Rebel™ EMP 320ic

Industrial compact machines for MIG/MAG, MMA and Lift TIG



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-core wires with a high duty cycle.

- Automatically adaptive start parameters provide distinct and precise starts every time, regardless of wire type and dimension
- An extremely user-friendly and multilingual TFT display incorporates spare parts lists and weld parameter guides for all processes
- Weighing in at 31.4 kg, the machine 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
- 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
- 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
- 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

Visit **esab.com** for more information.

Industry

- Industrial and General Fabrication
- Repair and Maintenance
- Civil Construction
- Automotive
- 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 320ic

Specifications	EMP 320ic
Primary Voltage	400 VAC
Supply Voltage Range	360 – 440 VAC
Number of Phases	3 ph
Supply Frequency	50/60 Hz
Supply Plug	CEE16A plug
Mains Cable	3 m 4x2.5 mm^2
Maximum Output	350 A
MIG Welding Output 40% Duty Cycle 60% Duty Cycle 100% Duty Cycle	 320 A / 30.0 V 265 A / 27.3 V 200 A / 24.0 V
MMA Welding Output 40% Duty Cycle 60% Duty Cycle 100% Duty Cycle	 300 A / 32.0 V 255 A / 30.2 V 180 A / 27.2 V
TIG Welding Output 40% Duty Cycle 60% Duty Cycle 100% Duty Cycle	 320 A / 22.8 V 265 A / 20.6 V 200 A / 18.8 V
Wire Feed Speed Range	2.0 – 20.3 m/min
Wire Diameter Range: Mild Steel Stainless Steel Flux Cored Aluminium	 0.8 –1.4 mm 0.8 –1.4 mm 0.8 –1.6 mm 1.0 –1.2 mm
Wire Spool Size	200 mm, 300 mm
Approvals	CE: IEC/EN 60974-1, 5, 7, 10, 12 & 13. RoHS
Protection Class	IP23S
Power Source Dimensions, Lx W x H	686 x 292 x 495 mm
Power Source Weight	31,4 kg

Rebel™ EMP 320ic

Functions	EMP 320ic
Max output power 350 A	X
Flux Cored wire up to 1.6 mm	X
MIG/MAG functionality	X
MMA functionality	X
LiftTIG functionality	X
sMIG	X
Multi lingual TFT-display	X
200 mm bobbin capacity	X
300 mm bobbin capacity	X
4-wheel wire feed mechanism	X
Weld setting storage (memories)	X
Inductance control	X
2t and 4t trigger functionality	X
Voltage trim adjustment	X
SCT (Short Circuit Termination)	X
Adjustable burn-back time	X
Pre and Post gas flow (TIG & MIG/MAG)	X
Spot welding (MIG/MAG)	X
Gas purging	X
Wire inching	X
Creep start	X
Adjustable Hot start and Arc force (MMA)	X
Adjustable slope up/down (TIG)	X
Dual gas inlet valve	X
TIG gas outlet valve	X

Rebel™ EMP 320ic

Ordering Information	
Rebel EMP 320ic	0700300991

Delivery 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

Options & Accessories	
TIG Foot Control 4.5 m cable and 8-pin connector	W4014450
2-wheel trolley	0700300872

Wear and Spare Parts for Aluminium	
PTFE liner, 3m for 1.0 mm Aluminium wire	0366550884
PTFE liner, 3m for 1.2 mm Aluminium wire	0366550886
Drive roll U-groove for 1.0/1.2 mm Aluminium wire	0369557006
PTFE Outlet Guide Tube for 1.0 mm Aluminium wire	0464659880
PTFE Outlet Guide Tube for 1.2 mm Aluminium wire	0464660880

For additional wear and spare parts please see the product catalogue, manual or separate spare parts list.

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GLOBALLY CERTIFIED MANAGEMENT SYSTEMS

XA00194820 / GL / EN 06/2026 ESAB reserves the right to alter specifications without prior notice.