

**TECHNICAL DATA, ARISTO® MIG 4004i PULSE**

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| Mains Voltage, V                      | 380-460                           |
| Number of Phases, ph                  | 3                                 |
| Supply Frequency, Hz                  | 50/60                             |
| Fuse Slow, A                          | 20                                |
| <b>Welding Output A/V</b>             |                                   |
| 100% duty cycle                       | 300/29                            |
| 60% duty cycle                        | 400/34                            |
| <b>Setting range A</b>                |                                   |
| MIG/MAG                               | 16-400                            |
| MMA                                   | 16-400                            |
| TIG                                   | 4-400                             |
| Open Circuit Voltage, V               | 55                                |
| Open Circuit Voltage VRD, V           | <35                               |
| Rated kVA                             | 25.2                              |
| Energy Save Mode, W                   | 40                                |
| Efficiency at Max Current %           | 89.5                              |
| Power Factor at Max Current           | 0.95                              |
| Dimensions L x W x H, mm              | 610 x 250 x 445                   |
| Weight with / without COOL 1, kg      | 58/44.5                           |
| Operating Temperature, °C             | -10 to +40                        |
| Enclosure Class                       | IP23                              |
| Application Class                     | S                                 |
| Insulation Class                      | H                                 |
| Certification Mark (Standards)        | CE                                |
| Recommended Mains Cable Cross Section | AWG 10, (4x 4,0 mm <sup>2</sup> ) |

**TECHNICAL DATA, WATER COOLER COOL 1**

|  |                 |
|--|-----------------|
| Power supply, from power source, VDC       | 24              |
| Coolant flow capacity, l/min               | 2.0             |
| Coolant quantity, l                        | 4.5             |
| Cooling power, kW                          | 1.3             |
| Max pressure, bar                          | 4.5             |
| Max pressure height to torch, m            | 8.5             |
| Weight / incl. coolant, kg                 | 12/16.5         |
| Dimensions incl. filler tube L x W x H, mm | 610 x 256 x 256 |

**TECHNICAL DATA, ARISTO® FEED 3004**

|                         |                 |
|-------------------------|-----------------|
| Power supply, AC        | 42              |
| Wire spool capacity, kg | 18 (30**)       |
| Max. spool diameter, mm | 300 (440**)     |
| Wire feed speed, m/min  | 0.8-25.0        |
| Dimension L x W x H, mm | 690 x 275 x 420 |
| Weight, kg              | 15              |

**ORDERING INFORMATION: TYPICAL PLANT, W1009640**

|                                     |            |
|-------------------------------------|------------|
| Aristo Mig 4004i Pulse 380-440      | 0465152884 |
| Trolley 4Wheel-AristoMig 4004i      | 0462151880 |
| Kit Bracket-Trolley Mig 4004i       | 0463125880 |
| Aristo Feed 3004W MO                | 0460526891 |
| Aristo Pendant U82 Plus Incl Holder | 0460820881 |
| PSF405 L=3m Euro                    | 0458401882 |
| Con. Set AA 10m Can 70mm 2 10p      | 0459528782 |
| REG COMET 250 ARG 45LPM 2GA         | 201017     |
| KIT CONN 5/8UNRH-5MM HOSE           | 308689     |

Water Cooled versions available.

**ESAB**  
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**ORDERING INFORMATION, POWER SOURCE, FEEDERS ARISTO, ARISTO® U82**

|  |  |                         |
|--|--|-------------------------|
| <b>Power Source</b>                    |  |                         |
| Aristo® Mig 4004i Pulse                |  | 0465 152 884            |
| <b>Feeders</b>                         |  | <b>Air/Water-Cooled</b> |
| Aristo™ Feed 3004, U6 Encl. 10 pole    |  | 0460 526 896            |
| Aristo™ Feed 3004, U82 Encl. 10 pole   |  | 0460 526 891            |
| <b>Aristo® U82</b>                     |  |                         |
| Aristo® U82 Plus complete incl. holder |  | 0460 820 881            |
| Control cable extension U82 7.5 m      |  | 0460 877 891            |

**ORDERING INFORMATION, INTERCONNECTION CABLES**

| 70 mm <sup>2</sup> Feed 3004 | Air-Cooled   | Water-Cooled |
|------------------------------|--------------|--------------|
| 1.7 m, 10 pole               | 0459 528 780 | 0459 528 790 |
| 5.0 m, 10 pole               | 0459 528 781 | 0459 528 791 |
| 10.0 m, 10 pole              | 0459 528 782 | 0459 528 792 |
| 15.0 m, 10 pole              | 0459 528 783 | 0459 528 793 |
| 25.0 m, 10 pole              | 0459 528 784 | 0459 528 794 |
| 35.0 m, 10 pole              | 0459 528 785 | 0459 528 795 |

**ORDERING INFORMATION, ACCESSORIES**

|  |                |
|--|----------------|
| Trolley, 4-wheel                         | 0462 151 880   |
| Trolley bracket (without COOL 1)         | 0463 125 880   |
| Water cooler, COOL 1                     | 0462 300 880   |
| Flow guard, COOL 1 (optional)            | 0456 855 881   |
| PSF 405 3.0m Mig Gun                     | 0458 401 882   |
| PSF 405 4.5m Mig Gun                     | 0458 401 883   |
| PSF 410w 3.0m Water Cooled Mig Gun       | 0458 400 882   |
| PSF 410w 4.5m Water Cooled Mig Gun       | 0458 400 883   |
| MXH 300PP 10m air cooled electric        | 0700 200 018   |
| MXH 400wPP 10M water cooled electric     | 0700 200 016   |
| Remote adapter kit MXH™ PP and PSF™ RS3  | 0459 681 881   |
| Remote adapter kit Miggy-/Railtrac       | 0459 681 880   |
| Wheel kit for feeder                     | 0458 707 880   |
| Strain relief for welding torch          | 0457 341 881   |
| Strain relief for interconnection cables | 0459 234 880   |
| Lifting eye                              | 0458 706 880   |
| Quick connector MarathonPac™             | F102 440 880   |
| Adapter for 5 kg spool                   | 0455 410 001   |
| Spool cover                              | 0458 674 880   |
| Spool cover, steel                       | 0459 431 880   |
| Adapter for spool diameter 440 mm        | 0459 233 880** |
| Counter balance device                   | 0458 705 880   |
| Stabilizer 4-wheel for counter balance   | 0460 946 880   |
| Inlet Nozzle - Aluminium                 | 0455 049 001   |
| Intermediate Guide - Aluminium           | 0456 615 001   |
| Outlet Nozzle - Aluminium                | 0469 837 881   |
| Feed Roller 1.2/1.6 Aluminium            | 0458 824 003   |

**CONSUMABLES FOR PULSE MIG**

ESAB is offering a large range of consumables for welding of mild steel, stainless steel and aluminium. **Pulse MIG** is recommended as the method for positional welding from sheet metal up to medium thickness as it provides better control of the heat. The listed consumables combined with the pulse MIG synergic lines available from **U6** or **U82** are our recommendation for high productivity and quality welding.

**Mild Steel:**

OK AristoRod 12.50/12.63 in Ø0.8 - Ø1.2 mm  
OK Autrod 12.51/12.64 in Ø0.8 - Ø1.2 mm

**Stainless Steel:**

OK Autrod 308LSi in Ø0.8 - 1.6 mm  
OK Autrod 316LSi in Ø0.8 - 1.6 mm

**Aluminium:**

OK Autrod 4043/4047 in Ø1.0 - 1.6 mm  
OK Autrod 5183/5356 in Ø1.0 - 1.6 mm

# Aristo® Mig 4004i Pulse

## Aristo® Feed 3004, U6/U8<sub>2</sub>

### Advanced Multi Process Inverter



**MIG**

**STICK**

**TIG**

**SAT-SWIFT ARC TRANSFER**

**PULSE/SUPER PULSE**

These welding power sources comply with the requirements of IEC/EN 60974-1 as well as IEC/EN 60974-2 and EN 60974-10. The symbol **S** 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.



Aristo® Mig 4004i Pulse is a digital controlled MIG/MAG/MMA lightweight inverter based welding power source, designed for high productivity and quality welding applications.

This NEW series Aristo 4004i pulse builds on the already acclaimed welding performance with enhanced software and hardware, delivering increased response times, to provide superb starting characteristics and arc characteristics. Whether you're welding Aluminium, Stainless steel or Mild steels. Performance has also been optimised for use with Co2 shielding gases.

Fan on demand cooling systems increase the welding time of the equipment. The cooling unit COOL 1 provides cooling of liquid-cooled torches to support great comfort to the welder. The cooling fans in the power source and the cooling system for the torch automatically turn off after 6.5 minutes inactivity, significantly reducing the idle time energy consumption.

This 4th generation inverter offers considerable improved efficiency with a high power factor. This gives you minimized energy consumption and will offer significant reductions in your energy cost with the same welding conditions.

| Technology | Weight  | Efficiency |
|------------|---------|------------|
| Chopper    | >149 kg | <70%       |
| Inverter   | 46 kg   | >85        |

| FEATURES   | BENEFITS  |
|--|---|
| <b>NEW</b> Improved Arc Enhancements                   | Through hardware & software upgrades that improve start performance and welding with CO2. Feeder upgrades and new polished feed rolls for improved Aluminium feeding performance. |
| SuperPulse™  | Advanced pulse functionality that reduces heat input and minimizes spatter (U82).   |
| QSet™  | An Intelligent welding system that monitors the welding arc and optimises welding parameters.   |
| TrueArcVoltage™  | Measures the correct arc voltage value at the contact tip, independent of interconnection cable length, return cable or welding torch assembly. (Valid with ESAB torches).        |
| High Duty Cycle  | For long runs and various applications ensuring high productivity 400 A at 60%  |
| Wide mains input tolerance                             | 380 - 460 V   |
| Generator compatible                                   | For on site use.  |
| Robust Design  | Heavy duty construction with added protection from moisture and dust.   |
| Standby Function                                       | For energy savings.   |
| Improved Power Factor                                  | 0.95 and an efficiency of 89.5%   |
| Memory   | 10 (U6) or 255 (U82) welding schedules.   |
| Pre-programmed synergic lines                          | Up to 250 synergic lines (U82). To ensure optimum settings with a wide choice of materials, wire dimensions and gas combinations.   |
| Customized synergic lines                              | For user customisation and flexibility.   |
| Pre-flow, creep start, and hot start functions         | Provides soft and more direct starts with less spatter.   |
| Crater filling, adjustable burn-back time and post gas | For a defect-free weld, smooth finish and no cracks. Also extends the lifetime of the contact tip.  |

| APPLICATIONS  |
|---|
| <ul style="list-style-type: none"> <li>Highly productive MIG/MAG and advanced MMA welding. Suitable for Aluminium, Stainless Steel, Mild Steel and Cored Wire.</li> <li>Typical market segments:                             <ul style="list-style-type: none"> <li>General Industrial Fabrication</li> <li>Energy Generation</li> <li>Windmills</li> <li>Trucks Busses and Trailers</li> <li>Trains &amp; Railway Cars</li> <li>Earthmoving and Mining Equipment</li> <li>Mobile Machinery</li> <li>Steel Sections</li> <li>Shipbuilding/Offshore</li> </ul> </li> </ul> |



## QSET™ - THE INTELLIGENCE WELDING SYSTEM WHICH SIMPLIFIES WELDING

QSet™ monitors the welding arc and optimizes welding parameters in dip transfer, just weld and the arc condition will be optimized within a few seconds. Then simply adjust the wire feed speed to suit the application and let QSet™ do the rest.

A robust fully enclosed design protects the welding wire from moisture, dust and other airborne contaminants.

Aristo® Feed 3004 is available with 2 operational solutions, the U6 panel and the U82 pendant.

A 7.5 m connection cable to provide a wider working range is available for the U82 pendant. Access for remote controls at the front of the feeder.

Adapter kit for PSF RS3 torches and MXH Push-Pull guns provide access to pre-programmed welding schedules from the torch (PSF RS3) or control of the wire feed speed from the PP guns (MXH 300/400w PP).

The feeder accept standard 200, 300 and 440 mm spools additional to MarathonPac™. (See Ordering information, Accessories).

## LIVETIG™

The LiveTig™ start function electronically limits the start current by 12-15A is implemented to U6 and U82. Aristo® Mig 4004i Pulse combined with U6 or U82. offer a complete multi-process package supporting MMA, TIG, MIG/MAG and pulse MIG.

The package supports welding of mild steel and stainless steel in all processes and Aluminium in MMA, MIG/MAG and pulse MIG.

## SUPERPULSE™ (U82)

- Makes positional welding easier
- Allows welding with low heat input
- Provides uniform penetration
- Allows operator more control over welding speed
- TIG-looking weld appearance with MIG
- Extends working range with larger wire size
- Less sensitive to joint gap variations
- Less sensitive to unequal heat transfer

## USER-FRIENDLY INTERFACE



- |                                       |  |                      |
|---------------------------------------|--|----------------------|
| 1. Display                            | 6. USB unit                                      | 10. Setting wheel    |
| 2. Soft pushbuttons (function keys)   | 7. Setting wheel                                 | 11. Setting wheel    |
| 3. Menu                               | 8. Large, bright display - ledgible when welding | 12. Function buttons |
| 4. Voltage setting                    | 9. Menu button                                   | 13. "Enter" button   |
| 5. Wire feed speed or current setting |  | 14. Robust casing    |

For more details about Aristo® U82, see fact sheet XA00141820

