

AGP®



CS18 High Frequency Concrete Chainsaw

May. 2024

Internal & Confidential

AGP | CS18 High Frequency Concrete Chainsaw

AGP TAIWAN

Lee Yeong Industrial Co., Ltd.

No.2, Kejia Rd., Douliu City, 64057, Taiwan

Tel : 886-5-5518689 Fax : 886-5-5518635

AGP EUROPE BV

Evenbroekveld 16D, 9420 Erpe-Mere, Belgium

Tel : +32 53 21 62 22 Fax : +32 53 83 88 20



Introduction

Target group & Applications

Introduction & Target Group

This saw, together with its P8K Power Converter, is an indispensable tool for professional concrete cutters. Its 6600 W, PMSM motor has significantly higher 90% efficiency than the induction type motors used by competitors, providing the necessary power to easily drive long guide bars. Its electronic controls grant excellent performance, motor protection, and operator useability. It incorporates a variety of useful features to maximize work efficiency, especially its tool-free chain tensioning system and dual-plane spirit levels.

The P8K Converter is unique in the industry in having 32A input capacity, allowing far higher power on single phase supply than the 16A of competitors' converters.

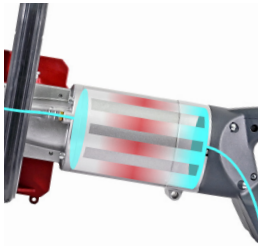
Applications

A concrete chainsaw has unique capabilities, being able to perform many types of cuts in reinforced concrete which are not possible with any other method. It allows corners to be cut cleanly, with no overcuts. It also allows very small cutouts to be made, as small as the width of the guide bar. With patience and skill, it is even possible to make curved cuts. Its special design allows very near to flush cuts. And of course, depending on the guide bar used, it enables very deep depths of cut, achieving an impressive 470 mm with a 19" bar.

When a special concrete cutting challenge is encountered, the CS18 wins the day.



Sales Arguments



Super-Efficient High-Frequency Motor

6600 W, water-cooled, permanent magnet synchronous motor for industry-leading efficiency and power. Constant speed is maintained regardless of load.



Dual Plane Spirit Levels

Dual plane horizontal and vertical spirit levels for precise alignment



Main Handle Hand Protector

Unique main handle design gives enhanced protection for the operator's right hand from chain breakage



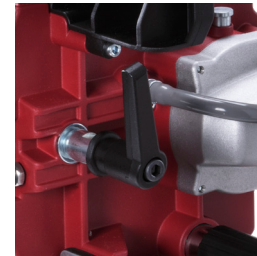
Side Handle with Hand Protector

The ergonomic side handle allows excellent control in many positions and includes a hand protector



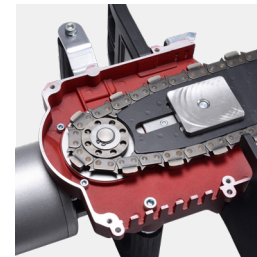
Bumper Spike

Bumper Spike for increased leverage



Tool-Free Chain Adjustment

Tool-free bar clamp lever for faster chain tension adjustment enables a huge time savings



Flush cut system

Special design allows very close to flush cutting



Waterproof Hall Effect Switch

Hall Effect Switch is completely waterproof and dustproof

LED Load Indicator

LED Indicator Indicates load conditions

Technical Specifications



Model	CS18
Power Input	3 Ø ~380-480 V 6600 W 1 Ø ~200-240 V 5500 W (32 A), 3600 W (16 A)
No Load Speed*	8500 min ⁻¹
Linear Speed	20.7 m/s (3/8"), 25.7 m/s (0.444")
Pitch	3/8" or 0.444"
Guide Bar Nominal Length	12" , 14" , 16" or 19"
Max. Cutting Depth	406 mm (w / 16" Bar)
Max. Cutting Depth	470 mm (w / 19" Bar)
Dimensions (LxWxH)	635 x 250 x 316 mm
Weight	8.9 kg (19.5 lb)



Model	P8K
Power Input (maximum)	3 Ø ~380-480 V 16 A 8000 W 1 Ø ~200-240 V 32 A 7000 W
Min. Water Flow (25°C)	3.5 L/min (1 gpm)
Max. Water Pressure	7 bar (100 psi)
Dimensions (LxWxH)	460 x 220 x 260 mm
Weight	7.1 kg (15.6 lb)

Offer Content

Standard Accessories

- ① CS18 High Frequency Concrete Chainsaw
- ② Snap Ring Pliers
- ③ T-Wrench
- ④ Hex Key (M4)























Optional Accessory










- ⑤ Sprocket
- ⑥ Guide Bar
- ⑦ Diamond Chain



Comparison Table

Brand						
Hf Chainsaws						
Model	CS18	TK40	K6500 Chain	Beluga SXM + Espada 400	Spider Chainsaw	CWF 630 Hf
Motor Type	PMSM 	3~ Induction, High Frequency	3~ Induction, High Frequency	3~ Induction, High Frequency	Servo Drive	3~ Induction, High Frequency
Power (Input) 3~380 V	6600 W	6500 W	5500 W	8000 W	6500 W	9000 W
Efficiency 3~380 V	90%	74%	75%	67.5%	(Not Quoted)	(Not Quoted)
Power (Input) 3~230 V	6200 W / 5500 W	N/A	At Decreased Power (Not Quoted)	N/A	N/A	N/A
Power (Input) 1~230 V	5500 W (32 A) Wired Direct 3700 W (16 A) W/ Adaptor	3700 W	3500 W	3500 W	3000 W	N/A (3 Phase Only)
Efficiency 1~230 V	90%	73%	74%	69%	(Not Quoted)	N/A
Bar Length	300 mm / 350 mm / 400 mm / 480mm (12" / 14" / 16" / 19")	300mm / 350mm / 400mm (12" / 14" / 16")	300mm / 350mm / 400mm (12" / 14" / 16")	400mm / 500mm / 600mm (16" / 20" / 25")	300mm / 400mm (12" / 16")	250 / 380 / 500 / 630mm (10" / 15" / 20" / 25")
Sprocket / Chain Pitch	3/8" - 9T or F4 (0.444")	3/8" - 8T (ICS Force3) or F4 (0.444") (ICS ProForce)	3/8" - 9T or 0.444" - 7T	F4 (0.444") (ICS ProForce)	3/8" - 8T (ICS Force3) or F4 (0.444") (ICS ProForce)	F4 (0.444") (ICS ProForce)
No Load Speed	9 960 min ⁻¹	5 500 min ⁻¹	8800 min ⁻¹	2800 min ⁻¹	(Not Quoted)	6500 min ⁻¹
Linear Speed	22.33 m/s (3/8") - 25.7 m/s (0.444")	21 m/s (3/8") - 24 m/s (0.444")	24 m/s (3/8") - 26 m/s (0.444")	20 m/s	(Not Quoted)	(Not Quoted)
Depth Of Cut	305 / 356 / 406 / 470 mm	320 / 370 / 420 mm	350 / 400 / 450 mm	380 / 480 / 600 mm	300 / 400 mm	260 / 380 / 500 / 630 mm
Weight (w/o Bar & Chain)	8.85 kg	9.8 kg	9.1 kg	7.5 kg + 5.2 kg = (12.7 kg)	12.0 kg	14.0 kg
IP Class	IP 55	IP 55	IP 54	IP 67	IP 64	IP 54
Waterproof Hall-Effect Switch	Yes 	no	no	no	no	no
Bumper Spike	Yes 	Yes	No	No	Yes	Yes (ICS Wall Walker)
Splash Guard	Yes 	No	Yes	No	No	No
Led Indicator	Yes 	Yes	No	No (Tool-Free Sprocket Cover)	No	No
Tool-Free Chain Adjustment	Yes 	Yes	No	Yes	Yes	Yes
Slurry Collector	Yes 	No	No	No	No	No
Flush Cutting	Yes (+4.0 mm) 	Yes (+ ?)	No	Yes (+ ?)	Yes (+ ?)	Yes (+ 4.0 mm)
Conclusion	The AGP is the lightest and most efficient chainsaw in this group. Its very high power output allows it to run at a higher linear speed, for more efficient cutting. It includes many useful features, such as tool-free chain adjustment, bumper spike, and flush cutting. The main handle is at the most ergonomic angle for best control and low fatigue operation.					

Comparison Table

Brand						
						
Model	P8K	FU6 U	PP65	PB RX/SX 12	SPIDER POWER PACK	Pentpack 427
Power 3Ø 380 V-480 V	16 A (8000 W) (max)	13.5 A (6500 W)	12 A (6500 W)	15 A (12000 W)	16 A (11000 W)	16 / 32 A (18000 W) (31 kW max)
Power 3Ø 220 V-240 V	32 A (7000 W) (max)	N/A	At Decreased Power (not quoted)	N/A	N/A	N/A
Power 1Ø 220 V-240 V	32 A (7000 W) (max)	16 A (3700 W)	16 A (3500 W)	16 A (4000 W)	16 A (3000 W)	N/A
Information Indicator	LCD display	2 Flashing LEDs	LCD display	3 Flashing LEDs	LCD display	4 Flashing LEDs
Min. Water Flow (25°C)	3.5 l/min (1 gpm)	Not Listed	Not Listed	Not Listed	Not Listed	4 l/Min (1 gpm)
Max. Water Pressure	7 bar (100 psi)	3 bar (45 psi)	{Air Cooled}	3 bar (45 psi)	4 bar	min. 1.5 bar (20 psi)
Weight	7.1 kg (15.6 lb)	Not Listed	9.5 kg (20.9 lb)	16.5 kg (36.4 lb)	11 kg	26 kg
Dimensions (LxWxH)	460 x 220 x 260 mm	Not Listed	419 x 184 x 351 mm	469 x 173 x 400 mm	430 x 200 x 320 mm	680 x 300 x 280 mm
Packing	Strong Carton	Not Listed	Wooden case	Not Listed	Not Listed	Not Listed
Conclusion	The AGP P8K converter is the only one in this group which is designed to run at 32A on single phase, so it can give much higher output on single phase supply in situations where 3 phase supply is not available.					

Tool Dimensions

