

FastMig M – Proven reliability from the top of the welding technology



Briefly

- Modular design
- Two package options: Regular and Synergic
- Multi-voltage power source model available
- All Wise™ welding optimisation products
- MasterTig LT 250 and ArcFeed connection in power source with the optional AS kit
- SuperSnake sub feeder for extended reach
- MagTrac F 61 welding carriage for improved productivity



Applications

- Offshore and shipyards
- Metal workshops
- Construction



Product package options

FastMig M is a modular welding equipment range containing three power source and three wire feeder options.

There are two FastMig M sales packages available with either air or liquid cooling option:

Regular package

- Regular set-up for strong and reliable industrial welding for affordable price
- Equipped with the MR control panel
- Easy traditional two-knob regulation

Synergic package

- Synergic set-up for demanding industrial applications
- Equipped with the MS control panel
- Clear visual presentation of the welding parameters and programs, one-knob control of welding power, easy setup and selection of memory channels

See detailed technical information and ordering codes later in this datasheet.



For more product information, videos and news, please visit our website at www.kemppi.com



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There are following three power source and wire feeder options that you can choose for your Regular or Synergic FastMig M package.

Power source options

Three power levels:

- 320 A at 100 % duty cycle
- 420 A at 60 % duty cycle
- 420 A at 60 % duty cycle (Multi-Voltage)
- 520 A at 60 % duty cycle
- Mains connection is 3-phase 400 V
Multi-voltage version accepts 3-phase 220-230 V and 380-400 V mains supply

See detailed technical information and ordering codes later in this datasheet.



Wire feeder options

- FastMig MXF 63 is a small and light model for 200 mm wire spools
- FastMig MXF 65 is a metal casing model for 300 mm wire spools
- FastMig MXF 67 is an extra-strong dual-skin plastic casing model for 300 mm wire spools

NOTE: All wire feeder models have a special EL type to be used with synergic MS control panels.

Control panel options

- MR type of control panels are for Regular FastMig M packages
- MR 200 fits MXF 63 wire feeder, and MR 300 fits MXF 65 and MXF 67 wire feeders
- MS type of control panels are for Synergic FastMig M packages
- MS 200 fits MXF 63 EL wire feeder, and MS 300 fits MXF 65 EL and MXF 67 EL wire feeders



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Cooling options

- You can purchase your FastMig M system either air-cooled or equipped with the FastCool 10 liquid cooling unit

Compatibility with welding quality solutions

- ArcQuality welding management system
- ArcInfo welding monitoring system
- Kemppi Universal WPS packages for MMA and MIG/MAG welding

Optional extras

- AS Kit is an optional control kit for the FastMig M power source. It allows stand-alone usage of the power source for MMA welding and for outside devices like MasterTig LT 250 and ArcFeed
- SuperSnake sub feeder for extra wide working range to up to 30 m
- Welding carriage MagTrac F 61
- Remote controllers R10, R20, R30
- Gun remote controller RMT10
- Transport units PM 500, P 501
- Gun holder GH 30
- Protection sliders for MXF 63
- Gas guard GG200/300
- Wise™ and Match™ products for the Synergic package



Technical specifications

	FastMig M 320	FastMig M 420	FastMig M 520
Connection voltage			
3~, 50/60 Hz	400 V -15 %...+20 %	400 V -15 %...+20 %	400 V -15 %...+20 %
Rated power			
60 % ED	-	20 kVA	27 kVA
100 % ED	15 kVA	18 kVA	20 kVA
Connection cable			
Fuse (delayed)	25 A	35 A	35 A
Output 40 °C			
60 % ED	-	420 A	520 A
100 % ED	320 A	380 A	430 A
Welding current and voltage range			
MMA	15 A/20 V – 320 A/45 V	15 A/20 V – 420 A/44 V	15 A/20 V – 520 A/43 V
MIG	20 A/12 V – 320 A/45 V	20 A/12 V – 420 A/44 V	20 A/12 V – 520 A/43 V
Max. welding voltage			
Open circuit voltage MMA	U ₀ = 48 – 53 V, U _{av} = 50 V	U ₀ = 48 – 53 V, U _{av} = 50 V	U ₀ = 48 – 53 V, U _{av} = 50 V
Open circuit voltage MIG/MAG			
Idle power	25 W	25 W	25 W
Efficiency at max. current	88 %	89 %	89 %
Power factor at max. current	0.80	0.87	0.90
Operating temperature range			
Storage temperature range	-20 ... +40 °C	-20 ... +40 °C	-20 ... +40 °C
Degree of protection			
EMC class	A	A	A
Minimum short circuit power S _{sc} of supply network			
External dimensions			
length	590 mm	590 mm	590 mm
width	230 mm	230 mm	230 mm
height	430 mm	430 mm	430 mm
weight	34 kg	35 kg	36 kg
Voltage supply for auxiliary devices			
X14, X15	fuse 6.3 A delayed	fuse 6.3 A delayed	fuse 6.3 A delayed
Operating voltage (for cooling unit)			
	400 V -15 %...+20 %	400 V -15 %...+20 %	400 V -15 %...+20 %

Technical specifications

FastMig™ M 420MV		230 V range	400 V range
Connection voltage	3~, 50/60 Hz	220 V -10 %...230 V +10 %	380 V -10 %...440 V +10 %
Rated power	60% ED	21 kVA	22 kVA
	100% ED	18 kVA	19 kVA
Connection cable	H07RN-F	4G6 (5 m)	4G6 (5 m)
Fuse (delayed)		50 A	35 A
Output 40 °C	60 % ED	420 A	420 A
	100 % ED	380 A	380 A
Welding current and voltage range	MMA	15 A/20 V...420 A/48 V	15 A/20 V...420 A/44 V
	MIG	20 A/12 V...420 A/48 V	20 A/12 V...420 A/44 V
Max. welding voltage		48 V	44 V
Open circuit voltage	MMA	U ₀ = 48...53 V, U _{av} = 50 V	U ₀ = 48...53 V, U _{av} = 50 V
	MIG/MAG	U ₀ = 60...65 V	U ₀ = 53...58 V
Idle power		25 W	25 W
Efficiency at max. current		87 %	87 %
Power factor at max. current		0.85	0.82
Operating temperature range		-20...+40 °C	-20...+40 °C
Storage temperature range		-40...+60 °C	-40...+60 °C
Degree of protection		IP23S	IP23S
EMC class		A	A
Minimum short circuit power S _{sc} of supply network		N/A	5.6 MVA
External dimensions	L x W x H	590 x 230 x 580 mm	590 x 230 x 580 mm
Weight		49 kg	49 kg
Voltage supply for auxiliary devices		50 V DC	50 V DC
X14, X15		fuse 6.3 A delayed	fuse 6.3 A delayed
Operating voltage (for cooling unit)		380 V -10 %...440 V +10 %	380 V -10 %...440 V +10 %

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Technical specifications

FastMig		MXF 63	MXF 65	MXF 67
Operating voltage (safety voltage)		50 V DC	50 V DC	50 V DC
Rated power		100 W	100 W	100 W
Output 40 °C	60 % ED	520 A	520 A	520 A
	100 % ED	440 A	440 A	440 A
Wire feed speed		0 – 25 m/min	0 – 25 m/min	0 – 25 m/min
Wire feed mechanism		4-roll	4-roll	4-roll
Diameter of feed rolls		32 mm	32 mm	32 mm
Filler wires	∅ Fe, Ss	0.6 – 1.6 mm	0.6 – 1.6 mm	0.6 – 1.6 mm
	∅ Cored wire	0.8 – 1.6 mm	0.8 – 2.0 mm	0.8 – 2.0 mm
	∅ Al	1.0 – 1.6 mm	1.0 – 2.4 mm	1.0 – 2.4 mm
Wire spool	max. weight	5 kg	20 kg	20 kg
	max. ∅	200 mm	300 mm	300 mm
Maximum gas pressure		0.5 MPa	0.5 MPa	0.5 MPa
Gun connection		Euro	Euro	Euro
Operation temperature range		-20 ... +40 °C	-20 ... +40 °C	-20 ... +40 °C
Storage temperature range		-40 ... +60 °C	-40 ... +60 °C	-40 ... +60 °C
EMC class		A	A	A
Degree of protection		IP23S	IP23S	IP23S
External dimensions	L x W x H	510 x 200 x 310 mm	620 x 210 x 445 mm	625 x 243 x 476 mm
Weight		9.4 kg	11.1 kg	12.5 kg

Ordering information

Power sources		
FastMig M 320		6132320
FastMig M 420		6132420
FastMig M 520		6132520
FastMig M 420MV		6132423

Wire feeders		
MXF 65 EL	To be used with MS panels	6152100EL
MXF 67 EL	To be used with MS panels	6152200EL
MXF 63 EL	To be used with MS panels	6152300EL
MXF 65	To be used with MR panels	6152100
MXF 67	To be used with MR panels	6152200
MXF 63	To be used with MR panels	6152300

Panels for wire feeders		
FastMig MR 200		6136100
FastMig MR 300		6136200
FastMig MS 200		6136300
FastMig MS 300		6136400

Software		
WiseFusion welding function		9991014
WisePenetration welding function		9991000
WiseRoot welding process		6265011
WiseThin welding process		9991013
WiseSynergicMig		9990420
MatchLog		9991017
MatchPIN		6265026

Ordering information

Accessories		
Earth return cable	5 m, 50 mm ²	6184511
Earth return cable	5 m, 70 mm ²	6184711
Cable for MMA welding	5 m, 50 mm ²	6184501
Cable for MMA welding	5 m, 70 mm ²	6184701
AS KIT		6264263
Cooling unit FastCool 10		6068100
Cabinet heater KWF 200/300		6185288
Gun holder GH 30		6256030
Sub feeder synchronisation unit MXF Sync 65		W004030
SuperSnake GT02S sub feeder	10m	6153100
SuperSnake GT02S sub feeder	15m	6153150
SuperSnake GT02S sub feeder	20m	6153200
SuperSnake GT02S sub feeder	25m	6153250
SuperSnake GT02S W sub feeder	10m	6154100
SuperSnake GT02S W sub feeder	15m	6154150
SuperSnake GT02S W sub feeder	20m	6154200
SuperSnake GT02S W sub feeder	25m	6154250
Transport unit PM500		6185291
Transport unit P 501		6185269
Transport unit PM 501		6185292
Transport unit PM 502		6185293
MSF 55 & MXF 65 hanging kit		W001694
KFH 1000 hanging device		6185100
KV 200 mounting kit for 2 wire feeders		6185249
R10		6185409
R20	5 m	6185419
R30 DataRemote	5 m	6185420
R30 DataRemote	10 m	618542001
RMT 10 (for PMT MIG gun)		6185475
Remote controlled interconnecting cable	10 m	6185481

Ordering information

MIG guns			
PMT 35		3 m	6253513
PMT 35		4,5 m	6253514
PMT 42		3 m	6254213
PMT 42		4,5 m	6254214
PMT 50		3 m	6255013
PMT 50		4,5 m	6255014
PMT 30W		3 m	6253043
PMT 30W		4,5 m	6253044
PMT 42W		3 m	6254203
PMT 42W		4,5 m	6254204
PMT 52W		3 m	6255203
PMT 52W		4,5 m	6255204
WS 35	AL 1.2 mm	6 m	6253516A12
WS 30 W	AL 1.2 – 1.6 mm	6 m	6253046A12
WS 30 W	AL 1.2 – 1.6 mm	8 m	6253048A12
WS 42 W	AL 1.2 – 1.6 mm	6 m	6254206A12
WS 42 W	AL 1.2 – 1.6 mm	8 m	6254208A12
WS 35	Ss 1.0 mm	6 m	6253516S10
WS 30 W	Ss 1.0 mm	6 m	6253046S10
WS 30 W	Ss 1.2 mm	6 m	6253046S12
WS 30 W	Ss 1.0 mm	8 m	6253048S10
WS 30 W	Ss 1.2 mm	8 m	6253048S12
WS 42 W	Ss 1.0 mm	6 m	6254206S10
WS 42 W	Ss 1.2 mm	6 m	6254206S12
WS 42 W	Ss 1.0 mm	8 m	6254208S10
WS 42 W	Ss 1.2 mm	8 m	6254208S12

For a complete list of welding guns, please visit Kemppi website at www.kemppi.com.

Interconnection cable		1.8 m	6260401
Interconnection cable		5 m	6260405
Interconnection cable		10 m	6260326
Interconnection cable		15 m	6260325
Interconnection cable		20 m	6260327
Interconnection cable		30 m	6260330
Interconnection cable, water cooled		1.8 m	6260410
Interconnection cable, water cooled		5 m	6260407
Interconnection cable, water cooled		10 m	6260334
Interconnection cable, water cooled		15 m	6260335
Interconnection cable, water cooled		20 m	6260337
Interconnection cable, water cooled		30 m	6260340

Other lengths available