

SELECT THE IDEAL **REBEL** TO SUIT YOUR **APPLICATION.**

This selection guide will assist in choosing the right machine to meet your requirements. Consider the questions below and find the corresponding information next to each machine.

What input voltage is available at the job site?

Single phase (1ph) works well for 0.8 – 1.0 mm wire applications and short welds with 1.2 mm flux-cored wire. For 1.2 mm wire applications and higher duty cycles, a three phase system would be more suitable.

Where will the machine predominantly be used?

For field work, consider one of the machines designed for 5 kg spools (200 mm). For workshops with higher wire consumption choose a machine capable of 18 kg spools (300 mm).

What output power level is required?



Choosing a machine with higher output power will allow the use of thicker wires and flux-cored wires in a production environment.




Working with thin sheet metal?



Consider selecting the Rebel EMP 205ic AC/DC for the additional TIG capabilities. AC Frequency up to 400 Hz for increased focus of the arc and DC Pulse TIG for greater heat control even on thin materials.

	EMP 205ic AC/DC			EMP 215ic	
	For additional TIG capabilities			For maximum portability	
Input voltage	Single phase (1ph) 110V - 230V			Single phase (1ph) 110V - 230V	
Output power	MIG	MMA	AC/DC (TIG)	205A @ 25%	
	205A @ 25%	170A @ 25%	205A @ 25%		
Maximum output	235A			235A	
Spool size	200 mm			200 mm	
Weight	25.5 kg (portable)			18.6 kg (portable)	
Drive system	2-wheel, 12.1 m/min wire feed speed			2-wheel, 12.1 m/min wire feed speed	
Wire type and dimensions	Mild steel	0.6 - 0.9 mm		Mild steel	0.6 - 0.9 mm
	Stainless steel	0.8 - 0.9 mm		Stainless steel	0.8 - 0.9 mm
	FCW	0.8 - 1.2 mm		FCW	0.8 - 1.2 mm
	Aluminium	0.9 - 1.2 mm		Aluminium	0.9 - 1.2 mm
					



EMP 235ic		EMP 320ic	
For workshops with single phase power		For production welding with solid and flux-cored wires	
Single phase (1ph) 110V - 230V		Three phase (3ph) 360V - 440V	
230A @ 25%		320A @ 40%	
250A		350A	
200 - 300 mm		200 - 300 mm	
28.6 kg		31.4 kg	
2-wheel, 17.8 m/min wire feed speed		4-wheel, 20.3 m/min wire feed speed	
Mild steel	0.6 - 1.0 mm	Mild steel	0.8 - 1.4 mm
Stainless steel	0.8 - 1.0 mm	Stainless steel	0.8 - 1.4 mm
FCW	0.8 - 1.2 mm	FCW	0.8 - 1.6 mm
Aluminium	0.9 - 1.2 mm	Aluminium	1.0 - 1.4 mm
			

Rebel™ EMP 205ic AC/DC & EMP 215ic Portable, true all-process welding system



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EMP 205ic AC/DC



- True All-Process – excellent performance on MIG/MAG, Flux-Cored, MMA (including 6010 electrodes), DC TIG and AC TIG (EMP 205ic) industrial applications
- EMP 205ic AC/DC includes advanced AC TIG Features like High Frequency Starts, Frequency Adjustment up to 400 Hz, Expanded Balance & Offset Control and Dual Current. DC TIG also offers a Pulse Mode up to 500 Hz
- sMIG Technology - exclusive sMIG (“smart MIG”) feature continuously learns and adapts to the operator’s welding technique to provide a stable arc and superior, repeatable welds; increases productivity for the experienced welder, and reduces training time for novice welders
- Unique, five-handle roll cage industrial design and unibody steel construction in a lightweight, highly portable unit
- TFT Multilingual Display with 4 programmable memory locations for each process, trim adjustment, inductance control, pre/post flow control and spot weld setting
- Rebel Series models come ready-to-weld out of the box with Professional Grade accessories

MULTI-PROCESS machines

EMP 215ic



Ordering Information

Rebel EMP 205ic AC/DC, CE Multi-Process Package	0700300998
Rebel EMP 215ic Multi-Process Package	0700300985

Rebel EMP 205ic AC/DC Package includes power source with 3 m mains cable and plug, MXL 201 MIG torch 3 m, SR-B 26 TIG torch w. accessories (3 collet 1.6-3.2 mm, 3 collet body 1.6-3.2 mm, 1 long back cap, 3 ceramic nozzles and 3 gold tungstens 1.6-3.2 mm), return cable and clamp 3 m, gas hose with quick connector 4.5 m, drive rolls for 0.6, 0.8 and 1.0 mm wire, guide tubes for 0.6, 0.8, 1.0 and 1.2 mm wire, thickness gauge tool.

Rebel EMP 215ic Package includes power source with 3 m mains cable and plug, MXL 201 MIG torch 3 m, welding cable with electrode holder 3 m, 5 kg OK Aristorod 12.50, 0.8 mm wire, return cable and clamp 4.5 m, gas hose with quick connector 4.5 m, drive rolls, contact tips and guide tubes for 0.6, 0.8 and 1.0 mm wire, thickness gauge tool.

Rebel EMP 205ic AC/DC Specifications

Input Voltage	Input Current Draw	Setting Range	Wire Feed Speed	Rated kVA	MIG/MAG Voltage Range	
120/230 VAC 1 ph ± 10%, 50/60 Hz	30 A (29.6 A) @ 25% Duty Cycle	5 – 235 A	2.0 – 12.1 m/min	4.98 kVA (> 7 kVA generator)	12 – 26 V	
Welding Output				AC TIG Functionality		DC Pulse
MIG/MAG (GMAW) 205 A/24.3 V @ 25% Duty Cycle 150 A/21.5 V @ 40% Duty Cycle 125 A/20.3 V @ 60% Duty Cycle 110 A/19.5 V @ 100% Duty Cycle	TIG (GTAW) 205 A/18.2 V @ 25% Duty Cycle 125 A/15.0 V @ 60% Duty Cycle 110 A/14.4 V @ 100% Duty Cycle	MMA (SMAW) 170 A/27.2 V @ 25% Duty Cycle 125 A/25.0 V @ 60% Duty Cycle 100 A/24.0 V @ 100% Duty Cycle	Balance Range Frequency Range Offset Range	60 – 90% 25 – 400 Hz Max set A to min set A -10A	1 – 500 Hz	
Open Circuit Voltage	Power Factor @ Max Current	Efficiency @ Max Current	Mains Cable Length	Protection Class	Dimensions L x W x H	Weight
68 V	0.98	83%	1.8 m	IP23S	584 x 229 x 406 mm	25.5 kg

Rebel EMP 215ic Specifications

Input Voltage	Setting Range	Supply Voltage Range	Wire Feed Speed	Rated kVA	MIG/MAG Voltage Range	Open Circuit Voltage
120/230 VAC 1 ph ± 10%, 50/60 Hz	5 – 150 A (120 V) 5 – 240 A (230 V)	90 – 270 VAC	2.0 – 12.1 m/min	4.5 kVA (120 V) 7 kVA (230 V)	12 – 26 V	68 V
Welding Output				Wire Diameter		
MIG/MAG (GMAW) 130 A/20.5 V (120 V) @ 20% Duty Cycle 205 A/24.3 V (230 V) @ 25% Duty Cycle	TIG (GTAW) 130 A/15.2 V (120 V) @ 40% Duty Cycle 180 A/17.2 V (230 V) @ 30% Duty Cycle	MMA (SMAW) 90 A/23.6 V (120 V) @ 40% Duty Cycle 180 A/27.2 V (230 V) @ 25% Duty Cycle	Mild Steel Stainless FCW Aluminium	0.6 – 0.9 mm 0.8 – 0.9 mm 0.8 – 1.2 mm 0.9 – 1.2 mm		
Maximum Output	Max Plate Thickness	Supply Plug	Protection Class	Dimensions L x W x H	Weight	
235 A	9.5 mm	230 V, 16A plug	IP23S	584 x 229 x 406 mm	18.2 kg	

Rebel™ EMP 235ic, & EMP 320ic

Industrial, multi-process packages



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EMP 235ic



EMP 320ic



- True Multi-Process – excellent performance on MIG/MAG, TIG and MMA
- Weighing in at 28.6kg and 31.4 kg, the machines can be lifted manually or transported on a trolley to provide unmatched mobility
- A high duty cycle combined with a robust 4-wheel wire feed system offers both high speed and torque, making it the perfect tool for the most demanding jobs
- Full MMA performance with electrodes up to 5 mm and excellent Lift TIG performance with adjustable pre/post gas flow and weld current ramp up/down
- Two gas inlets, one for MIG/MAG and one for TIG where both can be connected simultaneously. Built in TIG gas solenoid valve on the front of the machine eliminating the need for a manual valve on the TIG torch

MULTI-PROCESS machines

Ordering Information

Rebel EMP 235ic Multi-Process Package	0700300989
Rebel EMP 320ic Multi-Process Package, no torch	0700300991

Rebel EMP 235ic Package includes power source with 3 m mains cable and plug, MXL 271 MIG torch 3 m, welding cable with electrode holder 3 m, return cable and clamp 4.5 m, gas hose with quick connector 4.5 m, drive rolls, contact tips and guide tubes for 0.6, 0.8 and 1.0 mm wire, thickness gauge tool.

Rebel EMP 320ic Package includes power source with 3 m mains cable and plug, return cable and clamp 4.5 m, gas hose with quick connector 4.5 m, drive rolls for 0.8, 1.0 and 1.2 mm wire, guide tubes for 0.8, 1.0 and 1.2 mm wire, thickness gauge tool.

Rebel EMP 235ic Specifications

Input Voltage	Setting Range	Wire Feed Speed	Rated kVA	MIG/MAG Voltage Range	Open Circuit Voltage	
120/230 VAC 1 ph ± 10%, 50/60 Hz	5 – 150 A (120 V) 5 – 250 A (230 V)	2.0 – 17.8 m/min	4.5 kVA (120 V) 7 kVA (230 V)	14.8 – 26 V	68 V	
Welding Output				Wire Diameter		
MIG/MAG (GMAW) 100 A/19 V (120 V) @ 40% Duty Cycle 195 A/24 V (230 V) @ 40% Duty Cycle	TIG (GTAW) 130 A/15.2 V (120 V) @ 40% Duty Cycle 240 A/19.6 V (230 V) @ 40% Duty Cycle	MMA (SMAW) 85 A/23.4 V (120 V) @ 40% Duty Cycle 210 A/28.4 V (230 V) @ 25% Duty Cycle		Mild Steel Stainless FCW Aluminium	0.6 – 1.0 mm 0.8 – 1.0 mm 0.8 – 1.2 mm 0.9 – 1.2 mm	
Maximum Output	Max Plate Thickness	Supply Plug	Mains Cable Length	Protection Class	Dimensions L x W x H	Weight
250 A	12.7 mm	230 V, 16A plug	3 m	IP23S	673 x 292 x 495 mm	28.6 kg

Rebel EMP 320ic Specifications

Input Voltage	Setting Range	Wire Feed Speed	Supply Voltage Range	MIG/MAG Voltage Range	Open Circuit Voltage	
400 VAC 3 ph ± 10%, 50/60 Hz	5 – 350 A (EMP 320ic)	2.0 – 20.3 m/min	360 – 440 VAC	14.8 – 34 V	68 V	
Welding Output			Wire Diameter			
	MIG/MAG (GMAW)	TIG (GTAW)	MMA (SMAW)			
EMP 320ic	320 A/23 V @ 40% Duty Cycle 265 A/27 V @ 60% Duty Cycle 200 A/24 V @ 100% Duty Cycle	320 A/23 V @ 40% Duty Cycle 265 A/21 V @ 60% Duty Cycle 200 A/19 V @ 100% Duty Cycle	300 A/32 V @ 40% Duty Cycle 255 A/30 V @ 60% Duty Cycle 180 A/27 V @ 100% Duty Cycle	EMP 320ic	Mild Steel/Stainless FCW Aluminium	0.8 – 1.4 mm 0.8 – 1.6 mm 1.0 – 1.4 mm
Maximum Output	Max Plate Thickness	Supply Plug	Mains Cable Length	Protection Class	Dimensions L x W x H	Weight
350 A (EMP 320ic)	12.7 mm	CEE16A plug	3 m	IP23S	673 x 292 x 495 mm	31.4 kg

Rebel™ Series Accessories

Options & Accessories		EMP 205ic AC/DC EMP 215ic	EMP 235ic	EMP 320ic
0700300869	TIG Torch ET17v, 4 m (8 pin connection)	■ (EMP 215ic)		
0700025580	SR-B 26 TIG Torch, Gas, OKC50, 4 m	■ (EMP 205ic AC/DC)	■	■
0700025581	SR-B 26 TIG Torch, Gas, OKC50, 8 m	■ (EMP 205ic AC/DC)	■	■
0700025589	SR-B 26FX-R TIG Torch, Gas, OKC50, flex head, remote, 4 m	■ (EMP 205ic AC/DC)	■	■
0700025590	SR-B 26FX-R TIG Torch, Gas, OKC50, flex head, remote, 8 m	■ (EMP 205ic AC/DC)	■	■
W4014450	TIG Foot Control incl. 4,5 m cable	■	■	■
0700025030	PSF 315 3 m (for FCW 1.2 mm)			■
0700025220	MXL 201 3 m	■		
0700025230	MXL 271 3 m (for FCW 1.2 mm)	■	■	
0700300872	2-wheel trolley	■	■	■
0349313500	4-wheel trolley	■	■	■
0700006900	Electrode Holder, Handy 200 A with 25 mm ² , 3 m, OKC50	■	■	■
For welding aluminium with MXL 271				
0367556004	Drive roll for Aluminium 0,8 and 1,2 mm U-groove	■	■	
0464598880	Aluminium outlet tube kit	■	■	
0700200091	PTFE liner for Aluminium 0,8 –1,2 mm wire	■	■	
For welding aluminium with PSF 315				
0366550884	PTFE liner, 3m for 1,0 mm wire			■
0366550886	PTFE liner, 3m for 1,2 mm wire			■
0369557006	Drive roll U-groove for 1,0/1,2 mm wire			■
0464660880	PTFE Outlet Guide Tube for 1,0 mm and 1,2 mm wire			■
0558102643	Center Guide Tube			■

MULTI-PROCESS
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Rebel™ Series Features

	EMP 205ic AC/DC EMP 215ic	EMP 235ic	EMP 320ic
MIG/MAG functionality	■	■	■
MMA functionality	■	■	■
LiftTIG functionality	■	■	■
sMIG	■	■	■
Multi lingual TFT-display	■	■	■
Single phase (1 ph)	■	■	
Three phase (3 ph)			■
200 mm bobbin capacity	■	■	■
300 mm bobbin capacity		■	■
2-wheel wire feed mechanism	■	■	
4-wheel wire feed mechanism			■
Weld setting storage (memories)	■	■	■
Inductance control	■	■	■
2t and 4t trigger functionality	■	■	■
Voltage trim adjustment	■	■	■
SCT (Short Circuit Termination)	■	■	■
Adjustable burn-back time	■	■	■
Pre and Post gas flow (TIG & MIG/MAG)	■	■	■
Spot welding (MIG/MAG)	■	■	■
Gas purging			■
Wire inching			■
Creep start			■
Adjustable Hot start and Arc force (MMA)	■	■	■
Adjustable slope up/down (TIG)	■	■	■
Dual gas inlet valve		■	■
TIG gas outlet valve	■ (EMP 205ic AC/DC)	■	■

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