

Fabricator EM 401i & 501i

Rugged & reliable inverter



esab.com/fabricator

- Rugged and Reliable welding system for heavy application, 400 A or 500 A at 60% Duty Cycle
- Three variants, one 500 with integrated cooling unit and two 400 with and without cooling unit
- Energy savings with high power factor, high efficiency and low idle power
- Lower cost of operation. Delivers all the added benefits of an inverter technology at a similar price as a conventional transformer machine
- The machine is built in with integrated wide and large wheels and cylinder support to facilitate moving around the workshop. Also includes two side cable handling supports
- Wide voltage tolerance for stable welding output and with variable inductance control for better arc performance
- IP23 use anywhere, for field and workshop applications



Fabricator EM 501i with integrated cooling unit

MULTI-PROCESS machines

| Specifications | | Fabricator EM 401i | Fabricator EM 501i |
|---|-------------------|---|---|
| Input Voltage | | 380 - 415 V 3ph ± 10% 50/60 Hz | 380 - 415 V 3ph ± 10% 50/60 Hz |
| Welding Output MIG/MAG (GMAW), MMA (SMAW) | | 400 A @ 60% duty cycle 310 A @ 100% duty cycle | 500 A @ 60% duty cycle 390 A @ 100% duty cycle |
| Settings range DC | GMAW FCAW SMAW | 30-400 A, 15.5-34 V 30-400 A, 21.2-36 V | 30-500 A, 15.5-39 V 30-500 A, 21.2-40 V |
| Energy Saving Mode | | < 35 W | < 35 W |
| Mains Cable | | 4 x 6 Ø mm ² | 4 x 6 Ø mm ² |
| Power Factor at Maximum Current MIG/MAG | | 0.91 | 0.91 |
| Efficiency at Maximum Current MIG/MAG | | 86% | 87% |
| Operating Temperature | | -10 to 40°C | -10 to 40°C |
| Enclosure Class | | IP 23 | IP 23 |
| Application Class | | S | S |
| Certification Mark | | CE, EAC | CE, EAC |
| Dimensions, L x W x H w/ cooling unit | | 1,035 x 500 x 1,015 mm | 1,035 x 500 x 1,015 mm |
| Weight | | 102 kg | - |
| Weight w/ cooling unit (incl. coolant) | | 107.5 (111.5) kg | 111.5 (115.5) kg |

| Specifications | COOL 2F Cooling Unit |
|-----------------------------|----------------------------------|
| Cooling Power | 1 kW at 25°C ambient temperature |
| Coolant Volume and Max Flow | 4.5 L and 1.8 L/min |

| Specifications | Fabricator Feed 304 | Fabricator Feed 304w |
|----------------------------------|-----------------------------|-----------------------------|
| Drive System and Wire Feed Speed | 4-wheel drive; 1.5–25 m/min | 4-wheel drive; 1.5–25 m/min |
| Wire Spool Capacity/Diameter | 18 kg/300 mm | 18 kg/300 mm |
| Wire Dimensions | 0.8–1.6 mm | 0.8–1.6 mm |
| Dimensions, L x W x H | 675 x 265 x 418 mm | 675 x 265 x 418 mm |
| Water Cooling | – | Yes |
| Weight | 13.9 kg | 14.2 kg |

Fabricator EM 401i & 501i

Ordering Information

| | | | |
|---|------------|--------------------|------------|
| Fabricator EM 501i with integrated cooling unit | 0446400882 | Fabricator EM 401i | 0446400884 |
| Fabricator EM 401i with integrated cooling unit | 0446400883 | | |

Delivery includes power source, 5 m mains cable, wheels, 5 m return cable with clamps, shelf for gas cylinder and a guide pin for the wire feeder, instruction manual.

Options & Accessories

| | | | |
|---------------------------------|------------|---|------------|
| Fabricator Feed 304 | 0446401881 | Strain Relief bracket for Interconnection Cable set | 0459234880 |
| Fabricator Feed 304w | 0446401882 | Quick Connector Marathon Pac™ | F102440880 |
| Wheel Kit, front wheels turn | 0458707880 | Counterbalance Arm | 0458705880 |
| Wheel Kit, all wheels turn | 0458707881 | Coolant 10 l (3 gal) | 0465720002 |
| Strain Relief for Welding Torch | 0457341881 | | |
| MIG Torches | 3 m | 4 m | 5 m |
| MXL 341 with Euro Connection | 0700025240 | 0700025241 | 0700025242 |
| MXL 411W with Euro Connection | 0700025250 | 0700025251 | 0700025252 |
| MXL 511W with Euro Connection | 0700025260 | 0700025261 | 0700025262 |

MULTI-PROCESS machines



Fabricator EM 501i with integrated-cooling unit and Counterbalance Arm

Fabricator complies with new European regulations for eco-friendly welding equipment, helping you save on energy costs with a power source efficiency greater than 85% and idle power below 50 W.



POWER EFFICIENCY

