

# PM-1609/160A-B/458

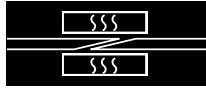
## Heat press with air cooling





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## 0 Preface

Habasis thanks you for purchasing the

### **PM-1609/160A-B/458**

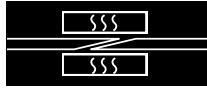
This press belongs to the press range called PM-09/160A.

If you handle your PM-1609/160A-B/458 press with care, it will guarantee joint reliability and quality for many years to come..

This document includes spare parts and product diagrams



Observing the instructions in this manual lets you work during: handling, installation, use and maintenance phases in safe conditions while guaranteeing good machine working order and economies of scale. HABASIT Italiana S.p.A. is not liable for damages due to negligence or failure to observe these instructions.

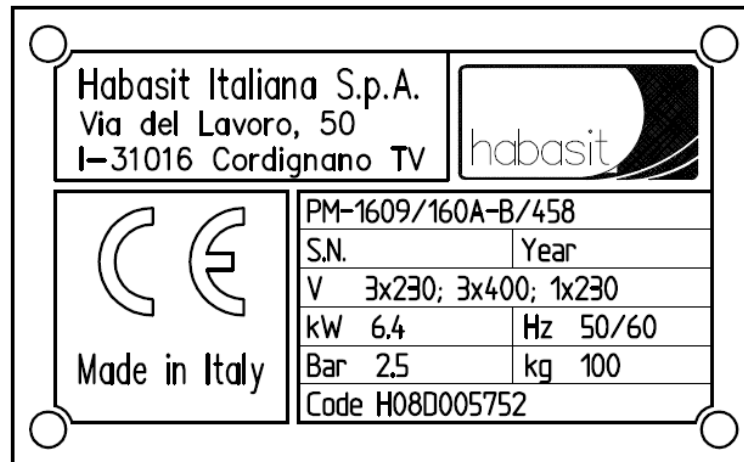


## 1 Machine identification data

<b>Machine</b>	Heat press
<b>Type/Series</b>	PM-1609/160A-B/458
<b>Serial number</b>	See EC identification plate
<b>Year of construction</b>	See EC identification plate

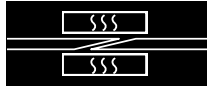
### 1.1 Identification plate and EC markings

The following identification plate was affixed to the press (FAC SIMILE):



This plate SHOULD NOT BE REMOVED for any reason. If damaged, please request a copy.

If necessary, the plate data must be communicated for service or spare parts.



## DICHIARAZIONE DI CONFORMITÀ

DECLARATION OF CONFORMITY

2006/95/CE



Noi We

**HABASIT ITALIANA S.p.A.**  
Via del Lavoro, 50  
I - 31016 Cordignano (TV) - ITALY

dichiaro sotto la nostra esclusiva responsabilità *declare under our sole responsibility*  
che l'apparecchiatura tipo: *that the device type:*

**Pressa a caldo Hot press**

Modello: *Series:*

**PM-1609/160A-B/458**

Matricola: *Serial Number:*

è conforme alle seguenti direttive: *is in conformance with the following directives:*

2006/95/CE

Direttiva Bassa Tensione *Low Voltage Directive*

2004/108/CE

Direttiva Compatibilità Elettromagnetica *Electromagnetic Compatibility Directive*

ed è conforme alle disposizioni delle seguenti norme *and is in conformance with the rules of the*  
armonizzate: *following harmonized standard:*

UNI EN ISO 12100/2010

CEI EN 60204-1/2006

Il Fascicolo Tecnico viene conservato presso: *The Technical File is stored at:*

**HABASIT ITALIANA S.p.A.**  
Via del Lavoro, 50  
I – 31016 Cordignano (TV) - ITALY

Cordignano,

Il Direttore Generale  
*General Manager*

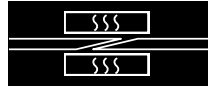
Ugo Passadore

Il Responsabile del Fascicolo Tecnico  
*Technical File Manager*

Matteo Mapelli

.....

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## DICHIARAZIONE DI INCORPORAZIONE

### DECLARATION OF INCORPORATION

2006/42/CE – Allegato II - B



Noi We

**HABASIT ITALIANA S.p.A.**  
Via del Lavoro, 50  
I - 31016 Cordignano (TV) - ITALY

dichiariamo sotto la nostra esclusiva responsabilità *declare under our sole responsibility that the partly*  
che la quasi-macchina tipo: *completed machinery type:*

**Pressa a caldo Hot press**

Modello: *Series:*

**PM-1609/160A-B/458**

Matricola: *Serial Number:*

è conforme ai requisiti essenziali della salute e *is in conformance with the essential health and*  
sicurezza il cui elenco è riportato nella *safety requirements, the list of such is reported in*  
documentazione tecnica pertinente, secondo *the relevant technical documentation, according*  
l'allegato VII – B della Direttiva 2006/42/CE, *with the annexed VII – B of 2006/42/EC directive,*  
conservata presso: *at:*

**HABASIT ITALIANA S.p.A.**  
Via del Lavoro, 50  
I - 31016 Cordignano (TV) - ITALY

ed è inoltre conforme alla Direttiva Bassa Tensione *and is also in conformance with the 2006/95/CE*  
2006/95/CE. *Low Tension Directive.*

Ci impegnamo a trasmettere le informazioni *We strive to provide the relevant information on*  
pertinenti su richiesta adeguatamente motivata dalle *reasoned request by national authorities.*  
autorità nazionali.

E' comunque espressamente vietato procedere *It is however expressly forbidden to proceed with*  
all'avviamento della quasi-macchina in oggetto *the start up of the said partly completed machinery*  
prima che il sistema al quale è prevista la sua *before the system which is intended for its*  
incorporazione sia dichiarato conforme alle vigenti *incorporation is declared to be in conformity with*  
direttive CE. *the current EC directive.*

Cordignano,

Il Direttore Generale  
*General Manager*

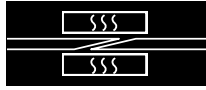
Ugo Passadore

Il Responsabile della documentazione tecnica  
*Technical documentation manager*

Matteo Mapelli

.....

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## 2 Regulations and general warnings

### 2.1 Manual layout criteria

This manual observes the organizational rules and requirements of Directive 2006/42/, duly amended, being the Directive of the Council of the European Community, concerning the reconciliation of the laws of member states regarding machines, and also all the other Directives and Regulations referred to in the said Machine Directive, inspired by criteria which, in addition to illustrating the technical characteristics of the machine and its use, maintenance and troubleshooting methods, also clearly indicate the following:

- All the protection measures adopted on the machine, fully integrating design safety planning and construction safety
- All protection measures to be adopted to meet those risks that cannot be completely eliminated
- All indications for the training of personnel using the machine, while indicating where it is necessary to provide for individual safety protection devices.
- The manual is divided up into sections. Each section deals with a specific subject in which every aspect of safety is considered and clearly highlighted in the text.

### 2.2 Manual use criteria

HABASIT encourages the reader to fully read this manual when receiving the equipment it comes with and, in any case, before handling the equipment. This manual is designed to provide all the instructions, indications and warnings needed by the user to learn about the equipment, understand its main operating principles and be suitably informed for safe use.

In addition to the instructions in this manual, we would ask users to observe any specific current laws.

This manual must be considered as an essential part of the equipment. Its contents must be made known to the entrusted maintenance persons and users.

The purpose is to provide all the information required for good, correct use of the equipment.

The manuals must be kept throughout the equipment's life and must be updated in the event of modifications aimed at improving the equipment's performance.

The manuals must be available to qualified personnel.

Consultation of this manual is facilitated by the general index on the first page, which makes it possible to immediately find the subject of interest.

If the subject dealt with is particularly important it is highlighted with references to the type of technical personnel required to intervene.

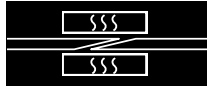
All updates HABASIT considers necessary to improve the quality of the equipment will be communicated by way of sending of further specific documentation or a new manual to replace the previous one.

Should the equipment be transferred to another customer, manuals must be included and HABASIT informed in order to provide future modifications or updates.

A copy of this manual, delivered with the equipment, is meant for the maintenance operators, who shall read and keep it near the equipment, and consult it before undertaking any action on the equipment.

The **PM-1609/160A-B/458** 458 press has been specifically developed for hot joining of HABASIT drive and conveyor parts using the Flexproof process.

It was exclusively designed for the applications described hereto. Other or unsuitable applications are prohibited. Habasis shall not be liable for unintended application consequences. The **PM-1609/160A-B/458** press was professionally manufactured in accordance with EC safety instructions. All assembly, maintenance and repair work, as well as the operation of the equipment, is expected to be carried out by qualified personnel or staff under the supervision of responsible specialists and experts.



For space reasons, these instructions for use cannot cover all possible operating, maintenance and repair aspects. The indications provided concern normal machine use by qualified personnel. In the event of doubt or in need of further information, always contact the manufacturer.





## 3 Technical specifications

### 3.1 Electrical specifications

Power	4 x 1600 W = W 6400
Supply voltage	400V or 230 V ~
Frequency	50-60 Hz

### 3.2 Pneumatic characteristics

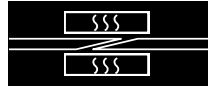
Fluid characteristics	Filtered, non-lubricated air
Maximum working pressure	2.5 bar $\pm$ 0.2 bar / 36.25 <i>psi</i>
Min. supply diameter	Rapid connector of 1/4"

### 3.3 Dimensions and environmental characteristics

Dimensions (LengthxWidthxHeight) (including handles)	2066L x 300W x 311H mm 81.33 x 11.81 x 12.24 <i>inches</i>
Total Weight	100 kg / 220 <i>lbs.</i>
Upper part weight	50 kg / 110 <i>lbs.</i>
Lower part weight	50 kg / 110 <i>lbs.</i>
Noise level	< 70 db
Working temperature	Between 15°C – 38°C / 59°F – 100.4°F
Humidity tolerance	Between 45 ÷ 70%

### 3.4 Production specifications

Max length of belt/tape	1600 mm / 62.99 <i>in</i>
Max width of belt/tape	10 mm / 0.4 <i>in</i>
Minimum length of belt/tape	940 mm / 37 <i>in</i>
Heating plate width	160 mm / 6.3 <i>in</i>
Max. working temperature	2.5 bar / 36.25 <i>psi</i>
Max. working temperature	199° C / 390° F
Temperature interval	+ 2° / - 4° C + 3.6° / - 7.2° F
Maximum heating plate temperature deviation from nominal value	+/- 2°C / 3.6° F
Mean heating time at 180° C	3 min (230V~) 4 min (400V~)
Cooling time from 180° C to 80° C	15 min



### 3.5 Dimensions

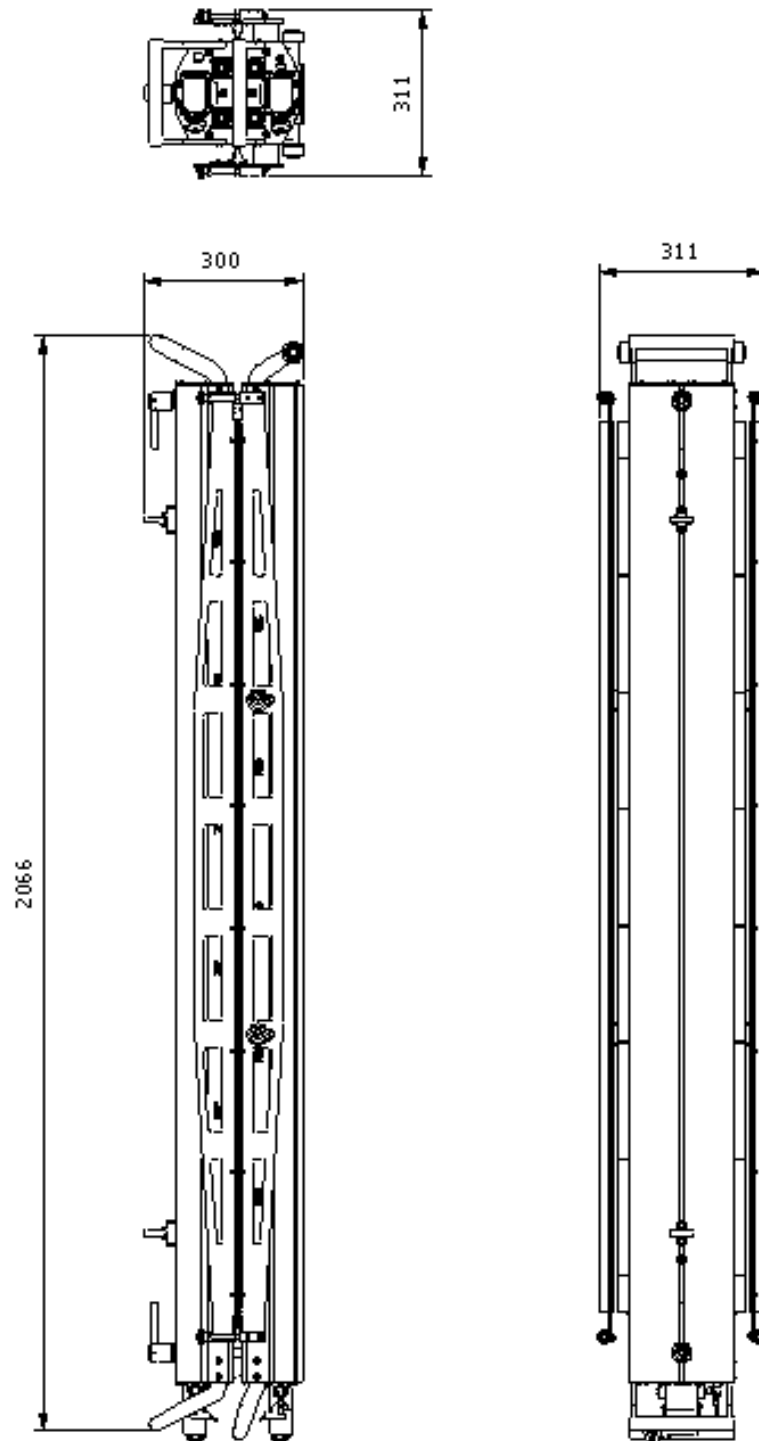
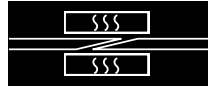


Figure 1– Press general dimensions PM-1609/160-B/458



## 4 Drawings and spare parts list

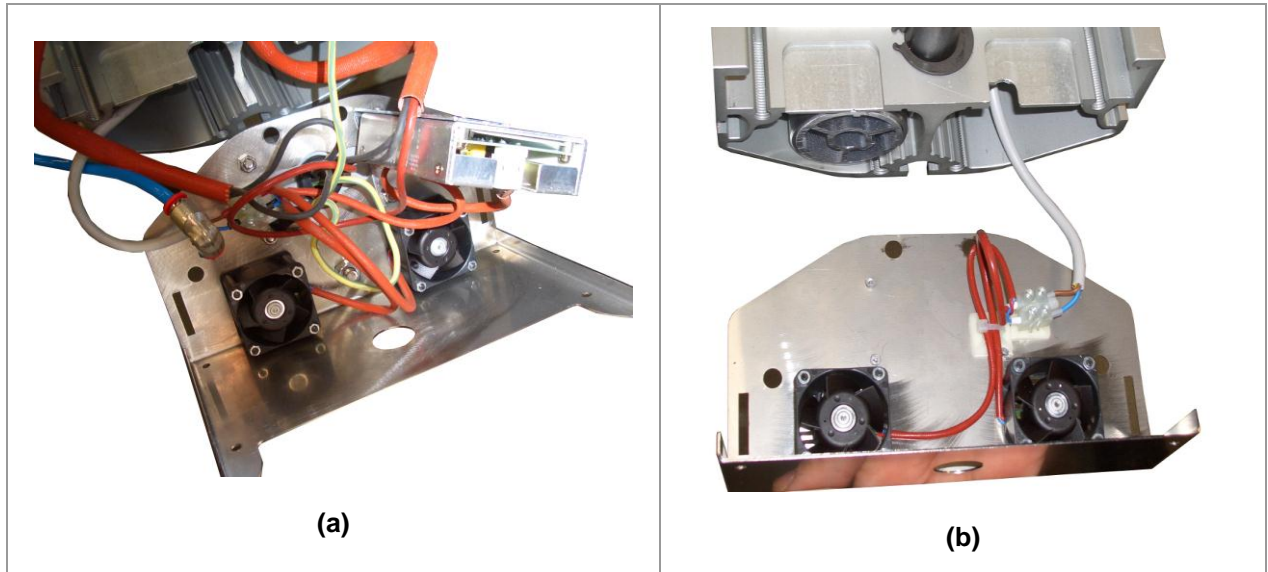
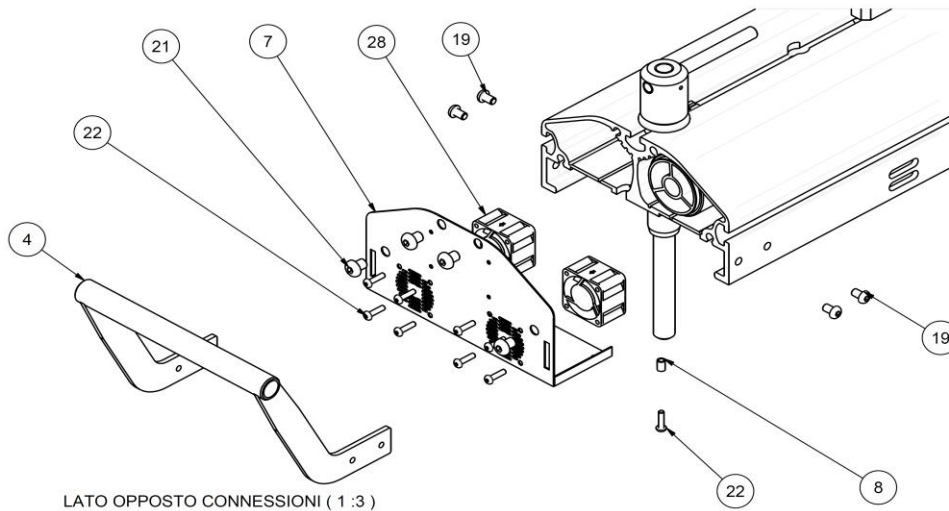
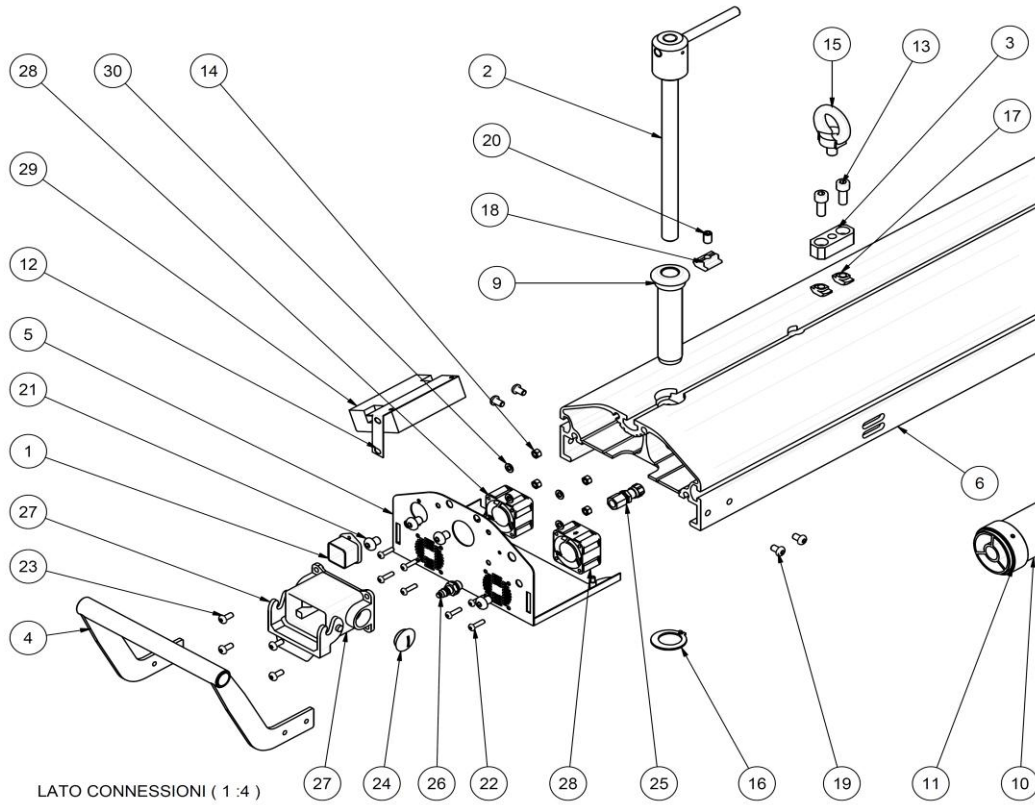


Figure. 2 - PM-1609/160-B/458 press internal connection, electrical connector side (a) and opposite side (b).

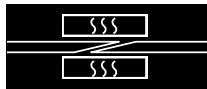


### 4.1 H08D005752 – Press beam unit

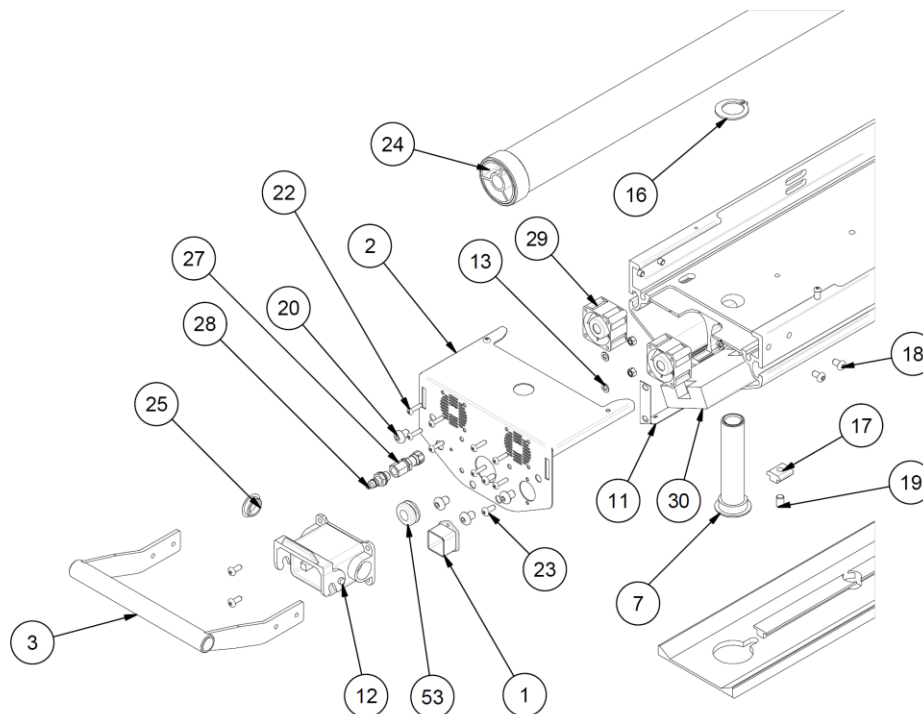




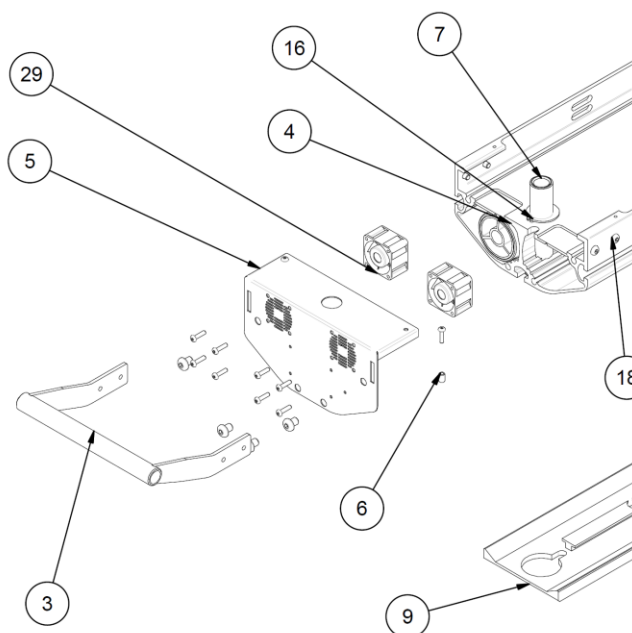
PM-1609/160A Press		H08D005752 – Press beam unit	
Position	Q.ty	Code	Description
1	1	H080704506	RECESSED CASE CKA 03 I - ILME
2	2	H08D002868	LOW PROFILE CLOSING SCREW
3	2	H08D003604	LIFTING RING LOCK
4	2	H08D005755	COMPLETE HANDLE FOR UPPER BEAM
5	1	H08D005756	FAN CONNECTION SIDE HEAD
6	1	H08D005759	DRAWN PROFILE BEAM 1680
7	1	H08D005771	FAN NEUTRAL SIDE HEAD
8	4	H08D005772	CALIBRATED ELECTRO-WELDED TUBE Ø6X1
9	2	H08D005773	UPPER BUSHING V2
10	2	H08D005777	BEAM REINFORCEMENT TUBE D.50 L 1770 MM
11	6	H08D005788	REINFORCEMENT TUBE GUIDE RING D.55,6X20
12	1	H08D007211	TRANSFORMER SUPPORT PLATE
13	4	H08N010023	CHH SCREW UNI 5931-M8X20 GALVANIZED.
14	4	H08N010113	ALLEN NUT ISO 4034 - M5 DIN EN
15	2	H08N010023	MALE LIFTING RING UNI 2947 M10 GALVANIZED.
16	2	H08D010408	SELF-LOCKING STOP RING WA-G 24 GANDINI
17	4	H08N010956	DAM0810 HAMMER NUT M8X10
18	2	H08N010958	DAT0810 MECHANICA NUT
19	8	H08N011451	CONVEX RECESSED HEAD ALLEN SCREW - M6 X 10 - GALVANIZED
20	2	H08N011536	FLAT-TIPPED GRUB SCREW ISO 4026 M8X12
21	8	H08N012005	SCREW VTBEI UNI-ISO 7380-M8X10 STAINLESS STEEL
22	20	H08N012122	CONVEX RECESSED HEAD ALLEN SCREW - M4 X 16 - GALVANIZED
23	4	H08N012123	SCREW VTBEI UNI-ISO 7380-M5X12 GALVANIZED.
24	1	H08N012128	CAP PG16
25	1	H08N020951	QCK-1/8-PK-4-B THROUGH CONNECTOR COD.9425
26	1	H08N020953	MALE COUPLING 11 MINI 1/8" COD. 0102011
27	1	H08D007299	FIXED CASE WITH LEVER ILME - CHP 06 L
28	4	H08N040418	AXIAL FAN 24VDC - 414 J - 40X40X25 - EBMPAPST
29	1	H08N040432	TRANSFORMER - AMEC15-24SMAZ - AIMTEC
30	4	H08N010061	WASHER DIN 125 - A 5,3



## **4.2 H08D005754 – Press beam unit – heads**



LATO CONNESSIONI ( 1 : 5 )

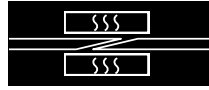


LATO OPPOSTO CONNESSIONI ( 1 : 5 )

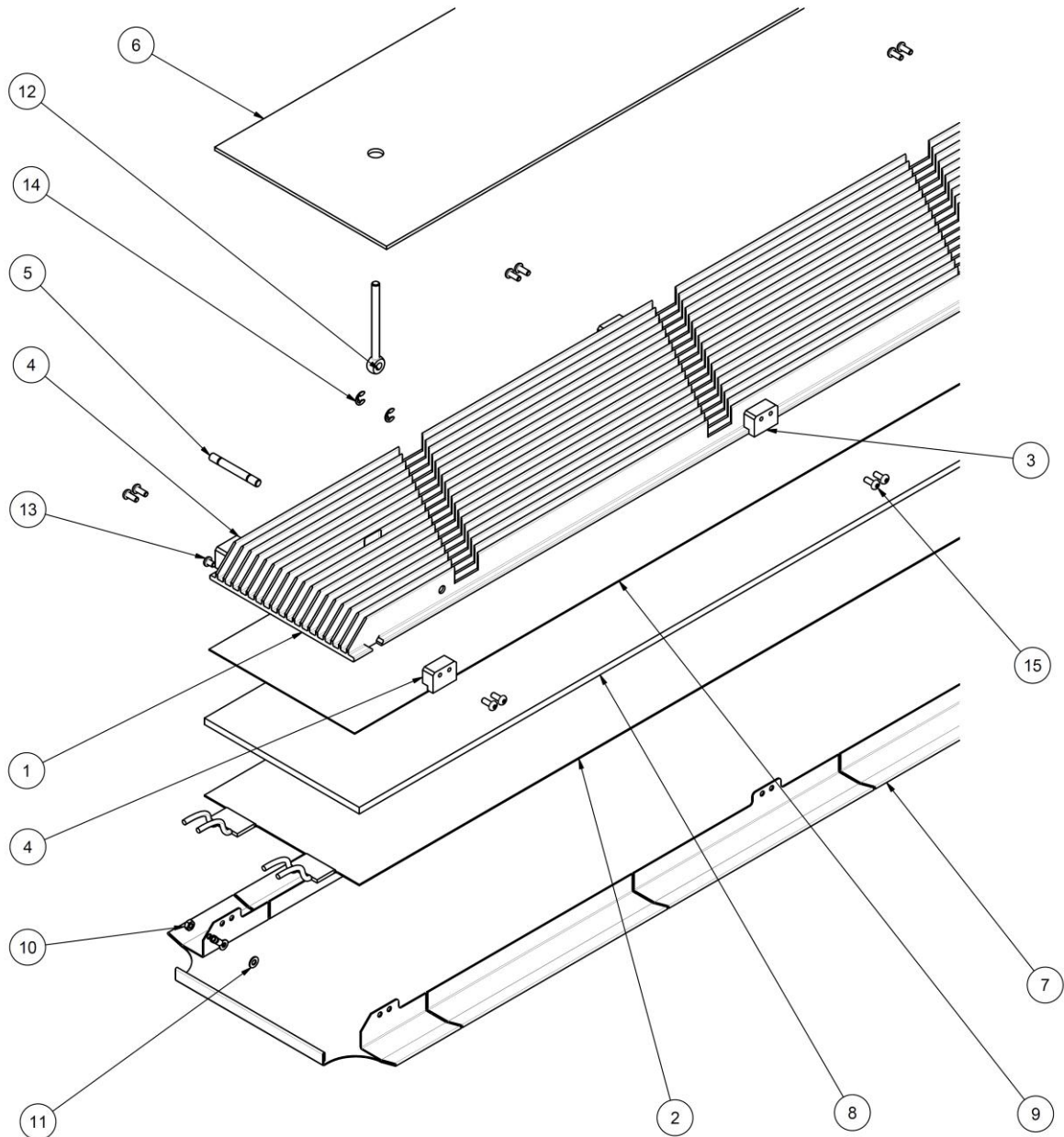


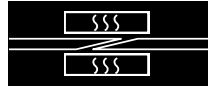
PM-1609/160A Press		H08D005754 – Lower press beam unit	
Position	Q.ty	Code	Description
1	1	H080704506	RECESSED CASE CKA 03 I - ILME
2	1	H08D005756	FAN CONNECTION SIDE HEAD
3	2	H08D005758	LOWER BEAM SIMPLE HANDLE
4	1	H08D005759	DRAWN PROFILE BEAM 1680
5	1	H08D005771	FAN NEUTRAL SIDE HEAD
6	4	H08D005772	CALIBRATED ELECTRO-WELDED TUBE Ø6X1
7	2	H08D005774	LOWER BEARING V2
9	1	H08D005781	PEDESTAL 1680
11	1	H08D007211	TRANSFORMER SUPPORT PLATE
12	1	H08D007299	PERFORATED FIXED CASE WITH LEVER ILME - CHP 06 L
13	4	H08N010061	UNI 6592-5.3x10 GALVANIZED WASHER.
16	2	H08N010408	SELF-LOCKING STOP RING WA-G 24 GANDINI
17	8	H08N010958	NUT DAT0810 MECHANICA
18	8	H08N011451	VTBEI UNI-ISO 7380-M6x10 GALVANIZED SCREW
19	2	H08N011536	FLAT-TIPPED GRUB SCREW ISO 4026 M8x12
20	8	H08N012005	VTBEI UNI-ISO 7380-M8x10 STAINLESS STEEL SCREW
22	20	H08N012122	VTBEI UNI-ISO 7380-M4x16 GALVANIZED SCREW
23	4	H08N012123	VTBEI UNI-ISO 7380-M5x12 GALVANIZED SCREW
24	6	H08N012127	UNI ISO 5927 M5X6 TIPPED GRUB SCREW
25	1	H08N012128	CAP PG16COD.1844 CEMBRE
27	1	H08N020951	QCK-1/8-PK-4-B THROUGH CONNECTOR COD.9425 FESTO
28	1	H08N020953	MALE COUPLING 11 MINI 1/8" COD. 0102011
29	4	H08N040418	AXIAL FAN 24VDC 19M3/H COD.414J COD. RS 250-836
30	1	H08N040432	TRANSFORMER AIMTEC AMEC15-24SMAZ.
53	1	H08N040434	LEGRAND PITCH CODE 098093





### 4.3 H08D005753 – Heating unit

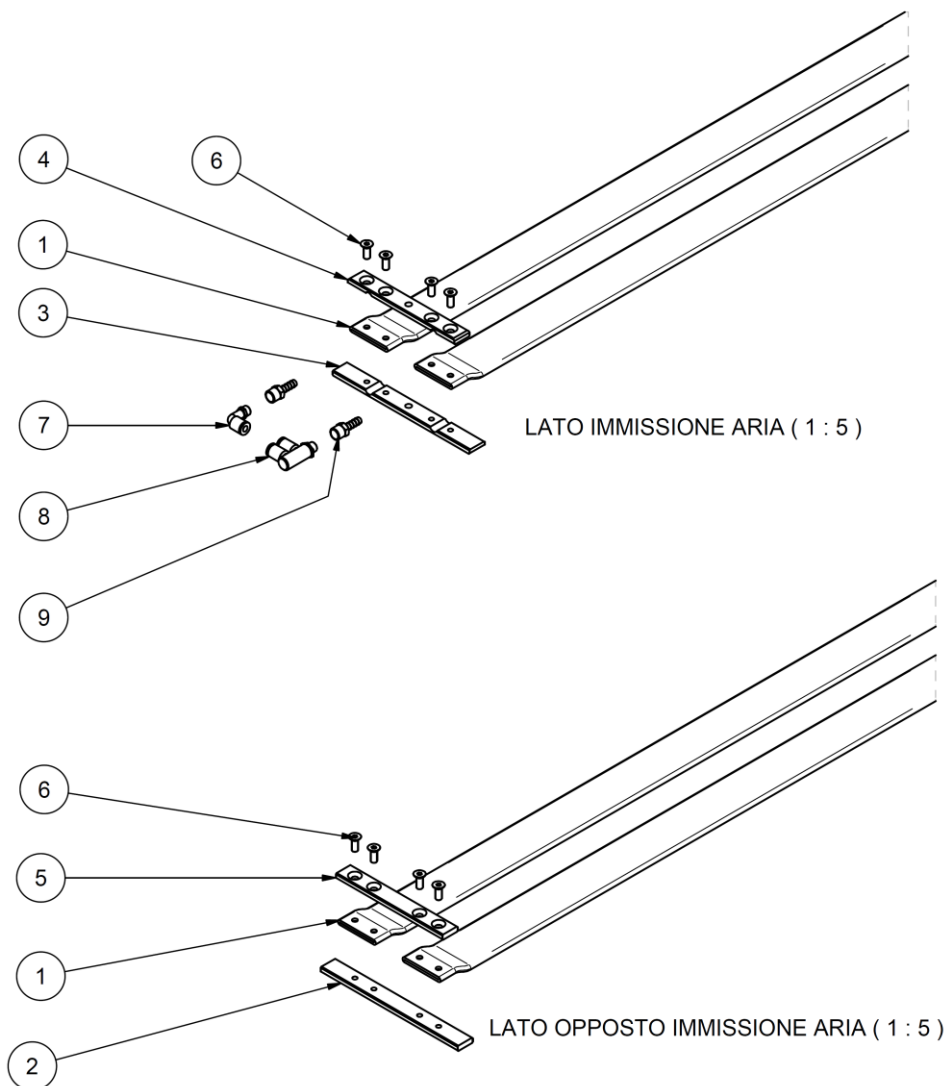




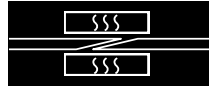
PM-1609/160A Press		H08D005753 - Heating unit	
Position	Q.ty	Code	Description
1	1	H08D005760	CHANNELLED RADIATOR 1680 - OMAR 2118
2	1	H08D005761	HEATER ETCHED FOIL 230V 1600W PM-1609/A COD. 1KITI634001 - 165 X 1680 X 1.2MM
3	8	H08D005762	INSULATING SPACER BLOCK
4	2	H08D005763	LOCKING INSULATING SPACER BLOCK
5	2	H08D005764	TIE FASTENING PIN
6	1	H08D005765	MULTILAYER BEACH SEPARATOR
7	1	H08D005776	WIDE WELDING PLATE PM1609/A SILICON S.6
8	1	H08D005779	NEUTRAL SILICON INSULATING STRIP 6MM PM1609/A
9	1	H08D005780	GALVANISED IRON INSULATING PLATE S=1MM PM-1609A
10	1	H08N010148	UNI 5588-68 M4 STAINLESS STEEL NUT
11	1	H08N010172	WASHER DIN 125 - A 4,3 GALVANIZED
12	2	H08N011786	EYE SCREW DIN 444-M6-75 - ELESA
13	1	H08N012121	CONVEX RECESSED HEAD ALLEN SCREW - M4 X 6 - GALVANIZED
14	4	H08N012125	STOP WASHER - UNI 7434-75 - 5 - 6
15	20	H08N012126	CONVEX RECESSED HEAD ALLEN SCREW - M4 X 10 - GALVANIZED



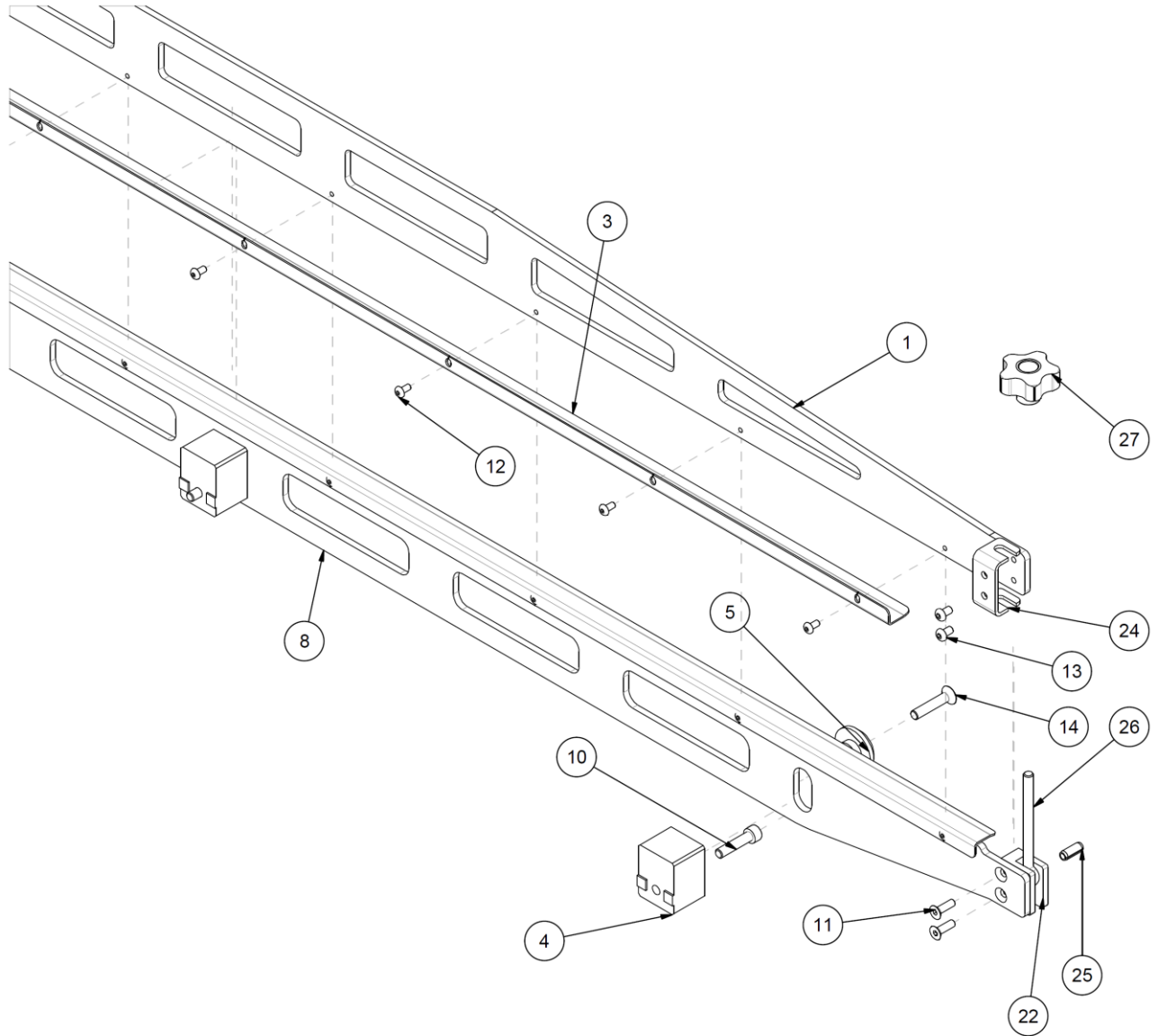
#### 4.4 H08D005751 – Pressure pad unit



PM-1609/160A Press		H08D005751 – Pressure pad unit	
Position	Q.ty	Code	Description
1	2	H08D005810	FLATTENING TUBE øi 32 Cod.1640860 IVG COLBACHINI
2	1	H08D005767	CUSHION RESTRAINING THREADED PLATE
3	1	H08D005768	CUSHION RESTRAINING THREADED PLATE - ATTACCHI
4	1	H08D005769	CUSHION RESTRAINING COUNTERSUNK PLATE - ATTACCHI
5	1	H08D005770	CUSHION RESTRAINING COUNTERSUNK PLATE
6	1	H08D005775	PNEUMATIC TUBE ELASTOLAN 6/4 L=200mm
7	8	H08N010003	OHH SCREW UNI 5933-M6x16 GALVANIZED
8	2	H08N021242	HOSE-END FITTING 7x1/8' FEMALE
9	2	H08N020538	KQ2L-06-01S ELBOW END COUPLING D6 X 1/8"
10	1	H08N020875	KQ2VD06-01S DOUBLE ELBOW END COUPLING 1/8" D.6



### 4.5 H08D005786 – Belt lock bar unit

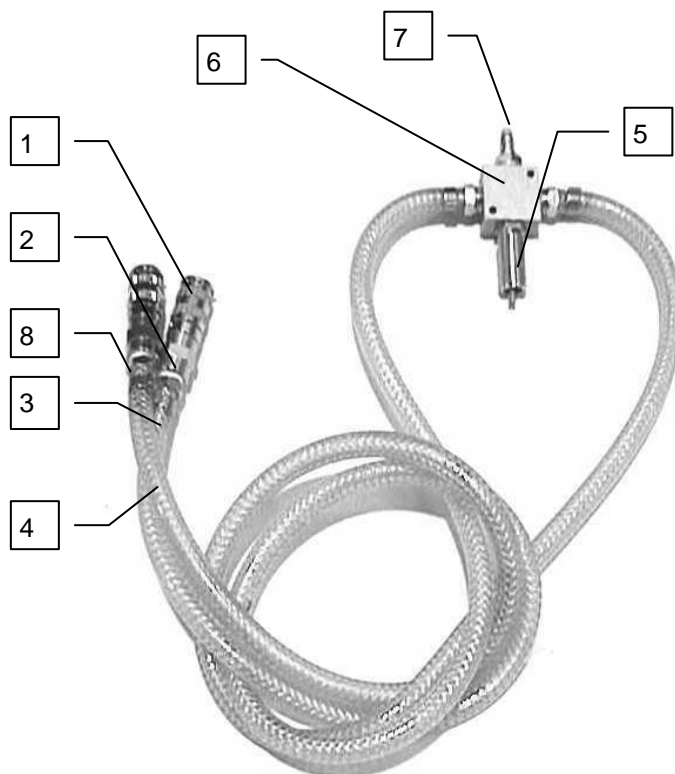




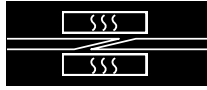
PM-1609/160A Press		H08D005786 – Belt lock bar unit	
Position	Q.ty	Code	Description
8	1	H08D007212	LOWER PRESSER PANEL V02
1	1	H08D005790	UPPER PRESSER PANEL
3	2	H08D005794	BELT PRESSURE PROFILE
4	3	H08D005795	PRESSER SUPPORT BLOCK
5	3	H08D005796	PRESSER LOCK WASHER
10	3	H08N010126	VTCEI UNI 5931-M8x35 GALVANIZED SCREW
11	4	H08N010266	VTSEI UNI 5933-M6X20 GALVANIZED SCREW
12	16	H08N011450	VTBEI UNI-ISO 7380-M5x10 GALVANIZED SCREW
13	4	H08N011451	VTBEI UNI-ISO 7380-M6x10 GALVANIZED SCREW
14	3	H08N012028	VTSEI UNI 5933-M8x40 GALVANIZED SCREW
22	1	H08D007215	LH PRESS LOCK BLOCK
24	2	H08D007213	PRESSER CLOSING ROD
25	2	H08N012249	ISO 8752 8x20 STAINLESS STEEL Elastic plug
26	2	H08N012248	DIN 444 B M8x100 STAINLESS STEEL EYE SCREW
27	2	H08N011407	VCT.50 FP-M8 code 69956 LOBE HAND WHEEL



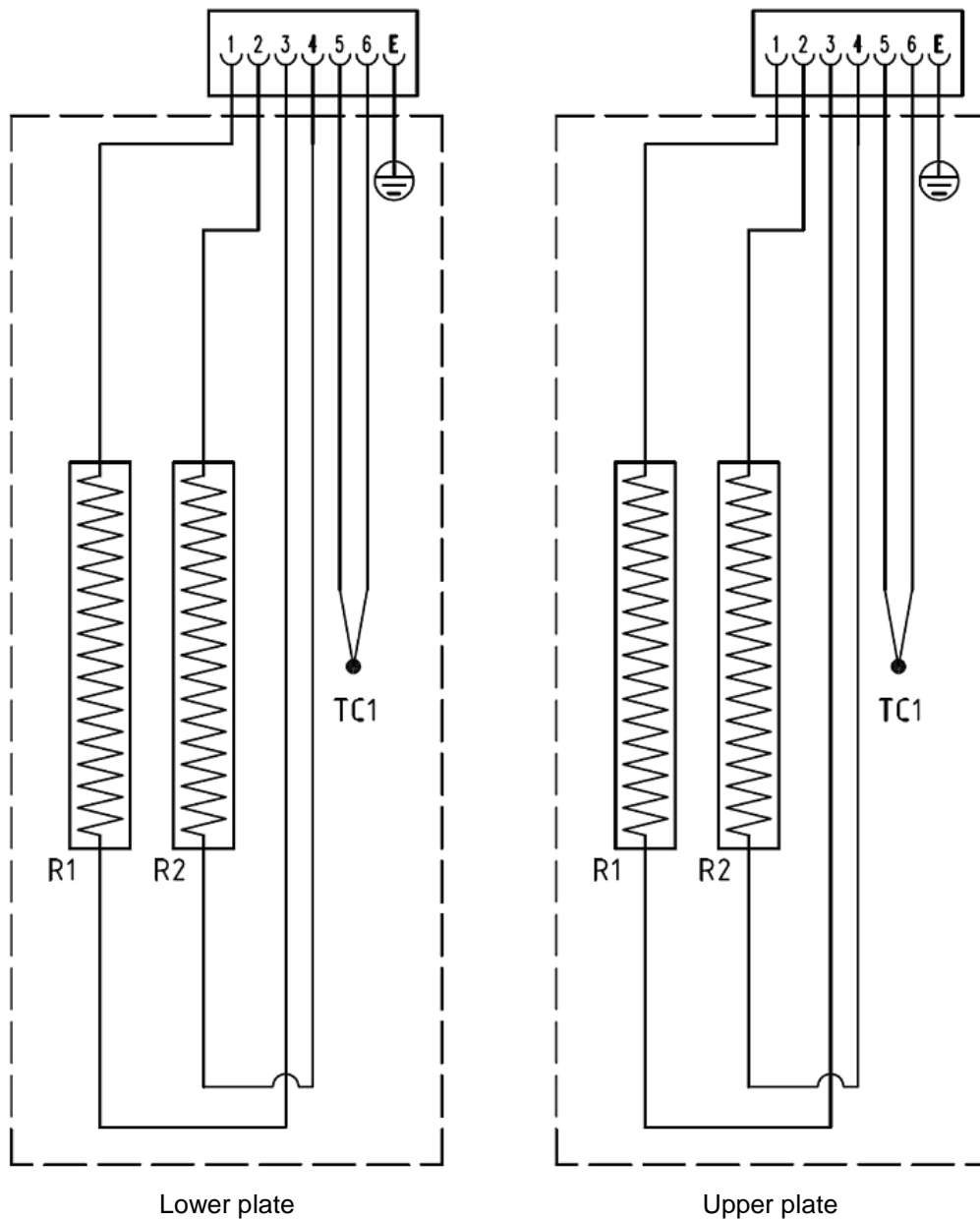
#### 4.6 H08008E100 – Pneumatic connection



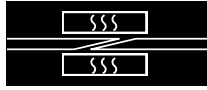
Position	Code	Description	U.M.	Q.ty
	H08008E100	PNEUMATIC CONNECTION	NR	1
1	H08N020655	1/4" mini 04 QUICK COUPLING	NR	2
2	H08N020407	HOSE-END ACCESSORY 6x1/4"	NR	4
3	H08N020410	PLASTIC TUBE PVC 6x12	NR	1
4	H08N020410	PLASTIC TUBE PVC 6x12	NR	1
5	H08N020406	SAFETY VALVE MAX PRESSURE 3BAR 1/4"	NR	1
6	H08N020950	1/4" 4-WAY AIR DISTRIBUTOR	NR	1
7	H08N020656	1/4" mini 12 MALE QUICK COUPLING	NR	1
8	H08N020412	2-EAR 11X13 HOSE CLAMP COLLAR	NR	4



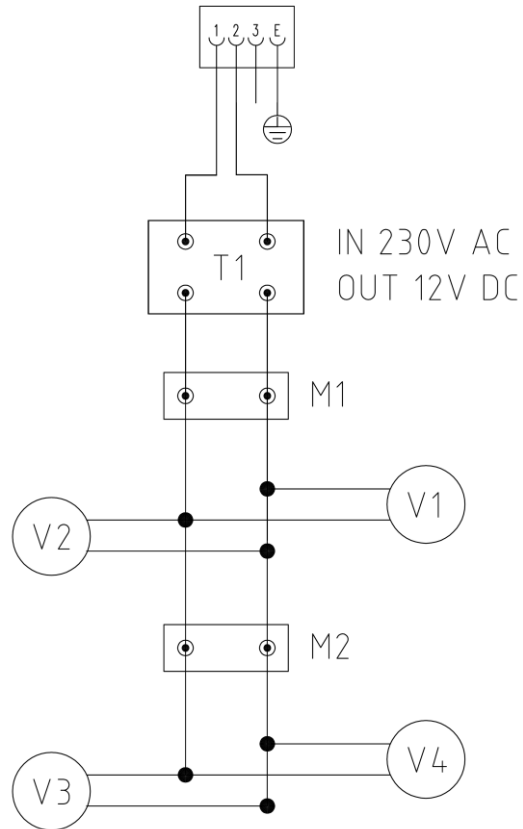
## 5 Press wiring diagram



Code		Description
R1	H08D005761	RESISTANCE ETCHED FOIL 230V 1600W PM-1609/A cod. 1KIT1634001 - 165 x 1680 x 1.2mm
TC1	H08N040431	Thermocouple



## 5.1 Fan connection diagram







## 6 Product and product use liabilities

For any further clarifications, contact Habasis Italiana S.p.A. customer service at the following address:

### **Habasis Italiana S.p.A.**

Via del Lavoro, 50.

**31016 CORDIGNANO (TV) - ITALY**

Phone: +39 0438 9113

Fax: + 39 0438 912374

E-mail : [info@habasis.it](mailto:info@habasis.it)

Internet : [www.habasis.com](http://www.habasis.com)

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### **Product liability, application considerations**

The proper selection and application of Habasis products, including the related area of product safety, is the responsibility of the customer.

All indications / information are recommendations and believed to be reliable, but no representations, guarantees, or warranties of any kind are made as to their accuracy or suitability for particular applications. The data provided herein are based on laboratory work with small-scale test equipment, running at standard conditions, and do not necessarily match product performance in industrial use. New knowledge and experiences can lead to modifications and changes within a short time without prior notice.

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This use and maintenance manual and its attachments are translated from original language  
(Italian)

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