



DDC12 3-Speed Soft Percussion Diamond Core Drilling Motor

For Wet and Dry Drilling of Reinforced Concrete

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Internal & Confidential

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Introduction & Applications

DDC12 Introduction

• Dry Drilling Plus Wet Drilling

The DDC12 is a core drilling motor for both wet and dry drilling up to 300 mm in reinforced concrete. The universal motor is rated at an impressive 3500 W input. There are 3 mechanical gear ratios to cover its range of operation.

Soft Percussion

Its most special characteristic is its inclusion of switchable soft percussion function and convertible port, which allows vaccuum connection for dry drilling, and water feed for wet drilling. This allows the motor to keep its wet drilling capabilities, while adding the capability to dry drill reinforced concrete.

Advantages

This dry drilling capability will be very useful for situations where water is not allowed or where water would be extremely inconvenient, such as in finished buildings, inverted drilling, and drilling in sub-zero temperatures.

Safety & Electronics

Safety and protection of the tool are provided by a robust, yet accurate mechanical clutch in combination with soft-start, thermal protection, overload protection, and anti-restart. The electronics also include the slow start function, which automatically assists in starting the kerf.

The operator is able to monitor the load level visually with the LED Load Indicator, the AVR system also warns the operator of overload conditions by slowing the motor at the load limit, allowing uninterrupted operation.

Durability

Durability is ensured by the all metal construction and the special waterproof reed-type switch.

Target Groups

The DDC12 will be the primary choice for operators who need to dry drill as well as wet drill large diameters in reinforced concrete. It will be a great choice for drilling companies, contractors, and anyone who needs a robust, high performance drilling motor.





Sales Arguments



Switchable Soft Percussion

Keeps diamond segments sharp and assists the general efficiency of the dry drilling process.



Integrated Convertible Port

Convertible port allows quick change from water feed for wet drilling, to through-the-spindle dust collection for dry drilling.



Robust Oil-Bath Gearbox

The 3-speed oil-bath gearbox allows optimized torque and drilling speeds for a wide range of diameters. The mechanical slip clutch protects the system.



Anti-Seize Ring

The motor comes standard with an anti-seize ring which helps prevent the bit becoming stuck on the spindle.



3500 W Universal Motor with Aluminum Housing

The high-efficiency motor features complete electronic protection, including overload and thermal protection, as well as soft start. It also features Slow Start: which automatically runs the motor slowly for a short time, which assists in starting the kerf.



Intuitive Load Warning Systems

- 1. LED Load Indicator gives visual information.
- 2. The AVR load warning system automatically slows the motor at the load limit.

Together these make it easy to operate the motor at its optimal load range

Sales Arguments



Special Waterproof Switch

The switch's reed-type operative element is completely impervious to water, dust or slurry, thus eliminating a common failure point in coring motors, and also features anti-restart function.



Spirit Levels

Horizontal and vertical spirit levels are built into the motor for more convenient set-up.

Technical Specifications

Model	DDC12
Power Input	3500 W /16 A (230 V), 2800 W / 25 A (110 V)
Voltage, Frequency	220-240 V~ 50-60 Hz or 110-120 V~ 50-60 Hz
No Load Speeds	450 / 810 / 1300 min ⁻¹
Rated Load Speeds	270 / 480 / 780 min ⁻¹
Percussion Frequency	6 480 / 11 520 / 18 720 bpm
Capacity-Wet or Dry (RC)	Ø300 mm (12")
Gear Oil Type	80W-90
Gear Oil Capacity	625 ml
Spindle Thread	1-1/4" UNC male & 1/2" BSP female
Insulation Class	Class I with PRCD / GFCI (110-120V w/o PRCD / GFCI)
Soft Start & Overload Protection	With
Dimensions	623 x 149 x 213 mm (LxWxH)
Weight	13 kg (28.6 lb)



- 1 Spindle
- 2 Anti-Seize Ring
- 3 Percussion Selector
- 4 Motor Unit
- 5 Tail Handle
- 6 Power Supply Cord
- 7 Gear Selector

- 8 Water Feed Adaptor Head
- Water Feed Valve
- 10 Vacuum Adaptor Head
- 11 Horizontal Spirit Level
- 12 Motor Start / Stop Switch
- 13 LED Load Indicator
- 14 Vertical Spirit Level



Offer Content

Standard Accessories

 DDC12 Three-Speed Diamond Core Drilling Motor
 Vacuum Adaptor Head
 Water Feed Adaptor Head

Optional Accessories

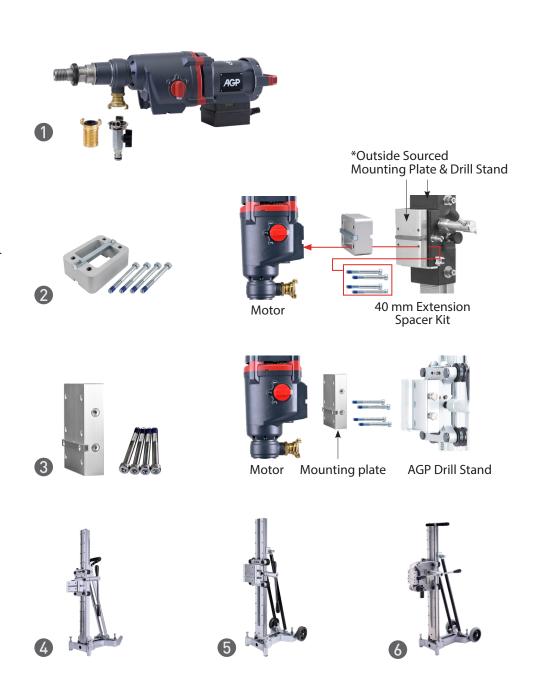
2 40mm Extension Spacer Kit

This spacer kit is not necessary with AGP drill stands, but may be necessary when mounting the motor to some models of other manufacturers' drill stands. The spacer fits between the motor and the stand's mounting plate to provide clearance and prevent the motor from interfering with the stand. Screws are included. (The spacer also adds an extra 80 mm to the maximum core bit diameter with a given stand.)

Mounting Plate (AGP drill stands only)

Long type, for use with AGP drill stands. The plate is standard equipment with large AGP drill stands, so you only need to buy the mounting plate if you need to use multiple motors sharing the same drill stand.

- 4 S350 Drill Stand
- 5 S500 Drill Stand
- 6 QS600 Drill Stand



Comparison Table

Brand











Special Dry Drilling of Reinforced Concrete with Percussion, Rig Mounted











Model	DDC12	DPH 3500 SE	DKS 32	DKS 32 S	BDB 8295
Power	230 - 240 V: 3500 W	230 V: 3420 W	230 V: 3200 W	230 V: 3200 W	230 V: 2200 W
RPM (rated load)	Gear 1: 270 /min Gear 2: 480 /min Gear 3: 780 /min	Gear 1: 440 /min Gear 2: 720 /min Gear 3: 1200 /min	Gear 1: 230 /min Gear 2: 460 /min Gear 3: 720 /min	Gear 1: 300 /min Gear 2: 590 /min Gear 3: 930 /min	Gear 1: 480 /min Gear 2: 940 /min
Percussion Freq. (rated load)	Gear 1: 6 480 bpm Gear 2: 11 520 bpm Gear 3: 18 720 bpm	Gear 1: 10 560 bpm Gear 2: 17 280 bpm Gear 3: 28 800 bpm	Gear 1: 5 520 bpm Gear 2: 11 040 bpm Gear 3: 17 280 bpm	Gear 1: 7 200 bpm Gear 2: 14 160 bpm Gear 3: 22 320 bpm	Gear 1: 9 600 bpm Gear 2: 18 800 bpm
Percussion Ratio	24:1	24:1	24:1	24:1	20:1
Insulation Class	Class 1	Class 2	Class 1	Class 1	Class 2
Capacity-Dry, Reinforced Concrete	Class 1 300 mm	Class 2 250 mm	Class 1 300 mm	Class 1 250 mm	Class 2 250 mm
Capacity-Dry, Reinforced Concrete	300 mm	250 mm	300 mm	250 mm	250 mm

Comparison Table

Brand











Special Dry Drilling of Reinforced Concrete with Percussion, Rig Mounted





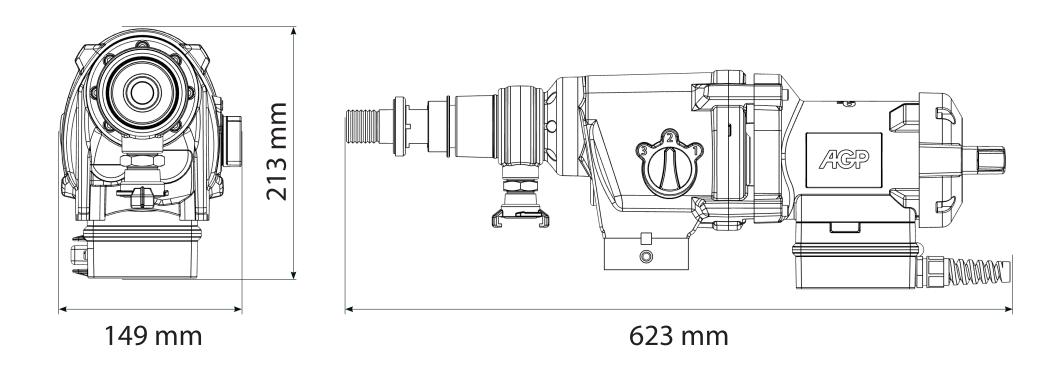






Madal	DDC12	DPH 3500 SE	DIAC 33	DIVC 22 C	BDB 8295		
Model	DDC12	DPH 3000 SE	DKS 32	DKS 32 S	BDB 8243		
Led indicator	Yes 👍	No	No	No	Yes		
Anti-seize ring	Yes	Optional	Yes	Yes	Optional		
Integrated Dust Collection	Yes	Yes	Yes	Yes	No (external)		
Switch Type	Dustproof / Waterproof Reed Type	Standard Type	Standard Type	Standard Type	Standard Type		
Locking Gear Lever	Yes 👛	No	No	No	No		
Spirit Levels	Yes 👍	No	No	No	Yes		
Weight	13.5 kg	16.4 kg	12.4 kg	12.4 kg	6.21 kg		
Gearcase / Motor Housing Material	Aluminum / Aluminum	Aluminum / Aluminum	Aluminum / Aluminum	Aluminum / Aluminum	Aluminum / Plastic		
Gearbox Lubrication	Oil bath	Oil Bath	Oil Bath	Oil Bath	Oil Bath		
Street Price (Germany, w/o tax) Internet sourced info (as of 2023.09)		2306,76 €	2389,00 €	2389,00 €	1.134,12 €		
Conclusion	The AGP has the highest power rating in this group while also having the most complete range of features, such as the waterproof switch, AVR surge-type load warning system combined with the visual LED load indicator, slow start hole starting function, and included spirit levels. The AGP offers the best combination of performance and value in one product.						

Tool Dimensions (mm)



Exploded View

MODEL: DDC12/3 Speed diamond core drill

