

Process Controller PEK

- Supports SAW, ESSC, Carbon Arc Gouging and GMAW (limited) processes
- Pre-setting of all welding parameters (total of 255 sets)
- Programmable sequential welding (distance measuring via encoder feed back)
- Heat input visible on display
- High resolution encoder feed-back from (wire feed and motion control)
- Internal USB for data backup and external USB for system upgrades and transferring welding parameters between PEK units
- Programmable I/O controlled pattern for wire cladding
- Motion control of 2-axis as stand alone unit
- WeldCloud enabled via Ethernet



PEK is a system adapted for use with ESAB's automatic power sources LAF 631/1001/1251/1601, TAF 801/1251 and Aristo® 1000 AC/DC. The control system is connected to the power source via a control cable and incorporates a CAN bus system for data transfer.

PEK can also be used as a motion controller to integrate other power sources for mechanisation and automation.

The control system is easy to use thanks to its clear text menu. Users can choose between a large number of different languages. The large display keeps the user informed about the main parameters including current, voltage and travel speed. Parameter sets can be given names for easier assignment. Five soft keys can be configured according to individual preferences. PEK supports your system's maintenance and keeps track of its use.

ESAB standard motors and travel axis can be selected from a list and other motors can be programmed manually.

Pre-settings

PEK can easily be pre-set by the user. Manual control keys for wire feed and travel direction allow fast access to frequent settings. Turn knobs allow easy adjustment of wire feed speed, voltage and travel speed during the process.

Additional functionality

More functions are available by adding an external analogue or digital interface.

Welding parameter limits

PEK allows defined limits for the settings and the measured parameters. The welder will be alerted if the weld parameters are outside the allowed limits.

Makes welding safer and easier

A USB slot enables users to file all settings and configurations. Restore your valuable production data within minutes. Security is provided by three-level user accounts. Users can also transfer welding parameters between other PEK units.

Emergency stop button

The emergency stop button can also be used in an extended E-stop chain.

Technical data

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| Connection voltage from the power source | 42V AC 50/60 Hz |
| Connection power | max 900 VA |
| Motor drives | connection of 2 motors, motor current 6A cont., max 10A |
| Speed control | feedback from pulse encoder |
| Welding speed | 0.1-2 m/min (depending on travel carriage) |
| Max man. travel speed | 2 m/min |
| Wire feed speed | 0.3-25 m/min (depending on wire feed unit) |
| Valve output (flux or gas) | 1 pc, 42V AC, 0.5A |
| Inputs | for connection of sensors or limit switches |
| Connection to power source | Burndy connector 12-poles |
| Max ambient temperature | 45°C |
| Min ambient temperature | -15°C |
| Relative humidity of air | 98% |
| Dimensions l x w x h | 246 x 235 x 273 mm |
| Weight | 6.6 kg |
| Enclosure class | IP23 |
| Standards | EN-60974-1, EN-60974-10 |

Applications

ESAB components like **PEK** can, together with the **LAF/TAF** and **Aristo® 1000 AC/DC** power sources, be used for successful integration on Column-and-Boom manipulators, gantries, portals or similar carriers.



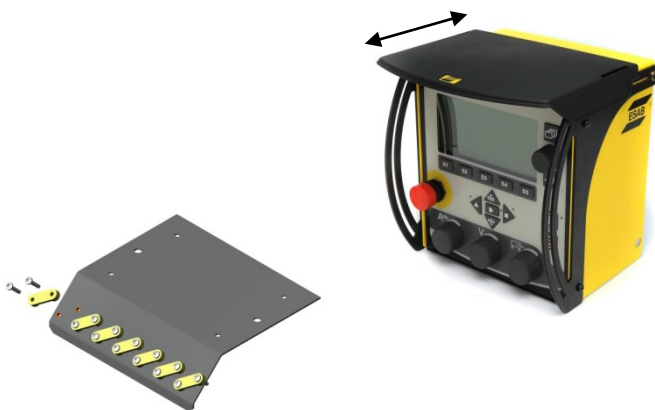
Ordering information

Process Controller PEK 0460 504 880

Options

I/O-Module 0462 080 001
 Set of connectors for I/O module 0462 119 880
 Cable restraining bracket 0460 861 880

Adjustable sun shield for better visibility for outdoor use



Cable restraining bracket



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