

# 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

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

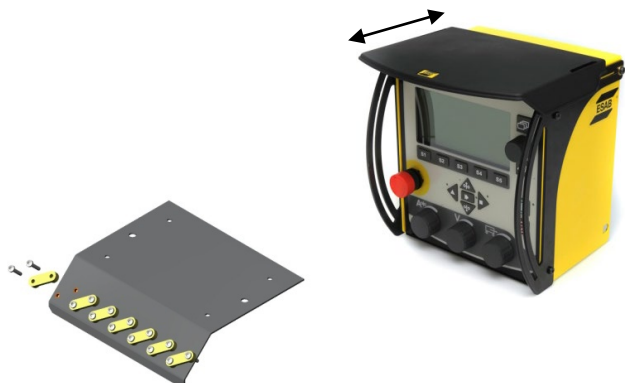
Process Controller PEK 0460 504 880

## 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



ESAB / [esab.com](http://esab.com)

