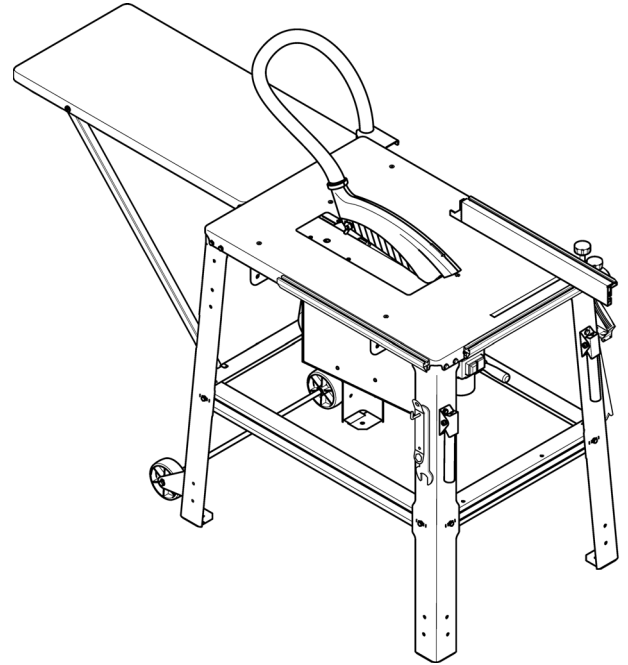


## TKHS 315 C



170274070 = 115 168 7787 / 0220



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ENG	Original operating instructions	19
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<b>de Deutsch KONFORMITÄTSERKLÄRUNG</b>
Wir erklären in alleiniger Verantwortlichkeit: Diese Tischkreissäge, identifiziert durch Type und Seriennummer *1), entspricht allen einschlägigen Bestimmungen der Richtlinien *2) und Normen *3). Prüfbericht *4), Ausstellende Prüfstelle *5), Technische Unterlagen bei *6) - siehe unten.
<b>en English DECLARATION OF CONFORMITY</b>
We declare under our sole responsibility: This table saw, identified by type and serial number *1), complies with all relevant requirements of the directives *2) and standards *3). Test report *4), Issuing test body *5), Technical file at *6) - see below.
<b>fr Français DÉCLARATION DE CONFORMITÉ</b>
Nous déclarons sous notre seule responsabilité : Cette scie circulaire de table, identifiée par le type et le numéro de série *1), est conforme à toutes les prescriptions applicables des directives *2) et normes *3). Compte-rendu d'essai *4), Organisme de contrôle *5), Documents techniques pour *6) - voir ci-dessous.
<b>nl Nederlands CONFORMITEITSVERKLARING</b>
Wij verklaren op eigen en uitsluitende verantwoording: Deze tafelcirkelzaag, geïdentificeerd door type en serienummer *1), voldoet aan alle relevante bepalingen van de richtlijnen *2) en normen *3). Testrapport *4), Uitvoerende keuringsinstantie *5), Technische documentatie bij *6) - zie onder.
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Declaramos con responsabilidad propia: Esta sierra circular de mesa, identificada por tipo y número de serie *1), corresponde a las disposiciones correspondientes de las directivas *2) y de las normas *3). Informe de la prueba *4), Oficina que expide el certificado *5), Documentación técnica con *6) - ver abajo.
<b>pt Português DECLARAÇÃO DE CONFORMIDADE</b>
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<b>sv Svenska CE-ÖVERENSSTÄMMELSEINTYG</b>
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Vakuutamme yksinomaisella vastuullamme: Tämä rakennussirkkeli, merkitty tyyppitunnuksella ja sarjanumerolla *1), vastaa direktiivien *2) ja normien *3) kaikkia asiaankuuluvia määräyksiä. Tarkastuskertomus *4), Valtuutettu tarkastuslaitos *5), Teknisten asiakirjojen säilytyspaikka *6) - katso alhaalla.
<b>no Norsk SAMSVARSERKLÆRING</b>
Vi erklærer under eget ansvar: Denne bordsirkelsagen, identifisert gjennom type og serienummer *1), tilsvare alle gjeldende bestemmelser i direktivene *2) og standardene *3). Prøverapport*4), Ansvarlig kontrollinstans*5), Tekniske dokumenter ved *6) - se nedenfor.
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Oświadczamy na własną odpowiedzialność: Ta pilarka stołowa, oznaczona typem i numerem seryjnym *1), spełnia wszystkie obowiązujące wymogi dyrektyw *2) i norm *3). Sprawozdanie z testu *4), Urząd wystawiający sprawozdanie z testu *5), Dokumentacja techniczna *6) - patrz poniżej.
<b>el Ελληνικά ΔΗΛΩΣΗ ΠΙΣΤΟΤΗΤΑΣ</b>
Δηλώνουμε με ίδια ευθύνη: Αυτό το επιτραπέζιο δισκοπρίονο, που αναγνωρίζεται μέσω τύπου και αριθμού σειράς *1), ανταποκρίνεται σε όλες τις σχετικές διατάξεις των οδηγιών *2) και των προτύπων *3). Έκθεση ελέγχου *4), Εκδίδουσα υπηρεσία ελέγχου *5), Τεχνικά έγγραφα στο *6) - βλέπε κατωτέρω.
<b>hu Magyar MEGFELELŐSÉGI NYILATKOZAT</b>
Kizárólagos felelősségünk tudatában kijelentjük: Ez az asztali körfűrész – típus és sorozatszám alapján történő azonosítással *1) – megfelel az irányelvek *2) és szabványok *3) összes vonatkozó rendelkezésének. A jegyzőkönyvet *4), a kiállítást végző vizsgálóhelyet *5), a műszaki dokumentációt *6) - lásd lent.
<b>sl Slovensko IZJAVA O SKLADNOSTI</b>
Z izključno odgovornostjo izjavljamo: Ta mizna krožna žaga, označena s tipom in serijsko številko *1), ustreza vsem zadevnim določbam smernic *2) in predpisov *3). Tehnična dokumentacija pri *4) - glejte spodaj.

\*1) **TKHS 315 M - 2,5 WNB / 3,1 WNB / 4,2 DNB - 01031530... / 01031531... / 01031533...**

\*2) 2011/65/EU; 2006/42/EC; 2014/30/EU

\*3) EN 50581:2012, EN 1870-19:2013, EN 60204-1:2018, EN ISO 12100 :2010, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 55014-1:2017, EN 55014-2:2015

\*4) BM 50450945 0001 (2,0 WNB); BM 50450972 0001 (2,8 DNB)

\*5) TÜV Rheinland LGA Products GmbH, Tillystraße 2, D-90431 Nuernberg; Reg.-No. 0197

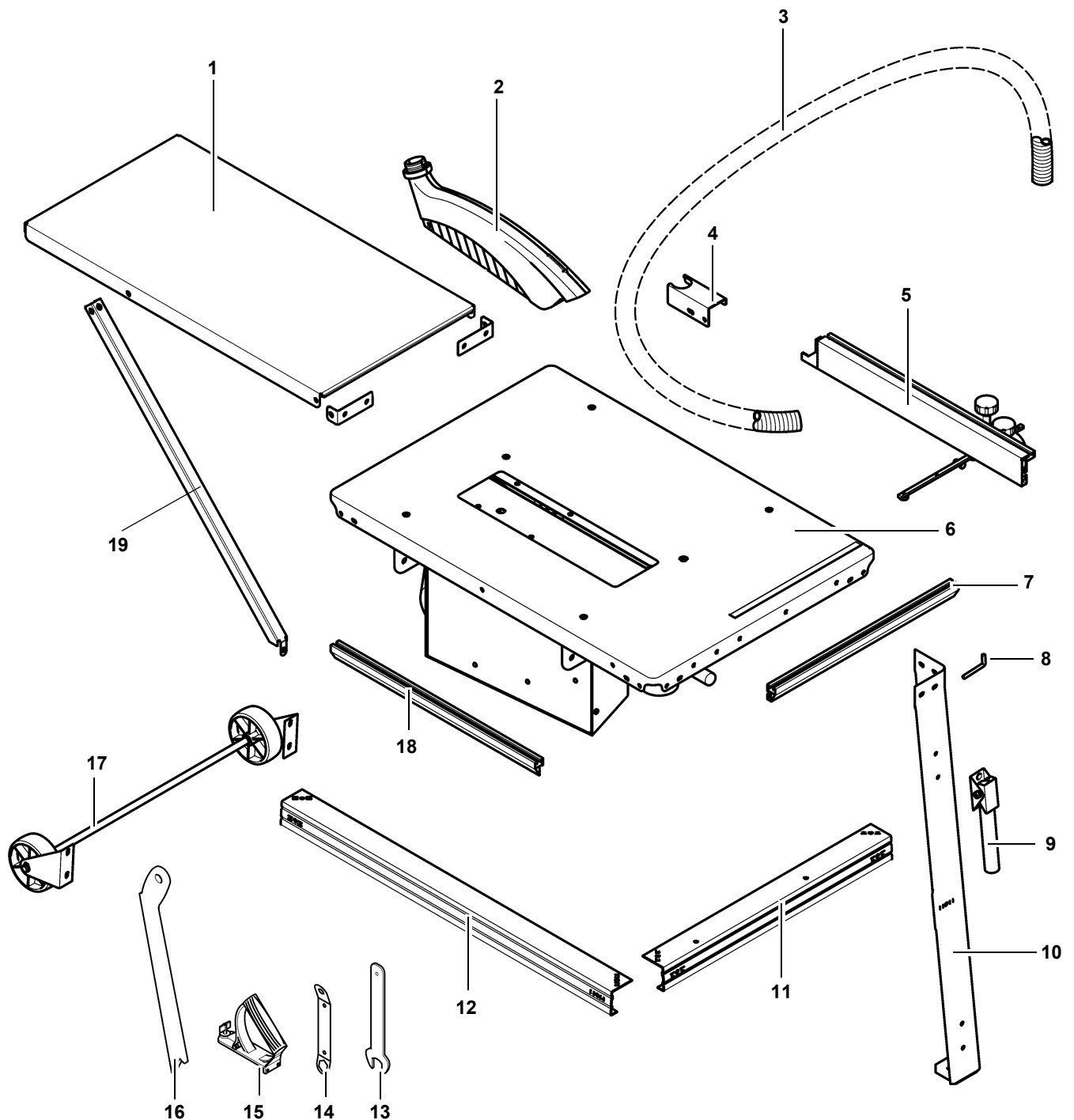
\*6) Metabowerke GmbH, Metabo-Allee 1, 72622 Nuertingen, Germany

2019-11-15

Bernd Fleischmann  
Direktor Produktentstehung & Qualität  
(Director Product Engineering & Quality)

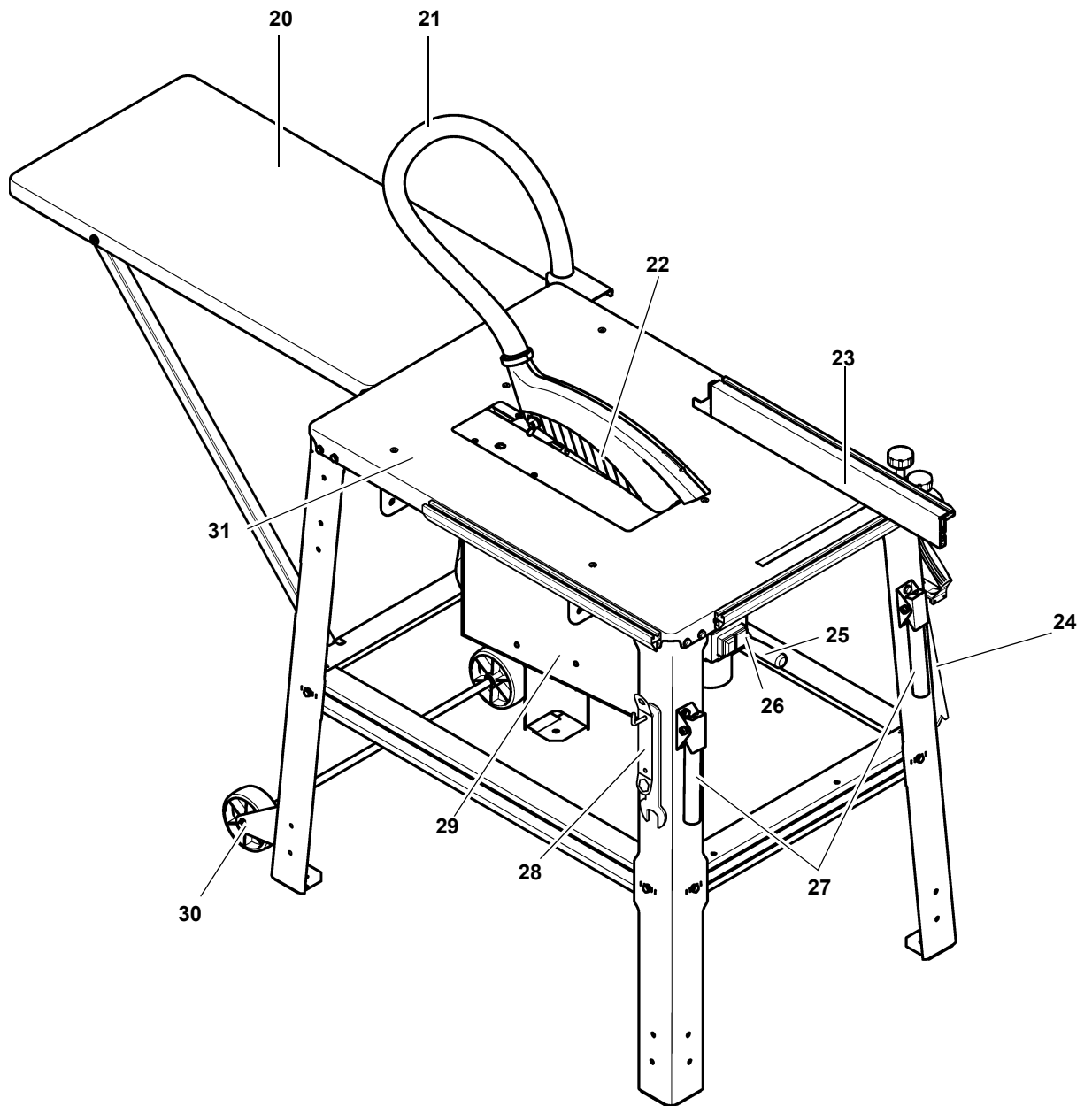
ppa. 

## 1. Scope of delivery



- |  |  |   |
|--|--|---|
| 1 Plate, table rear extension  | 8 Screw hooks as accessory holder (2x) | 17 Wheel set                                  |
| 2 Blade guard  | 9 Transport handle (2x)                | 18 Rip fence guide extrusion                  |
| 3 Suction hose   | 10 Leg (4x)                            | 19 Support (2x)                               |
| 4 Hose carrier   | 11 Stanchion, short (2x)               | – Operating instructions and spare parts list |
| 5 Universal fence  | 12 Stanchion, long (2x)                | – Hardware bag                                |
| 6 Table panel, c/w with motor carrier unit, motor, switch, saw blade, riving knife, dust extraction port | 13 Spanner for saw blade change        |   |
| 7 Rip fence guide extrusion  | 14 Spanner for saw blade change        |   |
|  | 15 Handle for push block               |   |
|  | 16 Push stick / feeding aid            |   |

## 2. Machine overview



- |   |   |
|---|---|
| <b>20</b> Table extension   | <b>26</b> ON/OFF switch   |
| <b>21</b> Suction hose  | <b>27</b> Transport handles   |
| <b>22</b> Blade guard   | <b>28</b> Accessory holder for saw blade change wrenches                                      |
| <b>23</b> Universal fence – can be used as rip fence (installed on front) or mitre fence (installed on left hand side of the saw table) | <b>29</b> Motor carrier unit – angle of inclination steplessly adjustable from 0° through 45° |
| <b>24</b> Accessory holders for push stick / feeding aid and push block handle  | <b>30</b> Wheel set   |
| <b>25</b> Crank for cutting height setting, stepless from 0 – 85 mm   | <b>31</b> Table top   |

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## 3. Please Read First!

These instructions have been written in a way which facilitates learning of how to safely operate your saw. Here is a guide on how you should read these instructions:

- Read these instructions before use. Pay special attention to the safety information.
- These instructions are intended for persons with basic technical knowledge regarding the operation of a device like the one described herein. Inexperienced persons are strongly advised to seek competent advice and guidance from an experienced person before operating this machine.

- Keep all documents supplied with this machine for future reference. Retain proof of purchase in case of warranty claims.

- This device must not be sold or lent to someone else without being accompanied by these Operating Instructions and all other documents supplied with the device.

- The equipment manufacturer is not liable for any damage resulting from neglect of these operating instructions.

Information in these instructions is designated as under:



**Danger!**

Risk of personal injury or environmental damage.



**Risk of electric shock!**

Risk of personal injury by electric shock.



**Drawing-in/trapping hazard!**

Risk of personal injury by body parts or clothing being drawn into the rotating saw blade.



**Caution!**

Risk of material damage.



**Note:**

*Additional information.*

- Numbers in illustrations (1, 2, 3 etc.)
  - denote component parts;
  - are consecutively numbered;
  - relate to the corresponding number(s) in brackets (1), (2), (3) etc. in the neighbouring text.
- Numbered steps must be carried out in sequence.
- Instructions which can be carried out in any order are indicated by a bullet point (•).
- Listings are marked by a dash (–).

## 4. Safety Instructions

### 4.1 Specified conditions of use

This machine is intended for ripping, cross-cutting and cutting to size of solid wood, particle board, fibreboard, plywood and these materials provided they have plastic laminate surfaces or edge trim or are veneered.

Round workpieces may not be sawed as they can be twisted by the rotating saw blade.

The tool must not be used for grooving. Always have blade guard installed during operation.

Any other use is considered to be not as specified and not permitted. The manufacturer is not liable for any damage caused by unspecified use.

Reconstruction of this machine or use of parts that have not been tested and released by the manufacturer can lead to unforeseen damage and dangers during operation.

### 4.2 General Safety Instructions

- When using this machine observe the following safety instructions to minimise the risk of personal injury or material damage.
- Please also observe the special safety instructions in the respective sections.
- Where applicable, follow the legal directives or regulations for the prevention of accidents pertaining to the use of circular saws.



**General hazards!**

- Keep your work area tidy – a messy work area invites accidents.
- Be alert. Know what you are doing. Set out to work with reason. Do not operate device while under the influence of drugs, alcohol or medication.
- Consider environmental conditions. Keep work area well lit.
- Avoid unnatural body positions. Ensure firm footing and keep your balance at all times.
- Use suitable workpiece supports when cutting long stock.

- Wedges may only be cut using a wedge cutting jig, adapted to the desired wedge thickness, length, and taper:
    - Install riving knife and blade guard.
- With your right hand push the wedge cutting jig against the rip fence, while at the same time feed it into the saw blade. Secure workpiece with your left hand.
- Do not operate the machine near inflammable liquids or gases.
  - The saw shall only be started and operated by persons familiar with circular saws and who are at any time aware of the dangers associated with the operation of such machine.

Persons under 18 years of age shall use this tool only in the course of their vocational training under the supervision of an instructor.


- Keep bystanders, particularly children, out of the danger zone. Do not permit bystanders to touch the device or mains cable while it is running.
- Do not overload device – use it only within the performance range it was designed for (see 'Technical Data').

 **Danger! Risk of electric shock!**

- Do not expose device to rain.
 

Do not operate device in damp or wet environment.

Prevent body contact with earthed objects such as radiators, pipes, cooking stoves or refrigerators when operating this device.
- Do not use the mains cable for any purpose it is not intended for.
- Do not use any damaged mains cable.
- A damaged mains cable may only be replaced by the manufacturer, its customer service or its service partner.

 **Risk of personal injury and crushing by moving parts!**


- Do not operate the machine without installed guards.
- Always keep sufficient distance to the saw blade. Use suitable feeding aids if necessary. Keep sufficient

distance to driven components when operating the device.

- Wait for the saw blade to come to a complete stop before removing cut-outs, waste wood etc. from the work area.
- Do not attempt to stop the saw blade by pushing the workpiece against its side.
- Ensure the device is disconnected from power before servicing.
- When turning ON the machine (e.g. after servicing) ensure that no tools or loose parts are left on or in the machine.
- Turn power OFF if the machine is not used.

 **Cutting hazard, even with the cutting tool at standstill!**

- Wear gloves when changing cutting tools.
- Store saw blades in such a manner that nobody can get hurt.


 **Risk of kickback (workpiece is caught by the saw blade and thrown against the operator)!**

- Always work with a properly set riving knife.
- Riving knife and saw blade used must match: The riving knife should be thinner than the kerf, but thicker than the saw blade body.
- Do not jam workpieces.
- Make sure the saw blade is suitable for the workpiece material.
- Cut thin or thin-walled workpieces only with fine-toothed saw blades.
- Always use sharp saw blades.
- If in doubt, check workpiece for inclusion of foreign matter (e.g. nails or screws).
- Cut only stock of dimensions that allow for safe and secure holding while cutting.
- Never cut several workpieces at the same time – and also never cut bundles containing several individual pieces. There is a risk of personal injury if individual pieces are caught by the saw blade in an uncontrolled manner.
- Remove small cut-outs, waste wood etc. from the work area – when you


are doing so, the saw blade must be at a complete standstill.

 **Drawing-in/trapping hazard!**

- Ensure that no parts of the body or clothing can be caught and drawn in by rotating components (**no ties, no gloves, no loose-fitting clothes**; contain long hair with hairnet).
- Never attempt to cut any workpieces which contain
  - ropes,
  - strings,
  - bands,
  - cables or
  - wires or to which any of the above are attached.

 **Danger due to insufficient personal protection equipment!**


- Wear ear protection.
- Wear safety goggles.
- Wear dust mask.
- Wear suitable work clothes.
- When working outdoors wearing of non-slip shoes is recommended.

 **Risk of injury by inhaling wood dust!**

- Some types of wood dust (e.g. oak, beech, ash) may cause cancer when inhaled. If working in a closed room, always use a dust collector.
- Make sure that as little as possible wood dust can escape into the environment:
  - install dust collector
  - repair any leaks on the dust collector
  - keep your work area well ventilated at all times.

Operation without a dust collector is only possible:

- outdoors;
- for short-term operation (up to a maximum of 30 minutes); or
- if a dust respirator is worn.

 **Hazard caused by modification of the machine or use of parts not**

### tested and approved by the manufacturer!

- Strictly follow these instructions when assembling the device.
- Use only parts approved by the equipment manufacturer. This applies particularly to:
  - Saw blades (please see 'Available accessories' for order numbers);
  - safety devices (see 'Spare parts list' for stock numbers).
- Do not change any parts.



### Hazard generated by machine defects!

- Keep the machine and accessories in good repair. Follow the maintenance instructions.
- Before any use check machine for possible damage: before operating the machine all safety devices, protective guards or slightly damaged parts need to be checked for proper function as specified. Check to see that all moving parts work properly and do not jam. All parts must be correctly installed and meet all requirements for proper operation of the device.
- Any damaged parts or protection devices must be repaired or replaced by a qualified specialist. Have damaged switches replaced by a service centre. Do not operate device if the switch cannot be turned ON or OFF.
- Keep handles free of oil and grease.



### Risk of injury by noise!

- Wear ear protection.
- Make sure the riving knife is not bent. A bent riving knife will push the workpiece against the side of the saw blade, causing noise.



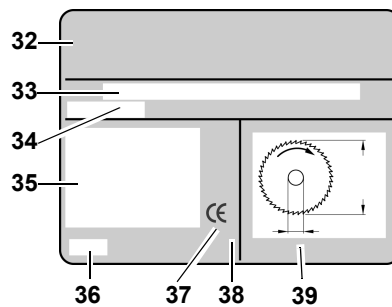
### Danger from blocking workpieces or workpiece parts!

If blockage occurs:

1. Switch machine OFF.
2. Unplug mains cable.
3. Wear gloves.
4. Clear the blockage using a suitable tool.

## 4.3 Symbols on the machine

### Data on the nameplate



- 32 Manufacturer
- 33 Serial number
- 34 Machine designation
- 35 Motor data (see also 'Technical Data')
- 36 Date of manufacture
- 37 CE mark – This machine meets the EC directives as per declaration of conformity
- 38 Waste disposal symbol – Device can be disposed of by returning it to the manufacturer
- 39 Dimensions of permissible saw blades

### Symbols on the machine



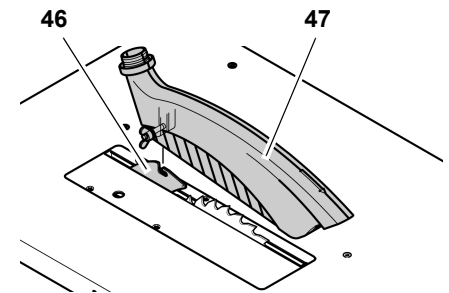
- 40 Wear ear protection
- 41 Wear eye protection
- 42 Do not operate tool in moist or wet environment.
- 43 Read operating instructions
- 44 Do not reach into saw blade area
- 45 Hazardous area warning

## 4.4 Safety devices

### Riving knife

The riving knife (46) prevents the workpiece from being caught by the rising teeth of the saw blade and being thrown back against the operator.

Always have riving knife installed during operation.



### Blade guard

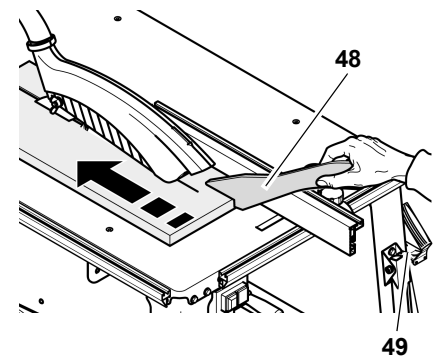
The blade guard (47) protects against unintentional contact with the saw blade and from chips flying about.

Always have the blade guard installed during operation.

### Push stick

The push stick (48) serves as an extension of the hand and protects against accidental contact with the saw blade.

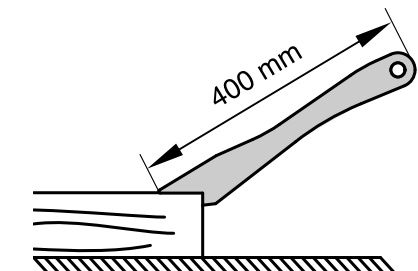
Always use the push stick if the distance between saw blade and rip fence is less than 120 mm.



Guide the push stick at an angle of 20° ... 30° against the saw table's surface.

When the push stick is not used, it can be hung to the holder (49) provided.

Replace the push stick if it is damaged.



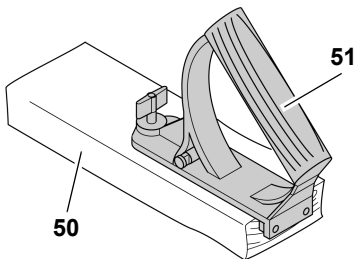
### Handle for push block

The handle for the push block (51) is screwed to a matching board (50). It is used for safe guidance of relatively small workpieces.



The board should be 400 mm long, at least 200 mm wide and 15 – 20 mm high.

The push block handle must be replaced if damaged.



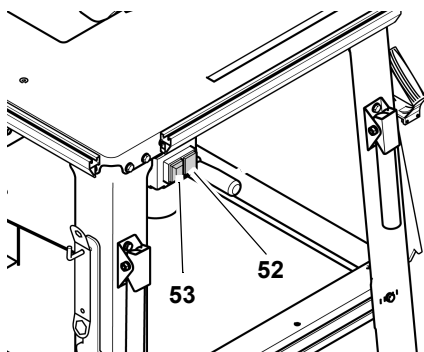
## 5. Special Product Features

- Steplessly adjustable bevel tilt from 0 to 45°.
- Stepless depth of cut setting to 85 mm.
- An undervoltage relay prevents the power tool from starting up when power is restored after a power failure.
- All operating elements are located at the machine's front.
- A rear table extension is standard delivery.
- Robust sheet steel construction – high load-bearing capacity and permanent protection against corrosion.

## 6. Operating elements

### ON/OFF switch

- To start = press green switch button (52).
- To stop = press red switch button (53).

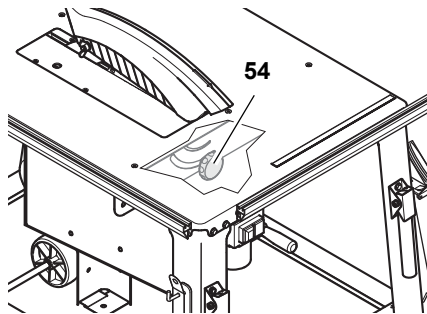


### **i** Note:

*In case of a power failure an undervoltage relay trips. This prevents the power tool from starting when the power is restored. To restart, press the green switch button again.*

### Setting device for saw blade tilt

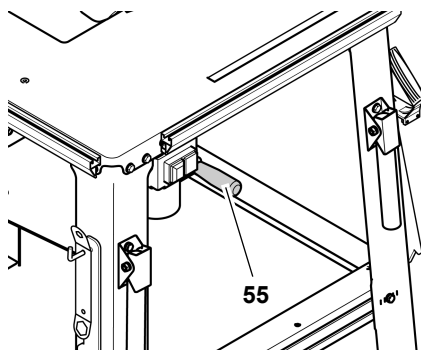
The saw blade tilts steplessly between 0° and 45°.



To keep the set angle of inclination from changing when sawing it is locked by means of two handwheels (54) at the front and rear of the chip case.

### Crank for cutting height adjustment

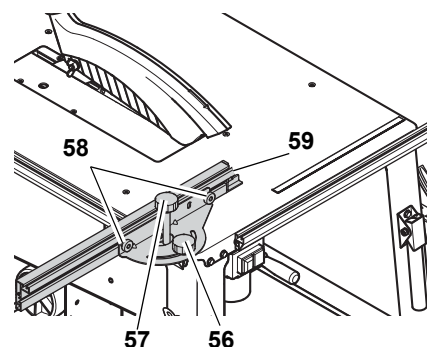
The cutting height is adjusted by turning the crank (55).



### Fences

The saw is equipped with a universal fence, which can be used as mitre fence or rip fence:

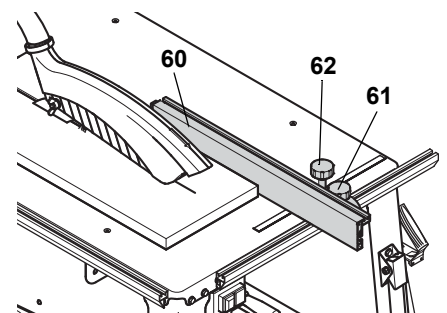
- Mitre fence (for cross-cuts / mitre cuts):



To be used as mitre fence the universal fence is installed on the guide extrusion at the left side of the saw table.

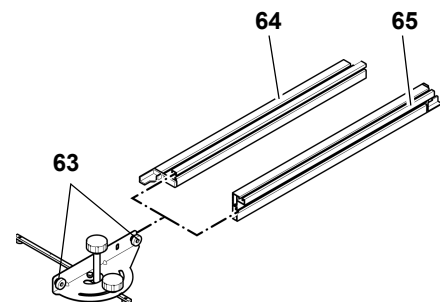
- Knob (56) for mitre angle setting. The setting range is 60°. When sawing with the mitre fence knob (56) must be firmly tightened.
- Knob (57) for sliding function. When sawing with the mitre fence knob (57) must be loosened.
- Knurled nuts (58) for fence extrusion position adjustment. The plastic lug (59) of the fence extrusion shall have at least 10 mm distance to the line of cut.

- Rip fence (for ripping):



To be used as rip fence the universal fence is installed on the guide extrusion at the front of the saw table.

- For ripping the fence extrusion (60) must be parallel with the saw blade and locked in position by knob (61).
- Knob (62) for sliding function. When sawing with the rip fence knob (62) must be firmly tightened.
- Knurled nuts (63) for attaching the fence extrusion. After loosening the two knurled nuts (63), the fence extrusion can be removed and shifted:



Small edge (64):

- for cutting thin stock.
- when the saw blade is tilted.



Wide edge (65) :

- for cutting thick stock.

## 7. Assembly



**Danger!**

**Modifications to the saw or use of parts not tested and released by the manufacturer can lead to unforeseen damage during operation!**

- Assemble the saw in strict accordance with these instructions.
- Use only the parts supplied as standard delivery.
- Do not change any parts.

Only if you follow the instructions exactly does the saw conform to the safety regulations and can be safely operated.

If you also observe the following notes, the assembly will cause no problems:

- Read the instructions for each step before executing it.
- Lay out the parts required for each work step.

### Required tools

- Two 10 mm wrenches

### Stand assembly

Item	Description	Qty.
66	Leg	4
67	Hexagon head screw M6 x 16	28
68	Washer 6.4	56
69	Hexagon nut M6	28
70	Hose carrier	1
71	Stanchion, long	2
72	Stanchion, short	2

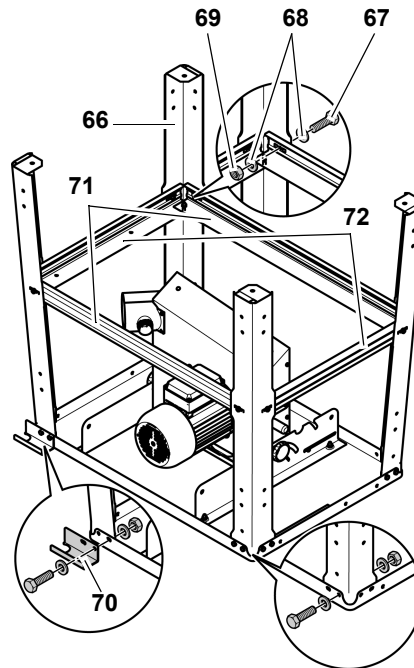
1. Place table panel, motor facing up, on a stable support.



**Caution!**

**Saw blade and riving knife must not rest on the support! To prevent damage to the saw or support, the table panel should be placed onto two sawhorses.**

2. Attaching the four legs (66) to the inside of the table panel's corners:
  - Put hexagon head screws (67) with washers (68) fitted through from the outside;
  - from the inside put on washers (68) and screw on hexagon nuts (69) – do not fully tighten yet.
3. At the location indicated by an arrow attach the hose carrier (70), with the opening to the rear, to the saw table.



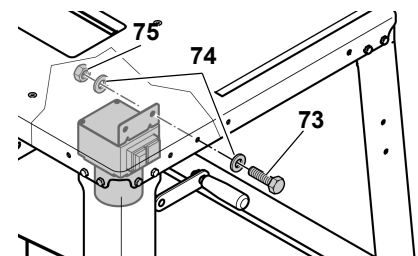
4. Fit long stanchions (71) between the side legs and short stanchions (72) between the front and rear legs:
  - the wide sides of the stanchions face the table panel;
  - the nibs and recesses must fit into each other;
  - Put hexagon head screws with washers fitted through from the outside;
  - from the inside put on washers and screw on hexagon nuts – do not fully tighten yet.
5. Bolting up the stanchions with each other:
  - Put hexagon head screws with washers fitted through from the saw table's top side;
  - from the underside put on washers and screw on hexagon nuts – do not fully tighten yet.
  - With the help of another person, turn the saw over and stand it on a level floor.

6. Tighten all hexagon head screws and hexagon nuts of the saw stand.

### ON/OFF switch installation

Item	Description	Qty.
73	Hexagon head screw M6 x 16	2
74	Washer 6.4	4
75	Hexagon nut M6	2

1. Remove the transport lock of the switch and attach the switch plate from the inside to the edge of the saw table:
  - Put hexagon head screws (73) with washers (74) fitted through from the outside;
  - from inside put on washers (74) and screw on hexagon nuts (75).



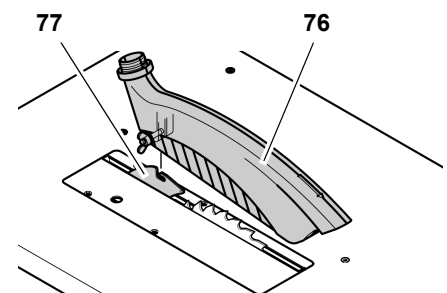
**Caution!**

Make sure the cable does not run over sharp edges and is not bent.

### Installing the dust collection gear

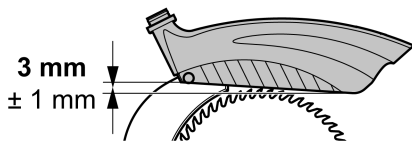
Item	Description	Qty.
76	Blade guard	1
78	Suction hose	1

1. Raise saw blade fully.
2. Install blade guard (76) on riving knife (77).

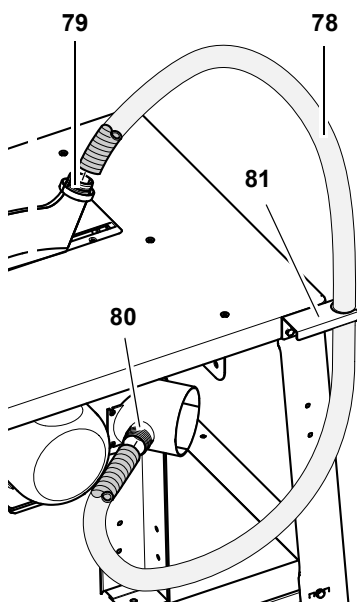


**Note:**

*The blade guard is tilted slightly downward on the operator side after installation on the riving knife.*



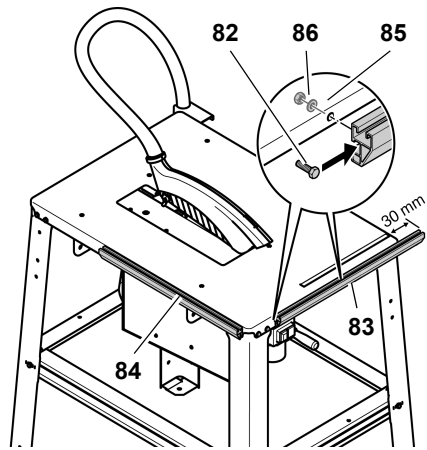
3. Push one end of the suction hose (78) on the blade guard's suction port (79).
4. Fit other end of the suction hose to the dust extraction port (80) on the chipcase.
5. Hook the suction hose into the hose carrier (81).
6. Connect the saw's dust extraction port at the chipcase to a suitable dust collector (see 'Dust collector' in chapter 'Operation').



**Guide extrusion installation**

Item	Description	Qty.
82	Hexagon head screw M6 x 16	4
83	Guide extrusion, short	1
84	Guide extrusion, long	1
85	Washer 6.4	4
86	Hexagon nut M6	4

1. Slide two each hexagon head screws (82) with the heads into a guide extrusion.
2. Guide extrusion locations:
  - short guide extrusion (83) at the front of the saw table;
  - long guide extrusion (84) at the left-hand side of the saw table;



3. Adjust position of the guide extrusions so that the countersinking of the extrusions will accommodate the hexagon head screws of the legs.
4. Put one each washer (85) from inside on the hexagon head screw, then secure with hexagon nut (86).

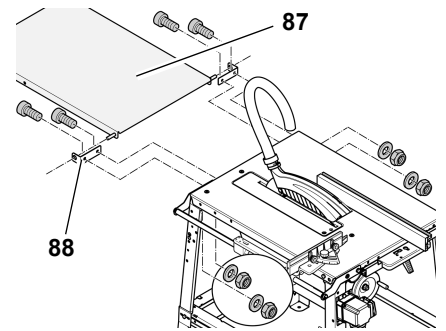
**Installing the table extension**

Item	Designation	Number
87	Extension plate	1
89	Washer 6.4	2
90	Locking nut M6	2
92	Bearing screw M6 x 35	2
91	Support	2
93	Hexagon nut, self-locking M6	2
94	Hexagon screw M6 x 16	2
88	Angle	2

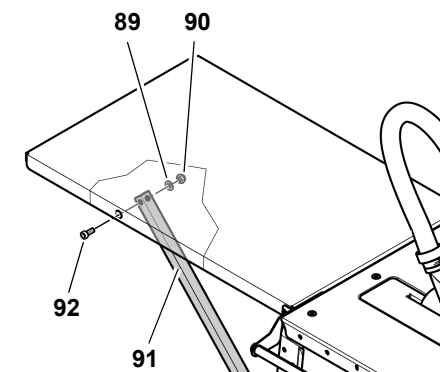
**⚠ Caution!**

**When installing the rear table extension, both panel and support struts need to be held as long as they are only bolted to one end.**

1. Unscrew and remove the 4 hexagon screws at the rear side of the frame.
2. Push the angles (88) onto the axles of the extension plate (87) and screw to the frame using the previously removed hexagon screws.



3. Attach each of the supports (91) with one bearing bolt (92), one washer (89) and one flange nut (90) to the table extension (see illustration).



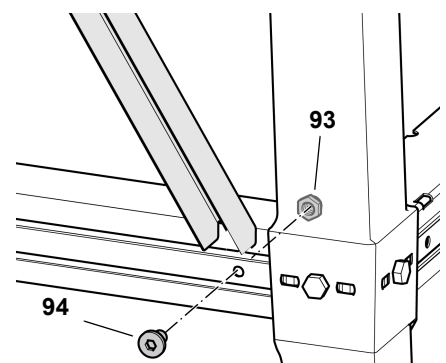
4. Tighten all bolted connections of the table extension hand-tight using a suitable tool.

**i Note:**

*The supports of the table extensions can be fixed securely in place. Alternatively, they can be installed in such way that the table extension can swing down.*

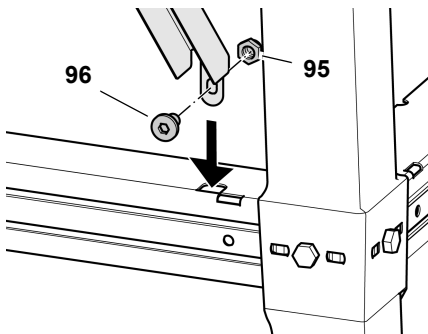
**Stationary support installation**

1. Insert the offset ends of the supports into the slots of the short strut at the rear of the saw and slide them towards the outside.
2. Fasten each of the supports with one countersunk screw (94) and one prevailing torque-type hexagon nut (93) to the strut as illustrated.



### Support installation for folding down of table extension

1. Attach one countersunk screw (96) and one prevailing torque-type hexagon nut (95) to the lower end of each of the struts.
2. Insert the lower ends of the supports into the slots of the short strut at the rear of the saw and slide them towards the outside (see illustration).



### Tightening the screwed connections

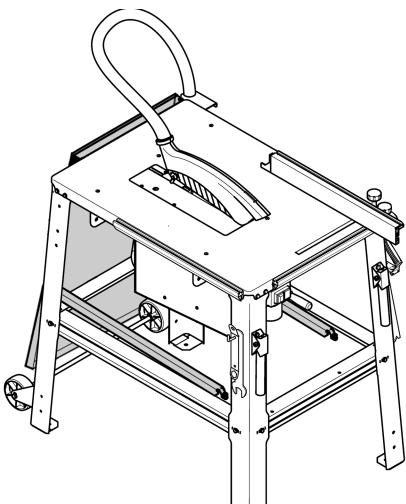
- Check all screwed connections of the saw. Tighten all screwed connections hand-tight with a suitable tool.

Observe the following when tightening the screws:

- The machine must stand firmly and levelly after the screws have been tightened.
- Adjusting the table extension: the table extension's surface must be parallel with and in the same plane as the top of the saw table.

### Swinging the table extension down

1. Slide the lower ends of the supports towards each other.
2. Lift supports out of the strut and swing table extension down as illustrated.

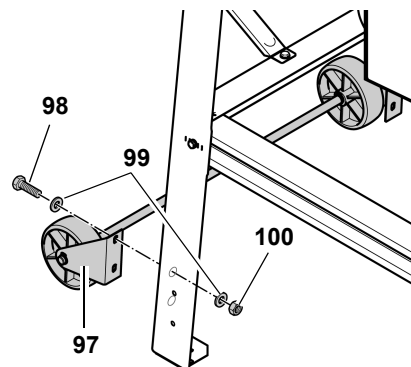


### Wheel set installation

Item	Description	Qty.
97	Wheel set	1
98	Hexagon head screw M6 x 16	4
99	Washer 6.4	8
100	Hexagon nut M6	4

The wheel set attaches to the rear legs of the saw.

1. Each of the wheel set brackets (97) must have two hexagon head screws (98), with washers fitted (99) put through it from the rear.
2. From inside put on washers (99) and screw on hexagon nuts (100).
3. Adjust position of brackets so that the wheels are approx. 1 mm above the floor when the saw is standing on all four legs.



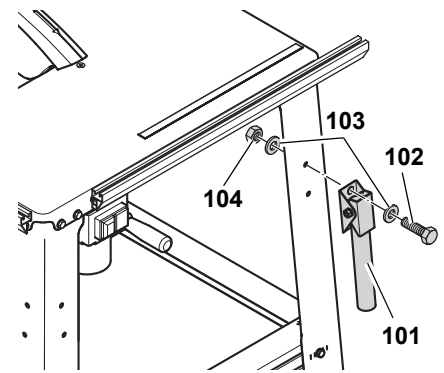
4. Tighten hexagon nuts.

### Transport handle installation

Item	Description	Qty.
101	Transport handle	2
102	Hexagon head screw M6 x 16	4
103	Washer 6.4	8
104	Hexagon nut M6	4

The transport handles are installed on the front legs of the saw.

1. From the front put through each transport handle (101) two hexagon head screws (102) with washers (103) fitted.



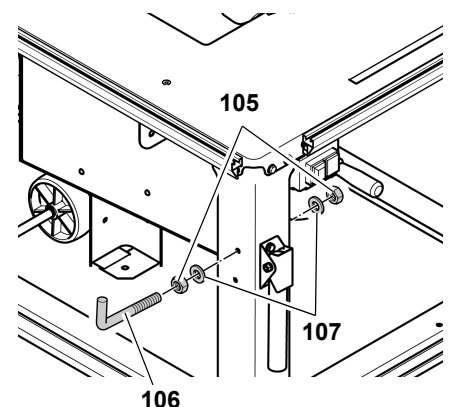
2. Install transport handles in such way that the tubes can be folded down.
3. From inside put on washers (103) and screw on hexagon nuts (104).

### Accessory holder installation

Item	Description	Qty.
105	Hexagon nut M6	4
106	Screw hook M6	2
107	Washer 6.4	4

In a final assembly step two screw hooks are installed on the sides of the front legs to serve as accessory holder:

1. Turn one each hexagon nut (105) about 10 mm up the thread of the screw hook (106).
2. Put a washer (107) on the screw hook.
3. Put hook through the hole provided in the leg and secure with one each washer (107) and hexagon nut (105).



### Tightening the screwed connections

- Check all screwed connections of the saw. Tighten all screwed connections hand-tight with a suitable tool.

## 7.1 Mains connection



### Danger! High voltage

- Operate this device only in a dry environment.
- Operate the saw only on a power source matching the following requirements (see also "Technical Specifications"):
  - outlets properly installed, earthed, and tested;
  - mains voltage and system frequency conform to the voltage and frequency shown on the device's name plate;
  - fuse protection by a residual current operated device (RCD) of 30 mA sensitivity;
  - system impedance  $Z_{max}$  at the interconnection point (house service connection) 0.35 Ohm maximum;



### Note:

Contact your Electricity Board or a qualified electrician, if you are not sure if your house service connection meets these requirements.

- Make sure that the mains cable is out of the way so that it does not interfere with the work and cannot be damaged.
- Protect mains cable from heat, aggressive liquids and sharp edges.
- Use only rubber-insulated extension cables with sufficient cross sections (see 'Technical Data').
- Do not pull on mains cord to unplug.



### Changing the direction of rotation! (only possible for version with DC motor)

Depending on the wiring of the electrical connection the saw blade may rotate the wrong way. This can lead to the workpiece being hurled away when attempting to make a cut. The direction of rotation must therefore be checked every time the saw is connected to another outlet. In case of an incorrect direction of rotation, the wiring of the outlet must be changed by a qualified electrician:

1. After the saw and all of its safety devices have been assembled, connect it to the mains supply.
2. Raise saw blade fully.
3. Start saw and switch OFF immediately.
4. Check the saw blade's direction of rotation from the left-hand side of the saw. The saw blade must rotate clockwise.
5. If the saw blade rotates anticlockwise, unplug the power cable at the saw.
6. Have the electric supply changed by a qualified electrician!

## 7.2 Set-up

- Place the machine on a firm, level floor.
- To align the table surface horizontally, compensate for unevenness or slippery floor surfaces using suitable materials. Then check that the machine is stable.
- Ensure there is sufficient space to handle larger workpieces.

For maximum upright stability the saw can be bolted to the floor:

1. Place the fully assembled saw at a suitable site and mark the bore holes on the floor.
2. Move saw aside and drill the holes.
3. Align saw with the holes and bolt to the floor.

## 8. Operation



### Risk of injury!

This saw may only be operated by one person at a time. Other persons shall stay only at a distance to the saw for the purpose of feeding or removing stock.

Before starting work, check to see that the following are in proper working order:

- mains cable and plug;
- ON/OFF switch;
- riving knife;
- blade guard; and

- feeding aids (push stick, push block and handle).

### Use personal protection equipment:

- dust mask;
- ear protection; and
- safety goggles.

### Assume proper operating position:

- at the front of the saw on the operator side;
- in front of the saw;
- to the left of the line of cut; and
- if work is being carried out by two persons, with the other person remaining at an adequate distance to the saw.

### If the type of work requires it, use the following:

- suitable workpiece supports – if otherwise workpiece would fall off the table after being cut
- dust extractor.

### Avoid typical operator mistakes:

- Do not attempt to stop the saw blade by pushing the workpiece against its side. This poses a risk of kickback.
- Always hold the workpiece down on the table and do not jam it. This poses a risk of kickback.
- Never cut several workpieces at the same time – and also never cut bundles containing several individual pieces. There is a risk of personal injury if individual pieces are caught by the saw blade in an uncontrolled manner.



### Drawing-in/trapping hazard!

Never cut workpieces to which ropes, cords, bands, cables or wires are attached or workpieces which contain any of these materials.

## 8.1 Dust collector



### Danger!

Some types of wood dust (e.g. beech, oak, ash) may cause cancer when inhaled. Use suitable dust extractor when working in enclosed spaces.

### The dust collector must comply with the following requirements:

- hoses must fit the outer diameter of the dust extraction ports (blade guard 38 mm; chip case 100 mm);
- air flow volume  $\geq 460$  m<sup>3</sup>/h;
- vacuum at the dust extraction port of the saw  $\geq 530$  Pa;
- air speed at the dust extraction port of the saw  $\geq 20$  m/s.

The dust extraction ports are located at the chipcase assembly and at the saw blade guard.

Also follow the operating instructions supplied with the dust collector!

Operation without a dust collector is only possible:

- outdoors;
- for short-term operation (up to a maximum of 30 minutes); or
- if a dust respirator is worn.

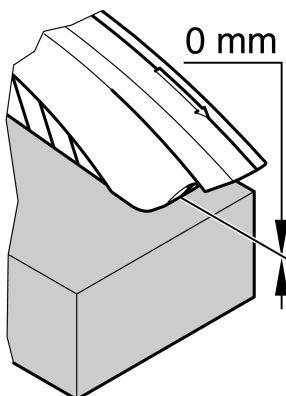
## 8.2 Adjusting the cutting depth



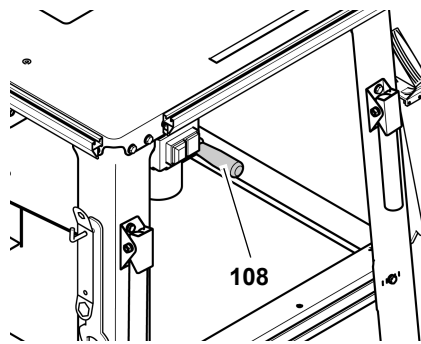
**Danger!**

**Parts of the body or objects in the adjustment area can be caught by the running saw blade! Set the depth of cut only with the saw blade at standstill!**

The saw blade's cutting height needs to be adapted to the height of the workpiece: the blade guard shall rest with its front edge on the workpiece.



- Adjust cutting height by turning the handwheel (108) on the chipcase.



**Note:**

To compensate for possible play in the blade height setting mechanism, always raise the blade to the desired position from below.

## 8.3 Setting the saw blade tilt

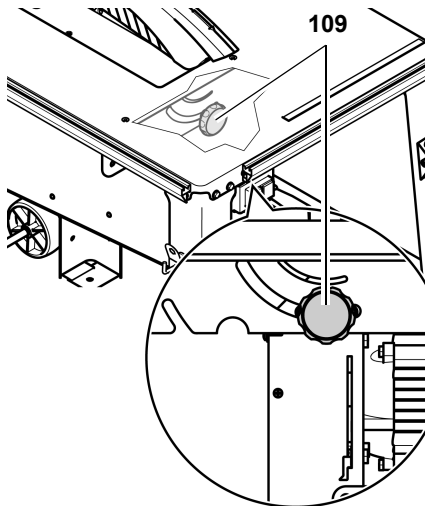


**Danger!**

**Parts of the body or objects in the adjustment area can be caught by the running saw blade! Set the depth of cut only with the saw blade at standstill!!**

You can adjust the blade bevel angle infinitely between 0° and 45°.

1. On the front (109) of the chip box, release the handwheel by roughly one turn.



2. Set required saw blade tilt.
3. Secure the adjusted inclination angle by turning and tightening the handwheel.



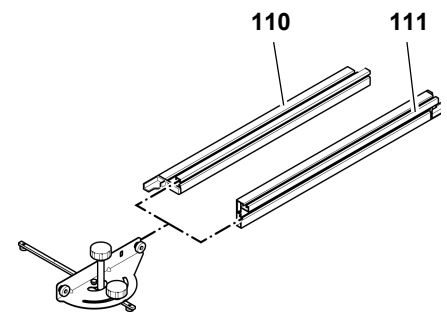
**Note:**

If necessary, you can adjust the 0° limit stop of the handwheel (on the front (109) of the chip box: release the screw

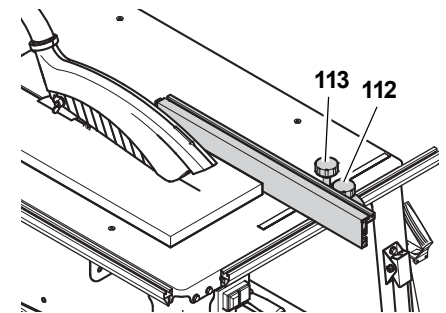
on the 0° limit stop, turn the eccentric disc if necessary and retighten the screw.

## 8.4 Sawing with the rip fence

1. Slide universal fence into the guide extrusion at the front of the saw.
2. Adapt the rip fence extrusion to the workpiece height:



- Small edge (110) = for cutting thin stock
  - Wide edge (111) = for cutting thick stock
3. Adjust fence extrusion parallel with the saw blade and arrest by tightening knob (112).

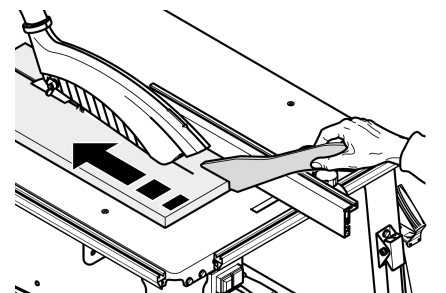


4. Set cutting width and arrest with knob (113).



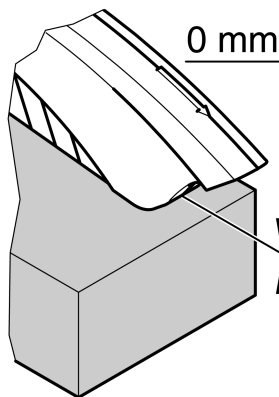
**Danger!**

**Always use the push stick if the distance between saw blade and rip fence is less than 120 mm.**





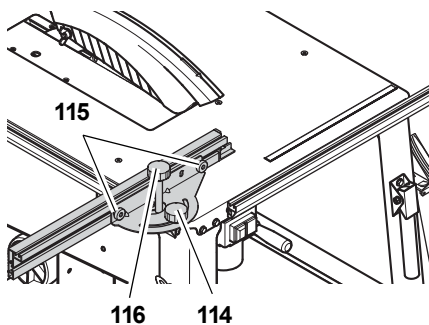
- Set the cutting height of the saw blade. The blade guard must rest with its front edge on the workpiece.



- Set and arrest the saw blade tilt.
- Start motor.
- Cut workpiece in a single pass.
- Turn machine off if no further cutting is to be done immediately afterwards.

### 8.5 Sawing with the mitre fence

- Slide universal fence into the guide extrusion at the left-hand side of the saw.
- Set required mitre angle and arrest with knob (114).



- Align fence extrusion and arrest in position with knurled thumb screws (115).



#### Caution!

The plastic nose must have at least 10 mm distance to the line of cut.

- Tighten knob (116) just enough for the fence to slide easily on the guide extrusion.
- Set the cutting height of the saw blade.
- Set and arrest the saw blade tilt.

- Start motor.
- Cut workpiece in a single pass.
- Turn machine off if no further cutting is to be done immediately afterwards.

### 9. Tips and Tricks

- Before making a cut: make a trial cut on appropriate waste pieces.
- Always lay the workpiece on the saw table such that it cannot tip over or wobble (e.g. place a curved board with the convex side up).
- For long workpieces: use suitable workpiece supports, for example roller support or extension table (see 'Available Accessories').
- Keep surfaces of the table top and table extension clean – in particular, remove resin residue with a suitable cleaning and maintenance spray (optional accessory).

### 10. Care and Maintenance



#### Danger!

Unplug before servicing.

- Repair and maintenance work other than described in this section should only be carried out by qualified specialists.
- Damaged parts, particularly safety devices, must only be replaced with genuine parts. Parts which have not been tested and released by the manufacturer can lead to unforeseen damage.
- Check that all safety devices are operational again after each service.

#### 10.1 Changing the saw blade



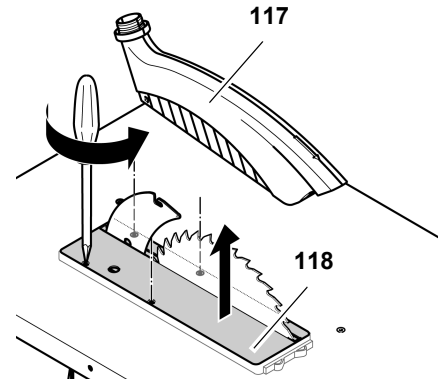
#### Danger!

Directly after cutting the saw blade may be very hot – burning hazard! Let a hot saw blade cool down. Do not clean the saw blade with combustible liquids.

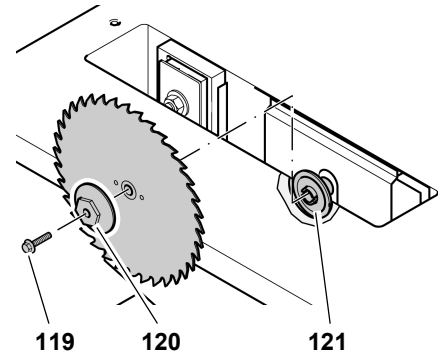
Risk of injury, even with the blade at standstill. Wear gloves when changing blades.

When fitting a saw blade, observe the direction of rotation!

- Raise saw blade fully.
- Remove blade guard (117).
- Remove fixing screws of the table insert extrusion (118) and remove it.



- Loosen arbor bolt (119) with spanner (L.H. thread!). Hold outer blade collar (120) with open-ended spanner to counter.



- Remove outer blade collar (120) and saw blade from the saw spindle.
- Clean clamping surfaces of saw spindle and saw blade.

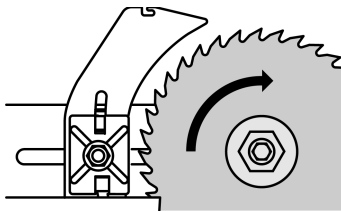


#### Danger!

Do not use cleaning agents (e.g. to remove resin residue) that could corrode the light metal components of the saw; the stability of the saw would be adversely affected.

- Put on a fresh saw blade (observe direction of rotation!).





**Danger!**

Use only saw blades meeting the requirements of EN 847-1 (see "Technical Specifications") – if unsuitable or damaged saw blades parts are used, parts can be ejected due to centrifugal force in an explosive-type manner.

Do not use:

- saw blades with maximum speed ratings lower than the saw spindle speed (see 'Technical Data');
- saw blades made of high-strength steel (HSS or HS);
- saw blades with visible damage or deformations;
- cut-off wheel blades.



**Danger!**

- Only install saw blade with genuine parts.
- Do not use loose-fitting reducing rings; the saw blade could work loose.
- Saw blades have to be installed in such way that they do not wobble or run out of balance and cannot work loose during operation.

8. Put on outer blade collar (120) (the inner blade collar's (121) lug must engage in the groove of the outer blade collar).
9. Turn arbor bolt (119) into saw spindle (left-handed thread!) and tighten. Hold outer blade collar (120) with ring spanner to counter.



**Danger!**

- Do not extend the tool for tightening the arbor bolt.
- Do not tighten the arbor bolt by hitting the wrench.

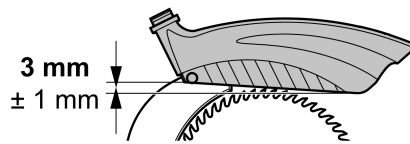
- After the arbor bolt has been tightened, remove all tools used during saw blade installation!

10. Put table insert extrusion (118) in flush with the saw table and secure with fixing screws.

11. Install blade guard on the riving knife.



*The blade guard is tilted slightly downward on the operator side after installation on the riving knife.*



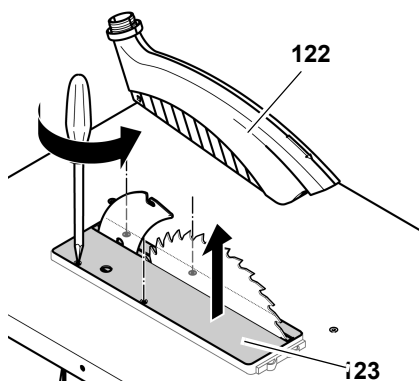
### 10.2 Aligning the riving knife



*The riving knife has already been aligned to the saw blade in the factory. However, it is still necessary to check the distance from the riving knife to the saw blade and if necessary align the knife at regular intervals.*

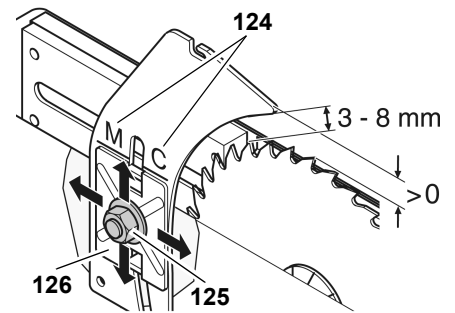
To align the riving knife:

1. Raise saw blade fully.
2. Remove blade guard (122).
3. Remove fixing screws of the table insert extrusion (123) and remove it.



#### Distance to the saw blade:

- The distance between the saw blade's outer edge and the riving knife shall be between 3 and 8 mm.
- The riving knife must project over the saw table at least as far as the saw blade does.



M → TKHS 315 M  
C → TKHS 315 C

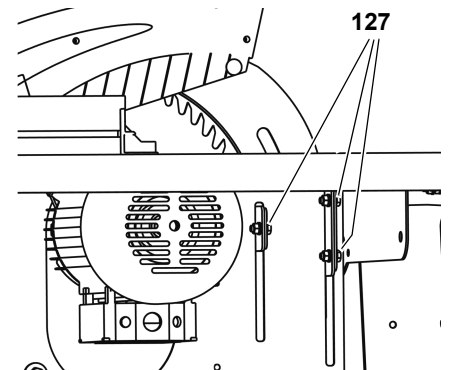
1. Loosen the Keps nut (125) holding the riving knife by one turn.
2. Adjust the distance from the riving knife to the saw blade.
3. Line the riving knife up with the saw blade. To do this align the riving knife marking (124) with the upper edge of the riving knife holder (126).
4. Tighten the Keps nut.

#### Lateral alignment:

Riving knife and saw blade must be perfectly in line. The lateral alignment of the riving knife is preset by the manufacturer.

In case a fine setting should become necessary:

1. Loosen all three screws (127) of the riving knife carrier.



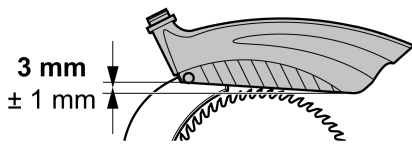
2. Adjust the riving knife
3. Tighten all three screws (127) of the riving knife carrier again.

After alignment:

1. Put table insert extrusion (123) in flush with the saw table and secure with fixing screws.
2. Install blade guard on the riving knife.



*The blade guard is tilted slightly downward on the operator side after installation on the riving knife.*



### 10.3 Cleaning the saw blade's height adjustment mechanism

1. Raise saw blade fully and dismount it (see "Saw blade change").

Now the spindle of the height adjustment is accessible from the top.

2. Clean spindle with brush, vacuum, or compressed air.
3. Apply a light coat of Care and Maintenance Spray.
4. Install saw blade and tighten arbor bolt.
5. Install the table insert.

### 10.4 Storing the saw



**Danger!**

Store saw so that

- it cannot be started by unauthorised persons and
- nobody can get injured.



**Caution!**

Do not store saw unprotected outdoors or in a damp environment.

### 10.5 Maintenance

#### Before switching ON

Visual check if distance saw blade – riving knife is 3...8 mm.

Visual check of power cable and power cable plug for damage; if necessary have damaged parts replaced by a qualified electrician.

#### After switching OFF

Check to see if the saw blade post-runs for more than 10 seconds; if so, have the electronic motorbrake replaced by a qualified electrician.

#### Monthly (if used daily)

Remove saw dust and chips with vacuum or brush; apply light coat of oil to guide elements:

- threaded rod of height adjustment;
- swivel segments.

#### After every 300 hours of operation

Check all screwed connections and retighten if necessary.

## 11. Repairs



**Danger!**

Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Contact your local Metabo representative if you have Metabo power tools requiring repairs. See [www.metabo.com](http://www.metabo.com) for addresses.

You can download a list of spare parts from [www.metabo.com](http://www.metabo.com).

## 12. Transport

- Lower saw blade fully.
- Dismount add-on parts (fence, sliding carriage, table extension).
- If possible, use the original cardboard box for shipping.

## 13. Available Accessories

For special tasks the following accessories are available at your specialised dealer – see back cover for illustrations:

- A** Sliding Carriage  
For convenient guiding of long stock.
- B** Suction Adapter  
To connect a shop vacuum to the dust collection attachment.
- C** Care and Maintenance Spray  
For removing resin residue and preserving metal surfaces.
- D** Saw blade HW 315 x 3.0 x 30  
24 alternate bevel teeth  
General-purpose blade for rip and cross cuts, also in particle board (standard delivery).
- E** Saw blade CV 315 x 1.8 x 30  
56 multiple combination teeth  
For solid wood and particle board.

- F** Saw blade CV 315 x 1.8 x 30  
80 neutral multiple teeth  
For especially smooth cuts in solid wood and particle board.
- G** Saw blade TCT 315 x 2.8 x 30  
48 universal alternate bevel teeth  
For all woods and wood-derived materials.
- H** Sawblade HW 315 x 2.8 x 30  
24 square teeth  
for solid wood, rip and cross cuts.
- I** Saw blade HW 315 x 2.8 x 30  
48 alternate top bevel teeth  
for solid and laminated wood, particle board, MDF, composite materials
- J** Saw blade HW 315 x 2.8 x 30  
84 alternate top bevel teeth  
for solid and laminated wood, particle board, MDF, composite materials
- K** Roller Stand RS 420

## 14. Environmental Considerations

The machine's packing can be 100% recycled.

End-of-life power tools and accessories contain large amounts of valuable raw materials and plastics which must be recycled.

This manual was printed on chlorine-free bleached paper.

## 15. Troubleshooting



**Danger!**

**Before carrying out any fault servicing, always do the following:**

1. **Switch machine OFF.**
2. **Unplug mains cable.**
3. **Wait for saw blade to come to standstill.**

**Check to see that all safety devices are operational after each fault service.**

**Motor does not run**

Undervoltage relay tripped by power failure:

- switch on again.

No mains voltage

- check cable, plug, outlet and mains fuse.

Motor overheated, e.g. by a blunt saw blade or chip build-up in the chip case:

- remove cause for overheating, wait for a few minutes, then start saw again.

Motor supply voltage too low:

- use a shorter supply line or a supply line with a larger cross section ( $\geq 1.5 \text{ mm}^2$ ).
- have power supply checked by a qualified electrician.

**Loss of cutting performance**

Saw blade blunt (possibly tempering marks on blade body):

- replace saw blade (see section 'Care and Maintenance').

**Saw dust build-up**

No dust collector or dust collector of insufficient capacity connected (see "Dust collector" in chapter "Operation"):

- connect dust collector, or
- increase suction capacity.

**Height adjustment mechanism of saw blade working stiff**

Spindle of height adjustment mechanism gummy:

- clean spindle and spray with Care and Maintenance Spray (see chapter "Care and maintenance").

## 16. Technical Data

		<b>TKHS 315 C 2.8 DNB</b>	<b>TKHS 315 C 2.0 WNB</b>	<b>TKHS 315 C 3.1 WNB</b>
Voltage		400 V / 3~50 Hz	230 V / 1~50 Hz	230 V / 1~50-60 Hz
Nominal current	A	4.7	9.0	13.5
Fuse protection min.	A	3-10 (time-lag)	1-16 (time-lag)	1-16 (time-lag)
Protection class		IP 54	IP 54	IP 54
Motor speed	min <sup>-1</sup>	2778	2980	2950 (50 Hz) / 3580 (60 Hz)
Motor power				
Power input P <sub>1</sub>	kW	2.8 kW S6 40%	2.0 S6 40%	3.1 kW S6 40%
Power output P <sub>2</sub>	kW	2.3 kW S6 40%	1.45 kW S6 40%	2.57 kW S6 40%
Saw blade cutting speed	m/s	50	50	50
Riving knife thickness	mm	2.5	2.5	2.5
Saw blade				
saw blade diameter (outer)	mm	315	315	315
saw blade hole (inside)	mm	30	30	30
cutting width	mm	> 2.6	> 2.6	> 2.6
max. base body thickness of the saw blade	mm	≤ 2.3	≤ 2.3	≤ 2.3
Cutting depth				
saw blade vertical	mm	0 - 85	0 - 85	0 - 85
at 45° saw blade tilt	mm	0 - 60	0 - 60	0 - 60
Dimensions				
Saw table length	mm	800	800	800
Saw table width	mm	550	550	550
Table extension length	mm	800	800	800
Table extension width	mm	400	400	400
Height (saw table)	mm	850	850	850
Height (overall)	mm	1050	1050	1050
Weight complete approx.	kg	64.0	62.0	62.0
Guaranteed sound power level according to DIN EN 1870-1 (2007)*				
no-load	dB (A)	88.0	88.0	88.0
when sawing	dB (A)	111.6	111.6	111.6
Sound pressure level according to DIN EN ISO 3746 (1995) and ISO 7960:1995 (E)*				
no-load	dB (A)	77.3	77.3	77.3
when sawing	dB (A)	97.7	97.7	97.7
Uncertainty K	dB (A)	4.0	4.0	4.0
Ambient temperature range	°C	-10 to +40	-10 to +40	-10 to +40
Extension cable – min. lead cross section				
Length of cable: 10 m	mm <sup>2</sup>	5 x 1.5	3 x 1.0	3 x 1.0
Length of cable: 25 m	mm <sup>2</sup>	5 x 2.5	3 x 1.5	3 x 1.5
Length of cable: 50 m	mm <sup>2</sup>	5 x 2.5	3 x 2.5	3 x 2.5

\* The values stated are emission values and as such do not necessarily constitute values which are safe for the workplace. Although there is a correlation between emission levels and environmental impact levels, whether further precautions are necessary cannot be derived from this. Factors influencing the actually present environmental impact level in the workplace include the characteristics of the work area and other noise sources, i.e. the number of machines and other neighbouring work processes. The permitted workplace values can likewise vary from country to country. This information is intended to assist the user in estimating hazards and risks.