# OPTIONAL 24VDC POSITIONING LASER

SAFETY INSTRUCTIONS FOR OPERATING AND MAINTENANCE

No P07056138



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Assembly instructions

REF: 8695 4197

**Original instructions** 



Thank you very much for the trust you have shown by choosing this piece of equipment. It will give you trouble-free service if it is used and maintained as recommended.

Its design, component specifications and manufacturing are in accordance with applicable European directives.

Please refer to the CE declaration enclosed to identify the directives applicable to it.

The manufacturer shall not be liable for any combination of parts not recommended by it.

For your safety, please follow the non-limitative list of recommendations and obligations, a large part of which are included in the Labour Code.

Please inform your supplier if you find any error in this instruction manual.

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## **Table of contents**

A - SAFETY INSTRUCTION	1
1 - Particular safety instructions	1
2 - Residual risks	1
B - DESCRIPTION	2
1 - Laser specifications	2
2 - Composition of supply	3
C - USE	3
1 - Assembly	3
D - SPARES	4
1 - Spare parts	4
PERSONAL NOTES	6

## INFORMATION

This technical literature is intended for the following machines or products:

- P07086086NG 
  Positioning laser, Simplified plasma
- P07086089NG 🖝 Positioning laser, Bevelling unit II
- P07086155NG 
  Positioning laser, Oxy-fuel cutting tool holder
- P07086160NG 
   Positioning laser, Tool holder THDi for large thickness
- P07056160NG 

   Positioning laser, Tool holder THDi
- P07056164NG 🖝 Positioning laser, Bevelling unit II
- AS-CM-LCC1530FL300 C LINC-CUT C HD FINELINE 300 1500X3000



These instructions and the product covered by them refer to the applicable standards.



Please read this document carefully before you install, use or maintain the machine. Keep these instructions in a safe place for future reference. This document must follow the machine described if there is a change in ownership of the machine and accompany it up to demolition.



#### Display and pressure gauge:

Measurement instruments or displays of voltage, intensity, speed, accuracy etc. are to be considered as indicators, whether they are analogue or digital.



For operating instructions, adjustments, troubleshooting and spare parts, please refer to the special instructions for safe operating and maintenance.



In spite of all the measures applied, invisible residual risks may still remain. Residual risks can be reduced if the safety instructions are observed, the machine is used as recommended and general service instructions are followed.

### REVISIONS

REVISION	: B	DATE	: 05/18
DESCRIPTION			PAGE
Change logos			
REVISION	: C	DATE	: 10/23
DESCRIPTION			PAGE
Update Change in laser			All
REVISION	: D	DATE	: 03/24
DESCRIPTION			PAGE
Imperial measure	ments added		

## **MEANING OF SYMBOLS**

	Reading the manual/instructions is mandatory.		Indicates a hazard.
	Mandatory use of safety shoes.	4	Warning of an electricity risk or hazard.
	Mandatory use of hearing protection.	<u>7</u>	Warning of a risk or hazard due to an obstacle on the floor.
	Mandatory use of a safety helmet.		Warning of a risk or hazard of falling with a level change.
	Mandatory use of safety gloves.		Warning of a risk or hazard due to suspended loads.
	Mandatory use of safety glasses.	<u>SSS</u>	Warning of a risk or hazard due to a hot surface.
	Mandatory use of a safety visor.		Warning of a risk or hazard due to moving mechanical parts.
	Mandatory use of safety clothing.		Warning of a risk or hazard due to a closing movement of mechanical parts of a machine.
	Make sure you clean the working zone.		Warning of a risk or hazard due to laser radiation.
	Mandatory use of breathing protection.		Warning of a risk or hazard due to an obstacle at a height.
	Visual inspection required.		Warning of a risk or hazard due to the presence of a pointed part.
	Indicates a lubrication operation.		Wearers of pacemakers may not be admitted in the designated area.
×	Requires maintenance action.		

#### POSITIONING LASER



For general safety instructions, please refer to the specific manual supplied with the equipment.

#### 1 - Particular safety instructions



The laser used is a class 1M laser.



Before using the machine. Make sure that the guard covers of the electrical and mechanical parts are in place before starting up the equipment. All guard covers must be screwed in.



While adjusting the laser, always make sure that you do not direct the beam towards your eyes or the eyes of individuals near the machine. Always keep the dot visible on the plate, preferably turned downwards.



Any use other than as specified in this document is forbidden.

The use of Personal Protective Equipment (PPE) and work clothing covering the body is mandatory in the work area. Do not wear a tie and keep your hair tied back securely.



- 2 Residual risks
  - 2.1 Residual risks General
    - Radiation risk Eye and skin injuries



The eyes are normally protected from laser radiation by natural reflexes, particularly the blinking reflex. However, you are advised never to look deliberately into the beam. Beam penetration into the eyes through an optical device (such as binoculars) is hazardous.

1

#### 1 - Laser specifications

Wavelength	520 nm (green)
Output power	3.3 mW
Laser class	1M
Type of beam	Green cross hairs (adjustable focus), line 2 mm (0,08") to 3 m (118")
Type of optics	Adjustable focus
Power supply voltage	24 VDC
Operating temperature	0°C/+50°C (32°F / 122°F)





The optional positioning laser makes it possible to position the tool holder precisely on a mark (plate or tube edge, marking). Accuracy is provided by a positioning laser and the laser-tool holder movement is semiautomatic.

Ring (**A**) is used to adjust the focus of the cross. The cross on the plate must be as fine as possible for maximum precision.

The distance between the laser and the method is factory set. The laser and its starting up are controlled by the **HPC Digital Process** or the switch (**B**).



Refer to the following:

• technical literature of the HPC Digital Process III: 86954995

2

• technical literature of the HPC Digital Process II: 86954944



#### C - USE

#### 1 - Assembly

If the laser is replaced, only the part located after the laser connector is to be replaced.



That is done with the power switched off (to avoid accidental eye exposure).

Proceed as follows:

- · Install the laser mechanically and electrically
- Adjust the focus of the laser: the cross on the plate must be as fine as possible for maximum precision
- Make sure that regardless of the position of the tool holder, the distance between the tool holder and the cross on the plate is identical
- Check that the offset values in the setup of the HPC Digital Process between the laser and the
  process are still correct (see technical literature to modify the values)



#### Refer to the following:

- technical literature of the HPC Digital Process III: 86954995
- technical literature of the HPC Digital Process III, Level 3: 86954996
- technical literature of the HPC Digital Process II: 86954944
- technical literature of the HPC Digital Process II, Level 3: 86954945

#### 1 - Spare parts

#### Ordering procedure:

Almost all the parts of a machine or installation are referenced in the photographs and sketches.

#### The descriptive tables contain three types of item:

- items normally held in stock:
- items not held in stock: X
- · articles upon request: no reference

(For such parts, please complete the list of parts page and send us a copy. In the Order column, state the number of parts required and indicate the type and number of your equipment.)

For items referenced in the photographs or sketches but not included in the tables, please send us a copy of the relevant page and highlight the relevant reference.

#### Example:

			~	normally held in stock.
			X	not in stock
				upon request.
Ref.	Part no	Stock	Order	Description
A1	W000XXXXXX	~		Machine interface board
A2	W000XXXXXX	X		Flow meter
A3	P9357XXXX			Printed front plates

• While ordering parts, please indicate the quantity and note the number of your machine in the box above.

СС Туре	 TYPE:
Matricule	 Number:

4





• While ordering parts, please indicate the quantity and note the number of your machine in the box above.

	<b>├</b>	TYPE:
Matricule	│ <b>►</b> [	Number:

LINCOLN ELECTRIC France S.A.S. Avenue Franklin Roosevelt 76120 Le Grand Quevilly 76121 Le Grand Quevilly cedex www.lincolnelectriceurope.com

6

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