

**USER'S MANUAL
LONGSEAM CONTROLLER, TYPE 4005**



Version C. July 2009

Subject to modification without notice.

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IMPORTANT SAFETY ADVICE

This user's manual must be made accessible to those persons installing, operating and maintaining the control unit.

In order to understand this user's manual, the user must be knowledgeable about welding and its potential dangers at a level similar to that of a professionally trained welder.

EU declaration of conformity



EU declaration of conformity

Producer	
Company name:	Migatronik Automation A/S
Address:	Knøsgaardvej 112
	DK-9440 Aabybro, Denmark
Phone number:	(+45) 96 96 27 00
Internet:	www.migatronik-automation.dk

hereby declares that

Machine/control unit	
Make:	Longseam controller
Type:	4005
Product no.:	76114005-1

is produced in accordance with the regulations contained in the EU-directive from June 14th 1989 on approximation of the laws of the EU member states with regards to machinery (89/392/EEC, changed through 91/368/EEC and 93/44/EEC) with special reference to the directive's appendix I on important health and safety requirements pertaining to construction and machine production (see Danish Labour Inspectorate's order no. 561 from June 24th 1994).

A handwritten signature in black ink, appearing to read "Keld Kjeldgaard".

Keld Kjeldgaard

5/7-2006

General description

The longseam controller type 4005 has been designed for use with Migatronic's MIG/MAG, TIG and PLASMA welding machines when welding straight seams with Migatronic's line routings and longseam machines.

The control unit controls the torch as it moves along the joint, and it activates/deactivates the welding arc.

The following standard connections are located at the back of the control unit:

- 6-pole starting connection for welding machine start-up and connection to the welding arc signal.
- 19-pole connection for wiring of various I/O such as stop switches, welding gun lifting device (optional) etc.
- 4-pole connection for wiring of 3-phased induction motor.
- 220 - 240V~ mains supply with appliance cable.

Furthermore, the following connections may be installed at the back of the control unit (optional):

- 6-pole starting connection for wiring a second welding machine or the reticle of a third part.
- 28-pole remote control connection for signals used for remote control.

The welding machine and, if applicable, the cold wire feeding unit are activated and deactivated through two-stroke keying.

Two-stroke keying means that welding arc and wire are activated when the " ARC START" output is activated, and deactivated once the signal disappears.

The control unit is activated as follows:

Activate the control unit using the main switch on the back of the unit.

Undo the emergency stop by turning the knob. Press the MIGATRONIC AUTOMATION logo in the middle of the display in order to enter the alarm menu. Press RESET in order to reset the emergency stop.

Activate the control unit by pressing START.

Pin 2&6 on the plug " ARC START 1 " will be closed by a relay signal.

Usually, this signal is used to activate the welding machine or, if applicable, a cold wire feeding unit.

Once the control unit has been activated, the red STOP-button lights up.

Depending on the control unit setting, the platen now moves to the start sensor. The green START-button starts blinking, indicating that the control unit is now ready to activate the welding arc.

Press START again in order to activate the welding arc and make the platen move at the set welding speed.

Alternatively, the control unit may be programmed to initiate welding in the respective platen position.

When the platen reaches the stop sensor, the welding process is halted and the platen returns to the start sensor.

Alternatively, it may be programmed to halt the cycle when reaching the stop sensor, whereby the next welding cycle will take place in the opposite direction.

FUNCTIONAL DESCRIPTION

Functions on the control unit front

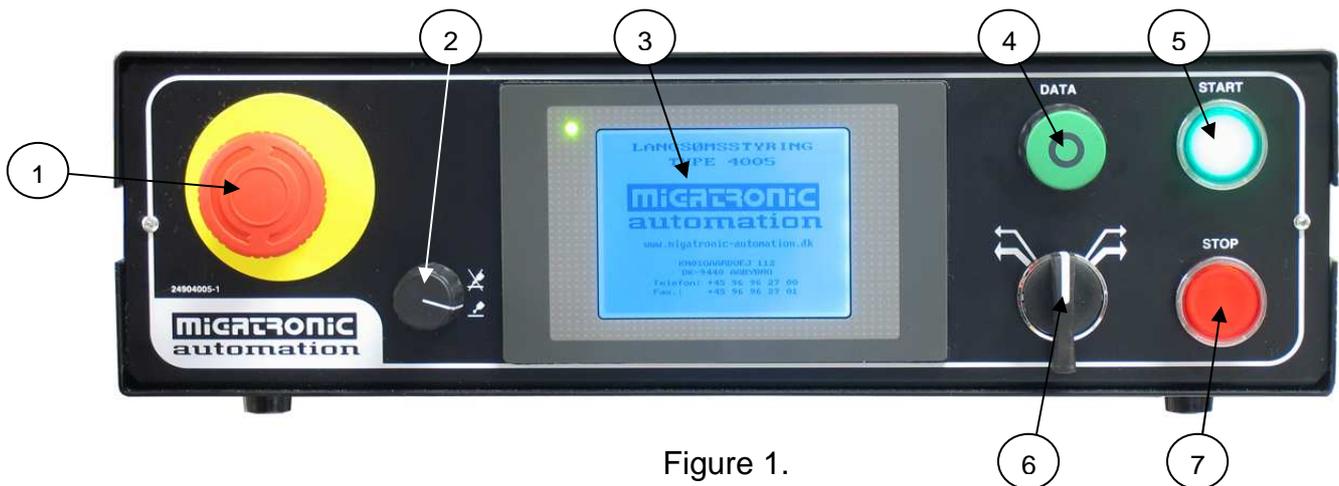


Figure 1.

Description of figure 1:

- 1: Emergency stop. Halts all dangerous movements and actions, e.g. welding platen, torch and welding arc.
- 2: Welding On/Off. Cycle without welding arc. In position  the welding arc is deactivated during operation. In position  the welding arc is activated during operation.
- 3: The secondary functions of the control unit are operated through the front display. Use the DATA-button to navigate through the display menus (point 4). When activating the control unit, the MIGATRONIC AUTOMATION logo is displayed. Press the logo to enter the menu.
- 4: DATA-button with two functions. If you want to change a value, turn the button in order to move the arrow to the parameter in question. Press the button in order to enter the data-change-function. Turn the button to change data. Press the button again, once the wanted value is displayed. The setting is now saved.
- 5: START-button. This button lights up, when the control unit is ready for activation. Press this button to initiate the cycle. If the function "search start sensor" has been selected, the platen will position itself by the start sensor. When reaching the start sensor, the platen stops and the button blinks. Press the button in order to continue the cycle.
- 6: Manual ranking of the welding plate. Use the rotary switch to position the welding platen manually. When turning the switch, the platen will start moving slowly. If the switch is depressed for a longer period of time, the speed increases step-by-step until reaching maximum speed. The button can only be activated when the cycle has been completed and the emergency stop has been reset.
- 7: STOP-button. This button lights up, when the cycle is running. Use this button to halt the cycle temporarily. Press this button to stop the machine completely. Press the button, until it lights up constantly, in order to reset the cycle.

Connections on the control unit back

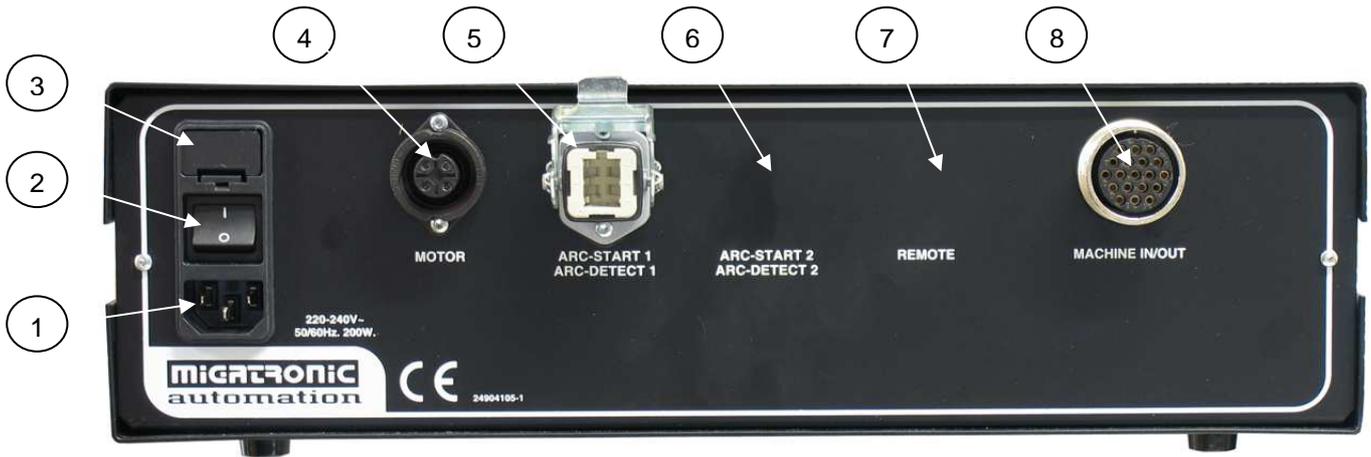


Figure 2.

Description of figure 2:

- 1: Mains connection 220-240V~ through appliance plug. Requires earth terminal.
- 2: Main switch for the control unit. 1 = Activated 0 = Deactivated
- 3: Main fuse for the control unit. When replacing the fuse, tilt the fuse clip by pressing the locking pin outwards, at the same time pulling out the fuse clip. Make sure that the mains cable has been detached from the control unit before replacing the fuse.

- 4: Motor connection. Motors of the following characteristics may be used:
3x230~ / max 0.37Kw.

Pin connections:

1: Phase L1.

2: Phase L2.

3: Phase L3.

PE: Earth terminal/connected to cabinet

- 5: Arc Start 1 / Arc Detect 1. Connection to the welding machine keying input. This plug sends out a relay signal that may be used to activate a welding machine or another control unit within the installation. Additionally, this plug passes on welding arc signals to the control unit from welding arc boxes etc.

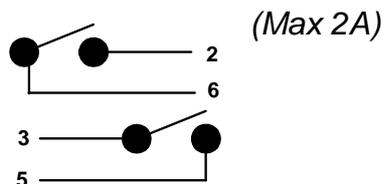
Pin connections:

2: Relay output start welding

6: - " -

3: Input: Welding arc* established.

5: - " -



Other pins are not connected.

- 6: Arc start 2 / Arc Detect 2. As point 5. This plug is optional.

- 7: Remote. This plug offers the possibility of sending out various signals, e.g. ext. start, ext. stop, cycle running, welding gun down, welding gun up. This plug is optional and is installed according to customer needs.
- 8: Machine in/out. This plug connects the control unit with the sensors and actuating devices of the automatic welder.
Pin connections:
A: Foot pedal, front spanners.
B: Foot pedal, rear spanners.
C: Stop switch sensor, left.
D: Work sensor, right.
E: 24V DC following emergency stop.
F: Step welding sensor.
G: Mandrel locked.
H:
J: Work sensor, left.
K: Stop switch sensor, right.
L: 24V DC.
M: 0V
N: Magnet valve, front spanners.
P: Magnet valve, rear spanners.
R: Torch in top position (optional).
S: Torch in welding position (optional).
T: Magnet valve, torch up (optional).
U: Magnet valve, torch down (optional).
V: Earth terminal.

DISPLAY OPERATION

General information about display operation

Use the DATA-button to navigate through the menus. Move the arrow by turning the DATA-button. When the arrow points at the wanted menu item, press the DATA-button.

Entry page



Figure 3.

Upon activating the control unit, a page featuring the control unit type number and the MIGATRONIC AUTOMATION logo is displayed.

If the control unit has not been utilised for a longer period of time, it automatically returns to this entry page.

Press the logo, or the DATA-button, in order to enter the main menu.

The figure below depicts the control unit's menu structure.

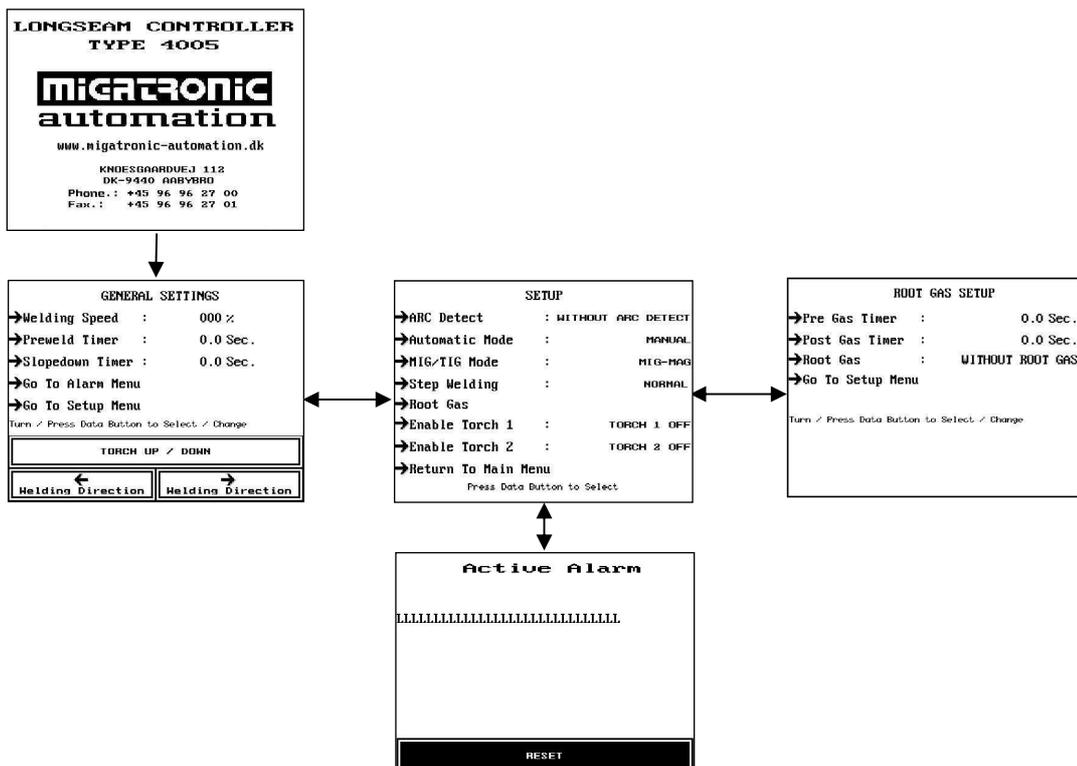


Figure 4.

General settings

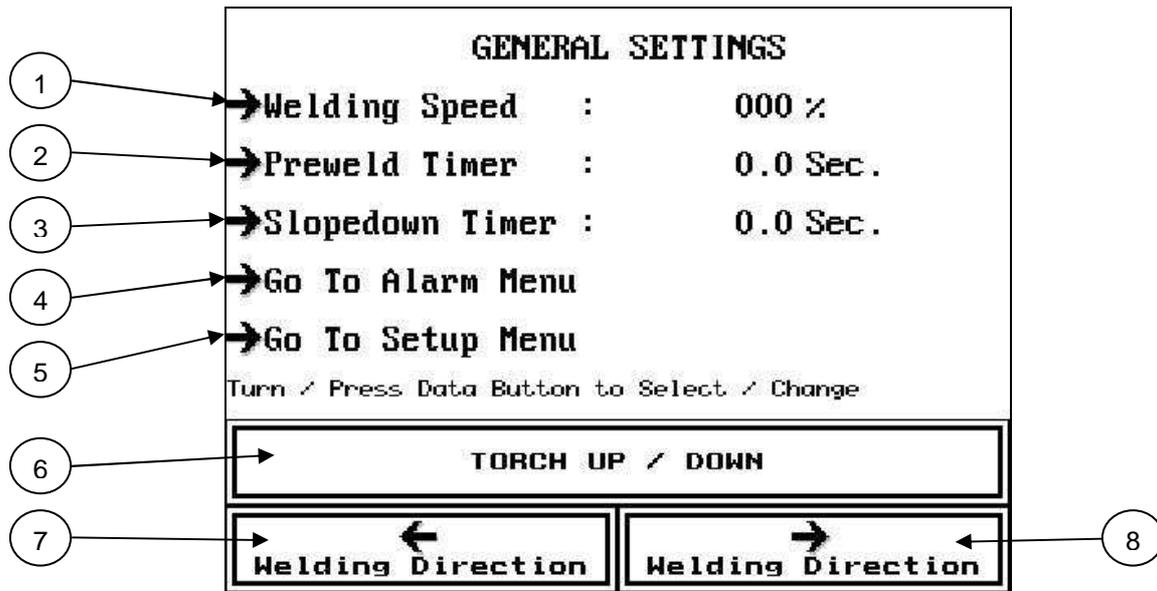


Figure 5.

On this page, use the DATA-button, or the buttons on the side, in order to set up the following parameters:

- 1: Welding speed. Selected as a percentage between 0 and 100.
The ideal speed depends on gearing and max. r.p.m. of the motor.
- 2: Prewelding timer. The amount of time elapsed between welding arc establishment and initial welding torch movements.
- 3: Slopedown timer. The amount of time elapsed between start signal release and the welding power reaching the minimum value.
In Migatronic welding machines, this function is controlled by the power source. When using a type 4005 control unit, set the value slightly higher than that of the welding machine in order to ensure that the welding arc is completely turned off before the torch is lifted or returned to its initial position.
- 4: Go to Alarm Menu. When the arrow points at this line and you press the DATA-button, a page showing currently active alarms is displayed. In case of an alarm error, this page is automatically displayed, providing an alarm status overview.
- 5: Go To Set-up Menu. Upon activation, a new menu is displayed, showing various function settings.
- 6: Welding torch up/down. Press this button to lift or lower the torch when no welding arc is in use.
- 7: Welding direction, left. Press this button to select the welding direction "from right to left".
- 8: Welding direction, right. Press this button to select the welding direction "from left to right".

Active Alarm display



Figure 6.

This page shows any errors that might have occurred in the control unit. When the error has been rectified, it disappears from this list without the user having to acknowledge the error. Certain errors, e.g. emergency stops and welding errors, are subject to user acknowledgement.

Function settings

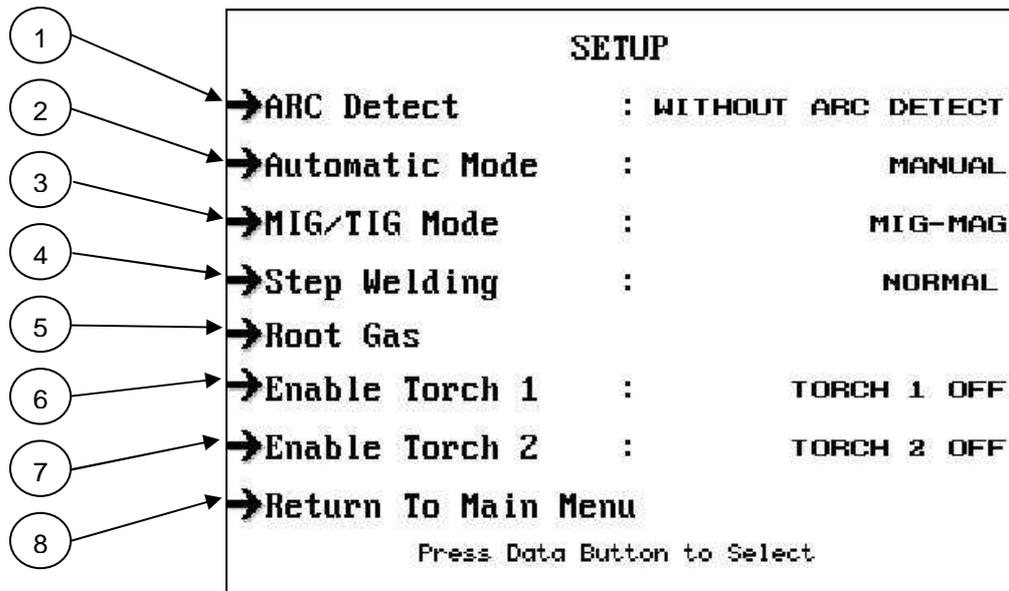


Figure 7.

Use the DATA-button to set up the following parameters:

- 1: Welding arc detect. Press the DATA-button to switch to another function. Choose between WITH WELDING ARC DETECT and WITHOUT WELDING ARC DETECT. When WITH WELDING ARC DETECT has been selected, the control unit awaits a signal from the welding arc control indicating that the welding arc has been activated. Subsequently, the prewelding timer is activated. When WITHOUT WELDING ARC DETECT has been selected, the prewelding timer is activated as soon as the welding machine has received a GO-signal. No consideration is given to gas preflow time, if applicable, or a slightly weak or missing ignition.
- 2: Automatic Mode. Choose between MANUAL, AUTOMATIC and AUTO M SEARCH.

In MANUAL mode, the welding process begins at the position of the torch. The platen continues until it meets the stop sensor, and the cycle is ended.

In AUTOMATIC mode, the welding process also begins at the position of the torch. The platen continues until it meets the stop sensor. Once the welding arc has been switched off, the platen returns to the start sensor, and the cycle is ended.

In AUTO M SEARCH mode, the platen starts by moving against the welding direction until it detects the start sensor. The platen stops and the START-button blinks. Press the START-button again to initiate the welding process. The platen moves along until it meets the stop sensor. Once the welding arc has been switched off, the platen returns to the start sensor, and the cycle is ended.

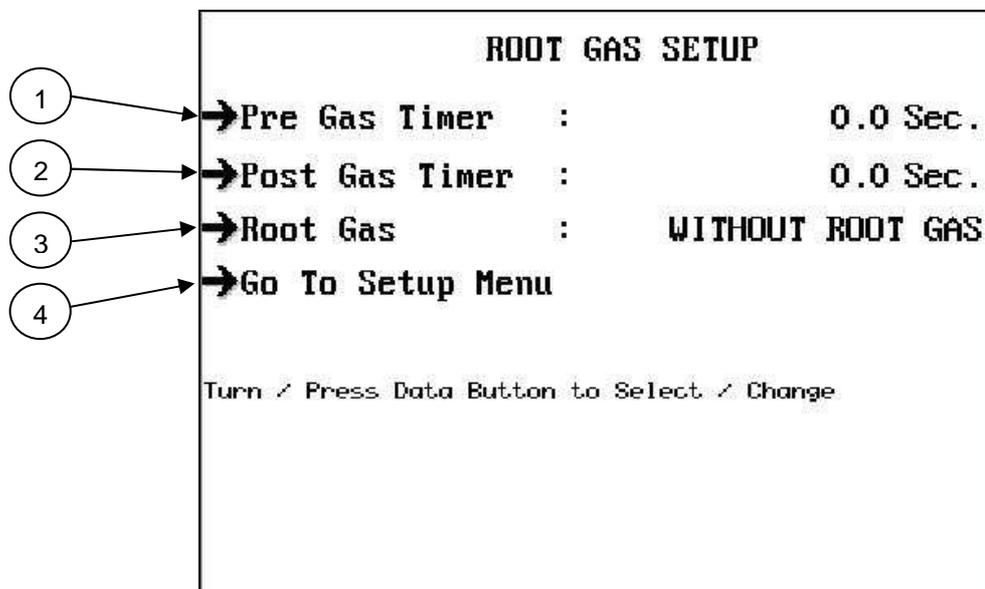
- 3: MIG/TIG WELDING. Within this menu, you can choose between MIG and TIG/PLASMA welding. The difference between these two welding functions is the way the welding process is ended.
In MIG mode, the platen stops moving, once it reaches the stop sensor. Once the slopedown period has elapsed, the welding arc stops.
In TIG/PLASMA mode, the welding arc stops once the platen has reached the stop sensor, and the platen continues moving during the slopedown period, allowing power to gradually reach the minimum value.
- 4: STEP WELDING. Within this menu, you are able to choose between NORMAL or AUTOMATIC. In NORMAL mode, the control unit runs as described previously.

In AUTOMATIC mode, welding takes place when the step sensor has been activated. When the step sensor is deactivated, the platen moves in quick motion to the next welding step.

Welding is carried out as in any other welding process, involving prewelding time and slopedown time.

- 5: ROOT GAS. Only on control units with root gas control function. Press the DATA-button in this menu to enter the page, where you can set up the root gas timers.
- 6: WELDING ARC TORCH 1. Only on control units that allow control of two torches. Press the DATA-button to switch between with/without welding. The control button WELDING ON / OFF on the front of the control unit disconnects both torches simultaneously.
- 7: WELDING ARC TORCH 2. Only on control units that allow control of two torches. Press the DATA-button to switch between with/without welding. The control button WELDING ON / OFF on the front of the control unit disconnects both torches simultaneously.
- 8: RETURN TO MAIN MENU. Return to the page containing general settings.

Root gas setting



On this page, you can set up the root gas pre- and post-gas timers.

- 1: PRE-GAS TIMER. Use this menu option to set up the pre-gas timer. The timer is activated, once the torch reaches its start position and you press the START-button.
- 2: POST-GAS TIMER. Use this menu option to set up the post-gas timer. The timer is activated, once the welding session has ended and the welding arc has been switched off.
- 3: ROOT GAS. Choose whether or not to turn on the root gas during welding.
- 4: GO TO SETUP MENU. Return to the setup menu.

FUNCTIONAL DESCRIPTION OF SENSORS

You may attach four sensors to the control unit; two stop sensors and two work sensors. The two stop sensors do not require adjusting. They only serve the purpose of protecting the mechanical parts and have no influence on unit functions.

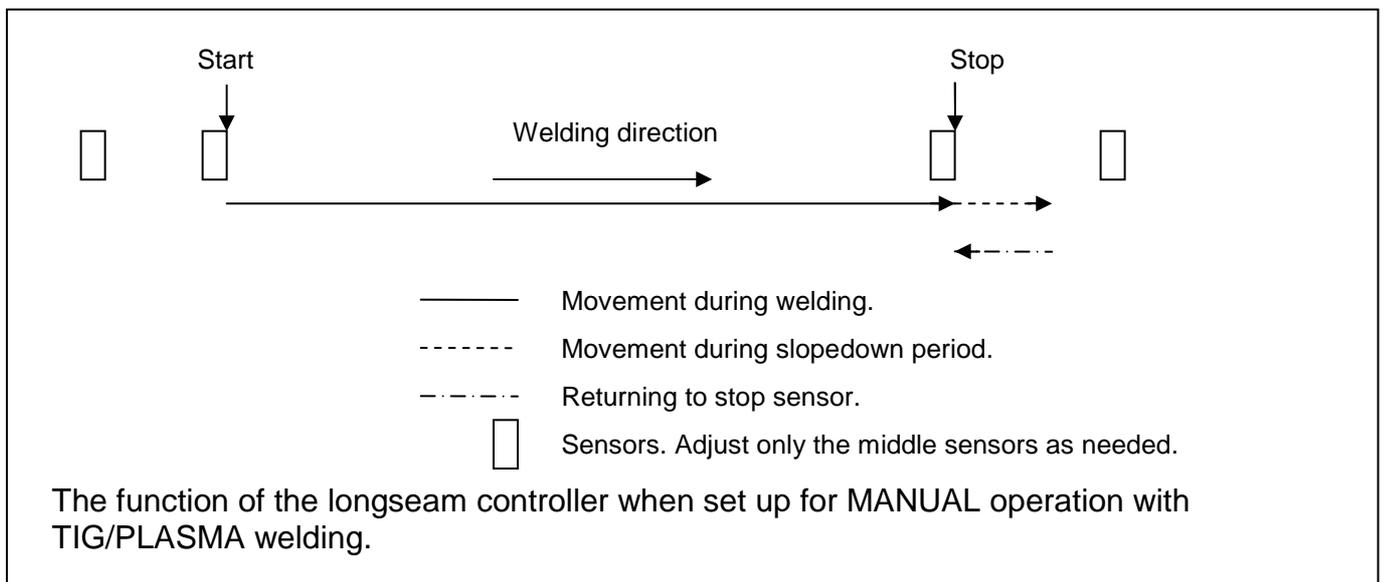
The two work sensors act as start and stop sensors. Depending on the chosen welding direction, either the left or the right sensor acts as either start or stop sensor. The examples contained on the following pages are based on the assumption that welding takes place from left to right.

Here, the left sensor is the start sensor and the right one is the stop sensor.

The examples include both TIG/PLASMA and MIG/MAG welding processes.

The difference between these two modes is, seen from a controlling point of view, that in TIG/PLASMA welding processes, the platen continues its movement during the slopedown period, whereas in MIG/MAG welding processes, it does not.

Manual operation with TIG/Plasma

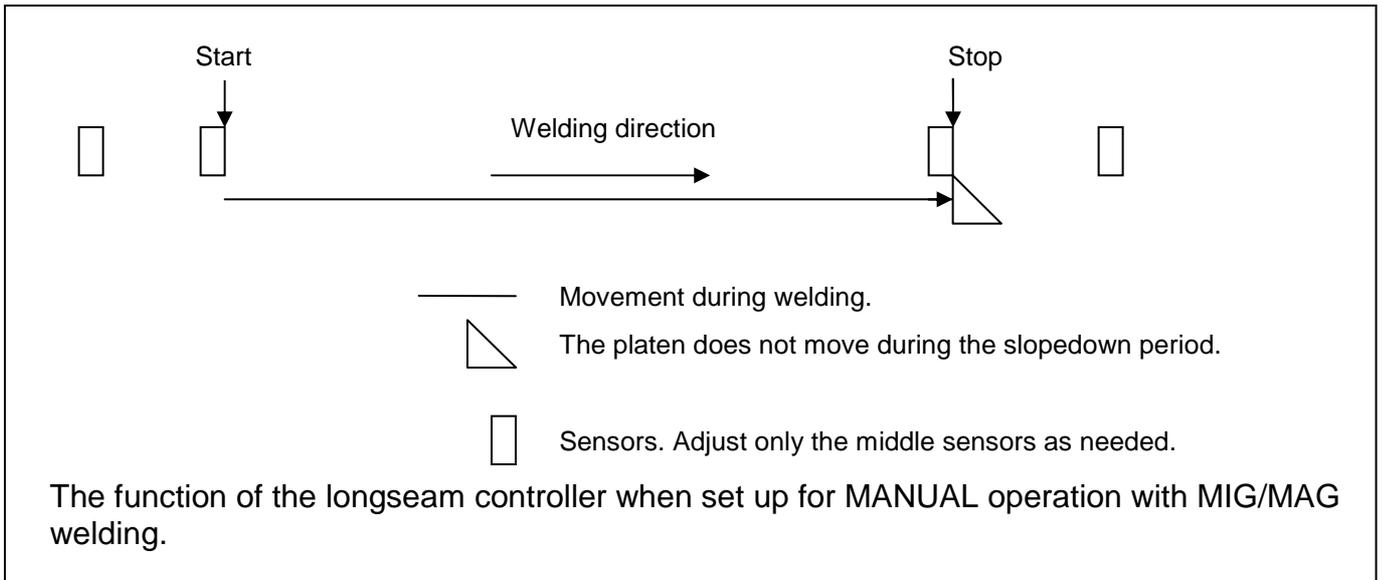


Manual operation with TIG/PLASMA welding. The welding process starts when you press START, and the platen moves along until it hits the stop sensor. The start signal for the welding machine is disconnected.

The platen continues moving until the welding arc has been switched off.

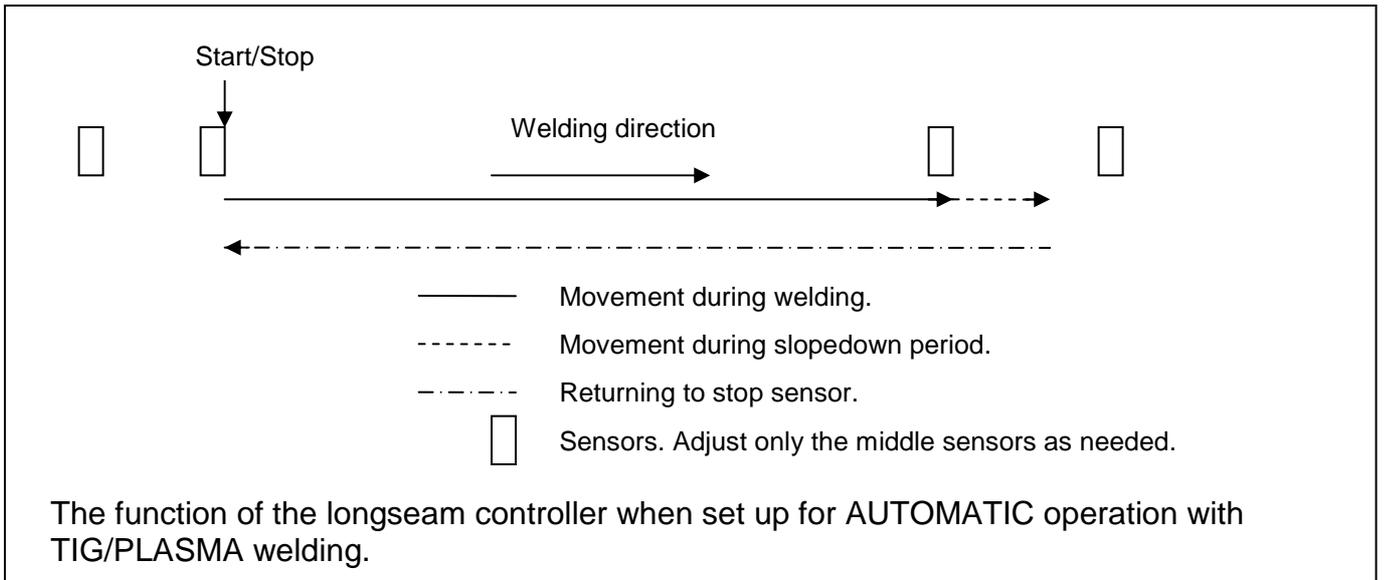
Once the welding arc has been switched off, the platen returns to the stop sensor.

Manual operation with MIG/MAG



Manual operation with MIG/MAG welding. The welding process starts when you press START, and the platen moves along until it hits the stop sensor. The start signal for the welding machine is disconnected.
The platen stops straight away.

Automatic operation with TIG/Plasma

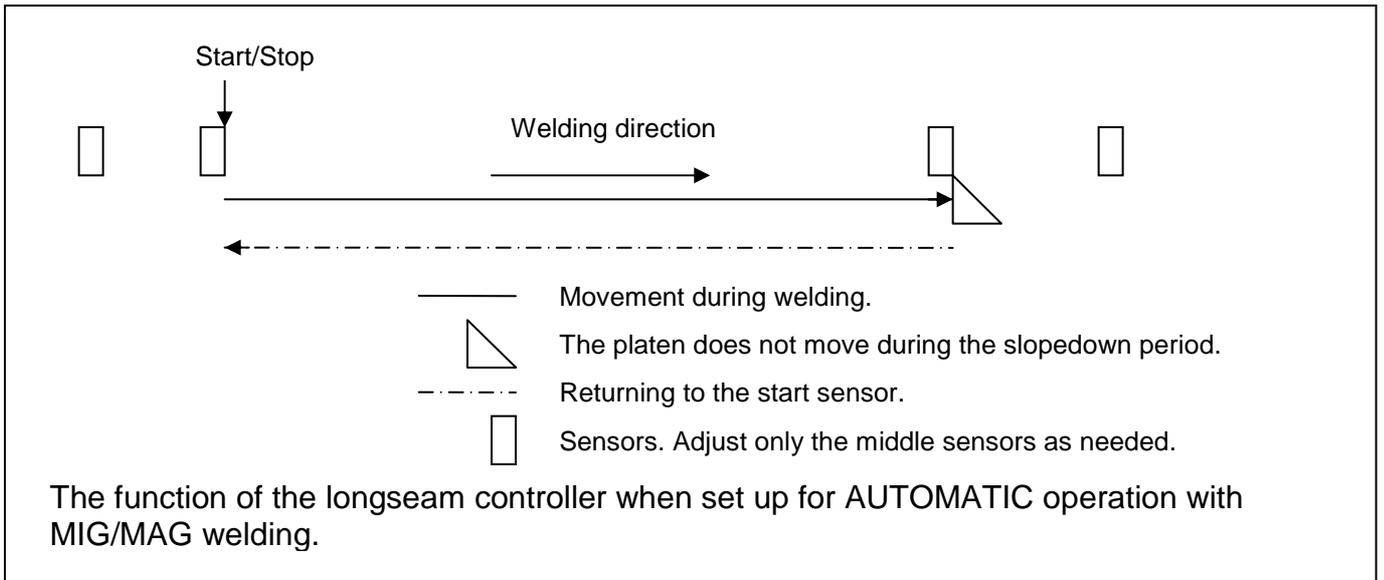


Automatic operation with TIG/PLASMA welding. The welding process starts when you press START, and the platen moves along until it hits the stop sensor. The start signal for the welding machine is disconnected.

The platen continues moving during the slopedown period.

Once the welding arc has been switched off, the platen returns to the start sensor.

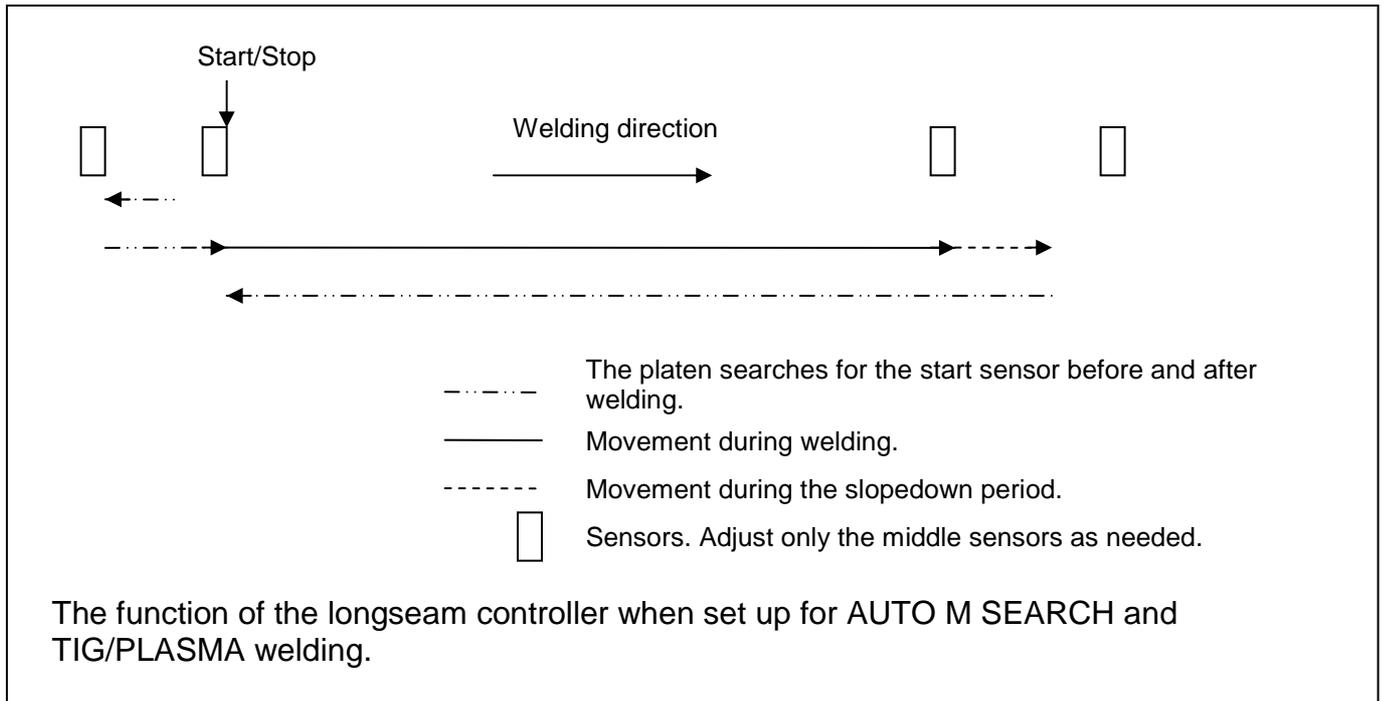
Automatic operation with MIG/MAG



Automatic operation with MIG/MAG welding. The welding process starts when you press START, and the platen moves along until it hits the stop sensor. The start signal for the welding machine is disconnected.

The platen does not move during the slopedown period. Once the welding arc has been switched off, the platen returns to the start sensor.

Automatic mode with search function and TIG/Plasma



Automatic operation with search function and TIG/PLASMA welding.

When you press START, the platen moves towards the stop switch sensor until it reaches the start sensor.

If the platen reaches the stop switch sensor before the start sensor, it starts moving in the opposite direction as from the stop switch sensor.

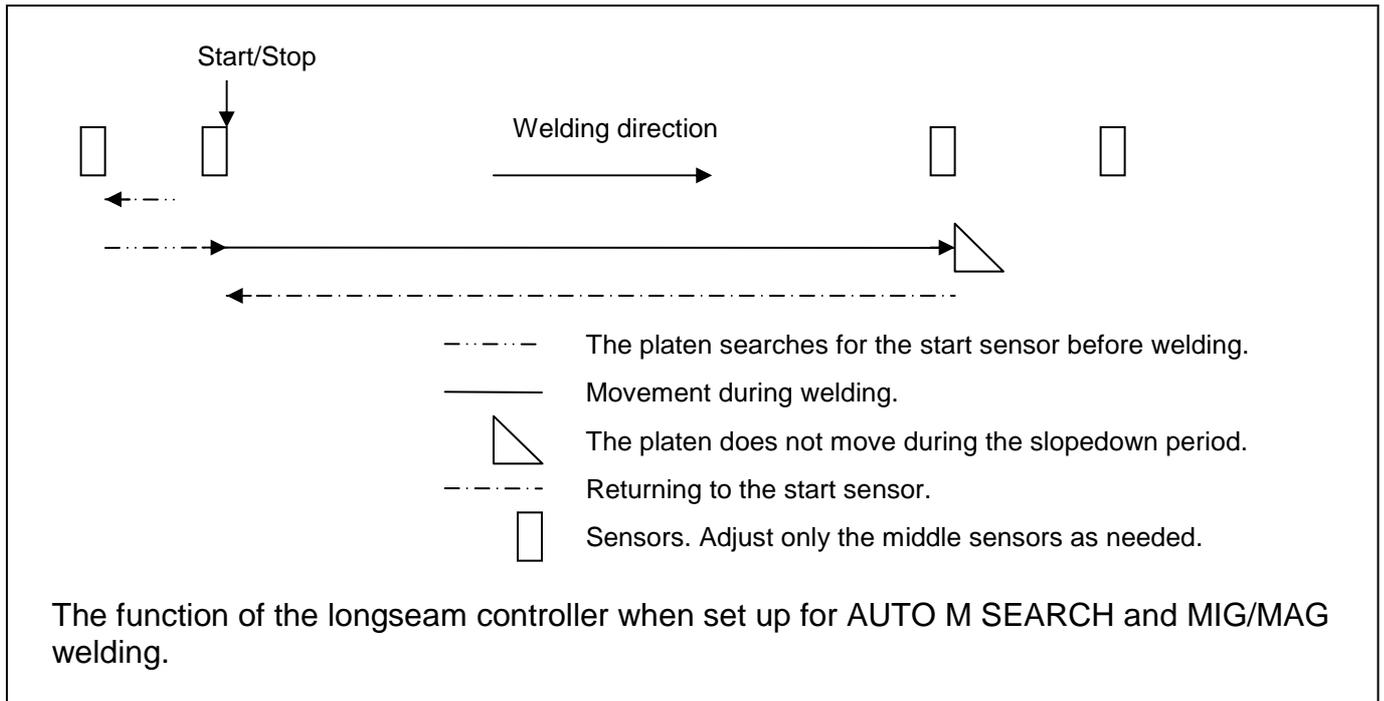
The platen now searches in the welding direction instead. When it reaches the start sensor, it stops and the START-button blinks.

When you press START, the welding process starts and the platen moves along until it hits the stop sensor.

The start signal for the welding machine is disconnected. The platen continues moving during the slopedown period.

Once the welding arc has been switched off, the platen returns to the start sensor.

Automatic mode with search function and MIG/MAG



Automatic operation with search function and MIG/MAG welding.

When you press START, the platen moves towards the stop switch sensor until it reaches the start sensor.

If the platen reaches the stop switch sensor before the start sensor, it starts moving in the opposite direction as from the stop switch sensor.

The platen now searches in the welding direction instead. When it reaches the start sensor, it stops and the START-button blinks.

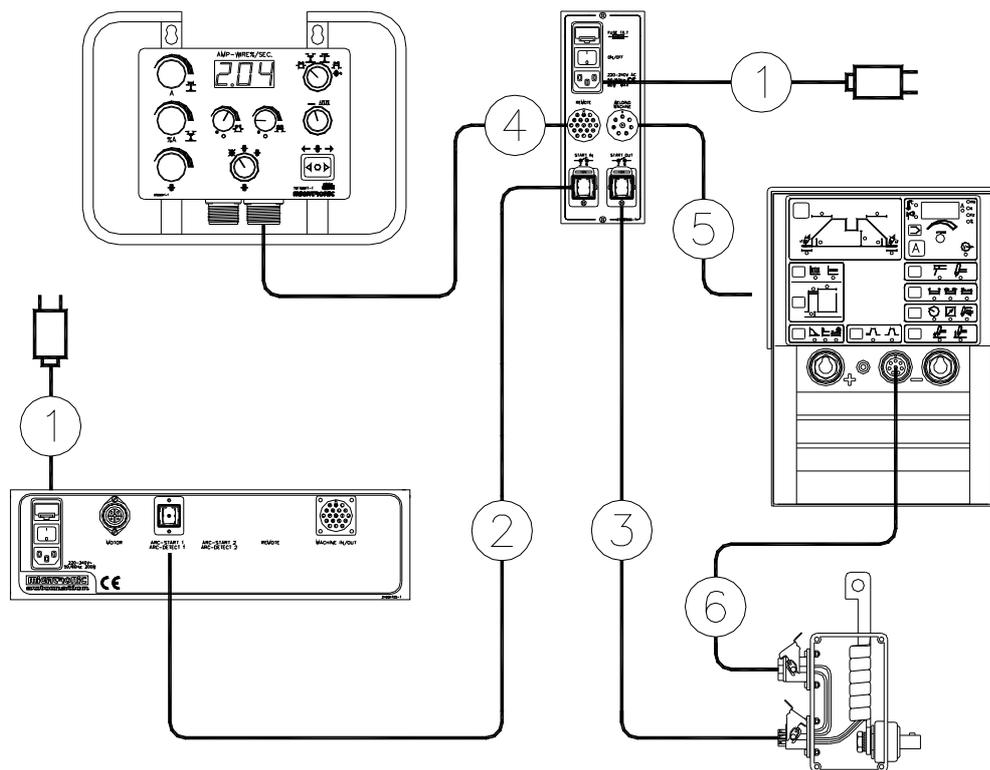
When you press START, the welding process starts and the platen moves along until it hits the stop sensor.

The start signal for the welding machine is disconnected. The platen does not move during the slopedown period.

Once the welding arc has been switched off, the platen returns to the start sensor.

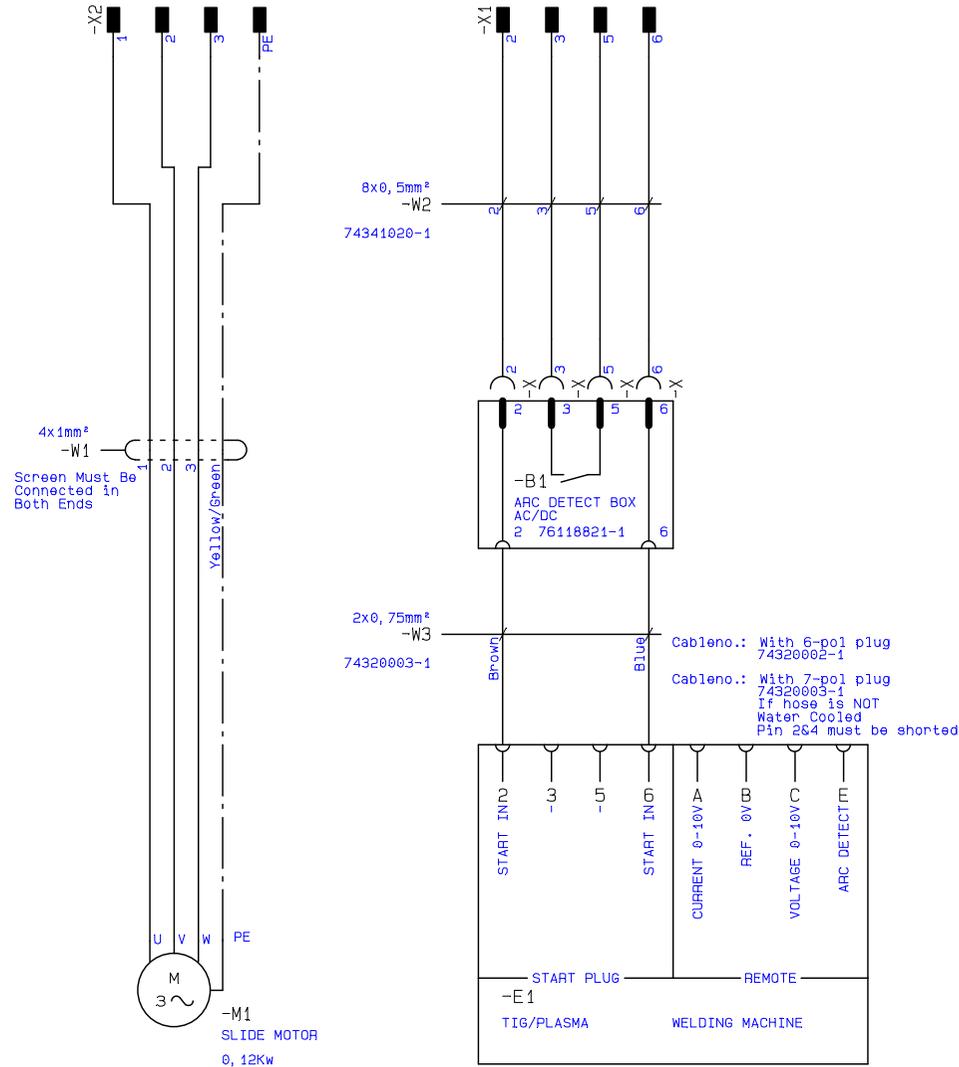
CONNECTION SAMPLE

Example of connection to Navigator 3000 with external welding arc box

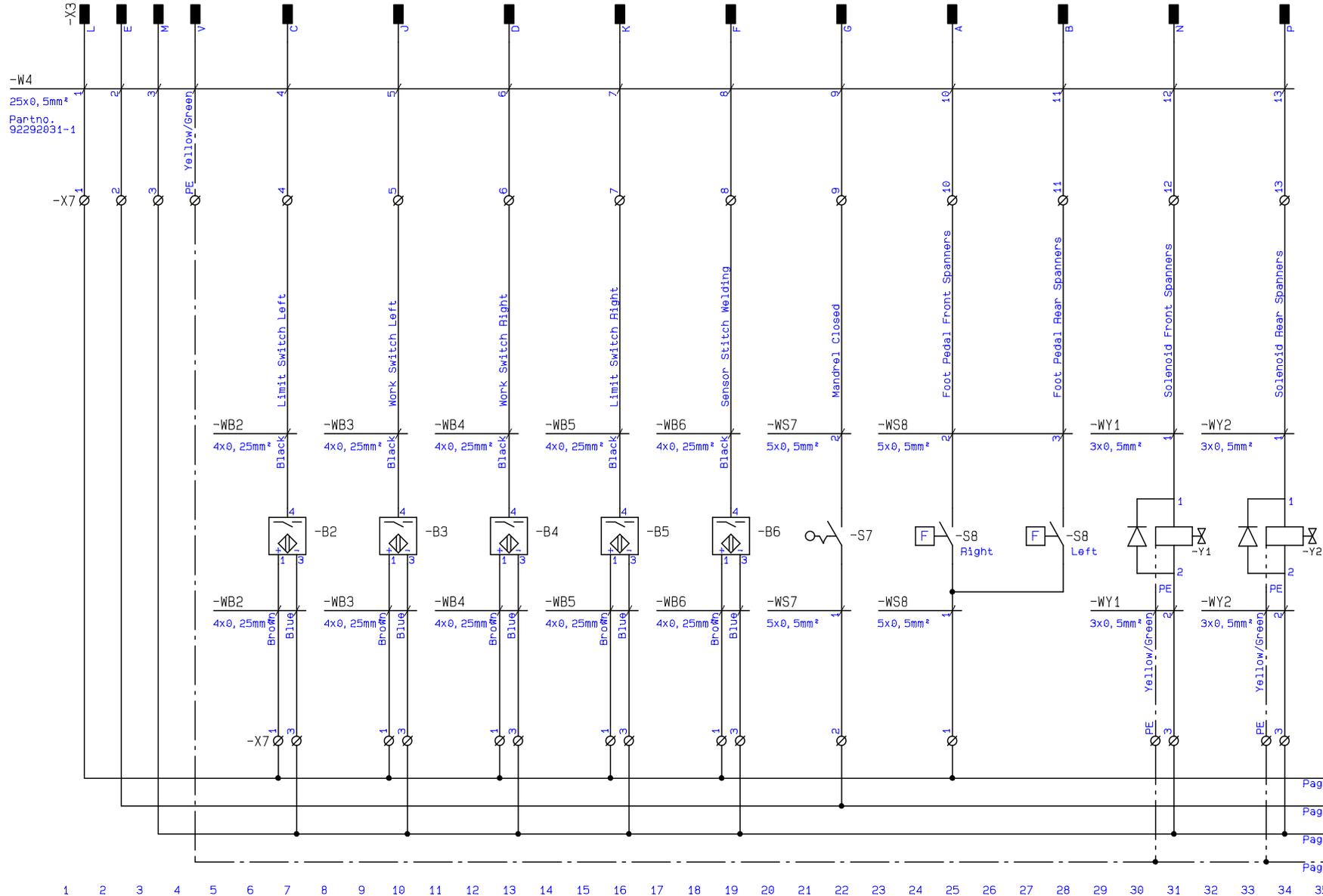


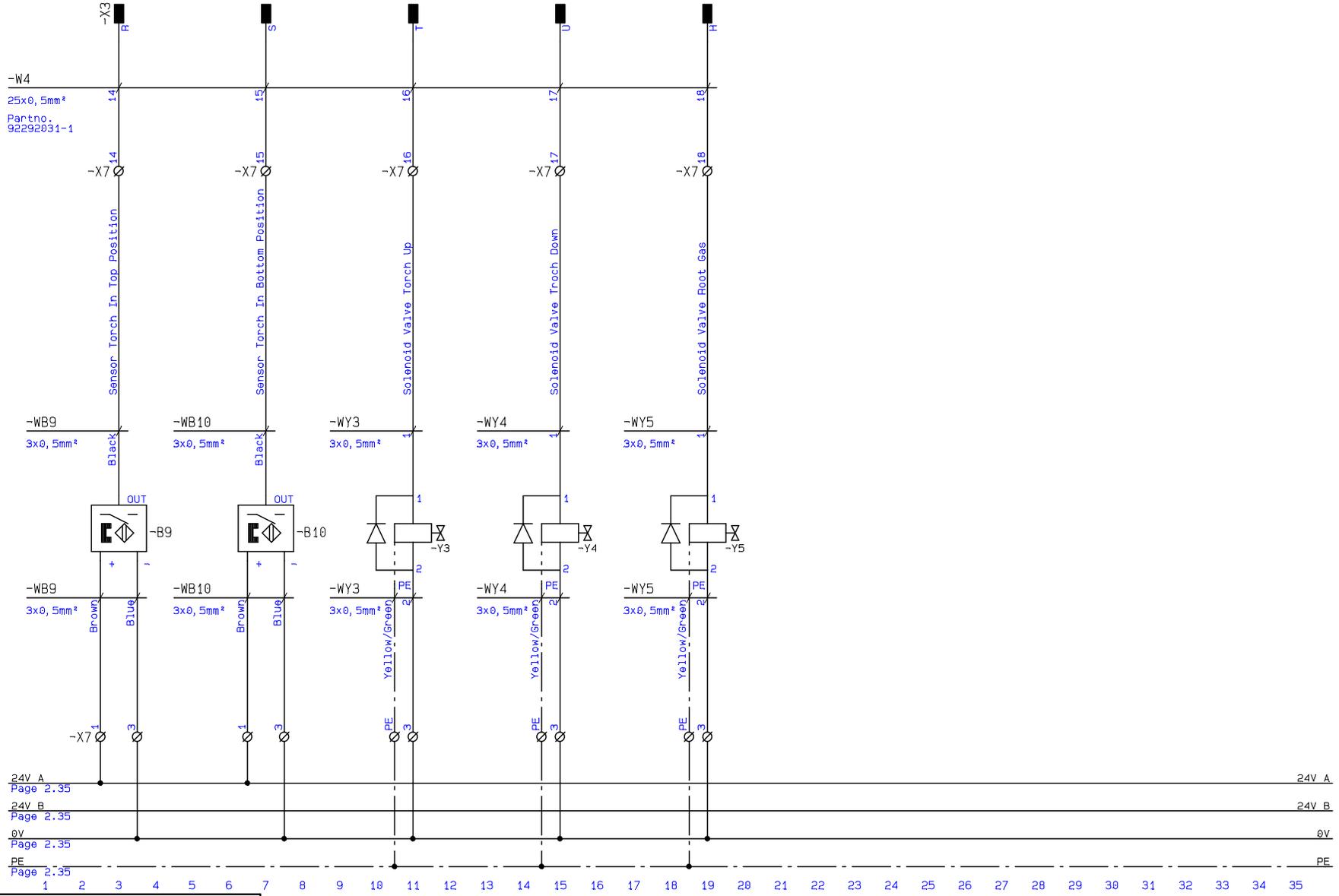
- 1: 220-240V~ 50/60Hz. Connect to plug with EARTH TERMINAL.
Mains cable with appliance plug and earth terminal, 5 meters. 92260150-1.
- 2: Keying signal for KT-4 unit, e.g. swivel table controller. Pin 2&6 is the keying signal in the plug. The longseam controller receives the welding arc signal through pin 3&5 from the cold wire box KT-4.
Inter-connecting cable no. 74341021-1 may be used. Standard: 5 meters.
- 3: Inter-connecting cable from the cold wire box KT-4 and the welding arc box. Start welding is pin 2&6, and the cold wire box KT-4 receives the welding arc signal through pin 3&5 from the welding arc box. Only applicable to DC welding. J2 on the KT-4 control circuit board must be in position "Open" (see also "Jumpers and connections on KT-4 board" in the KT-4 manual).
Inter-connecting cable no. 74341020-1 may be used. Standard: 5 meters.
- 4: Connection of 8911 or KTF remote control.
Inter-connecting cable no. 74341011-0 may be used. Standard: 6 meters.
- 5: Inter-connecting cable between the cold wire box KT-4 and the welding machine.
Inter-connecting cable no. 74340003-0 may be used. Standard: 5 meters.
- 6: Welding machine start signal. Pin 2&6 is the start signal in the plug. Machines with 7-pole start plugs require a connection between pin 2&4 in the plug located by the welding machine, unless the torch is water-cooled.
*Inter-connecting cable no. 74320003-1 is used for machines with 7-pole start plug.
Inter-connecting cable no. 74320002-1 is used for machines with 6-pole start plug.
Standard: 5 meters.*

The KT-4 cold wire box must be in position  remote control.



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35





24V A
Page 2.35
24V B
Page 2.35
0V
Page 2.35
PE
Page 2.35

24V A
24V B
0V
PE



Please note that some parts within the diagrams are optional, not standard.

Problemshooting

Problem:

Solution:

No light in the 4005 controller.

Check the mains connection, the mains cable and the 0/1 switch.
Check the fuse located on the back of the longseam controller.
Disconnect the power for 30 seconds, and then connect it again.

If this does not solve the problem, contact Technical Service.

The motor does not run in manual mode.

The controller is running a cycle. Press and hold down the STOP-button until the lamp lights up constantly. The cycle has now been reset.
Make sure that the longseam controller is able to rank the platen manually.
If not, contact Technical Service.

If the longseam controller is able to run with manual ranking, carry out the following procedure:

Does the alarm menu show an error message?

If yes:

Rectify the error.

Check the following:

- That the platen is able to move freely.
- That the welding speed is sufficiently high for the motor to be able to pull effectively.
- That all plugs on the back of the controller have been installed.
- That the torch is down and the reed contact is activated.
- That the platen has reached a stop switch sensor.
- That the mandrel is closed and locked.
- That the spanners are closed.
- That the welding machine is switched on and set up for two-stroke start.
- That the bay cable is connected.

If these procedures do not solve the problem, contact Technical Service.

The platen starts but the welding machine does not.

Check the cable connecting the longseam controller's "Arc Start" plug to the welding arc controller, as well as the cable connecting the welding arc box to the welding machine's start/trig socket.

Check that the welding on/off switch is set at welding on.
If the controller is equipped with two start plugs, check that welding has not been deactivated in the SETUP menu.
You might want to short out pin 2&6 in the plug connected to the welding machine. The welding machine should now start.

Problem:**Solution:**

If it does not start at this point, check all welding machine connections and plugs.

If this does not solve the problem, contact Technical Service.

The longseam controller and the welding machine start, however, the welding machine keeps welding even after pressing stop.

Check that the welding machine is not set up for a four-stroke start.

The longseam controller activates the welding process but the platen does not move.

Check the welding arc signal on pin 3&5 in the 6-pole start plug.

List of spare parts

Longseam controller, type 4005

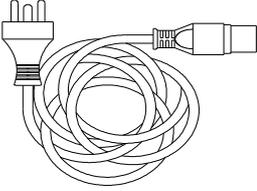
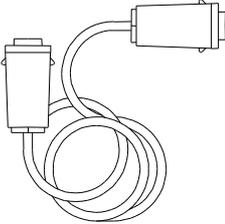
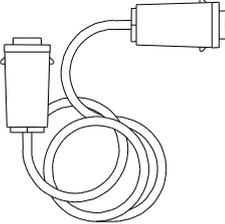
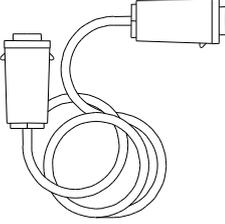
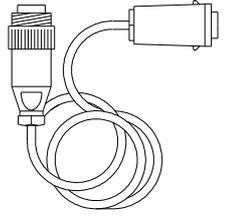
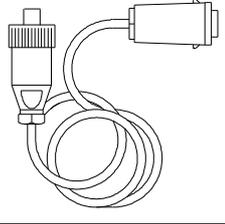
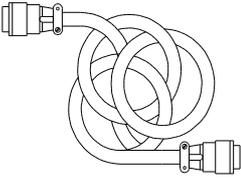


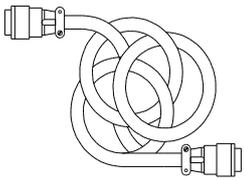
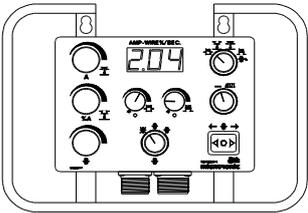
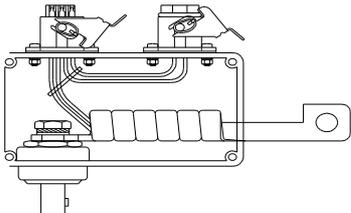
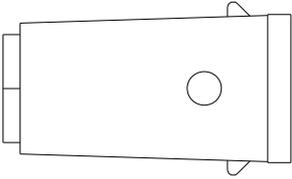
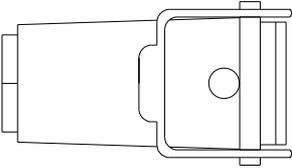
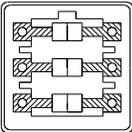
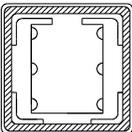
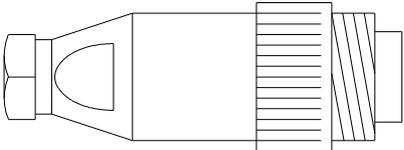
Pos. no.	Description	Product no.
1	Complete controller	76114005-1
2	Mushroom button, red Ø40	17116300-1
	Body for XB4-B	17116550-1
	Contact element, 1 break NC	17116504-1
3	Button Ø22, black matt with line	18502603-0
	Cover Ø20, black matt with line	18521303-0
	Switch 3x4 positions, Ø6mm	17120004-0
4	Operator panel, touch display	76119140-1
	Front film for operator panel	76119142-1
5	Button Ø28, without line, black matt	18503605-0
	Cover Ø28, green with black ring	18521209-0
	Encoder with switch 1-pole 6-pole plug, female	17120028-0
6	Turning handle, 3 positions, spring/return to centre	17116606-1
	Body for XB4-B	17116550-1
	Contact element, 1 end NO	17116501-1
7	Illuminated push button, main LED, green 24V	17116204-1
	Body for XB4-B	17116550-1
	Contact element, 1 end NO	17116501-1
8	Illuminated push button, main LED, red 24V	17116208-1
	Body for XB4-B	17116550-1
	Contact element, 1 end NO	17116501-1

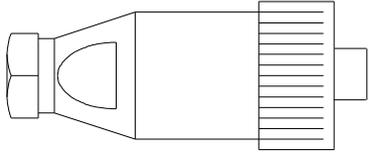


Pos. no.	Description	Product no.
1	Mains cable 2-pole + earth 5m with straight pin plug	92260150-1
2	Appliance plug with switch and 1 fuse clip	18180009-1
	Fuse clip for 18180009-1	18180008-1
	Fuse 2A-T 5x20mm	17172020-0
3	Chassis connector, female, 3-pole + earth	17200030-0
	Plug for cable fitting, male, 3-pole + earth	17210030-0
4	Chassis connector housing with rack	18200102-0
	Socket, 6-pole plug, female	18200001-0
	Housing for cable fitting	18200101-0
	Socket, 6-pole plug, male	17210001-0
5	Chassis connector, female, 19-pole	17200026-0
	Plug for cable fitting, male, 19-pole	17210026-0
6	Press rivet, feet 16x6.5mm	45050061-0

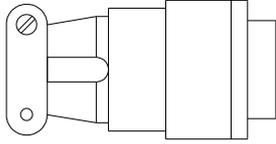
Accessories

	<p>Mains cable with appliance plug and earth terminal. Standard length: 5 meters. No. 92260150-1</p>
	<p>6-pole cable between controller and welding machine. Male/female plug. Only pin 2&6 fitted. No welding arc signal. Standard length: 5 meters. No. 74320002-1</p>
	<p>6-pole cable between controller and welding arc box 76118817-1. Fully fitted. Male/female plug. Standard length: 5 meters. No. 74341020-1</p>
	<p>6-pole cable between controller and other control unit, e.g. KT-4 cold wire box. Fully fitted. Male/female plug. Standard length: 5 meters. No. 74341021-1</p>
	<p>6-pole cable between controller/welding arc box and Pilot 1600/2400 or Commander/Navigator TIG welding machine. Male/female plug. Only 2&6 connected. Connection between 2&4 in oval plug is removed if the welding machine features water-cooling. Standard length: 5 meters. No. 74320003-1</p>
	<p>Adapter/extension cable from Pilot 1600/2400 or Commander/Navigator TIG welding hose (7-pole, female) to 6-pole, male. Pin 2&6 connected. Standard length: 5 meters. No. 74320018-1</p>
	<p>8-pole inter-connecting cable between KT-4 and welding machine, or between 8911 remote control and welding machine. Male/male plug. Fully connected. Standard length: 5 meters. No. 74340001-0</p>

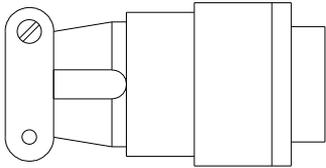
	<p>19-pole inter-connecting cable between KT-4 and 8911 remote control. Male/male plug. Fully connected. Standard length: 6 meters. No. 74341011-0</p>
	<p>Puls remote control 8911. Regulation of wire speed and welding power. Inter-connecting cable 74341011-0 required. No. 76118911-1</p>
	<p>Welding arc box. For use in installations where welding machine does not produce welding arc signals. Only for DC welding. Welding power > 20 ampere. No. 76118817-1</p>
	<p>Housing for multi-plug. For use with "ARC START" on longseam controller, and "START-IN" and "START-OUT" on cold wire box KT-4. No. 18200101-0</p>
	<p>Housing for multi-plug. For cable extension use. No. 18200103-0</p>
	<p>6-pole male insert plug. For use with "ARC START" on longseam controller, and "START-IN" and "START-OUT" on cold wire box KT-4. Also used for welding machines' "START-INPUT". No. 17210001-0</p>
	<p>6-pole, female insert plug. For use with extension cable and multi-plug housing 18200103-0. No. 17200001-0</p>
	<p>7-pole, male multi-plug. Used for Pilot 1600/2400 start/stop etc. No. 17210057-0</p>



7-pole, female multi-plug. E.g. used for extension cable between Pilot 1600/2400 or Commander/Navigator welding hose and the KT-4 "START-IN" plug.
Nr. 17200057-1



8-pole multi-plug. Used between KT-4 and welding machine.
No. 17210024-0



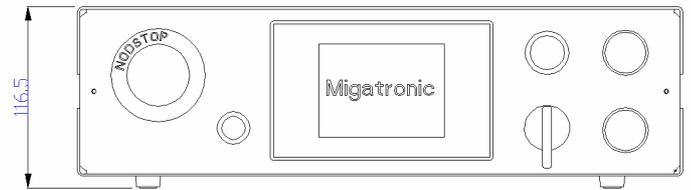
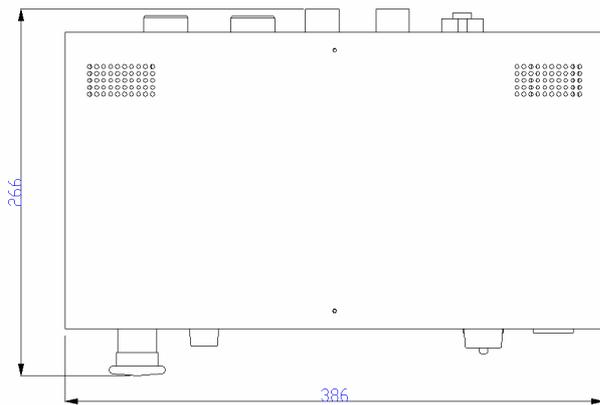
19-pole multi-plug. E.g. used for connecting the KT-4 remote control input.
No. 17210026-0

Technical data

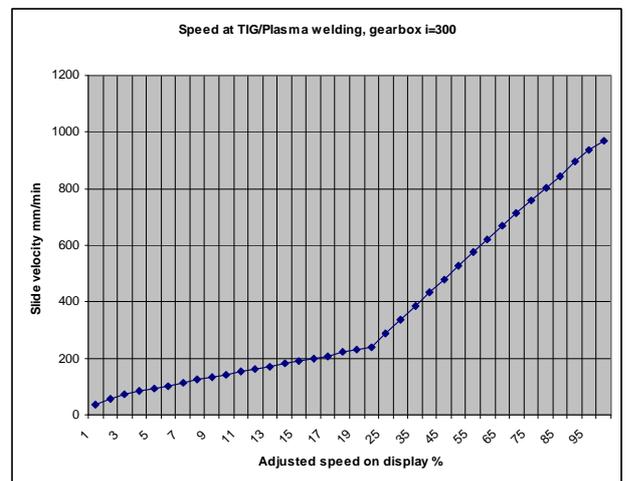
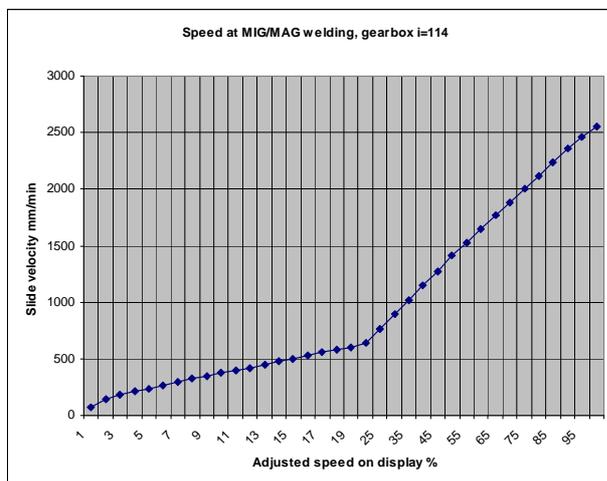
General

Mains supply:	220 - 240V~ 50/60Hz
Mains connection:	10A with earth terminal
Max. power:	500 Watt
Welding speed:	75 – 900 mm/min, or 200 - 2300 mm/min, depending on motor type
Pre-welding time:	0.0 – 9.9 sec.
Slopedown time/crater filling:	0.0 – 9.9 sec.
Nominal motor power:	0.12Kw
Nominal motor voltage:	3x230Vac
Sensor input:	24VDC
Magnetic valves:	24VDC / 2W
Welding arc signal:	Potential-free relay signal (24VDC)
Signal/begin welding:	Potential-free relay signal 5A / 250V~ / AC1
Weight:	5.8 kg.

Measurements:



Note that the motor torque is very low at low speeds. It might therefore be necessary to adjust the welding parameters in order to obtain a higher welding speed and prevent instability.





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