

## Specifications

|   | A40i  | A60i  | A80  | A120   |
|---|---|---|--|--|
| <b>Rated Output</b>                             | 40 Amps   | 60 Amps   | 80 Amps  | 120 Amps   |
| <b>Output Range</b>                             | 20 - 40 Amps, 60 Amps Max., Adjustable  | 20 - 60 Amps, 80 Amps Max., Adjustable  | 30 - 80 Amps, 100 Amps Max., Adjustable                                  | 30 - 120 Amps, 120 Amps Max., Adjustable                                 |
| <b>Production Piercing and Cutting Capacity</b> | 6 mm  | 10 mm   | 12 mm  | 15 mm  |
| <b>Maximum Piercing and Cutting Capacity</b>    | 12 mm   | 15 mm   | 20 mm  | 20 mm  |
| <b>Maximum Edge Start</b>                       | 25 mm   | 25 mm   | 30 mm  | 40 mm  |
| <b>Input Volts</b>                              | 380/400V, 3 ph, 50/60 Hz  | 380/400V, 3 ph, 50/60 Hz  | 380/400V, 3 ph, 50/60 Hz   | 380/400V, 3 ph, 50/60 Hz   |
| <b>Input Amps @ Max Output</b>                  | 7.7 (380V, 3 ph)<br>7.4 (400V, 3 ph)  | 12.9 (380V, 3 ph)<br>12.3 (400V, 3 ph)  | 29 (380V, 3 ph)<br>28 (400V, 3 ph)                                       | 35 (380V, 3 ph)<br>36 (400V, 3 ph)                                       |
| <b>Kilowatt Output</b>                          | 4.8 kW  | 7.9 kW  | 12 kW  | 15.4 kW  |
| <b>Duty Cycle</b>                               | 80% @ 40 Amps<br>100% @ 30 Amps   | 80% @ 60 Amps<br>100% @ 50 Amps   | 80% @ 80 Amps<br>100% @ 70 Amps  | 80% @ 120 Amps<br>100% @ 100 Amps  |
| <b>MAX OCV</b>                                  | 300 VDC   | 300 VDC   | 260 VDC  | 260 VDC  |
| <b>Gas Type</b>                                 | Air@ 5.2 bar @ 189 lpm<br>Argon (Marking) @ 5.2 bar @ 189 lpm                         | Air@ 5.2 bar @ 189 lpm<br>Argon (Marking) @ 5.2 bar @ 189 lpm                         | Air @ 5.2 bar @ 189 lpm)   | Air @ 5.5 bar @ 189 lpm  |
| <b>Pilot</b>                                    | Start Cartridge   | Start Cartridge   | Start Cartridge  | Start Cartridge  |
| <b>Weight</b>                                   | 15.9kg - Unit, Power Cable, (Torch and Leads)   | 15.9kg - Unit, Power Cable, (Torch and Leads)   | 28.6kg - Unit, Power Cable, (Torch and Leads)                            | 28.6kg - Unit, Power Cable, (Torch and Leads)                            |
| <b>Dimensions</b>                               | H 359 mm x W 199 mm x L 536 mm  | H 359 mm x W 199 mm x L 536 mm  | H 343 mm x W 248 mm x L 660 mm   | H 343 mm x W 248 mm x L 660 mm   |
| <b>Work Cable</b>                               | 6.1m  | 6.1 m   | 6.1 m  | 6.1 m  |
| <b>Control</b>                                  | CNC rear panel connector: Start/Stop, OK to Move, Divided arc voltage, Plate contact. | CNC rear panel connector: Start/Stop, OK to Move, Divided arc voltage, Plate contact. | CNC rear panel connector: Start/Stop OK to Move, and Divided arc voltage | CNC rear panel connector: Start/Stop OK to Move, and Divided arc voltage |
| <b>Input Power Cable</b>                        | 2 m without plug (400V)   | 2 m without plug (400V)   | 2 m without plug (400V)  | 2 m without plug (400V)  |
| <b>Warranty</b>                                 | 3 Years Power Supply & 1 Year Torch   | 3 Years Power Supply & 1 Year Torch   | 3 Years Power Supply & 1 Year Torch                                      | 3 Years Power Supply & 1 Year Torch                                      |
| <b>Certifications</b>                           | IP-23C, CSA, NTRL/C, CE, CCC  | IP-23C, CSA, NTRL/C, CE, CCC  | IP-23C, CSA, NTRL/C, CE, CCC   | IP-23C, CSA, NTRL/C, CE, CCC   |
| <b>Torch Configuration</b>                      |   |   |  |  |
| <b>Torch</b>                                    | SL100®SV w/ATC®, 180° Automation  |   |  |  |
| <b>SL100SV - 7.6m Leads</b>                     | 1-5634-4  | 1-6634-4  | 1-1334-4   | 1-1734-4   |
| <b>SL100SV - 10.6m Leads</b>                    | 1-5636-4  | 1-6636-4  | 1-1336-4   | 1-1736-4   |
| <b>SL100SV - 15.2m Leads</b>                    | 1-5635-4  | 1-6635-4  | 1-1335-4   | 1-1735-4   |

\*Systems include: power supply, automation torch with 35 mm diameter non-metallic mounting tube / 32 pitch rack (detachable), pinch block assembly, CNC interface cable, spare parts kit (15 tips, 3 electrodes, start cartridge), input power cable (selected systems), work cable, and clamp.

(subject to change without notice)

## Cut Speed Charts

| Cut Speed Chart - Mild Steel |               |                |              | Cut Speed Chart - Stainless Steel |               |                |              | Cut Speed Chart - Aluminium |               |                |              |
|------------------------------|---------------|----------------|--------------|-----------------------------------|---------------|----------------|--------------|-----------------------------|---------------|----------------|--------------|
| Amps                         | Plasma/Shield | Thickness [mm] | Speed mm/min | Amps                              | Plasma/Shield | Thickness [mm] | Speed mm/min | Amps                        | Plasma/Shield | Thickness [mm] | Speed mm/min |
| 40                           | Air/Air       | 1              | 3990         | 40                                | Air/Air       | 2              | 1140         | 40                          | Air/Air       | 2              | 3500         |
|                              |               | 2              | 2920         |                                   |               | 3              | 980          |                             |               | 3              | 2350         |
|                              |               | 3              | 1810         |                                   |               | 5              | 715          |                             |               | 5              | 1740         |
| 60                           | Air/Air       | 5              | 1345         | 60                                | Air/Air       | 4              | 2865         | 60                          | Air/Air       | 4              | 5230         |
|                              |               | 4              | 3650         |                                   |               | 6              | 1790         |                             |               | 6              | 2640         |
|                              |               | 6              | 2145         |                                   |               | 10             | 725          |                             |               | 10             | 1085         |
|                              |               | 10             | 1180         |                                   |               | 12             | 580          |                             |               | 12             | 845          |
| 80                           | Air/Air       | 12             | 795          | 80                                | Air/Air       | 6              | 2765         | 80                          | Air/Air       | 6              | 3190         |
|                              |               | 6              | 2745         |                                   |               | 10             | 1070         |                             |               | 10             | 1330         |
|                              |               | 10             | 1060         |                                   |               | 12             | 765          |                             |               | 12             | 1060         |
| 100                          | Air/Air       | 12             | 1025         | 100                               | Air/Air       | 10             | 1575         | 100                         | Air/Air       | 15             | 745          |
|                              |               | 15             | 610          |                                   |               | 12             | 1255         |                             |               | 10             | 1575         |
|                              |               | 10             | 1790         |                                   |               | 15             | 685          |                             |               | 12             | 1255         |
| 120                          | Air/Air       | 12             | 1310         | 120                               | Air/Air       | 10             | 2390         | 120                         | Air/Air       | 20             | 470          |
|                              |               | 20             | 490          |                                   |               | 12             | 1750         |                             |               | 10             | 2660         |
|                              |               | 10             | 2100         |                                   |               | 15             | 1160         |                             |               | 12             | 2100         |
|                              |               | 12             | 1860         |                                   |               |                |              |                             |               | 15             | 1445         |
|                              |               | 15             | 1320         |                                   |               |                |              |                             |               |                |              |
|                              |               | 20             | 720          |                                   |               |                |              |                             |               |                |              |

Note: The cutting speed chart includes preliminary data and is subject to change without notice. Take care in comparison. The speeds noted above are best cut speeds. Often, competitors show maximum cutting speeds. Although much higher speeds can be achieved, edge quality and bevel angle may be compromised. The capabilities shown in this table were obtained by using new consumables, correct gas and current settings, accurate torch height control and with the torch perpendicular to the workpiece. Please contact Thermal Dynamics for more information.