



reddot winner 2023
industrial design

Master M

353 / 355 / 358



Extend the MIG welding experience

- Model options 353, 355 and 358
- ED 40% @ 350A for industrial welding
- Manual, Auto and Auto Pulse
- MIG/MAG/TIG/MMA
- Weld Assist auto setting
- Self charging LED work lights
- Channel memory
- Gun trigger Power logic
- Kinetic spool brake
- Wide connection voltage
- Generator compatible
- Water cooler option
- MAX and Wise arc performance tools
- SuperSnake GTX sub feeder
- WeldEye ArcVision Industry 4.0
- Designed and manufactured in Finland
- 3 year warranty

Compact MIG welding machine

Designed and manufactured in Finland, Master M is a premium compact MIG/MAG welding machine series that elevates industrial welding performance and usability. Digital arc control, fast setup techniques and excellent power-to-weight ratio set new standards for weld quality and work efficiency.

Choose from three class leading models (353, 355 or 358) featuring alternative Manual, Auto and Auto Pulse (355 and 358 models) specifications. Weld with gas-cooled guns, or select the optional Master M cooling system for an integrated liquid cooled package, that maximizes use of the 350A 40% ED welding power.

Experience new levels of productivity and welding control by switching to MAX arc performance processes (optional with Master M 355 and 358 models).

Add MAX arc performance processes to your delivery package or consider for a future upgrade.

Switch on LED work lights for safety and convenience. The integrated self-charging LED work light system is a standard feature on all Master M models. This useful light source operates with or without mains power, which improves safety and increases productivity in low light conditions.

Ideal for workshop or site use, Master M is manufactured from injection-molded reinforced plastics, capable to absorb the knocks and impacts of everyday welding life.



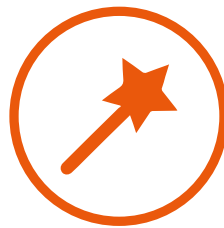


VALUE FEATURES



ELEVATE PRODUCTIVITY

MAX and Wise arc performance processes elevate productivity, increase welding speed, improve weld pool control and reduce heat input.



FASTER SETUP

Up to 60% faster than setting parameters manually, Weld Assist is your guidance tool for fast parameter setting. Simply select your joint type, welding position and material thickness and you're ready to weld.



WORK LONGER

Compact and multi-process Master M delivers 350A MIG/MAG welding power @ 40% ED at 40 °C.

Expand your options



WELD ASSIST

Weld Assist is a guidance tool for faster setup. Simply select the joint type, welding position and material thickness and you're ready to weld. It is an excellent instructive and educational tool, and Weld Assist parameters can also be adjusted manually for individual preference.



WORK LIGHTS

Improve work efficiency and safety with or without mains power connected. LED lighting is also included in the wire feed cabinet.



MASTER M COOLER

Keeps your welding gun cool and the arc conditions smooth and stable. The cooler tank is easy to clean and has integrated LED lighting, so you can monitor the cooling liquid level and make routine maintenance easy.



SAFE-TO-LIFT DESIGN

When using suitable lifting equipment Master M can be lifted by the handle, ensuring safe lifting and easy movement on site.



GAS GUARD

Prevents welding if the shielding gas supply is interrupted or is not connected. Gas guard is a standard feature on 355 and 358 models.



POWERLOG

Powerlog trigger logic allows three alternative power levels during welding. Use a standard gun trigger to select the power level required for the job.



AUTOMATIC CALIBRATION

Auto cable calibration measures the welding circuit resistance and calibrates the digital meters, ensuring that the arc voltage value displayed matches accurately the voltage of the welding arc. Critical for accurate WPS compliance.



Internal cabinet lighting and external LED work lights supports the welder improving safety, efficiency and convenience in low light conditions.



Water cooled packages are supported with two alternative transport carriage options, T25MT (two wheel), or P45MT (four wheel).



Master M models feature large, colour displays that are easy to read and use. Back lit navigation buttons help guide the user, and all models feature display impact protection panels and clear, hinged, polycarbonate display covers.

Technical specifications Master M 353 / 355 / 358

FEATURE		MASTER M G	MASTER M GM
Mains connection voltage 3~ 50/60 Hz		380 - 460 V ± 10 %	380 - 460 V ± 10 % 220 - 230 V ± 10 %
Output at +40 °C	40% [380 - 460 V] 40% [220 -230 V]	350 A (MMA 330 A)	350 A (MMA 330 A) 300 A (MMA 280 A)
	60% [380 - 460 V] 60% [220 -230 V]	280 A	280 A 240 A
	100% [380 - 460 V] 100% [220 -230 V]	220 A	220 A 190 A
Welding current and voltage range	MIG [380 - 460 V] MIG [220 -230 V]	15 A/10 V - 350 A/ 45 V	15 A/10 V - 350 A/ 45 V 15 A/10 V - 300 A/ 40 V
	MMA [380 - 460 V] MMA [220 -230 V]	15 A/10 V - 330 A/ 45 V	15 A/10 V - 330 A/ 45 V 15 A/10 V - 280 A/ 40 V
	TIG [380 - 460 V] TIG [220 -230 V]	15 A/1 V - 350 A/ 45 V	15 A/1 V - 350 A/ 45 V 15 A/1 V - 300 A/ 40 V
Gun connection		Euro	Euro
Wire feed mechanism		4-roll, single-motor	4-roll, single-motor
Diameter of feed rolls		32 mm	32 mm
Filler wires	Fe	0.8 - 1.2 mm	0.8 - 1.2 mm
	Ss	0.8 - 1.2 mm	0.8 - 1.2 mm
	Mc/Fc	0.8 - 1.2 mm	0.8 - 1.2 mm
	Al	0.8 - 1.2 mm	0.8 - 1.2 mm
Wire feed speed		0.5 - 25 m/min	0.5 - 25 m/min
Wire spool weight (max)		20 kg	20 kg
Wire spool diameter (max)		300 mm	300 mm
Shielding gas pressure (max)		0.5 MPa	0.5 MPa
Operating temperature range		-20...+40 °C	-20...+40 °C
Storage temperature range		-40...+60 °C	-40...+60 °C
EMC class		A	A
Degree of protection		IP23S	IP23S
External dimensions LxWxH		602 x 298 x 447 mm	602 x 298 x 447 mm
Weight without accessories		27 kg	27 kg
Recommended generator power (min)	400V	20 kVA	20 kVA
Standards		IEC 60974-1, -10	IEC 60974-1, -10

FEATURE		MASTER M COOLER	MASTER M COOLER MV
Cooling power at 1 l/min		1.0 kW	1.0 kW
Recommended coolant		MGP 4456 (Kemppi mixture)	MGP 4456 (Kemppi mixture)
Tank volume		3 l	3 l
Operating temperature range with recommended coolant		-20...+40 °C	-20...+40 °C
Storage temperature range		-40...+60 °C	-40...+60 °C
EMC class		A	A
Degree of protection (when mounted)		IP23S	IP23S
External dimensions LxWxH		635 x 305 x 292	635 x 305 x 292
Weight without accessories		14,9 kg	14,9 kg
Standards		IEC 60974-2, -10	IEC 60974-2, -10

Ordering information

MODEL DESCRIPTION	SALES PACKAGE CODE
Master M 353 G	MSM353G
Master M 353 GM	MSM353GM
Master M 355 G	MSM355G
Master M 355 GM	MSM355GM
Master M 358 G	MSM358G
Master M 358 GM	MSM358GM
Master M COOLER	MSMC1KW
Master M COOLER MULTI VOLTAGE	MSMC1KWM
T35A TWO WHEEL TRAVEL CART NO CYLINDER	T35A
T25MT TWO WHEEL CART INTERMEDIATE CYLINDER	T25MT
P45MT FOUR WHEEL CART LARGE CYLINDER	P45MT
P43MT FOUR WHEEL CART NO CYLINDER	P43MT
CABINET HEATER KIT	SP021614
ROTA METER GAS FLOW REGUALTION KIT	SP801136
SUPERSNAKE KIT	SP023803
Master M POWER SOURCE FILTER KIT	SP023312
MMA EURO CONNECTOR 500A	SP801140
HR40 TWO KNOB WIRED HAND REMOTE CONTROL	HR40
GXR10 GUN REMOTE CONTROL	GXR10
MSM MAX Speed	MSM80000
MSM MAX Cool	MSM70000
MSM MAX Position	MSM90000
MSM WiseFusion	MSM40000
MSM WisePenetration	MSM50000
MSM WiseSteel	MSM60000
Note: Power source packages include Gas Hose and Earth Return Lead	

