

KEMPPI K5 WELDING EQUIPMENT

FastMig M Synergic

FOR ROBUST AND HEAVY DUTY WELDING





FastMig M Synergic



TOP PERFORMANCE INDUSTRIAL MIG/MAG AND STICK (MMA) WELDING

The industrial multi-process welding solution in modular format. FastMig M Synergic is a combination of modularity and ease of use, suiting to wide ranging industrial welding applications. Strong duty cycle performance plus compact, lean dimensions and weight, increases your productivity and worksite mobility.

FastMig M performance modules in both hardware and software, provide endless process solutions and choice, increasing equipment efficiency and utilization. There are multiple package configurations, including three power source choices, wire feed cabinets, and distance and access sub feeding solutions. Choose your user control interface, either synergic control for optimized arc properties as well as easier and faster setting or a regular user interface, offering traditional set-up parameters and control.

KEY APPLICATIONS



PRESSURE VESSELS AND BOILERS



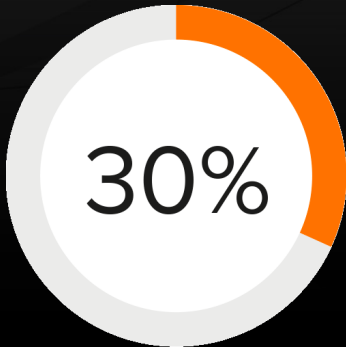
SHIPBUILDING



YELLOW GOODS



KEY BENEFITS



**30 % HIGHER WELDING
SPEED**

Thanks to WiseFusion
application software



**IMPROVED
ADAPTABILITY**

Due to wide selection of welding
software



**25 M EXTRA MIG GUN
REACH**

with the SuperSnake subfeeder

BENEFITS

- Increased welding speed, penetration, quality, and ease of use with WiseFusion.
- WisePenetration application software delivers consistent power to the weld pool regardless of distance changes and deviations between the welding gun nozzle and work piece, reducing welding defects and parameter adjustments
- Modular design in both hardware and software provides endless process solutions and choice, increasing equipment efficiency and utilization across a wide range of demanding industrial applications
- Excellent and unique distance and access solutions, SuperSnake GT02 sub feeder, providing wire feeding up to 25 m from the wire feeding cabinet and allowing up to 60 m distance welding from the FastMig M power source.
- FastMig M control cable technology typically saves 50 % of failure repairs and costs due to the lower cores count.



BENEFITS



FASTER, BETTER WELDING, WITH A FOCUSED ARC

When welding process is stable and easy to handle, it has a positive effect on the weld quality. WiseFusion is a special process for synergic MIG/MAG and pulsed arc welding. It keeps the welding arc focused so that the arc density concentrates in a narrow area. It provides better penetration and faster travel speed. In addition to that, lower deformations in the welded material means less straightening work, saving time and money.



MORE REACH, MORE PRODUCTIVITY

SuperSnake extends the reach of standard Euro MIG welding guns, providing simple distance wire feeding for a variety of filler wires. The SuperSnake GT02S/ GT02SW removes the need to carry large and heavy wire feed units, reducing personnel fatigue, improving safety, and increasing productivity.



WHAT'S IN THE SYSTEM - EQUIPMENT



FastMig M 420 Power source

The FastMig M 420 is a top performance multi-purpose power source, suitable for many applications. This unit is made for those who are looking to optimize welding productivity and quality.



MXF 65 EL Wire feeder

EL wire feeder versions are suitable for synergic MS control panels. Flexibility and performance for all welding applications in today's medium and heavy industries. This unit is compatible with 300 mm spool and is covered in an aluminum casing.



FastCool 10

The FastCool 10 is a cooling unit designed for FastMig M welding equipment and is used for cooling the welding gun.



FastMig MS 300 control panel

MS control panel, which includes easy-to-use synergic functionality and a rich selection of additional features for optimizing your welding work. These packages are suitable for professional use in more demanding industrial applications. This panel is for for MXF 65 EL and ?MXF 67 EL wire feeders.



ALTERNATIVE - EQUIPMENT AND SOFTWARE



FastMig M 320 Power source

FastMig M 320 is a multi-purpose power source, suitable for many applications. This unit is made for reliable everyday welding.



FastMig M 420 (400 V) MV Power source

The FastMig M 420 (400 V) MV is a top performance multi-voltage power source, suitable for many applications. This unit is made for those who are looking to optimize welding productivity and quality.



FastMig M 520 Power source

The FastMig M 520 is a top performance multi-purpose power source, suitable for many applications.



MXF 63 EL Wire feeder

EL wire feeder versions are suitable for synergic MS control panels. Flexibility for all welding applications in today's medium and heavy industries. This unit is compatible with 200 mm spool and is covered in a plastic casing.



MXF 63 Wire feeder

Flexibility for all welding applications in today's medium and heavy industry. This unit is compatible with 200 mm spool and is covered in a plastic casing.



MXF 65 Wire feeder

Flexibility and performance for all welding applications in today's medium and heavy industries. This unit is compatible with 300 mm spool and is covered in an aluminum casing.



MXF 67 EL Wire feeder

EL wire feeder versions are suitable for synergic MS control panels. Flexibility and performance for all welding applications in today's medium and heavy industries. This unit is compatible with 300 mm spool and is covered in a plastic casing.



MXF 67 Wire feeder

Flexibility and performance for all welding applications in today's medium and heavy industry. This unit is compatible with 300 mm spool and is covered in a plastic casing.



WiseFusion

Ensures excellent weld quality, efficiency and ease of use. Keeps the welding arc focused and guarantees the optimal arc length in any welding position in pulse and synergic MIG/MAG welding. Also available for automated welding.



WisePenetration

A welding function for ensured penetration in synergic MIG/MAG welding. Delivers constant power to the weld pool regardless of changes in welding gun orientation or distance between the welding gun and work piece. Also available for automated welding.



WiseRoot

Optimized short arc process for productive root pass welding with FastMig M. Excellent weld quality through automatic adjustment of the welding parameters. Gives higher speed than stick (MMA), TIG or MIG/MAG short arc welding. Also available for automated welding.



WiseThin

Short arc process for sheet metal welding. WiseThin produces easily controllable and spatterless arc thanks to the digital control of the welding parameters in any position, even in case of wider caps and gap variations. Also available for automated welding.



MatchLog

MatchLog includes Minilog and MatchChannel activation in WFX feeders (Minilog can be used only with MXF feeders). MatchChannel allows changing of the memory channel during welding and Minilog enables to change welding power in the same memory channel.



MatchPIN

For locking parameters in stored memory channels. You can prevent unauthorized or undesirable modifications of your welding parameters by setting a PIN code.



FastMig MS 200 control panel

MS control panel, which includes easy-to-use synergic functionality and a rich selection of additional features for optimizing your welding work. These packages are suitable for professional use in more demanding industrial applications. This panel is for MXF 63 EL wire feeder.



FastMig MR 200 control panel

MR control panel is the regular way of controlling the welding parameters. This package is suitable for basic welding applications in professional industrial welding and for FastMig M Regular setup with MXF 63 wire feeder.



FastMig MR 300 control panel

MR control panel is the regular way of controlling the welding parameters. This package is suitable for basic welding applications in professional industrial welding and for FastMig M Regular setup with either MXF 65 and MXF 67 wire feeders.



TECHNICAL SPECIFICATIONS

FastMig M 420 Power source

Product code	6132420
Connection voltage 3~ 50/60 Hz	400 V -15...+20%
Fuse (delayed)	35A
Minimum generator power	20kVA (60%) 18kVA (100%)
Welding range	U ₀ = 50 - 58 V
Output 60% ED	420 A
Output 100% ED	380 A
Rated power 60% ED	20 KVA
Rated power 100% ED	18 kVA
Max. welding voltage	45 V
Open circuit voltage MMA	U ₀ = 48 – 53 V, U _{av} = 50 V
Open circuit voltage MIG/MAG	U ₀ = 50 – 58 V
Welding current and voltage range, Stick (MMA)	15 A/20 V – 420 A/44 V
Idle power	25 W
Efficiency at max. current	89 %
Power factor at max. current	0.87
Welding current and voltage range, MIG	20 A/12 V – 420 A/44 V
Operating temperature range	-20 ... +40 °C
External dimensions LxWxH	590 × 230 × 430 mm
Weight (no accessories)	35 kg
Degree of protection	IP23S
Standards	IEC 60974-1, IEC 60974-5, IEC 60974-10
Storage temperature range	-40 ... +60 °C

MXF 65 EL Wire feeder

Product code	6152100EL
Output 60% ED	520 A
Output 100% ED	440 A
Wire feed mechanism	4-roll
Filler wires, Ss	0.6 – 1.6 mm
Filler wires, Al	1.0 – 2.4 mm
Filler wires, Fe	0.6 – 1.6 mm
Wire feed speed	0 – 25 m/min
Diameter of feed rolls	32 mm
Filler wires, Cored wire	0.8 – 2.0 mm
Wire spool weight, max.	20 kg
Wire spool diameter, max.	300 mm
External dimensions	620 × 210 × 445 mm
Weight	11.1 kg



FastCool 10

Product code	6068100
Cooling liquid	20% – 40 % etanol/water
Operating voltage	400V -15%...+20%
Connection capacity	250 W (100 %)
Start pressure, max	0.4 MPa
Operating temperature range	-20 ... +40 °C
Degree of protection	IP23S
Tank volume	ca. 3 l
External dimensions	570 x 230 x 280 mm
EMC class	A
Cooling power	1 kW
Storage temperature range	-40 ... +60 °C
Weight	11 kg

FastMig MS 300 control panel

Product code	6136400
--------------	---------

WWW.KEMPPI.COM

Kemppi is the pioneering company within the welding industry. It is our role to develop solutions that make you win business. Headquartered in Lahti, Finland, Kemppi employs over 600 welding experts in 13 countries and has a revenue of more than 110 MEUR. Our offering includes welding solutions - intelligent equipment, welding management software and expert services - for both demanding industrial applications and ready-to-weld needs. Local expertise is available via our global partner network covering over 60 countries.



FastMig M 420 Power source



OVERVIEW

The FastMig M 420 is a top performance multi-purpose power source, suitable for many applications. This unit is made for those who are looking to optimize welding productivity and quality.

Alternative:

- FastMig M320 - product code 6132320
- FastMig M420 MV - product code 6132423
- FastMig M520 - product code 6132520

TECHNICAL SPECIFICATIONS

FastMig M 420 Power source

Product code	6132420
Connection voltage 3~ 50/60 Hz	400 V -15...+20%
Fuse (delayed)	35A
Minimum generator power	20kVA (60%) 18kVA (100%)
Welding range	U ₀ = 50 - 58 V
Output 60% ED	420 A
Output 100% ED	380 A
Rated power 60% ED	20 KVA
Rated power 100% ED	18 kVA
Max. welding voltage	45 V
Open circuit voltage MMA	U ₀ = 48 – 53 V, U _{av} = 50 V
Open circuit voltage MIG/MAG	U ₀ = 50 – 58 V
Welding current and voltage range, Stick (MMA)	15 A/20 V – 420 A/44 V
Idle power	25 W
Efficiency at max. current	89 %
Power factor at max. current	0.87

FastMig M 420 Power source

Welding current and voltage range, MIG	20 A/12 V – 420 A/44 V
Operating temperature range	-20 ... +40 °C
External dimensions LxWxH	590 × 230 × 430 mm
Weight (no accessories)	35 kg
Degree of protection	IP23S
Standards	IEC 60974-1, IEC 60974-5, IEC 60974-10
Storage temperature range	-40 ... +60 °C