

A-Series

Automated Plasma Cutting Systems



A40i Power Source



A60i Power Source

The A-Series systems are based on an industrial proven platform. The A-Series offers standard features to meet the needs of many automated applications. With all the advantages of 1Torch and proven systems reliability, the automated A-Series delivers the best in productivity, precision and performance.

- All units have 80% duty cycle
- Single phase 208/230V available on all units
- Superior cut quality up to 120A
- Lightweight and compact design
- Durable in the toughest environments

Visit esab.com for more information.



Industry

- General Manufacturing
- Pipe Construction
- Power Poles
- HVAC
- Transportation



A80 Power Source



A120 Power Source

A-Series

Specifications				
	A40i	A60i	A80	A120
Max output	40 A	60 A	80 A	120 A
Recommended cut	6 mm (1/4 in.)	10 mm (3/8 in.)	12 mm (1/2 in.)	15 mm (5/8 in.)
Maximum cut	12 mm (1/2 in.)	15 mm (5/8 in.)	20 mm (3/4 in.)	20 mm (3/4 in.)
Maximum edge start	25 mm (1 in.)	25 mm (1 in.)	30 mm (1-1/4 in.)	40 mm (1-1/2 in.)
Mains supply, 50/60 Hz	208-230/460 V, 1-3 ph 380-400 V, 3 ph 600 V, 3 ph	208-230/460 V, 1-3 ph 380-400 V, 3 ph 600 V, 3 ph	208-230/460 V, 1-3 ph 380-400 V, 3 ph 600 V, 3 ph	208-230/460 V, 1-3 ph 380-400 V, 3 ph 600 V, 3 ph
Output range	10-40 A	10-60 A	30-100 A	30-120 A
Output power	4.8 kW	7.9 kW	12 Kw	15.4 Kw
Rated Output	40 A @ 80% duty cycle 30 A @ 100% duty cycle	60 A @ 80% duty cycle 60 A @ 50% duty cycle 50 A @ 100% duty cycle	80 A @ 80% duty cycle 70 A @ 100% duty cycle	120 A @ 80% duty cycle 100 A @ 100% duty cycle
Max OCV	300 VDC	300 VDC	260 VDC	260 VDC
Torch air pressure	5.2 bar (75.4 psig)	5.2 bar (75.4 psig)	5.2 bar (75.4 psig)	5.2 bar (75.4 psig)
Torch air consumption	189 l/min (400.5 cfh)	189 l/min (400.5 cfh)	189 l/min (400.5 cfh)	189 l/min (400.5 cfh)
Weight, incl cable and torch	15.9 kg (35 lbs.)	15.9 kg (35 lbs.)	28.6 kg (63 lbs.)	28.6 kg (63 lbs.)
Dimensions, L x W X H	536 x 199 x 359 mm (21.1 x 7.8 x 14.1 in.)	536 x 199 x 359 mm (21.1 x 7.8 x 14.1 in.)	660 x 248 x 343 mm (30 x 9.7 x 13.5 in.)	660 x 248 x 343 mm (30 x 9.7 x 13.5 in.)
Enclosure class	IP23C	IP23C	IP23C	IP23C
Recommended Cut				
Gauge 0.5 - 2.0 mm (0.02 - 0.08 in.)	•	•	•	•
6 mm (1/4 in.)	•	•	•	•
10 mm (3/8 in.)		•	•	•
12 mm (1/2 in.)			•	•
15 mm (5/8 in.)				•
Applications				
Sheet metal - duct work, artwork, trailer panels	•	•	•	•
Light fabrication - kitch- enware, autobody panels, pipe		•	•	•
Medium fabrication - industrial components, truck frame and body			•	•
Heavy fabrication - heavy equipment and structure components, pipe				•

A-Series

Input amps at max output 1/3 ph

Model	208 V	230 V	380 V	400 V	480 V	600 V
A40i	24.1/14.6 A	21.8/13.1 A	7.7 A	7.4 A	10.4/6.3 A	-
A60i	-	-	12.9 A	12.3 A	10.5 A	-
A80	99/46 A	95/49 A	-	-	59/29 A	-/22 A
A120	126/61 A	118/56 A	-	-	76/37 A	-/28 A

Ordering Information

Description	Part Number
Crossbow Plasma Kits	
Crossbow Plasma Kit A40i 208-480 V, 1 ph	0558102540
Crossbow Plasma Kit A40i 208-480 V, 3 ph	0558102541
Crossbow Plasma Kit A60i 208-480 V, 1 ph	0559166361
Crossbow Plasma Kit A60i 208-480 V, 3 ph	0559166362
Crossbow Plasma Kit A80 208/230V, 1/3 ph	0558102350
Crossbow Plasma Kit A80 480V, 3 ph	0558102351
Crossbow Plasma Kit A80 600V, 3 ph	0558102354
Crossbow Plasma Kit A120 208/230V, 1/3 ph	0558102355
Crossbow Plasma Kit A120 480V, 3 ph	0558102356
Crossbow Plasma Kit A120 600V, 3 ph	0558102359
Power Source Only	
ESAB A40i Plasma 208-480 V, 1 ph	0559356341
ESAB A40i Plasma 480 V, 3 ph	0559356342
ESAB A60i Plasma 208-480 V, 1 ph	0559366341
ESAB A60i Plasma 480 V, 3 ph	0559366342
ESAB A80 Plasma 208-480 V, 1/3 ph	0559313341
ESAB A80 Plasma 480 V, 3 ph	0559313342
ESAB A80 Plasma 600 V, 3ph	0559313345
ESAB A120 Plasma 208-480 V, 1/3 ph	0559317341
ESAB A120 Plasma 480 V, 3 ph	0559317342
ESAB A120 Plasma 600 V, 3 ph	0559317345
Torches	
SL100 SV with ATC, 180° Automation, 7.6 m (25 ft.)	7-4001
SL100 SV with ATC, 180° Automation, 10.6 m (35 ft.)	7-4002
SL100 SV with ATC, 180° Automation, 15.2 m (50 ft.)	7-4003
SL100 SV with ATC, 180° Automation, 23 m (75.5 ft.)	7-4004
SL100 SV with ATC, 180° Automation, 30.5 m (100 ft.)	7-4005

Crossbow kits include power supply, 10.8m (35 ft) torch and consumables kit.
 ESAB offers 4 year warranty on unit and 1 year on torch.

A-Series

Options & Accessories	
Description	Part Number
Spare parts kit 40 A	5-0079
Spare parts kit 60 A	5-0122
Spare parts kit 80 A	5-0123
Spare parts kit 120 A	5-0175
A40i/A60i CNC Cable, 7.6 m (25 ft.)	9-1125
A40i/A60i CNC Cable, 10.6 m (35 ft.)	9-1126
A40i/A60i CNC Cable, 15.2 m (50 ft.)	9-1127
A40i/A60i CNC Cable, 23.0 m (75 ft.)	9-1128
A40i/A60i CNC Cable, 30.5 m (100 ft.)	9-1129
A80/A120 CNC cable, 7.6 m (25 ft.)	9-1008
A80/A120 CNC cable, 10.6 m (35 ft.)	9-1010
A80/A120 CNC cable, 15.2 m (50 ft.)	9-1011
A80/A120 CNC cable, 23 m (75.5 ft.)	9-8315
A80/A120 CNC cable, 30.5 m (100 ft.)	9-8316
Remote pendant control, 6.1 m (20 ft.)	7-3460
Hand pendant extension, 7.6 m (25 ft.)	7-7744
Single stage air filter kit	7-7507
Two stage air filter kit	9-9387
Wear and Spare Parts	
O-ring	8-3484
O-ring	8-3486
O-ring lubricant	8-4025
Electrode	9-8232
Start cartridge	9-8277
Tip, standoff 40 A	9-8208
Tip, standoff 60 A	9-8210
Tip, standoff 80 A	9-8211
Tip, standoff 100 A	8-8212
Tip, standoff 120 A	9-8233
Shield cup	9-8218
Maximum life shield cup	9-8237
Ohmic clip	9-8224
Deflector	9-8243
Shield cap 40 A	9-8245
Shield cap 50 - 60 A	9-8238
Shield cap 70 - 100 A	9-8239
Shield cap 120 A	9-8256



ESAB / esab.com

