# Master M 205 and 323

PORTABLE MIG WELDING MACHINES FOR TOTAL CONTROL ANYWHERE







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# PORTABLE MIG WELDING MACHINES FOR TOTAL CONTROL ANYWHERE

The Master M 205 and the Master M 323 set new standards for power and performance in a portable MIG welding machine. With a portable, lightweight design that's easy to carry, you'll enjoy having a portable MIG welder that can be moved wherever you need it. If you're working in tight spaces, the 5" LCD screen is bright and easy to read, while self-charging LED lights can be turned on to improve safety. They work with or without mains power.

The Master M 205 and Master M 323 are also easy to use. Both portable MIG welding machines come with **Weld Assist**, which offers automatic parameter settings that help you start welding quickly. It's a simple solution that welders can also use with minimal experience. Just select the material thickness, joint type, welding position, and start welding.

The Master M 205 is a portable pulse MIG welder with 200 amps of power at a 40% duty cycle. Take on a wider range of materials with pulse welding and do your best work anywhere with the convenience of a 1-phase power supply. Save time and take welding to the next level with 37 built-in MIG/MAG welding programs for Fe, Ss, AlMg5, AlSi5, CuSi3, and CuAl8 filler materials. The Master M 205 comes with 17 programs for pulse MIG and 20 programs for 1-MIG.

**The Master M 323** is a high-performance portable MIG welding machine that delivers 320 amps of power at a 40% duty cycle. It's a portable and light small MIG welder ready for big jobs anywhere on site. Improve welding quality and save time with 28 built-in welding programs for Fe, Ss, AlMg5, AlSi5, CuSi3, CuAl8, and FC-CrNiMo filler materials. In addition, the Master M 323 portable MIG welder includes 4 welding programs for the MAX Cool arc welding process.



If you're looking for a portable MIG welder that can complete high-quality welds in challenging environments, the Master M 205 and Master M 323 should be on top of your list.

## **KEY BENEFITS**



EXPERIENCE PORTABLE POWER

Enjoy lightweight and portable welding power with no compromises.



INTUITIVE USER INTERFACE

Including Weld Assist supporting welders in all situations.



HIGH-QUALITY WELDING RESULTS

Achieve state-of-art welding results with wide-ranging materials and thicknesses.

## **BENEFITS**

- · Versatile process selection with premium MIG/MAG, DC TIG, and stick welding options
- Master M 205 includes a pulse MIG welding option with a 1-phase power supply
- · Lightweight and portable welders that are easy to carry anywhere
- · Ideal for tight workspaces
- Master M 323: 28 factory-installed MIG/MAG welding programs
- Master M 205: 17 pulse MIG welding programs and 20 1-MIG welding programs as a standard
- Root pass welding, thin sheet welding, and gap bridging with MAX Cool arc welding process as a standard in Master M 323
- Master M 323 includes the Gas Guard feature and gas regulation valve
- · Self-charging LED work lights for better worksite safety
- · Designed to be lifted with a crane
- · Weld Assist feature for fast parameter setting
- · 6 memory channels
- 40 % duty cycle
- Compatible with generator
- · Multivoltage as a standard feature
- · Alternative transport cart options



# **PRODUCT OPTIONS**



#### Master M 205 GM

A portable multiprocess welder that provides 200 A with a 40% duty cycle. Manual, synergic, and pulse MIG welding options available, along with stick and DC TIG welding options. Intelligent welding parameter setting with Weld Assist. Includes 20 factory-installed welding programs for 1-MIG and 17 factory-installed welding programs for pulse MIG. Welding programs include Fe, Ss, Al, CuSi, and CuAl materials. Suitable for generator use.



#### Master M 205 GM AU

A portable multiprocess welder for Australian markets. The power source provides 200 A with a 40% duty cycle. Manual, synergic, and pulse MIG welding options available, along with stick and DC TIG welding options. Intelligent welding parameter setting with Weld Assist. Includes 20 factory-installed welding programs for 1-MIG and 17 factory-installed welding programs for pulse MIG. Welding programs include Fe, Ss, Al, CuSi, and CuAl materials. Suitable for generator use.



#### Master M 323 GM

A portable multiprocess welder that provides 320 A with a 40% duty cycle. Manual and synergic MIG welding options available, along with stick and DC TIG welding options. Intelligent welding parameter setting with Weld Assist. Includes 28 factory-installed welding programs for 1-MIG and 4 factory-installed MAX Cool welding programs. Welding programs include Fe, Ss, Al, CuSi, CuAl, Fe Metal, Fe Rutil, and FC-CrNiMo materials. Suitable for generator use.



#### **FEATURES**



#### Invest in work site safety and ergonomics

Master M 205 and 323 are equipped with selfcharging LED work lights for better safety and convenience. Use with or without mains power connected, and improve safety in low light conditions. In addition, both models are safe to lift from the handle by a crane. Lightweight models are easy to carry and enable working in tight spaces.



Up to 60% faster parameter setting

Welding parameter setting has never been this fast! Weld Assist is a guidance tool for fast setup. Select material thickness, joint type, and welding position; you are ready to weld.



# Head start to welding with pre-installed welding programs

Master M 323 and 205 have a versatile package of factory-installed welding programs, making welding easier, improving welding quality, and saving time compared to manual parameter setting.



#### Built-in calibration feature

Auto cable calibration ensures quality assurance even before welding starts. It measures the welding circuit resistance and calibrates the digital meters, ensuring the arc voltage displayed accurately matches the arc voltage of the welding gun. The calibration needs to be done when the machine is used for the first time, or the total length of the welding gun and earth cable has changed by at least 5 m since the last calibration.

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# Control welding current with PowerLog feature

PowerLog is a trigger logic function for improved welding current control. Change between two or three power levels during welding with a welding gun's trigger click. Power levels can be adjusted independently.



#### Easy access to information with QR code

Each Master M model is equipped with a unique and scannable QR code. It enables easy access to all the relevant information, such as product numbers, serial numbers, technical specifications, ordering codes, consumables, user manuals, websites, and local dealers' or workshops' contact information. All the information can be found with a single mobile scan.



# **ACCESSORIES**



#### Master Cooler 05M

Cooling unit for easy, fast, and convenient coolant filling with integrated LED lighting for cooling liquid levels. Suitable with Master M 205 and 323 power sources.



#### Flexlite GX - Master M

Master M is designed to be used together with Kemppi's Flexlite GX series 5 and series 3 MIG welding guns with a Euro connector. User comfort, welding efficiency, and extended consumable parts life.



#### Flexlite TX - Master M

Master M can be used for TIG welding with dedicated Flexlite TX welding torches with a Euro connector. User comfort, welding efficiency, and extended consumable parts life.



#### S10M Skies

Skies under the Master M 205 and 323 Power Sources to prevent abrasive wear or hot steel plates from damaging the power source case.



#### T22M

T22M is a 2-wheel cart with a floor-level gas bottle rack. The maximum recommended size of the gas bottle is 20 liters.



#### T32/

T32A is a 2-wheel lightweight travel solution for easy transport of Master M 205 and 323 welders.



#### Master M 323 Rotameter Kit

Optional rotameter for Master M 323 for adjusting and measuring the flow of the shield gas. Needs to be installed by the Kemppi service workshop.



#### Master M 205/323 Power Source Filter Kit

The power source filter kit for Master M 205 and 323 includes a plastic frame and Ss mesh filter, giving additional protection to the power source to secure efficient airflow in dusty environments. The assembly clips to the rear of the power source.



#### Cabinet Heater Kit

A wire set including a heater resistor. Cabinet Heater Kit prevents moisture in the wire cabinet. Needs to be installed by the Kemppi service workshop.





#### MMA Euro Connector 500A

MMA Euro connector is a single unit assembly attached to the Euro welding gun connector, leaving a female DIX connector socket free so that you can connect the MMA lead male connector to the power source.



# **TECHNICAL SPECIFICATIONS**

### Master M 205 GM

Product code	MSM205GM
Sales package code	P513GX3 – Master M 205 GM, GX 303G HD 3,5 m P514GX3 – Master M 205 GM, GX 303G HD 5 m P515CGX3 – Master M 205 GM, Master Cooler 05M, GX 303W HD 3,5 m P516CGX3 – Master M 205 GM, Master Cooler 05M, GX 303W HD 5 m
Connection voltage 1~ 50/60 Hz	110 – 130 V ±10 %; 220 – 240 V ±10 %
Fuse	16/16 A
Output 40% ED	200 A (175 A MMA); 120 A (100 A MMA) (30% ED)
Output 60% ED	170 A (150 A MMA); 95 A (80 A MMA)
Output 100% ED	140 A (120 A MMA); 75 A (65 A MMA)
Wire feed mechanism	2-roll, single-motor
Wire feed speed	0.5 – 25 m/min
Rated power at max. current	6 kVA
Recommended generator power (min)	15 kVA
Gun connection	Euro
Wire spool weight, max.	5 kg
Wire spool diameter, max.	200 mm
Filler wires, Ss	0.8 – 1.0 mm
Filler wires, Al	0.8 – 1.2 mm
Filler wires, Fe	0.8 – 1.0 mm
Welding current and voltage range, MIG	15 A/10 V200 A/24 V; 15 A/10 V120 A/20 V
Welding current and voltage range, TIG	15 A/1 V200 A/18 V; 15 A/1 V120 A/14.8 V
Welding current and voltage range, MMA	15 A/10 V175 A/27 V; 15 A/10 V100 A/24 V
Operating temperature range	-20+40 °C
External dimensions LxWxH	520 x 250 x 379 mm
Weight (no accessories)	16.2 kg
Degree of protection	IP23S
Standards	IEC 60974-1, -10
EMC class	A
Storage temperature range	-40+60 °C

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#### Master M 205 GM AU

Product code	MSM205GMAU
Sales package code	P513GX3AU – Master M 205 GM AU, GX 303G HD 3,5 m P514GX3AU – Master M 205 GM AU, GX 303G HD 5 m P515CGX3AU – Master M 205 GM AU, Master Cooler 05M, GX 303W HD 3,5 m P516CGX3AU – Master M 205 GM AU, Master Cooler 05M, GX 303W HD 5 m
Connection voltage 1~ 50/60 Hz	110 – 130 V ±10 %; 220 – 240 V ±10 %
Fuse	16/16 A
Output 40% ED	200 A (175 A MMA); 120 A (100 A MMA) (30% ED)
Output 60% ED	170 A (150 A MMA); 95 A (80 A MMA)
Output 100% ED	140 A (120 A MMA); 75 A (65 A MMA)
Wire feed mechanism	2-roll, single-motor
Wire feed speed	0.5 – 25 m/min
Rated power at max. current	6 kVA
Recommended generator power (min)	15 kVA
Gun connection	Euro
Wire spool weight, max.	5 kg
Wire spool diameter, max.	200 mm
Filler wires, Ss	0.8 – 1.0 mm
Filler wires, Al	0.8 – 1.2 mm
Filler wires, Fe	0.8 – 1.0 mm
Welding current and voltage range, MIG	15 A/10 V200 A/24 V; 15 A/10 V120 A/20 V
Welding current and voltage range, TIG	15 A/1 V200 A/18 V; 15 A/1 V120 A/14.8 V
Welding current and voltage range, MMA	15 A/10 V175 A/27 V; 15 A/10 V100 A/24 V
Operating temperature range	-20+40 °C
External dimensions LxWxH	520 x 250 x 379 mm
Weight (no accessories)	16.2 kg
Degree of protection	IP23S
Standards	IEC 60974-1, -10
EMC class	A
Storage temperature range	-40+60 °C



### Master M 323 GM

Product code	MSM323GM
Sales package code	P517CGX3 – Master M 323 GM, Master Cooler 05M, GX 303W HD 3,5 m P517GX3 – Master M 323 GM, GX 303G HD 3,5 m P518CGX3 – Master M 323 GM, Master Cooler 05M, GX 303W HD 5 m P518GX3 – Master M 323 GM, GX 303G HD 5 m
Connection voltage 3~ 50/60 Hz	220 - 230 V ±10 %; 380 - 460 V ±10 %
Fuse	16/32 A
Output 40% ED	320 A (MMA 300 A); 280 A (MMA 255 A)
Output 60% ED	250 A (MMA 220 A); 230 A (MMA 205 A)
Output 100% ED	200 A (MMA 175 A); 175 A (MMA 150 A)
Wire feed mechanism	2-roll, single-motor
Wire feed speed	0.7 – 25 m/min
Rated power at max. current	13 kVA
Recommended generator power (min)	20 kVA
Gun connection	Euro
Wire spool weight, max.	5 kg
Wire spool diameter, max.	200 mm
Filler wires, Ss	0.8 – 1.2 mm
Filler wires, Al	0.8 – 1.2 mm
Filler wires, Fe	0.8 – 1.2 mm
Filler wires, MC/FC	0.8 – 1.2 mm
Welding current and voltage range, MIG	15 A/10 V320 A/34 V; 15 A/10 V280 A/32 V
Welding current and voltage range, TIG	15 A/1 V320 A/34 V; 15 A/1 V280 A/33 V
Welding current and voltage range, MMA	15 A/10 V300 A/34 V; 15 A/10 V255 A/33 V
Operating temperature range	-20+40 °C
External dimensions LxWxH	520 x 250 x 379 mm
Weight (no accessories)	18.5 kg
Degree of protection	IP23S
Standards	IEC 60974-1, -10
EMC class	A
Storage temperature range	-40+60 °C

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# ACCESSORIES

#### Master Cooler 05M

Product code	MSMC05M
Recommended coolant	MGP 4456 (Kemppi mixture)
Operating temperature range	-20+40 °C
External dimensions LxWxH	555 x 253 x 215 mm
Weight (no accessories)	11.5 kg
Degree of protection	IP23S
Standards	IEC 60974-2, -10
Tank volume	2.3
EMC class	A
Cooling power	0.5 kW
Storage temperature range	-40+60 °C

#### Flexlite GX - Master M

Product code	GX203G35 (3.5 m), GX203G5 (5 m)
	GX253G35 (3.5 m), GX253G5 (5 m)
	GX303G35 / GX303W35 (3.5 m), GX303G5 / GX303W5 (5 m)
	GX403G35 / GX403W35 (3.5 m), GX403G5 / GX403W5 (5 m)
	GX503W35 (3.5m), GX503W5 (5m)
	GX205G35 (3.5m), GX205G5 (5m)
	GX255G35 (3.5 m), GX255G5 (5 m)
	GX305G35 / GX305W35 (3.5 m), GX305G5 / GX305W5 (5 m)
	GX305GS6 (6 m), GX305GS8 (8 m)
	GX305WS6 (6 m)
	GX305GMN35 (3.5m), GX305GMN5 (5m)
	GX405G35 / GX405W35 (3.5 m), GX405G5 / GX405W5 (5 m)
	GX405WS6 (6 m), GX405WS8 (8 m)
	GX505W35 (3.5 m), GX505W5 (5 m)
	GX605W5 (5 m)
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#### Flexlite TX - Master M

Pi	roduct code	TX223GE4 (4 m)
		TX253WSE4 (4 m)
		TX353WE4 (4 m)

#### S10M Skies

#### T22M

Description	Transport carriage
Product code	T22M



#### T32A

Description	2-wheel light trolley
Product code	T32A

#### Master M 323 Rotameter Kit

Product code SP024820

#### Master M 205/323 Power Source Filter Kit

Product code SP023492

#### Cabinet Heater Kit

Product code SP021614

#### MMA Euro Connector 500A

Product code SP801140

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**Kemppi** is the design leader of the arc welding industry. We are committed to boosting the quality and productivity of welding by continuous development of the welding arc and by working for greener and more equal world. Kemppi supplies sustainable products, digital solutions, and services for professionals from industrial welding companies to single contractors. The usability and reliability of our products is our guiding principle. We operate with a highly skilled partner network covering over 70 countries to make its expertise locally available. Headquartered in Lahti, Finland, Kemppi employs close to 800 professionals in 16 countries and has a revenue of 178 MEUR.

