fräskopf	Komplett Omega		2,20
18-10-11-00	Zusatzgewicht 6 KG für Omega/Delta			6,00
18-10-29-01	Scheibenaufnahme Hartmetallsplitt und	Korundtopf Omega		5,95
18-10-29-01/R	Scheibenaufnahme Korund Zentrierscheibe	Omega		0,40
18-10-29-05	Schleifscheibe Fräskopf mit 6 Blöcken	inkl. Achsen Omega		6,90
18-10-29-10	Schleifschuh für Diamant Omega/Delta	Laserteil		0,20
18-10-29-11	Schleifschuh für Dotts			0,20
18-10-50-01	Scheibenaufnahme Bürstentöpfe Omega			5,95
18-10-50-03	Scheibenaufnahme für Polierdotts Omega			5,90
18-16-29-01	Schleifscheibe Hartmetallsplitt Grob	Omega		2,10
18-16-29-02	Schleifscheibe Hartmetallsplitt Fein	Omega		2,10
18-16-HSG	Schleifschuh Hartmetallsplitt Grob			0,26
18-21-30-00	Schleifscheibe Diamant Blau Omega	12 Segmente Normaler Beton / Estrich		6,10
18-21-30-H	Schleifscheibe Diamant Braun Omega	12 Segmente Aggresiver Estrich / Beton		6,10
18-21-30-RAP	Schleifscheibe Raptor OMEGA			6,10
18-21-30-S	Schleifscheibe Diamant Lila Omega	12 Segmente für harten Beton Korn Fein		6,10
18-21-30-T0	Schleifscheibe Diamant Silber Omega	12 Segmente sehr harter Beton		6,10
18-21-40-00	Schleifschuh Diamant Blau Harter Beton	Medium		0,26
18-21-40-6W	Schleifschuh Diamant Rot Epoxy/PU sehr	grob		0,26
18-21-40-GB-1	Schleifschuh Diamant Aubergine Polier-	schliff Vorschliff		0,26
18-21-40-GB-2	Schleifschuh Diamant Orange Polier-	schliff Mittel		0,26
18-21-40-GB-3	Schleifschuh Diamant Weiss Polier-	schliff Fein		0,26
18-21-40-H	Schleifschuh Diamant Braun Weichen Beton	/Estrich Mittel		0,26
18-21-40-S	Schleifschuh Diamant Schwarz für Hoch-	verdichteten Beton		0,26
18-21-40-T0	Schleifschuh Diamant Silber Harter Beton	Grob		0,26
18-21-6W	Schleifscheibe Diamant Rot - Omega	12 Segmente, Epoxyd/PU Klebereste		6,10
18-21-GB-1	Schleifscheibe Diamant Aubergine Omega	12 Segmente, Terazzo Vorschliff		6,10
18-21-GB-2	Schleifscheibe Diamant Orange OMEGA	12 Segmente, Mittelschliff		3,67
18-21-GB-3	Schleifscheibe Diamant Weiss OMEGA	12 Segmente, Mittelschliff		3,67
18-21-PKD-PL	Schleifschuh Diamant PKD Plättchen links	! ACHTUNG DREHRICHTUNG SCHEIBE LINKS !		0,26
18-21-PKD-PR	Schleifschuh Diamant PKD Plättchen recht	! ACHTUNG DREHRICHTUNG SCHEIBE RECHTS !		0,26
18-21-PKD-S	Schleifschuh Diamant PKD Splitt			0,26
18-23-00-100	Bürstentöpfe zum reinigen von Stahl und	Beton Omega		0,90
18-23-00-60	Korundstein Korn 16 für Beton Omega			700,00
18-23-00-65	Korundstein Korn 16 für Stahl Omega			700,00

OMEGA Stückliste / Parts List

18-23-10-65	Korundstein Korn 60 für Stahl Omega		700,00
23-16-01-08-12	Schleifscheibe Fräslamellen mit	Hartmetallspitzen Omega/Delta 12 Stück	360,00
23-16-01-08-24	Schleifscheibe Fräslamellen mit	Hartmetallspitzen Omega/Delta 24 Stück	720,00
23-16-01-09	Scheibenaufnahme Achsen für Fräskopf 6	Blöcke Omega	46,00
23-16-02-08-12	Schleifscheibe Fräslamellen Omega	Vollhartmetall 1 Set=12 Stück + Scheiben	504,00
23-16-02-08-24	Schleifscheibe Fräslamellen Omega	Vollhartmetall 1 Set=24 Stück + Scheiben	1.008,00
50-10-11-16	Schuko-Stecker Omega		0,00
50-20-20-14	Wendestecker 16 A, 400 Volt Omega		0,00
50-25-11-30	Verbindungskabel Stecker / Schalter	2 KW, 230 Volt Omega	0,00
50-25-11-31	Verbindungskabel Stecker / Schalter	3 KW, 400 Volt Omega	0,00
50-25-11-32	Verbindungskabel Schalter / Motor 2 KW	230 Volt Omega	0,00
50-25-11-33	Verbindungskabel Schalter / Motor	3 KW, 400 Volt Omega	0,00
51-20-30-01	Motorschutzschalter 2 KW, 230 Volt Omega		0,00
51-20-30-02	Motorschutzschalter 3 KW, 400 Volt Omega		0,00
51-20-30-03	Unterspannungsauslöser Omega 400 Volt		0,00
51-20-30-04	Unterspannungsauslöser Omega 230 Volt		0,00
55-03-01-21	Lüfterhaube für Motor Omega 2 KW, 230 V		400,00
55-03-02-20	Motor 1,8 KW, 230 Volt, 50 HZ, Omega	EMG Version	24,30
55-14-00-31	Lüfterhaube für Motor Omega 3 KW, 400 V		400,00
56-GXV-99	Bowdenzug Metall Universal für Benzin-	motor Delta/Omega	200,00
70-21-26-10	Griffgummi allgemein		60,00
70-23-29-01	Scheibenaufnahme Sandpapier nur	Moosgummi	200,00
70-23-40-40	Staubring Omega		0,25
70-25-40-40	Absaugschlauch PU NW 40 Omega		0,13
90-09-SW-5	Sechskant-Stiftschlüssel DIN 911 L SW 5	160 x 28 mm Omega/Delta	40,00
90-09-SW-6	Sechskant-Stiftschlüssel DIN 911 L SW 6	160 x 28 mm Omega/Delta	60,00

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Bartell Morrison Inc.
 170 Traders Blvd E
 Mississauga, Ontario, Canada
 L4Z 1W7
 Tel: 1-647-953-4100
 Fax: 1-647-953-4101



Bartell Morrison (USA) LLC
 200 Commerce Drive, Unit A
 Freehold, New Jersey, USA
 07728
 Tel: 1-848-225-8100
 Fax: 1-848-225-8101



Innovatech
 4701 Allmond Ave
 Louisville, Kentucky, USA
 40209
 Tel: (425) 405-9100
 Fax: (425) 405-9101



SPE International
 Honeyholes Lane
 Dunholme, Lincoln, UK
 LN2 3SU
 Tel: +44 (0)1673 860709
 Fax: +44 (0)1673 861119



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