

# Kempact RA

Switch on the new standard



Energy efficient



- Modern, energy efficient power source
- Excellent welding performance with mixed or CO<sub>2</sub> 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
- Kempki 2+ warranty

## New standards in compact MIG/MAG class

**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 Kempki'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.

## Design features:

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.



*Kemppet RA is accurate and efficient; designed for use with a variety of filler materials.*



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



*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.*



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



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# 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 I1max (180 A)	5 kVA	30 % ED I1max (250 A)	8.5 kVA
Supply current	50 % ED I1max (180 A)	22 A	30 % ED I1max (250 A)	36 A
	100 % ED I1eff (140 A)	16 A	100 % ED I1eff (150 A)	17 A
Connection cable	H07RN-F	3G1.5 (1.5 mm <sup>2</sup> , 5 m)	H07RN-F	3G2.5 (2.5 mm <sup>2</sup> , 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
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 cables)		44 kg		44 kg
EMC class		A		A
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	35 % ED I1max (250 A)	8.5 kVA	35 % ED I1max (320 A)	12 kVA
Supply current	35 % ED I1max (250 A)	11.9 A	35 % ED I1max (320 A)	17.2 A
	100 % ED I1eff (150 A)	6.1 A	100 % ED I1eff (190 A)	8.2 A
Connection cable	H07RN-F	4G1.5 (1.5 mm <sup>2</sup> , 5 m)	H07RN-F	4G1.5 (1.5 mm <sup>2</sup> , 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
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 cables)		44 kg		44 kg
EMC class		A		A
Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10				



Kempact 181/251 models include the GT02C, two roll wire drive unit.



Kempact 253/323 models include the DuraTorque four roll wire drive unit.



HotSpot™ feature makes metal shrinking and component heating simple and convenient.

# 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 I1max (250 A)(230V)	9 kVA	35% ED I1max (320A)(230V)	13.5 kVA	
	40% ED I1max (250A)(400V)	8.5 kVA	35% ED I1max (320A)(400V)	12.5 kVA	
Supply current	40% ED I1max (250A)(230V)	22.2 A	35% ED I1max (320A)(230V)	33.3 A	
	40% ED I1max (250A)(400V)	12.3 A	35% ED I1max (320A)(400V)	17.8 A	
	100% ED I1eff (150A)(230V)	10.8 A	100% ED I1eff (190A)(230V)	14.8 A	
	100% ED I1eff (150A)(400V)	6.2 A	100% ED I1eff (190A)(400V)	8.3 A	
Connection cable	H07RN-F	4G1.5 (1.5 mm <sup>2</sup> , 5 m)	H07RN-F	4G1.5 (1.5 mm <sup>2</sup> , 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		
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 cables)		44 kg		44 kg	
EMC class		A		A	
Standards: IEC 60974-1, IEC 60974-5, IEC 60974-10					

## Ordering information

Kempact RA			
Kempact 181A, FE 20, 3.5m	P2201	Kempact 253AMV, FE 32, 3.5m	P2217
Kempact 181A, FE 20, 5m	P2202	Kempact 253AMV, FE 32, 5m	P2218
Kempact 251R, FE 25, 3.5m	P2203	Kempact 323RMV, FE 32, 3.5m	P2219
Kempact 251R, FE 25, 5m	P2204	Kempact 323RMV, FE 32, 5m	P2220
Kempact 251A, FE 25, 3.5m	P2205	Kempact 323AMV, FE 32, 3.5m	P2221
Kempact 251A, FE 25, 5m	P2206	Kempact 323AMV, FE 32, 5m	P2222
Kempact 253R, FE 27, 3.5m	P2207	Kempact 323R, FE 35, 3.5M	P2260
Kempact 253R, FE 27, 5m	P2208	Kempact 323R, FE 35, 5.0M	P2255
Kempact 253A, FE 32, 3.5m	P2209	Kempact 323A, FE 35, 3.5M	P2261
Kempact 253A, FE 32, 5m	P2210	Kempact 323A, FE 35, 5.0M	P2256
Kempact 323R, FE 32, 3.5m	P2211	Kempact 323RMV, FE 35, 3.5M	P2262
Kempact 323R, FE 32, 5m	P2212	Kempact 323RMV, FE 35, 5M	P2263
Kempact 323A, FE 32, 3.5m	P2213	Kempact 323AMV, FE 35, 3.5M	P2264
Kempact 323A, FE 32, 5m	P2214	Kempact 323AMV, FE 35, 5M	P2265
Kempact 253RMV, FE 27, 3.5m	P2215	Holder	9592106
Kempact 253RMV, FE 27, 5m	P2216	Carbon electrode	4192160

For MIG/MAG welding gun range please see page 64 – 81.