



## M2, M4 Series - AC Control

The M2, M4 - AC Control are compact, easy to use and versatile AC Power Supplies, which offer a variable weld voltage and application-specific modifications. Maximum reliability delivers maximum up time and minimum maintenance cost. Applications range from automation, to strand welding and compacting especially for materials with good welding properties. Thanks to its premium cost of ownership M2, M4 Series - AC Control power supplies are a very reasonable long term investment.

### Key features M2, M4 Series - AC Control

- Application-specific modifications available
- Variable welding voltage
- Functional operation

## Specifications M2, M4 Series - AC Control 1/2

Criteria	M2L	M2P	M4L
<b>Configuration hardware</b>	Compact Tower AC power supply for external welding transformers; with integrated power stage	Compact Tower AC power supply for external welding transformers; with integrated power stage	Compact 19" flat AC Power supply with air control unit, without main stage
<b>Special features</b>	M2P and M4P are equipped with external program selection and proportional valve control	M2P and M4P are equipped with external program selection and proportional valve control	M2P and M4P are equipped with external program selection and proportional valve control
<b>Generic options</b>	Cycle control unit; 3-point electrodes for Insulated wire welding, other voltages; external weld schedules with 99 programs via BCD selection	Cycle control unit; 3-point electrodes for Insulated wire welding, other voltages; external weld schedules with 99 programs via BCD selection	Cycle control unit; 3-point electrodes for Insulated wire welding, other voltages; external weld schedules with 99 programs via BCD selection
<b>Special options</b>	.	.	Integral air cassette C40 (M4L) or CPV (M4P)
<b>Supply voltage</b>	400 V AC +/3 10% (440/480 V optional for M4L and M4P)	400 V AC +/3 10% (440/480 V optional for M4L and M4P)	400 V AC +/3 10% (440/480 V optional for M4L and M4P)
<b>Main frequency</b>	50-60 Hz	50-60 Hz	50-60 Hz
<b>Connected rating</b>	4.5 kVA (with TRM3 transformer)	4.5 kVA (with TRM3 transformer)	Depends on transformer
<b>Fusing</b>	25/20A delayed	25/20A delayed	Depends on transformer
<b>Protection class</b>	IP30	IP30	IP30
<b>Weld voltage</b>	Depends on connected transformer	Depends on connected transformer	Depends on connected transformer
<b>Open circuit voltage</b>	Variable via 8-step switch, Vmax is dependent on connected transformer	Variable via 8-step switch, Vmax is dependent on connected transformer	Depends on transformer
<b>Nominal power</b>	Depends on connected transformer; max 15 kVA at 50% d.r.	Depends on connected transformer; max 15 kVA at 50% d.r.	Depends on transformer
<b>Max. power rating</b>	Depends on transformer max 80 kVA	Depends on transformer max 80 kVA	Depends on transformer
<b>Max weld current</b>	Depends on connected transformer	Depends on connected transformer	Depends on connected transformer
<b>Sequence control</b>	For weld head with stroke cylinder or for weld pincers as an option.	For weld head with stroke cylinder or for weld pincers as an option.	For weld head with stroke cylinder or for weld pincers as an option.
<b>Control / control mode</b>	Via phase angle with secondary voltage stepping switch	Via phase angle with secondary voltage stepping switch	Via phase angle with secondary voltage stepping switch
<b>Weld head control</b>	Variable hold, rest and repeat times; as selected via air or proportional valve, with closing and welding pressure	Variable hold, rest and repeat times; as selected via air or proportional valve, with closing and welding pressure	Variable hold, rest and repeat times; as selected via air or proportional valve, with closing and welding pressure
<b>Programmable and external weld schedules</b>	99	99	99
<b># of weld pulses</b>	2 programmable pulses	2 programmable pulses	2 programmable pulses
<b>Weld pulse control</b>	Closing time, squeeze time, up-slope, on-time, down-slope	Closing time, squeeze time, up-slope, on-time, down-slope	Closing time, squeeze time, up-slope, on-time, down-slope
<b>Repet. Of 2nd weld pulse</b>	Max. 99	Max. 99	Max. 99

Weld transformer	TRM3	TRM3	TRM1, TRM3, TRM4 or TR5
Analog in- and output	M2L, M4L: none; M2P, M4P, Pressure sensor for proportional valve	M2L, M4L: none; M2P, M4P, Pressure sensor for proportional valve	M2L, M4L: none; M2P, M4P, Pressure sensor for proportional valve
Binary interface input	Start 1 to 3, quick-stop, without current	Start 1 to 3, quick-stop, without current	Start 1 to 3, quick-stop, without current
Binary interface output	Stepping contact; ready; air valve 1 to 3; locking contact; BSD selection (M2P and MP4P only)	Stepping contact; ready; air valve 1 to 3; locking contact; BSD selection (M2P and MP4P only)	Stepping contact; ready; air valve 1 to 3; locking contact; BSD selection (M2P and MP4P only)
Environment temp.	0-40 °C	0-40 °C	0-40 °C
Cooling	Water-cooled (2L/min at 3 bar)	Water-cooled (2L/min at 3 bar)	Air-cooled
Legal approval	CE compliant	CE compliant	CE compliant
Weight	Approx. 30 kg	Approx. 30 kg	Approx. 7.5 kg
Dimensions (LxHxD)	220 x 420 x 570 mm	220 x 420 x 570 mm	450 x 135 x 335 mm

## Specifications M2, M4 Series - AC Control 2/2

Criteria	M4P
Configuration hardware	Compact 19" flat AC Power supply with air control unit, without main stage
Special features	M2P and M4P are equipped with external program selection and proportional valve control
Generic options	Cycle control unit; 3-point electrodes for Insulated wire welding, other voltages; external weld schedules with 99 programs via BCD selection
Special options	Integral air cassette C40 (M4L) or CPV (M4P)
Supply voltage	400 V AC +/3 10% (440/480 V optional for M4L and M4P)
Main frequency	50-60 Hz
Connected rating	Depends on transformer
Fusing	Depends on transformer
Protection class	IP30
Weld voltage	Depends on connected transformer
Open circuit voltage	Depends on transformer
Nominal power	Depends on transformer
Max. power rating	Depends on transformer
Max weld current	Depends on connected transformer
Sequence control	For weld head with stroke cylinder or for weld pincers as an option.
Control / control mode	Via phase angle with secondary voltage stepping switch
Weld head control	Variable hold, rest and repeat times; as selected via air or proportional valve, with closing and welding pressure
Programmable and external weld schedules	99
# of weld pulses	2 programmable pulses
Weld pulse control	Closing time, squeeze time, up-slope, on-time, down-slope
Repet. Of 2nd weld pulse	Max. 99
Weld transformer	TRM1, TRM3, TRM4 or TR5
Analog in- and output	M2L, M4L: none; M2P, M4P, Pressure sensor for proportional valve
Binary interface input	Start 1 to 3, quick-stop, without current
Binary interface output	Stepping contact; ready; air valve 1 to 3; locking contact; BSD selection (M2P and MP4P only)
Environment temp.	0-40 °C
Cooling	Air-cooled
Legal approval	CE compliant
Weight	Approx. 7.5 kg
Dimensions (LxHxD)	450 x 135 x 335 mm

Product applications M2, M4 Series - AC Control



Automotive



Electronics



Attachment

# AMADA<sup>®</sup>

## AMADA WELD TECH

### OUR TECHNOLOGIES



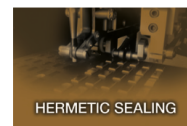
RESISTANCE WELDING



LASER WELDING



LASER MARKING



HERMETIC SEALING



HOT BAR REFLOW  
SOLDERING & BONDING



SYSTEMS SOLUTIONS

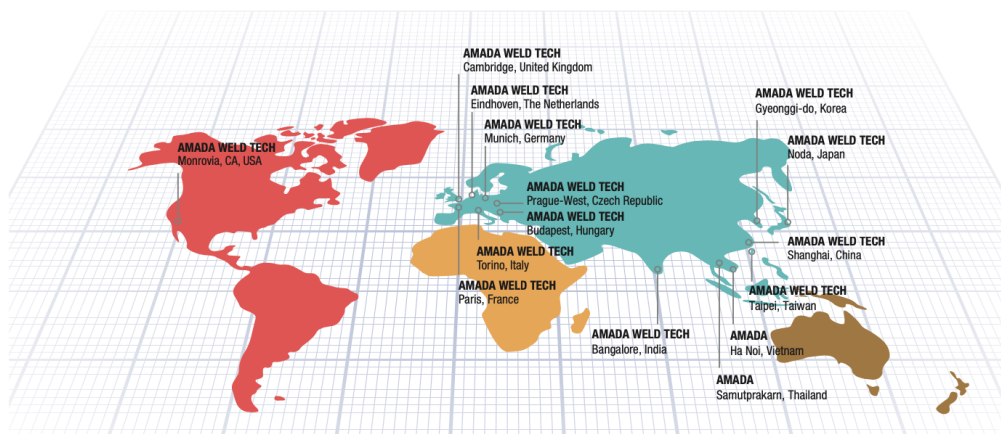


LASER CUTTING



MICRO TIG WELDING

### OUR SALES OFFICES



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