

Rebel™ EMP 215ic

Dual input voltage machine for MIG/MMA/Lift TIG



The Rebel™ Series Welding Machines offer 120/230V flexibility and some of the most innovative welding technology available. A breakthrough design inspired by professional welders, the Rebel is a complete package to weld anything – mild steel, aluminium, stainless steel – and go anywhere.

- True multi-process performance for best-in-class MIG, Flux-cored, MMA, including challenging electrodes, and Lift TIG welding with Rebel EMP 215ic
- 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.
- Innovative user interface with a large TFT display to provide a clear view of the weld parameters and settings, also from a distance. The display is loaded with exclusive features: on-demand availability of the user's manual, listing of spare parts – all in multiple languages.
- Unique, five-handle roll cage industrial design and unibody steel construction in a lightweight, highly portable unit; 3-year handle-to-handle warranty
- Rebel EMP 215ic comes ready-to-weld with professional-grade ESAB MXL 200 MIG torch with euro connector, electrode and return cable kits, 200 mm spool OK Aristorod 12.50 0.8 mm wire, 4,5 m gas hose with quick connector, contact tips and drive rolls for 0.6 – 1.0 mm wire.

Visit esab.com for more information.

Industry

- Light Fabrication
- Repair and Maintenance
- Automotive Bodies
- Automotive
- Mechanical Contractors
- Civil Construction
- Agricultural Equipment
- HVAC
- Training Schools



When choosing a top-performing welding machine you need top-performing ESAB Filler Metals.
Learn more at esab.com/fillermetals today.

Rebel™ EMP 215ic

Specifications	
Primary Voltage	120/230 VAC
Supply Voltage Range	90 – 270 VAC
Number of Phases	1
Supply Frequency	50/60 Hz
Supply Plug	230 V, Schuko 16A plug
Rated kVA	4.5 kVA (120 V), 7 kVA (230 V)
Mains Cable	3 m 3x2,5 mm ² H07RN-F
Maximum Output	240 A
MIG Welding Output 25% Duty Cycle 20% Duty Cycle	205 A/24.3 V (230 V) 130 A/20.5 V (120 V)
MMA Welding Output 25% Duty Cycle 40% Duty Cycle	180 A/27.2 V (230 V) 90 A/23.6 V (120 V)
TIG Welding Output 30% Duty Cycle 40% Duty Cycle	180 A/17.2 V (230 V) 130 A/15.2 V (120 V)
Current Range	5 – 240 A (230 V), 5 – 150 A (120 V)
MIG Welding Voltage Range	10 – 26 V
Wire Feed Speed Range	1.5 – 12.1 m/min
Nominal OCV Volt/DC	68 V
Maximum Plate Thickness	9.5 mm
Wire Diameter Range: Mild Steel Stainless Steel Aluminum Flux Cored	0.6 – 1.0 mm 0.8 – 1.0 mm 0.8 – 1.2 mm 0.8 – 1.2 mm
Wire Spool Size	100 mm, 200 mm
Approvals	CSA: E60974-1-00 CE: IEC/EN 60974-1, 5, 7, 10, 12 & 13. RoHS
Protection Class	IP23S
Power Source Dimensions, L x W x H	584 x 229 x 406 mm
Power Source Weight	18.2 kg

Rebel™ EMP 215ic

Ordering Information

Rebel EMP 215ic for MIG/MMA/Lift TIG Package	0700300985
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Rebel EMP 215ic comes ready-to-weld with ESAB MXL 200 MIG torch, electrode and return cable kits, 200 mm spool OK Aristorod 12.50 0,8 mm wire, 4.5 m gas hose with quick connector, contact tips and drive rolls for 0,6 – 1,0 mm wire.

Options & Accessories

TIG Torch ET17v, 4 m (8 pin connection)	0700300869
TIG Foot Control incl. 4,5 m cable	W4014450
MIG Torch MXL™ 270 3m (for FCW 1.2 mm)	0700200004
2-wheel trolley	0459366887

Wear & Spare Parts

Swan Neck	0700200051
Nozzle Spring	0700200078
Contact Tip M6 for 0,6 mm Wire	0700200063
Contact Tip M6 for 0,8 mm Wire	0700200064
Contact Tip M6 for 0,9 mm Wire	0700200065
Contact Tip M6 for 1,0 mm Wire	0700200066
Contact Tip M6 for 1.2 mm Wire (for MXL™ 270)	0700200071
Gas Nozzle Standard	0700200054
Gas Nozzle Straight	0700200057
Gas Nozzle Conical	0700200060
Gas Nozzle for Gasless Wire	0700200105
Steel Liner 3 m for 0.6 to 0.8 mm Wire	0700200085
Steel Liner 3 m for 0.9 to 1.2 mm Wire	0700200087
Feed Roller for 0.6 and 0.8 Cored, Steel and Stainless Wire	0367556001
Feed Roller for 0.8 to 1.0 Cored, Steel and Stainless Wire	0367556002
Feed Roller for 1.0 and 1.2 Cored, Steel and Stainless Wire	0367556003

Wear & Spare Parts for Aluminium

PTFE Liner 3 m for 0.8 to 1,2 mm Aluminium wire (low friction)	0700200091
Feed Roller for 1.0 and 1.2 Aluminium wire (U-groove)	0367556004

Rebel™ EMP 215ic



When choosing a top-performing welding machine you need top-performing ESAB Filler Metals.
Learn more at [esab.com/fillermetals](https://www.esab.com/fillermetals) today.



ESAB / [esab.com](https://www.esab.com)





THE **REBELLION** KEEPS GROWING.

EMP 205ic AC/DC

EMP 215ic

EMP 235ic

EMP 255ic

EMP 320ic

REBEL: THE TRUE MULTI-PROCESS INDUSTRIAL MACHINES YOU HAVE TO SEE TO BELIEVE.

Whether you choose the portable-single phase EMP 215ic or a three-phase industrial unit like the EMP 320ic, you will be amazed by the arc stability and reliability - guaranteeing you the highest performance. There are three truths to every Rebel - outperforming the competition, standing up to whatever comes your way in the shop or out in the field and making your job easier.



HIGH PERFORMANCE

Many machines claim they are multi-process but are little more than MIG units in disguise. Not Rebel. These are true multi-process welders, which means whether you are welding MIG, Flux-Cored, MMA – even those tricky 6010 electrodes – or TIG, these welders perform like they were born to run that process.

NEXT-LEVEL TECHNOLOGY

Whether you have been welding for two years or 20, Rebel's exclusive sMIG (smartMIG) technology is sure to impress. For the novice, there is basic mode, which makes setup a breeze. For the professional, the built-in dynamic arc control constantly monitors your weld and adapts to your technique, providing a smooth, stable arc and superior, repeatable welds.

UNMATCHED TOUGHNESS

You are on-site, out in the field, and in the shop. You need a machine that can go where you go and withstand the harsh environments you face. Rebel can. With a sturdy multi-handle roll cage, steel unibody construction, and IP23S-level protection, Rebel's rugged exterior gives you the confidence to go where you need to go without fear.

WELDING THIN SHEET METAL

You can now weld thin sheet metal such as aluminium with superior results. The Rebel 205ic AC/DC was born for this with advanced features like AC Frequency Adjustments up to 400 Hz and DC Pulse TIG.

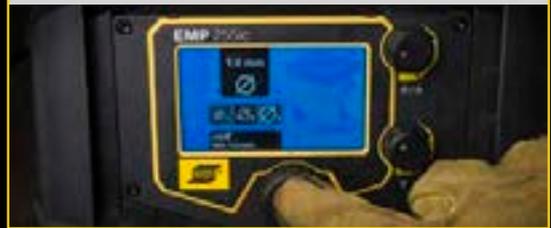
SMART MIG TECHNOLOGY.

This technology we call sMIG (smartMIG) produces less spatter, minimises weld defects, and adapts to your technique to provide a smooth, stable arc and repeatable welds. Simply set wire diameter and plate thickness and you are ready to weld. No matter what your skill level, setup is quick and easy with basic mode for the novice and advanced mode for the experienced.

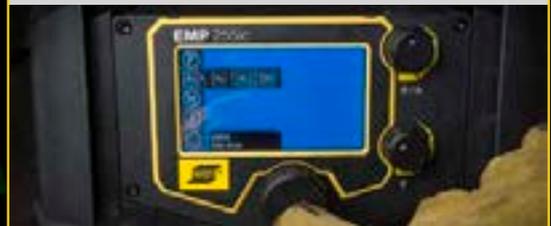
SELECT sMIG FROM THE MENU



SELECT WIRE DIAMETER



SELECT MATERIAL TYPE



SET MATERIAL THICKNESS



START WELDING AND sMIG DOES THE REST



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, 11.9 m/min wire feed speed			2-wheel, 11.9 m/min wire feed speed	
Wire type and dimensions	Mild steel	0.6 - 1.0 mm		Mild steel	0.6 - 1.0 mm
	Stainless steel	0.8 - 1.2 mm		Stainless steel	0.8 - 1.2 mm
	FCW	0.8 - 1.2 mm		FCW	0.8 - 1.2 mm
	Aluminium	1.0 - 1.2 mm		Aluminium	1.0 - 1.2 mm
					

TIG 120 VOLTS 230 VOLTS 1 PHASE

120 VOLTS 230 VOLTS 1 PHASE



EMP 235ic		EMP 255ic		EMP 320ic	
For workshops with single phase power		For production welding with solid wires		For production welding with solid and flux-cored wires	
Single phase (1ph) 110V - 230V		Three phase (3ph) 360V - 440V		Three phase (3ph) 360V - 440V	
230A @ 25%		255A @ 40%		320A @ 40%	
250A		300A		350A	
200 - 300 mm		200 - 300 mm		200 - 300 mm	
28.6 kg		31.4 kg		31.4 kg	
2-wheel, 17.8 m/min wire feed speed		4-wheel, 20.3 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 - 1.2 mm	Mild steel	0.8 - 1.4 mm
Stainless steel	0.8 - 1.0 mm	Stainless steel	0.8 - 1.2 mm	Stainless steel	0.8 - 1.4 mm
FCW	0.8 - 1.2 mm	FCW	0.8 - 1.2 mm	FCW	0.8 - 1.6 mm
Aluminium	1.0 - 1.2 mm	Aluminium	1.0 - 1.2 mm	Aluminium	1.0 - 1.4 mm



EVERYTHING YOU NEED TO KNOW ABOUT **REBEL.**

Rebel - the result of years of end-user research - combines the latest welding technology with an intuitive user interface, making it quick and easy to get started.

TFT DISPLAY / USER INTERFACE

All EMP (ESAB Multi-Process) variants are fitted with a 4.3" colour TFT display. The panel can display information in **22 different languages** making it very easy to set regardless of user nationality. The panel also includes:

- Spare and wear part lists and exploded views of the wire feed mechanism and MIG torch
- Weld parameter guides for all processes
- Maintenance recommendations



4-WHEEL WIRE FEED MECHANISM WITH GAS PURGING AND WIRE INCHING

For quick and convenient changes of wires/bobbin the EMP 255ic and EMP 320ic feature wire inching and gas purging functionality. The wire can be fed through the torch, and gas can be flushed through the system without activating the MIG torch. The 4-wheel wire feed mechanism ensures accurate and consistent feeding of wire regardless of material and type. The drive rolls and wire guides can easily be taken out and replaced without the use of tools. The high wire feed speed increases the material thicknesses that can be welded with thinner wires such as 0.8 mm Stainless Steel and Aluminium.



DUAL GAS INLET VALVES AND TIG GAS OUTLET VALVE

The dual gas inlet valves allow for two different gases to be connected simultaneously (or individually). In combination with the gas outlet valve located on the front panel of the machine, both a MIG and TIG torch can be connected and operational using different types of gases. The start of the gas flow is automatically controlled, and there is no need for a manual gas valve on the TIG torch.

CREEP START

When activated, the wire feed speed is reduced at the start of the weld the same time gas starts to flow. The wire feed speed accelerates to the set value when the wire gets in contact with the work piece. This ensures a smooth, spatter-free weld.

FEATURES GUIDE	EMP 205ic AC/DC	EMP 215ic	EMP 235ic	EMP 255ic	EMP 320ic
MIG/MAG functionality	X	X	X	X	X
MMA functionality	X	X	X	X	X
TIG AC functionality	X				
LiftTIG functionality	X	X	X	X	X
sMIG	X	X	X	X	X
Multi lingual TFT-display	X	X	X	X	X
200 mm bobbin capability	X	X	X	X	X
300 mm bobbin capability			X	X	X
2-wheel wire feed mechanism	X	X	X		
4-wheel wire feed mechanism	X			X	X
Weld setting storage (memories)	X	X	X	X	X
Inductance control	X	X	X	X	X
2t and 4t trigger functionality	X	X	X	X	X
Voltage trim adjustment	X	X	X	X	X
SCT (Short Circuit Termination)	X	X	X	X	X
Adjustable burn-back time	X	X	X	X	X
Pre and Post gas flow (TIG & MIG/MAG)	X	X	X	X	X
Spot welding (MIG/MAG)	X	X	X	X	X
Gas purging	X			X	X
Wire inching	X			X	X
Creep start	X			X	X
Adjustable Hot start and Arc force (MMA)	X	X	X	X	X
Adjustable slope up/down (TIG)	X	X	X	X	X
Dual gas inlet valve	X		X	X	X
TIG gas outlet valve	X		X	X	X
High frequency (HF) Start	X				
Pulsed DC	X				
Frequency adjustment	X				
Amplitude offset	X				

UNIVERSAL TROLLEY

The 2-wheel trolley features toolless attachment and detachment of the power source, and is designed to carry both small and large gas cylinders (up to 50 l). The compact format and small footprint make it easy to maneuver through doorways and narrow spaces.



REBEL EMP 215ic

The EMP 215ic multi-process machine is ideal for smaller workshops, service and repair and field installation work. It is truly a “Go anywhere, Weld anything” machine capable of running MIG/MAG, MMA and TIG on any input power between 120V and 230V.



EMP 215ic

The EMP 215ic features a multi-lingual colour TFT-display where the welder can customise the content and choose what is being presented. Use basic mode for simplicity and advanced mode for almost unlimited fine tuning of the weld performance. When choosing EMP the capabilities of the machine are unlocked, offering superior MIG/MAG, MMA and TIG performance.

TECHNICAL DATA	EMP 215ic
Setting range (MIG/MAG)	15A/14.8V - 230A/25.5V
Setting range (TIG)	5A/10.2V - 200A/18V
Setting range (MMA)	16A/20.6V - 180A/27.7V
Welding Output (MIG/MAG)	
25% duty cycle	205A/24.3V
60% duty cycle	125A/20.3V
100% duty cycle	110A/19.5V
Supply voltage range	120 - 230 VAC (1ph)
Wire feed speed range	1.5 - 12.1 m/min
Weight	18.2 kg
Power Source Dimensions, L x W x H	584 x 229 x 406 mm
Supply plug	230 V, Schuko 16A plug

EMP 215ic rated at 205 Amps @ 25% duty cycle, ideal when portability is key



For ordering information see back page.

MIG

FLUX-CORED

MMA

DC TIG

REBEL EMP 235ic

Rebel EMP 235ic with the 18kg spool capacity, is the most mobile welder in its class and has the power and performance to crush even the most demanding jobs. The multi-process capabilities of the EMP 235ic, combined with low weight and a compact format, make this a truly versatile machine.

UNPARALLELED PORTABILITY.

Weighing in at only 28.6 kg, Rebel EMP 235ic is the lightest machine in its class. With four perfectly placed handles and the ability to detach the power source from its trolley, you are able to tackle any job, anywhere, with dual voltage capability from 90 V to 270 V.

THE POWER TO PERFORM.

Rebel EMP 235ic is packed with power and ideal for any application requiring 0.6 to 1.0 mm welding wires. With a maximum welding output of 250A / 30V and a rated output of 230A @ 25% when connected to a 16A mains fuse, this machine is capable of tackling tough jobs where only single phase power is available.

VERSATILITY THAT CANNOT BE BEAT.

Rebel EMP 235ic is three machines in one – MIG, TIG, and MMA. Weld a wide range of metal thicknesses and applications, including the full range of 1.0 mm wires in short arc and up to 1.2 mm solid wires and flux cored wires. Plus, Rebel EMP 235ic can weld electrodes up to 4.0 mm and TIG rods up to 5.0 mm.

TECHNICAL DATA	EMP 235ic
Setting range (MIG/MAG)	15A/14.8V - 235A/26.0V
Setting range (TIG)	5A/10.2V – 240A/19.6V
Setting range (MMA)	16A/20.6V – 210A/28.4V
Welding Output (MIG/MAG)	
25% duty cycle	230A/25.5V
40% duty cycle	195A/23.8V
60% duty cycle	170A/22.5V
Supply voltage range	120 - 230 VAC (1ph)
Wire feed speed range	2.0 - 17.8 m/min
Weight	28.6 kg
Power Source Dimensions, L x W x H	686 x 292 x 495 mm
Supply plug	230 V, Schuko 16A plug

For ordering information see back page.

FOR WELDING ALUMINIUM - EMP 215ic / EMP 235ic ESAB recommend OK Autrod 5183 with 100% Argon shielding gas. It is important to set the system up correctly and to use appropriate accessories when welding Aluminium.

OPERATION	Part No.	Description
Replace the steel liner with a low friction PTFE line	0700200091	3 meter PTFE liner for 0.8 - 1.0 mm wire
Replace the feed rollers with the U-grooved alternative	0367556004	U-grooved drive roll for 1,0/1,2 mm wire
Replace the outlet guide tube with the PTFE alternative	0464598880	PTFE outlet guide tube for AL

FOR WELDING DUAL SHIELDED FLUX CORED WIRE - EMP 215ic / EMP 235ic ESAB recommend the use of 1.2 mm OK Tubrod 15.14 in combination with a PSF 315 MIG/MAG torch

OPERATION	Part No.	Description
The PSF 315 is set up for 1.2 mm wire when delivered	0458401880	PSF 315, 3 meter welding torch
Replace the feed roller with a V-groove for 1.2 mm wire	0367556003	V-grooved drive roll for 1,0/1,2 mm wire

MIG

FLUX-CORED

MMA

DC TIG

REBEL EMP 255ic & EMP 320ic

The industrial, true multi-process machines that combine power and mobility. These compact and lightweight systems offer flexibility in any fabrication environment. Designed for productivity and reliability, the 4-wheel wire feed system provides high and consistent weld quality regardless of the material being welded.

The EMP 320ic, with a maximum output of 350 Amps is the ideal universal welding system capable of running all 1.2 mm solid and flux-cored wires with a high duty cycle. EMP 255ic has a maximum output of 300 Amps.

START PARAMETERS

Automatically adaptive start parameters provide distinct and precise starts every time, regardless of wire type and dimension.

USER FRIENDLY

An extremely user-friendly and multilingual TFT display incorporates spare parts lists and weld parameter guides for all processes.

MOBILITY

Weighing in at 31.4 kg, the machine can be lifted manually or transported on a trolley to provide unmatched mobility.

POWER

A high duty cycle combined with a robust 4-wheel wire feed system offers both high speed and torque, makes it the perfect tool for the most demanding jobs.

SMIG TECHNOLOGY

The innovative smart-MIG feature dynamically monitors the arc characteristics by adapting to your technique, resulting in a smooth, stable arc. Just set wire diameter, material and plate thickness, and you are ready to weld.

PERFORMANCE

Achieve 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.

GAS CONTROL

Two gas inlets, one for MIG and one for TIG, can be connected simultaneously. A built-in TIG gas solenoid valve on the front of the machine eliminates the need for a manual valve on the TIG torch.

EMP 255ic rated at 255 Amps @ 40% duty cycle, ideal for 1.0 and 1.2 mm solid wires



EMP 320ic rated at 320 Amps @ 40% duty cycle, ideal for 1.0 and 1.2 mm solid wires and up to 1.6 mm Flux cored wires



MIG

FLUX-CORED

MMA

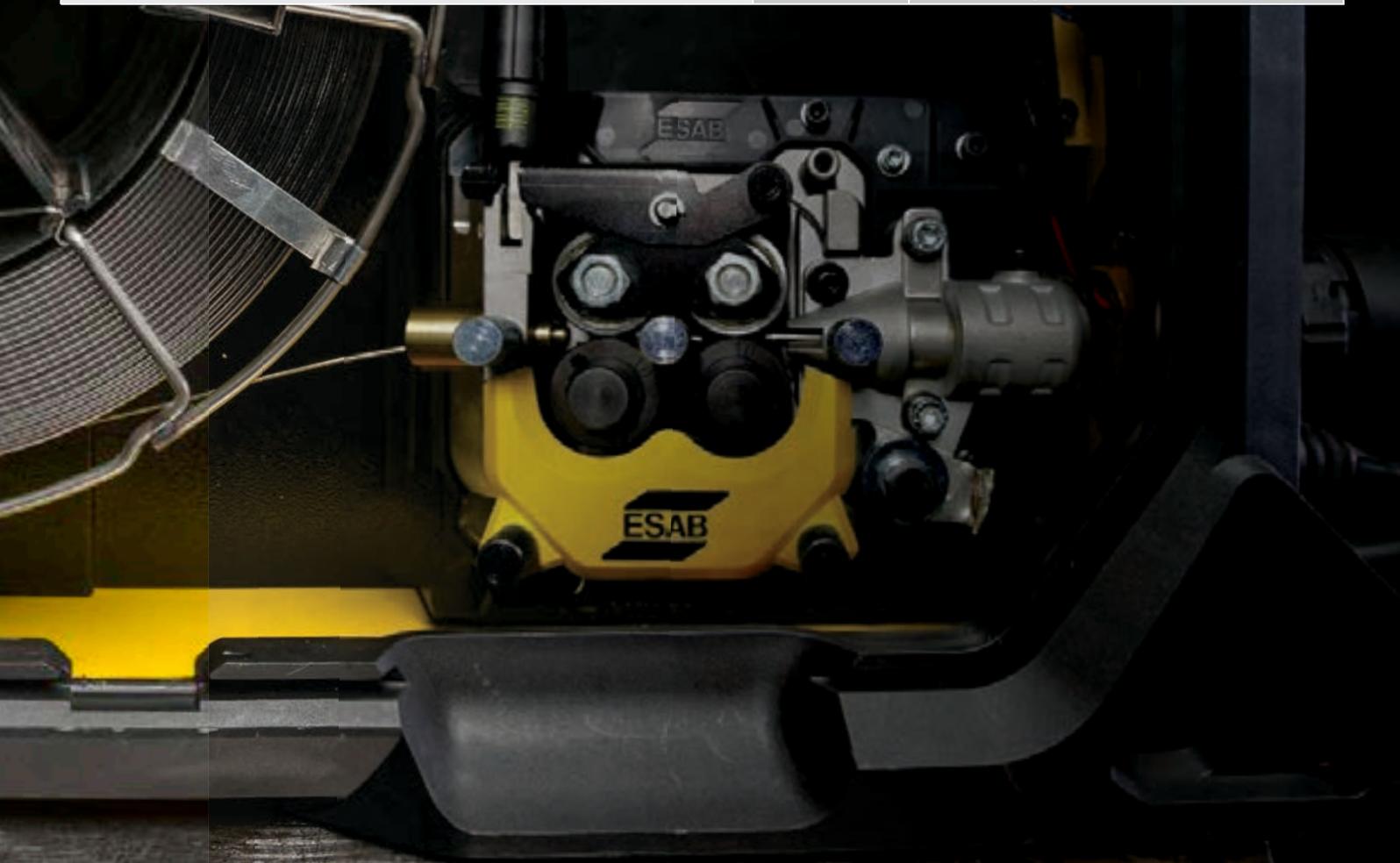
DC TIG

TECHNICAL DATA	EMP 255ic	EMP 320ic
Setting range (MIG/MAG)	15A/14.8V - 300A/34V	15A/14.8V - 320A/34V
Setting range (TIG)	5A/10.2V - 300A/22V	5A/10.2V - 320A/22.8V
Setting range (MMA)	16A/20.6V - 255A/30.2V	16A/20.6V - 300A/32.0V
Welding Output (MIG/MAG)		
40% duty cycle	255A/26.8V	320A/30V
60% duty cycle	200A/24V	265A/27.3V
100% duty cycle	160A/22V	200A/24V
Supply voltage range	360 - 480 VAC (3ph)	360 - 480 VAC (3ph)
Wire feed speed range	2.0 - 20.3 m/min	2.0 - 20.3 m/min
Weight	31.4 kg	31.4 kg
Power Source Dimensions, L x W x H	686 x 292 x 495 mm	686 x 292 x 495 mm
Supply plug	CEE16A plug	CEE16A plug

For ordering information see back page.

FOR WELDING ALUMINIUM - ESAB recommend OK Autrod 5183 with 100% Argon shielding gas.
It is important to set the system up correctly and to use appropriate accessories when welding Aluminium.

OPERATION	Part No.	Description
Replace the steel liner with a low friction PTFE line, use a 3 meter MIG torch	0366550884	3 meter PTFE liner for 1,0 mm wire
	0366550886	3 meter PTFE liner for 1,2 mm wire
Replace the feed rollers with the U-grooved alternative	0369557006	U-grooved drive roll for 1,0/1,2 mm wire
	0464659880	PTFE outlet guide tube for 1.0 mm wire
Replace the outlet guide tube with the PTFE alternative	0464660880	PTFE outlet guide tube for 1.2 mm wire
	0464661880	PTFE outlet guide tube for 1.4-1.6 mm wire



REBEL EMP 205ic AC/DC

Best-in-class all-process performance can be all yours with Rebel EMP 205ic AC/DC, the only industrial-grade portable machine of its kind that lets you TIG weld aluminium like a pro and run 6010 electrodes on 120 V input.

ALL THE INDUSTRIAL TIG CONTROLS YOU NEED

Fixed or limited settings will not cut it in the industrial world. We built Rebel EMP 205ic AC/DC for welders who want full control over the arc, especially with TIG.

AC PERFORMANCE

AC wave balance from 60% to 90% electrode-negative (EN) amperage: Turn it up to boost penetration, and turn it down to help clean away aluminium oxide.

AC frequency from 25 to 400 Hz: Get precise control over the arc cone and direction for superior penetration and higher travel speeds.

AMPLITUDE OFFSET

Effortlessly direct more energy into the workpiece, remove heat from the tungsten to avoid balling and damage, create a smaller bead profile, improve penetration, or reduce preheat on thick material.

PULSED TIG

Pulsed TIG DC range between 1 and 500 pulses per second (pps): Achieve better control and higher travel speeds when working with thin carbon steel or stainless steel.

HIGH FREQUENCY (HF) START

Say goodbye to touching the tungsten to the workpiece when starting the arc – HF start allows you to start up without the possibility of contaminating your work (additional option of LiftTIG for carbon steel and stainless steel).

DUAL SOLENOID VALVE

Conveniently set up your MIG gas and your TIG gas without having to switch back and forth.

ALL-PROCESS – NO COMPROMISE

Rebel EMP 205ic AC/DC runs MIG, Flux-Cored, MMA, DC TIG, and AC TIG like it was born to, without sacrificing performance. It comes with all the Rebel features welders love: An easy-to-use TFT display, a built-in user manual, welding parameters and process settings, multi-lingual controls, memory, dual voltage capabilities (90–270 V), a durable industrial-grade IP23S-rated package for outdoor use, and a weight of only 25.5 kg, meaning you can weld anything, anywhere.





TECHNICAL DATA	EMP 205ic AC/DC	
Setting range (MIG/MAG)	15A/14.8V - 230A/25.5V	
Setting range (TIG)	5A/10.2V - 200A/18V	
Setting range (MMA)	16A/20.6V - 180A/27.7V	
Welding Output (MIG/MAG)	25% Duty Cycle	205A/24.3V
	60% Duty Cycle	125A/20.3V
	100% Duty Cycle	110A/19.5V
Welding Output (TIG)	25% Duty Cycle	205A/18.2V
	60% Duty Cycle	125A/15.0V
	100% Duty Cycle	110A/14.4V
Welding Output (MMA)	25% Duty Cycle	170A/26.8V
	60% Duty Cycle	125A/25.0V
	100% Duty Cycle	100A/24.0V
Supply voltage range	120 - 230 VAC (1ph)	
Wire feed speed range	1.5 - 12.1 m/min	
Weight	25.5 kg	
Power Source Dimensions, L x W x H	584 x 229 x 406 mm	
Supply plug	230 V, Schuko 16A plug	

MIG

FLUX-CORED

MMA

DC TIG

AC TIG

REBEL EMP 205ic AC/DC

Best-in-class all-process performance can be all yours with Rebel 205ic AC/DC, the only industrial-grade portable machine of its kind that lets you TIG weld aluminium like a pro and use 6010 electrodes on 120 V input. It runs MIG, Flux-Cored, MMA, DC TIG, and AC TIG like it was born to, without sacrificing performance.

ALL THE INDUSTRIAL TIG CONTROLS YOU NEED



60%-90%
BALANCE

AC WAVE BALANCE FROM 60% TO 90% ELECTRODE-NEGATIVE (EN) AMPERAGE

Turn it up to boost penetration, and turn it down to help clean away aluminium oxide.



25-400 Hz
FREQUENCY

AC FREQUENCY FROM 25 TO 400 HZ

Get precise control over the arc cone and direction for superior penetration and higher travel speeds.



EN/EP
AMPLITUDE

AMPLITUDE OFFSET

Effortlessly direct more energy into the workpiece, remove heat from the tungsten to avoid balling and damage, create a smaller bead profile, improve penetration, or reduce preheat on thick material.



500 Hz
PULSED TIG (DC)

PULSED TIG DC RANGE BETWEEN 0.1 AND 500 HERTZ

Achieve better control and higher travel speeds when working with thin carbon steel or stainless steel.



HF START
AC/DC TIG

HIGH FREQUENCY (HF) START

Say goodbye to touching the tungsten to the workpiece when starting the arc – HF start allows you to start up without the possibility of contaminating your work (additional option of LiftTIG for carbon steel and stainless steel).



DUAL
SOLENOID VALVE

DUAL SOLENOID VALVE

Conveniently set up your MIG gas and your TIG gas without having to switch back and forth.

MIG

FLUX-CORED

MMA

DC TIG

AC TIG

ALL-PROCESS – NO COMPROMISE

Supreme performance

- Best-in-class all-process performance
- 6010 capable
- 90–270 V dual voltage (extended range)
- Two-wheel drive system
- Dual solenoid valve

Unmatched toughness

- Industrial-grade IP23S protection
- 25.5 kg
- Multi-handle roll cage
- Steel unibody construction

Next-level technology

- sMIG
- 4.3 in. color LCD/TFT display
- Four memory settings (per process)
- Multi-lingual display
- Built-in instruction manual, spare parts list, and weld parameters
- SCT™ (short circuit termination)

Advanced AC/DC TIG

- Lift Arc
- High frequency (HF) start
- Pulsed DC
- Balance control 60%–90%
- Frequency adjustment 25–400 Hz
- Amplitude offset

Standard features

- Ready to weld (includes all accessories and sample filler metals)
- Auto-detect spool gun capable
- 200 mm spool capable
- Inductance control (MIG mode only)
- Trigger lock (2T, 4T)
- Voltage trim adjustment (MIG mode only)
- Burn back adjustment
- Pre-flow/post-flow adjustment
- Spot timer capable
- Automatic hot start
- Arc force adjustment

FOR WELDING ALUMINIUM - EMP 205ic AC/DC ESAB recommend OK Autrod 5183 with 100% Argon shielding gas. It is important to set the system up correctly and to use appropriate accessories when welding Aluminium.

OPERATION	Part No.	Description
Replace the steel liner with a low friction PTFE line	0700200091	3 meter PTFE liner for 0.8 - 1.0 mm wire
Replace the feed rollers with the U-grooved alternative	0367556004	U-grooved drive roll for 1,0/1,2 mm wire
Replace the outlet guide tube with the PTFE alternative	0464598880	PTFE outlet guide tube for AL

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ORDER INFORMATION

ORDERING INFORMATION	CONTENT	Part No.
Rebel EMP 205ic AC/DC with SR-B 26 torch & MXL 201 torch	EMP 205ic AC/DC power source with 3 m mains cable and plug, MXL 201 MIG torch 3 m, SR-B 26 TIG torch w. accessories 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	0700300998
Rebel EMP 215ic with MXL 201 torch	EMP 215ic power source with 3 meter mains cable and plug, 3 meter MXL 201 MIG/MAG torch, 3 meter welding cable with electrode holder, 5 kg Aristorod 12.50, 0.8 mm wire, return cable and clamp 4.5 meter, gas hose with quick connector 4.5 meter, drive rolls, contact tips and guide tubes for 0.6, 0.8 and 1.0 mm wire, thickness gauge tool	0700300985
Rebel EMP 235ic with MXL 271 torch	EMP 235ic power source with 3 meter mains cable and plug, 3 meter MXL 271 MIG/MAG torch, 3 meter welding cable with electrode holder, return cable and clamp 4.5 meter, gas hose with quick connector 4.5 meter, drive rolls, contact tips and guide tubes for 0.6, 0.8 and 1.0 mm wire, thickness gauge tool	0700300989
Rebel EMP 255ic without torch	EMP 255ic power source with 3 meter mains cable and plug, return cable and clamp 4.5 meter, gas hose with quick connector 4.5 meter, 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	0700300992
Rebel EMP 320ic without torch	EMP 320ic power source with 3 meter mains cable and plug, return cable and clamp 4.5 meter, gas hose with quick connector 4.5 meter, 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	0700300991

ORDERING INFORMATION	CONTENT	Part No.
Rebel EMP 255ic with PSF 315 torch	EMP 255ic power source with 3 meter mains cable and plug, PSF 315 MIG/MAG torch, return cable and clamp 4.5 meter, gas hose with quick connector 4.5 meter, 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	with 3m torch
		0700303881
		with 4.5m torch
Rebel EMP 320ic with PSF 315 torch	EMP 320ic power source with 3 meter mains cable and plug, PSF 315 MIG/MAG torch, return cable and clamp 4.5 meter, gas hose with quick connector 4.5 meter, 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	0700303882
		with 3m torch
		0700303883
		with 4.5m torch
		0700303884

OPTIONAL ACCESSORIES	Part No.
2-wheel trolley	0700300872
SR-B 26 Torch, 4 m	0700025518
Foot pedal, 4.5 meter	W4014450
Handy 200 Electrode Holder	0700006030

When choosing a top-performing welding machine, you need top-performing ESAB Filler Metals. Learn more at esab.com/fillermetals today.



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