



Master 315

A bit of extra to the ordinary

- Specific design for MMA welding
- Compact and lightweight
- Designed for all electrode types, also for cellulosic electrodes.
- MMA and DC TIG welding function
- Suitable for use with power generators
- Designed and manufactured in Finland
- 3 year warranty

Applications

- Installation and set-up
- Repair and maintenance
- Chemical and process industry
- Shipyards and offshore industry

Fast and accurate setup premium weld quality

Master 315 is a stylish and practical MMA welding machine, capable of absorbing the knocks and shocks of everyday welding life.

Lightweight and compact, the Master 315 is constructed from tough injection molded plastic, featuring impact bridge protection structures, making it your reliable partner for workshop or site use.

Master 315 guarantees optimal welding performance and fast parameter setting, supported by the innovative Weld Assist menu selection tool.

Weld Assist ensures suitable parameters are set for each application, regardless of your welding experience. Select the electrode type, electrode size and joint type, and Weld Assist selects the perfect setting for you.

MMA welding may be a basic welding process, but Master 315 adds that little bit of extra to the ordinary in a perfect blend for professional welding.





VALUE FEATURES



WELD ASSIST

Take the guesswork out of MMA parameter setting with Weld Assist, which reduces setup time by up to 60 % and ensures suitable parameter setup the first time and every time.



HIGH-QUALITY STICK WELDING

Perfect welds are characterized by a smooth, controlled arc performance. Master 315 has the dynamic performance to keep the arc under control, including cellulosic electrodes.



WIRELESS REMOTE CONTROL

Extend usability and eliminate hazards with the HR45 wireless remote control. You can set the power level simply and safely and select memory channels up to 100 m from your workstation.



Suitable for all electrode types, including cellulosic electrodes.



Choose between wired and cordless remote control options HR43 (wired) or HR45 (cordless).



Optimal welding parameters for every job, using the large and clear TFT display, including a personalization screen saver feature. Add your company logo and contact details or a favorite image.

Superb user experience



PERSONALIZE

Upload your company logo, contact details or favorite image to the Master 315 screen saver. It's simple and fast.



PULSED MMA

For selected applications, Pulsed MMA can lower the overall heat input, improve welding arc control and increase welding speed. Additional benefits of Pulsed MMA include excellent positional and root pass welding properties, cleaner welds and reduced heat deformation.



ARCBREAK TECHNOLOGY

ARCBreak technology provides welding professionals a variable parameter setting to easily make and break the welding arc during MMA welding. With better control of the weld pool and heat input, ARCBreak helps you avoid burn through, improves overall weld quality and increases tack welding speed. ARCBreak can be optimized through the Weld Assist menu for variable electrode types.



CELLULOSIC WELDING PERFORMANCE

Cellulosic welding electrodes require a large voltage reserve for reliable welding. Master 315 has a special welding program and tuned power dynamics, ensuring the unique arc force properties for excellent cellulosic welding performance.



MEMORY CHANNELS

Master 315 includes 99 memory channels for your favorite parameter settings or WPS values. Copy or delete and update as needed. It's fast and simple.



OPTIMAL WELDING PARAMETERS FOR EVERY JOB

Equipped standard with a full-color 7-inch TFT display, Master 315 defines the best user experience and accuracy for weld parameter setting and control. The easy-to-use navigation buttons and multifunction control knob make it easy to find the optimal welding parameters for every job. Either select your own settings manually or allow Weld Assist to guide you through them. Welding machine control and setting does not get any easier.

Technical specifications

		Master 315 G	Master 315 G (VRD locked on)	Master 315 GM
Mains connection voltage	3~ 50/60 Hz	380...460 V ±10 %	380...460 V ±10 %	220...230 V ±10 % 380...460 V ±10 %
Fuse		16A-C	16A-C	16A-C
Rated maximum output at 40 °C, MMA	30 %			300 A / 32.0 V (400 V) 260 A / 30.4 V (220 V)
	40 %	300 A / 32 V	w300 A / 32 V	280 A / 31.2 V (400 V) 260 A / 30.4 V (220 V)
	60 %	260 A / 30.4 V	260 A / 30.4 V	260 A / 30.4 V (400 V) 230 A / 29.2 V (220 V)
	100 %	220 A / 28.8 V	220 A / 28.8 V	220 A / 28.8 V (400 V) 175 A / 27.0 V (220 V)
Rated maximum output at 40 °C, TIG	40 %	300 A / 22 V	300 A / 22 V	280 A / 21.2 V (400 V) 260 A / 20.4 V (220 V)
	60 %	260 A / 20.4 V	260 A / 20.4 V	260 A / 20.4 V (400 V) 230 A / 19.2 V (220 V)
	100 %	220 A / 18.8 V	220 A / 18.8 V	220 A / 18.8 V (400 V) 175 A / 17.0 V (220 V)
Welding range	MMA	10...300 A	10...300 A	10...300 A (400 V) 10...260 A (220 V)
	TIG	3...300 A	3...300 A	3...300 A (400 V) 3...260 A (220 V)
No-load voltage (reg)		50 Vdc	23 Vdc	50 Vdc
No-load voltage (un-reg)		70...95 V	70...95 V	70...95 V
No-load voltage, VRD		23 Vdc	23 Vdc	23 Vdc
Max welding voltage		63...89 Vdc	63...89 Vdc	38...60 Vdc
Power factor @ 100 %		0.89	0.89	0.89 (400V) 0.95 (220 V)
Efficiency @ 100 %		0.87	0.87	0.87 (400 V) 0.85 (220 V)
Operating temperature range		-20 ... +40 °C	-20 ... +40 °C	-20 ... +40 °C
EMC class		A	A	A
Degree of protection		IP23S	IP23S	IP23S
External dimensions	L x W x H	544 x 205 x 443 mm	544 x 205 x 443 mm	544 x 205 x 443 mm
Weight without accessories		21.4 kg	21.4 kg	22.6 kg
Recommended generator power (min)	Sgen	20 kVA	20 kVA	20 kVA
Stick electrode diameters	ø mm	1.6...7.0 mm	1.6...7.0 mm	1.6...7.0 mm
Standards		IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1	IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1 AS 60974.1-2006	IEC 60974-1,-3,-10 IEC 61000-3-12 GB 15579.1

Ordering information

Equipment	Description	Ordering code
Master 315 G	Power source 300 A, generator use	M315G
Master 315 G	Power source 300 A, generator use, VRD locked on	M315GAU
Master 315 GM	Power source 300 A, generator and multi-voltage use	M315GM
Welding cable	5 m, 35 mm ²	6184301
Welding cable	5 m, 50 mm ²	6184501
Earth return cable	5 m, 35 mm ²	6184311
Earth return cable	5 m, 50 mm ²	6184511
Flexlite TX 223GVD13	Flexlite TX torch with a manual gas valve and a DIX 13 mm connector	TX223GVD134
HR43	Wired remote	HR43
HR45	Wireless remote	HR45
FR43	Wired foot pedal remote	FR43
FR45	Wireless foot pedal remote	FR45
P43MT	4-wheel undercarriage	P43MT
T25MT	2-wheel cart with floor level cylinder loading	T25MT
P45MT	4-wheel cart with an innovative pivoting cylinder plate.	P45MT

P45MT

