



ESABMig C420/C420s

Compact strength and mobility

Robust and powerful

ESABMig C420/420s are sturdy and robust step-controlled welding power units intended for heavy duty MIG/MAG welding with solid filler wires of steel, stainless steel or aluminium, and cored wires with or without shielding gas. Well proven technology together with ESAB developed software provides high reliability and outstanding welding performance.

The units are made with a strong galvanised metal casing to withstand harsh environments. The large wheels make the units easy to move.

The units are fan-cooled and equipped with thermal overload protection, A temperature controlled cooling fan ensures reduced dust ingress and noise emissions.

Easy to use

The wide current and voltage range and the three-inductance outlets make it easy to optimise settings for a wide variety of filler materials and gases.

The units are equipped with the potentiometers to set the wire feed speed and burnback time adjustment. They also have 2/4 stroke torch switch functions.

The water cooled units can be fitted with an optional water flow guard. When the water-cooled torch is connected, the patented ELP, ESAB LogicPump, automatically starts the cooling water pump, preventing welding torch from overheating and costly repairs. When the air-cooled torch is connected, the pump is shutdown automatically, which results in reduced noise and extended pump lifetime.

Flexibility

The ESABMig C420 is equipped with standard control unit for manual setting of welding parameters and optionally with V/A digital instrument.



The ESABMig C420s is additionally equipped with synergic function - the operator preselects wire type and diameter along with the gas type. When changing the voltage (with voltage selectors) the digital display and LEDs on the front panel indicate prospective values of welding parameters, material thickness and recommended inductance outlets. In the course of the welding process the actual values of V/A are indicated. The wire feed speed automatically provides the optimum speed for the selected voltage switch position. The operator then only has to fine trim the wire feed speed control which permits adjustment of +/-20%.

The units can be equipped with transformer for CO₂ heater as an option.

Applications

- Auto-repair
- Light metal fabrication
- Transport
- Education
- Household and furniture
- Tack welding

- **Outstanding welding characteristics**- high efficiency and high quality welding.
- **Sturdy galvanised metal casing with air filter as option** - made to withstand tough corrosive and dirty environments.
- **Wide current and voltage range**- multiple purpose applications.
- **Three inductance outlets**- easy to optimise settings for different applications.
- **ELP, ESAB LogicPump**- automatically starts water pump when a water-cooled gun is connected.



Technical data

	ESABMig C420	ESABMig C420s
Mains voltage V, ph Hz	400-415 3~ 50 or 230/400-415/500, 3~ 50	400-415, 3~ 50 230/440-460, 3~ 60
Fuse, slow, V/A	230/35 - 400/25	400/25
Mains cable, mm²	4x4	4x4
Permitted load at		
50% duty cycle, A/V	420 / 35	420 / 35
60% duty cycle, A/V	400 / 34	400 / 34
100% duty cycle, A/V	315 / 30	315 / 30
Setting range (DC), A/V	50 / 16.5 - 420 / 35	50 / 16.5 - 420 / 35
Open circuit voltage, V	14-47	14-47
Open circuit power, kW	0.52	0.52
with cooling unit, kW	0.73	0.73
Power factor at maximum current	0.92	0.92
Efficiency at maximum current, %	77	77
Voltage steps	35	35
Inductance outlets	3	3
Dimensions l x w x h, mm	935x 640 x 800	935x 640 x 800
Weight	209	209
with cooling unit, kg	217	217
Operating temperature, °C	-10 to +40	-10 to +40
Enclosure class	IP 23	IP 23
Application classification	S	S
Wire feed speed, m/min	1.9-25	1.6-25
Wire dimensions		
Steel*, mm	0.6-1.6	0.6-1.6
Aluminium, mm	0.8-1.6	0.8-1.6
Stainless, mm	0.6-1.6	0.6-1.6
Cored wire, mm	0.9-1.6	0.9-1.6
Spot welding, s	-	0.5-4.0
Adjustable burnback time, s	0-0.5	0-0.5
Wire spool ø 300mm, kg	18	18

* unalloyed solid wire

Ordering information

ESABMig C420w (400-415V 50Hz)	0349 303 079
ESABMig C420w (230/400-415/500V 50Hz ; 230/440-460V 60Hz)	0349 303 080
ESABMig C420sw (400-415V 50 Hz)	0349 303 081
ESABMig C420 (400-415V 50Hz)	0349 302 655
ESABMig C420 (230/400-415/500V 50Hz; ; 230/440-460V 60Hz)	0349 303 196
ESABMig C420s (400-415V 50Hz)	0349 302 656
Air filter	0349 302 252
Digital instrument	0349 302 451
Transformer for CO ₂ heater	0349 302 250
Water flow guard	0349 302 251

Delivery content: welding torch PSF 405 / PSF 410W (*)
4,5m, 5m mains cable with plug, 5m return cable with clamp,
gas hose 1,5m, shelf for gas cylinder, attachment chain for gas
cylinder, instruction manual.

(*) for C420/420s and C420w/C420sw respectively

Unrivalled service and support

Our commitment and ability to deliver the expected service and support starts immediately after the order is confirmed. We endeavour to offer our customers an After Sales service, which is second to none. A strong and skilful service organisation is prepared to offer service and maintenance, calibration, validation and upgrading of equipment and software.

The service organisation will offer standardised solutions for the reconditioning or modification of existing products.

Spare and wear parts are manufactured according to ESAB's quality plan. Exchange Printed Circuit Board (PCB), exchange modules and components are available for all our products in order to reduce downtime to an absolute minimum. ESAB is continuously upgrading authorised service partners for local service support. Customers who have their own service and maintenance personnel will always be offered a service-training package as part of a total ESAB offering. However, product and process training for end-users will form an additional part of the ESAB offering. Always ask your ESAB sales representative or distributor for a complete ESAB solution.

ESAB reserves the right to alter specifications without prior notice
ESAB is approved according to ISO 9001:2000



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