

## Compact strength and mobility ESABMig C420

- Outstanding welding characteristics - high efficiency and high quality welding
- Modern design—provides reliability and excellent welding performance
- Sturdy galvanized metal chassis - made to withstand tough corrosive and dirty environments
- Slow run-in starts—ensure smooth arc starts every time
- Wide current and voltage range—multiple purpose applications
- Trigger Lock—for operator comfort on long welds.
- Three inductance outlets—easy to optimize settings for different applications
- Burn-Back—ensures no wire stick at the end of a weld
- Dust filter optional—to handle tough and dirty environment and avoid grinding-dust and metal particles inside the chassis

### Robust and powerful

The ESABMig C420 is a sturdy and robust step-controlled compact power unit. It is intended for heavy duty MIG/MAG welding with solid wires of steel, stainless steel or aluminum, and cored wires with or without shielding gas. Well proven technology together with ESAB developed software provides high reliability and outstanding welding performance.

The ESABMig C420 is made with a strong galvanized metal chassis to withstand harsh environments. The large wheels and built-in wire feeder ensures these units are practical and mobile solutions.

The control panels are also adapted to endure tough working environments, and are sealed, dirt-repellent, durable and easy to keep clean. The ESABMig C420 is designed to ensure maximum durability and service life.

The ergonomic design, large hand-grips and solid wheels make it easy to move the machine around. All setting controls are grouped on the angled front panel, making this machine very user friendly and enabling quick set-up times.

### Proven technology

The ESABMig C420 is dependable and reliable. The proven technology enables not only superior welding performance but also savings in wear-parts, leading in turn to lower operating costs and greater reliability.

Instruction Manual ..... 0349301075  
 Service Manual.....0349300041  
 Sales Literature ..... (12-01-2006) ARC-23166



### Flexibility

The ESABMig C420 is a 35 voltage step unit. The operator can adjust wire feed speed, burnback time and he can select 2/4 stroke Trigger Lock control and slow run-in start.

The ESABMig C420 is equipped with high visibility, easy to read digital meters for voltage and amperage.

### Easy to use

The wide current and voltage range with three inductance outlets make it easy to optimize settings for a wide variety of filler materials and gases. Easy change of polarity means fast and simple changes between all types of solid and cored wires. The man-machine communication is easy to operate. The control panel is clear and logically designed, with solid controls that can be set even when wearing gloves.

The ESABMig C420 is supplied with a GunMaster 400 air-cooled welding torch.

### Fantastic feed quality

The built-in feed mechanism is reliable and has excellent feed qualities. The powerful 4-roll feed mechanism provides an even and secure wire feed. The ESABMig C420 has tachometer controlled wire feed speed to ensure precision control. The wire feeder is designed for ease of service, and both the feed rollers and the guide nozzles can be changed without tools.

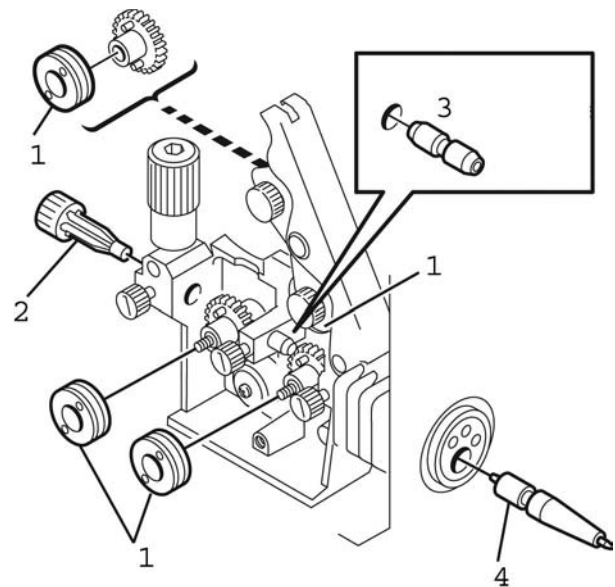
Together with the strong power supply, you have a dependable welding machine which will deliver a superior weld performance – every day.

## Specifications

Mains Voltage, 3 phase, V, Hz. 230/400-415/440-460/500/575, 50/60  
 Permitted load.....Input currents: 230V/400-415V/440-460V/500V/575V  
     at 50% duty cycle, A/V.....420/35/53A/24A/27A/24A/21A  
     at 60% duty cycle, A/V .....400/34/47A/22A/25A/22A/19A  
     at 100% duty cycle, A/V .....315/30/33A/15A/17A/15A/13A  
 Setting range, MIG/MAG, A/V .....50/16.5 - 420/35  
 Voltage Steps..... 35  
 Inductance outlets.....3  
 Open circuit voltage, V..... 14-47  
 Open circuit power, W.....520  
 Power factor at maximum current..... 0.92  
 Efficiency at maximum current, % ..... 77  
 Control voltage, V, Hz ..... 42, 50/60  
 Dimensions L x W x H.....36.4 x 25.2 x 31.5 in. (925 x 640 x 800mm)  
 Operating temperature, °F (°C) ..... 14 to 104 (-10 to +40)  
 Weight, net ..... 461 lbs. (209kg)  
 Enclosure class..... IP 23  
 Application class ..... S  
 Wire feed speed .....75 - 985 i.p.m. (1.9 - 25.0 m/min.)  
 Wire diameter ranges:  
 Steel (unalloyed solid wire).....0.023 - 1/16 in. (0.6 - 1.6mm)  
 Aluminum .....0.030 - 1/16 in. (0.8 - 1.6mm)  
 Stainless.....0.023 - 1/16 in. (0.6 - 1.6mm)  
 Cored.....0.035 - 5/64 in. (0.9 - 2.0mm)  
 Adjustable burnback time, sec..... 0 - 0.5  
 Creep start .....OFF/ON  
 2/4 stroke ..... 2 / 4  
 Wire spool Ø12" (300mm), lb. (kg) ..... 40 (18)

## Ordering Information

**ESABMig C420** 15' Ready-to-weld system ..... 0558004716  
**ESABMig C420** 12' Ready-to-weld system ..... 0558004717  
**ESABMig C420** Power source only ..... 0349305149



## Options & Accessories

**Air filter** ..... 0349302252  
**GunMaster 400cc** 15ft 0.035-0.045" torch  
 (see ARC-23095 for consumables) ..... 0558001669  
**GunMaster 400cc** 12ft 0.035-0.045" torch  
 (see ARC-23095 for consumables) ..... 0558001668  
**R-33-FM-580-HB Regulator/flowmeter** ..... 0558005172  
**Drive Roll Kits**  
 Drive Roll Kit 1/16" Knurled V groove ..... 0558005918  
 Drive Roll Kit 5/64-3/32" Knurled V groove ..... 0558005919

## Drive Roll and Feed System Wear Parts

Wire Diameter	Wire Type	1 Feed Roller (4 req'd.)	2 Inlet Nozzle	3 Intermediate Nozzle	4 Outlet Nozzle	Groove Type	1 Marking
.023 / .030	Fe, Ss, C	0459052001	0455049001	0455072002	0469837880	V	.023 S2 & .030 S2
.035-.040 / .045		0459052003	0455049001	0455072002	0469837880		.040 S2 & .045 S2
.052 / 1/16		0455052013	0455049001	0455072002	0469837880		.052 S2 & .062 S2
.035-.040 / .045	C	0558002352	0455049001	0455072002	0469837880	V-K	.039 R2 & .045 R2
.045 / .052		37319	0455049001	0455072002	0469837880		.045 R2 & .052 R2
1/16-5/64		37320	0455049001	0455072001	0469837880		1/16 R2 & 5/64 R2
.035-.040 / .045	Al	36860	0455049001	0456615001	0469837881	U	.039 A2 & .045 A2
.045 / 1/16		36861	0455049001	0456615001	0469837881		.045 A2 & 1/16 A2

*Delivery content: Ready-to-weld systems include either a 12 ft. or 15 ft. GunMaster 400cc torch with 5 x 0.035" (0.9mm) and 5 x 0.045" (1.2mm) contact tips, 0.035/0.045" upper and lower v-grooved drive rolls with outlet nozzle, an R33-FM-580 regulator/flowmeter, a sample 10 lb. spool of ESAB Spoolarc 87 HP solid carbon steel MIG wire, a 16 ft. (5m) mains cable, a 16 ft. (5m) work cable with deluxe vise clamp, wheels, a shelf for gas cylinder and instruction manuals.*