



ESAB DC Arc Power

Power sources

LAF 635, 1000, 1250 and 1600

The LAF series are remote-controlled, three phase, fan-cooled welding power sources designed for high productivity mechanized Submerged or MIG/MAG arc welding. They are used in combination with ESAB's A2/A6 Process Controller (PEH), and equipment range.

LAF welding power sources have excellent welding characteristics throughout the entire current and voltage range, with particularly good starting and re-ignition properties. These power sources demonstrate good arc stability at both high and low arc voltages.

The welding power source can be adjusted and monitored from the front panel of the process controller (PEH), which permits easy adjustment of all welding parameters. Preset welding parameters can be monitored and adjusted during welding.

The welding power sources are protected against overload by a thermal cut-out. When it trips, a yellow lamp on the front panel is illuminated. The cut-out is automatically reset when the temperature drops to an acceptable level.

The welding current range can be extended by connecting two power sources in parallel.



004.345.465

Applications

Submerged arc welding





The excellent welding characteristics of the LAF series make these power sources ideal for submerged arc welding.


MIG/MAG welding

LAF power sources produce a stable arc at very low currents and voltages. This means that they are also ideal for MIG and MAG welding.

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Technical data


| | LAF 635 | LAF 1000 | LAF 1250 | LAF 1600 |
|------------------------------------|---|---|---|---|
| Voltage, 3 ph 50 Hz, V | 400/415 | 400/415/500 | 400/415/500 | 400/415/500 |
| Voltage, 3 ph 60 Hz, V | 440 | 400/440/550 | 400/440/550 | 400/440/550 |
| Current A 100%, 50 Hz | 52 | 64/64/52 | 99/99/80 | 136/136/108 |
| 80% | | | | |
| 60% | | | | |
| Current A 100%, 60 Hz | 52 | 64/64/52 | 99/99/80 | 136/136/108 |
| 80% | | | | |
| 60% | | | | |
| Cable area mm ² , 50 Hz | 4x16 | 4x16 | 3x35+25/3x35+25/3x25+16 | 3x70+35/3x70+35/3x50+35 |
| 60 Hz | 4x16 | 4x16 | 3x35+25/3x35+25/3x25+16 | 3x70+35/3x70+35/3x70+35 |
| Fuse, slow A 50 Hz | 63 | 63 | 125/125/80 | 160/160/125 |
| 60 Hz | 63 | 63 | 100/100/80 | 160/160/125 |
| Maximum load at: | | | | |
| 100% duty cycle A/V | 630/44 | 800/44 | 1250/44 | 1600/44 |
| 80% duty cycle A/V | - | - | - | - |
| 60% duty cycle A/V | 800/44 | 1000/44 | - | - |
| Setting range A/V | | | | |
| MIG/MAG | 50/17-630/44 | 50/17-1000/45 | 60/17-1250/44 | - |
| SAW | 30/21-800/44 | 40/22-1000/45 | 40/22-1250/44 | 40/22-1600/46 |
| Open circuit voltage, V | 54 | 52 | 51 | 54 |
| Open circuit power, W | 150 | 145 | 220 | 220 |
| Efficiency | 0,84 | 0,84 | 0,87 | 0,86 |
| Power factor | 0,90 | 0,95 | 0,92 | 0,87 |
| Enclosure class | IP23 | IP 23 | IP 23 | IP 23 |
| Dimensions L x W x H mm | 670x490x930 | 646x552x1090 | 774x598x1428 | 774x598x1428 |
| Weight, kg | 260 | 330 | 490 | 585 |
| Application class |  |  |  |  |
| Ordering information | 0457 350 880 | 0456 321 881 | 0456 323 880 | 0456 324 880 |

| Compliment technical data | LAF 1000M | LAF 1250M | LAF 1600M |
|--|---|---------------------------------|----------------------------------|
| Voltage, 3 ph 50 Hz, V | 230/400/415/500 | 230/400/415/500 | 230/400/415/500 |
| Voltage, 3 ph 60 Hz, V | 230/400/440/550 | 230/400/440/550 | 230/400/440/550 |
| Current A 100 %, 50 Hz | 111/64/64/52 | 171/99/99/80 | 235/136/136/108 |
| 60 % | 138/80/80/65 | - | - |
| Current A 100 %, 60 Hz | 111/64/64/52 | 171/99/99/80 | 235/136/136/108 |
| 60 % | 138/80/80/65 | - | - |
| Cable area mm ² , 50 Hz | 4x50/4x16/4x16/4x16 | 3x70+35/3x35+25/3x35+25/3x25+16 | 3x120+70/3x70+35/3x70+35/3x50+35 |
| Cable area mm ² , 60 Hz | 4x50/4x16/4x16/4x16 | 3x70+35/3x35+25/3x35+25/3x25+16 | 3x120+70/3x70+35/3x70+35/3x70+35 |
| Fuse, slow A 50 Hz | 125/63/63/63 | 160/125/125/80 | 200/160/160/125 |
| Fuse, slow A 60 Hz | 125/63/63/63 | 160/100/100/80 | 200/160/160/125 |
| Application class |  | | |
| Ordering information | 0456 321 882 | 0456 323 881 | 0456 324 881 |
| For more technical information, see LAF 1000, LAF 1250 and LAF 1600. | | | |

Ordering information

| | |
|-----------------------|--------------|
| Control cable 15 m | 0456 500 880 |
| Control cable 25 m | 0456 500 881 |
| Control cable 35 m | 0456 500 882 |
| Control cable 50 m | 0456 500 883 |
| Control cable 75 m | 0456 500 884 |
| Control cable 100 m | 0456 500 885 |
| Set of wheels LAF 635 | 0457 787 880 |

These welding power sources comply with the requirements of EN 60974-1 and IEC 974-1

The symbol  indicates that the welding power source may be used in areas with an increased electrical hazard, i.e. areas where the electrical hazard is increased due to damp and/or the proximity to earthed metal objects. Equipment marked IP 23 is designed for indoor and outdoor use.

