

Kempact RA



Switch on the new standard

+ Why buy

- Modern, energy efficient power source
- Excellent welding performance with mixed or CO₂ shielding gas
- Precise, clean arc ignition
- Maximum output at 35 % duty cycle
- Large, clear LCD display
- WireLine™ service indicator
- GasMate™ chassis design featuring floor level cylinder loading
- Brights™ cabinet lighting
- HotSpot™ heat treatment function
- 2T/4T gun switch latching
- Spot and cycle arc timer
- Parts storage trays
- 3.5 m FE welding gun
- Kemppi 2+ warranty



Energy efficient



Key features

Designed for the modern welding workshop, Kempact RA expresses stylish and purposeful design through high build quality and functional user benefits, making weld tasks productive, accurate and efficient.

Kempact RA is built on Kemppi's latest power source platform, ensuring optimal welding performance and excellent power cost efficiency. Eleven model options include 180, 250 and 320 ampere power sources, including a choice of either Regular (R) or Adaptive (A) control panel interface, which serve the wide ranging needs of metal fabrication workshops. Delivery specification includes welding gun and earth return lead pack.

New technology features include reduced energy costs of more than 10 % when compared to conventional step controlled power sources, Brights™ cabinet lighting for easy wire loading in low light conditions, WireLine™ service alert function that signals routine wire-path maintenance needs, plus the integrated GasMate™ chassis design, making gas cylinder loading and machine movement easy and safe. Whichever model you select, Kempact RA ensures you get the most from every welding task.



Kempact R control panel interface



Kempact A control panel interface

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

Kempact RA

Technical specifications

Kempact	181A		251R, 251A	
Connection voltage	1~, 50/60 Hz	230V (±15 %)	1~, 50/60 Hz	240V (±15 %)
Rated power at max. current	50 % ED I _{1max} (180 A)	5 kVA	30 % ED I _{1max} (250 A)	8.5 kVA
Supply current	50 % ED I _{1max} (180 A)	22 A	30 % ED I _{1max} (250 A)	36 A
	100 % ED I _{1eff} (140 A)	16 A	100 % ED I _{1eff} (150 A)	17 A
Connection cable	H07RN-F	3G1.5 (1.5 mm ² , 5 m)	H07RN-F	3G2.5 (2.5 mm ² , 5 m)
Fuse	Type C	16 A	Type C	20 A
Welding range		10 V / 20 A – 26 V / 180 A		10 V / 20 A – 29 V / 250 A
No load voltage		36V		36V
Idle power		35W		35W
Power factor at max.	180 A / 23 V	0.99	250 A / 26.5 V	0.99
Efficiency at 100% ED	140 A / 21 V	0.82	150 A / 21.5 V	0.82
Wire feed speed adjustment range		1.0-14.0 m/min		1.0-18.0m/min
Voltage adjustment range		8.0-26.0V		8.0-29.0V
External dimensions	L x W x H	623 x 579 x 1070 mm	L x W x H	623 x 579 x 1070 mm
Weight (without gun and gables)		44 kg		44 kg
EMC class		A		A
Degree of protection		IP23S		IP23S
Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10, IEC 61000-3-12				

Kempact	253R, 253A		323R, 323A	
Connection voltage	3~, 50/60 Hz	400V (±15 %)	3~, 50/60 Hz	400V (±15 %)
Rated power at max. current	40 % ED I _{1max} (250 A)	8.5 kVA	35 % ED I _{1max} (320 A)	12 kVA
Supply current	40 % ED I _{1max} (250 A)	11.9 A	35 % ED I _{1max} (320 A)	17.2 A
	100 % ED I _{1eff} (150 A)	6.1 A	100 % ED I _{1eff} (190 A)	8.2 A
Connection cable	H07RN-F	4G1.5 (1.5 mm ² , 5 m)	H07RN-F	4G1.5 (1.5 mm ² , 5 m)
Fuse	Type C	10A	Type C	10A
Welding range		10 V / 20 A – 31 V / 250 A		10 V / 20 A – 32.5 V / 320 A
No load voltage		41V		46V
Idle power		25W		25W
Power factor at max.	250 A / 26.5 V	0.93	320 A / 30 V	0.94
Efficiency at 100% ED	150 A / 21.5 V	0.88	190 A / 23.5 V	0.86
Wire feed speed adjustment range		1.0-18.0m/min		1.0-20.0m/min
Voltage adjustment range		8.0-31.0V		8.0-32.5V
External dimensions	L x W x H	623 x 579 x 1070 mm	L x W x H	623 x 579 x 1070 mm
Weight (without gun and gables)		44 kg		44 kg
EMC class		A		A
Degree of protection		IP23S		IP23S
Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10				

Kempact RA

Technical specifications

Kempact	253 RMV/AMV		323 RMV/AMV	
Connection voltage	3~, 50/60 Hz	230 V -15%...400 V +15%	3~, 50/60Hz	230 V -15%...400 V +15%
Rated power at max. current	40% ED I _{1max} (250 A)(230V)	9 kVA	35% ED I _{1max} (320A)(230V)	13.5 kVA
	40% ED I _{1max} (250A)(400V)	8.5 kVA	35% ED I _{1max} (320A)(400V)	12.5 kVA
Supply current	40% ED I _{1max} (250A)(230V)	22.2 A	35% ED I _{1max} (320A)(230V)	33.3 A
	40% ED I _{1max} (250A)(400V)	12.3 A	35% ED I _{1max} (320A)(400V)	17.8 A
	100% ED I _{1eff} (150A)(230V)	10.8 A	100% ED I _{1eff} (190A)(230V)	14.8 A
	100% ED I _{1eff} (150A)(400V)	6.2 A	100% ED I _{1eff} (190A)(400V)	8.3 A
Connection cable	H07RN-F	4G1.5 (1.5 mm ² , 5 m)	H07RN-F	4G1.5 (1.5 mm ² , 5 m)
Fuse	Type C (230V)	16 A	Type C (230V)	16 A
	Type C (400V)	10 A	Type C (400V)	10 A
Welding range	10V/20A - 31V/250A		10V/20A - 32.5V/320A	
No load voltage	46V		50V	
Idle power	35W		35W	
Power factor at max.	250A/26.5V (230V)	0.94	320A/30V (230V)	0.94
	250A/26.5V (400V)	0.93	320A/30V (400V)	0.94
Efficiency at 100% ED	150A/21.5V (230V)	0.79	190A/23.5V (230V)	0.80
	150A/21.5V (400V)	0.82	190A/23.5V (400V)	0.83
Wire feed speed adjustment range	1.0-18.0m/min		1.0-20.0m/min	
Voltage adjustment range	8.0-31.0V		8.0-32.5V	
External dimensions	L x W x H	623 x 579 x 1070 mm	L x W x H	623 x 579 x 1070 mm
Weight (without gun and gables)	44 kg		44 kg	
EMC class	A		A	
Degree of protection	IP23S		IP23S	
Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10				



GasMate chassis design makes gas cylinder collection, storage and movement easy. Gas cylinders are floor level loaded and secured with a strong fabric webbing system.



Kempact Adaptive (A) models include special features, including power setting by plate thickness control, filler materials selection and memory channels.



The large and clear LCD control panels make parameter setting and reference easy. Parts trays provide convenient storage and access.

Kempact RA

Ordering information

Kempact RA	Order code	Kempact RA	Order code
Kempact 181A, FE20 3,5 m	P2201	Kempact 323A, FE32 3,5 m	P2213
Kempact 181A, FE20 5 m	P2202	Kempact 323A, FE32 5 m	P2214
Kempact 251R, FE25 3,5 m	P2203	Kempact 253RMV, FE27 5 m	P2215
Kempact 251R, FE25 5 m	P2204	Kempact 253RMV, FE27 3,5 m	P2216
Kempact 251A, FE25 3,5 m	P2205	Kempact 253AMV, FE27 5m	P2217
Kempact 251A, FE25 5 m	P2206	Kempact 253AMV, FE27 3,5 m	P2218
Kempact 253R, FE27 3,5 m	P2207	Kempact 323RMV, FE32 3,5m	P2219
Kempact 253R, FE27 5 m	P2208	Kempact 323RMV, FE32 5 m	P2220
Kempact 253A, FE32 3,5 m	P2209	Kempact 323AMV, FE32 3,5 m	P2221
Kempact 253A, FE32 5 m	P2210	Kempact 323AMV, FE32 5 m	P2222
Kempact 323R, FE32 3,5 m	P2211	Holder	9592106
Kempact 323R, FE32 5 m	P2212	Carbon electrode	4192160



1. Tough Plexiglas cover and lens plate provide added protection and style.
2. Choose either Regular (R models) or Adaptive (A models) control panel interface.
3. 2-roll (181 and 251 models) or 4-roll (253 and 323 models) wire drive systems.
4. Inverted gun connection improves wire feeding and gun life.
5. Brights™ wire cabinet lighting for low light conditions.
6. WireLine™ service symbol alerts drive system maintenance needs.
7. Integrated storage trays for wire drive and gun parts.
8. GasMate™ chassis design makes cylinder loading and machine movement easy and safe.
9. Strong pressed steel and moulded plastic construction.
10. Easy change welding polarity terminals.
11. Particle filter option for dusty fabrication shops.