

Manuel utilisateur

DK6/20/648/2026/42

LABO-MODERNE

Heating digester with programmable increases of temperature

Operation Manual for models: DK 6 – DK 20 – DK 6/48 – DK 20/26 – DK 42/26

IMPORTANT:

READ THE INFORMATION CONTAINED IN THE PRESENT MANUAL BEFORE USING THE UNIT. THE MANUFACTURER DOES NOT ACKNOWLEDGE ANY RESPONSIBILITY FOR AN IMPROPER USE OF THE EQUIPMENT, NOT RESPONDING TO DIRECTIONS FOR USE.

The labels applied to the unit warn the user on the dangers to which he is exposed during the use or the maintenance. The labels must be left on the unit and substituted if they are no more readable.



Warn of danger

Read carefully the Safety Regulations here below



Caution hot surface

This unit must only be used for laboratory applications

SAFETY RULES

- 1) The heating plate if programmed, may reach a temperature of 450°C, this happens during the heating phase but also during the cooling phase.
- 2) The containers and the products used during the work must be compatible with the temperature set on the unit.

CLEANING

Always unplug the unit before cleaning. The heating plate must be cool. Use a damp cloth and not flammable, not aggressive detergents.

PERSONAL PROTECTION EQUIPMENT

The equipment used for personal protection must be compatible with the possible dangers deriving from the working materials and from the glass vessels.

MAINTENANCE

According to the law on products guarantee our instrument must be repaired at our factory, save different agreements with our agents. For more information see the "Maintenance" Chapter in this manual.

GUARANTEE

Starts from the date of delivery note and is referred to the number of register of the single unit.

The manufacturer, engaged in a continuous improvement of his products reserves the right to modify any of their characteristics without notice.

CONTENTS

1. Introduction	3
2. Instrument description	3
3. Control of the instrument when received	4
4. Installation	4
5. Operation controls	5
5.1 Description of control board	5
5.1.1 Rapid guide	6
5.2 Main menu	7
5.3 Program menu	8
5.3.1 Selection of program	8
5.3.2 Visualization of values	8
5.3.3 Setting of values	9
5.4 Print menu	9
5.4.1 Data printing	10
5.4.2 Setting of data	11
5.4.3 Setting a printer or a PC serial interface	12
5.4.4 Transmission file	12
5.5 Language menu	13
5.6 System menu	14
5.6.1 Setting of RS232	14
5.6.2 Setting date and hour	15
5.6.3 Setting of unit	15
6. Start	17
7. Maintenance	19
7.1 Replacement of fuses	19
8. Accessories	19
8.1 How to verify the temperature of the heating block	22
9. Spare parts	22
10. Technical features	24
11. Electric scheme	29

1. Introduction

The Velp Scientifica heating blocks (thermoreactors) are designed for wet digestions of liquid or solid samples. The usual amount of sample is up to 15 ml or 5 g. The DK6 model can hold up to 6 samples the DK20 model up to 20 samples at the same time. The duration of digestion is related to sample nature and to the adopted method.

The selectable temperatures vary from room to 450°C.

The Velp Scientifica digesters allow to work in reproducible conditions in a safe way, saving reactivities and space.

2. Instrument description

The structure is manufactured from stainless steel and protected by special resins and paints purposely studied and tested to assure a strong resistance to chemical or mechanical agents. The heating block is manufactured from an aluminium alloy which allows an optimal temperature homogeneity at all the selectable temperatures.

The temperature of the heating block is controlled by a microprocessor with PID logic. The temperature probe is a Pt100 platinum probe which does not require a calibration because at each turning on the electronics performs a self calibration. All this allows a good precision and reproducibility of performed tests.

The instrument is equipped by a sophisticated electronics aimed to simplify as much as possible its use exploiting fully the power of software.

The use of the equipment is controlled by only four keys which allow an easy entering of all the functions during programming or normal use.

Each window shown by the display gives the description of the controls that will be developed when the key evidenced on the corresponding line will be pressed. This allows to enter four principal menus.

The **PROGRAM MENU** allows to select up to 20 work programs. For each work program it is possible to select up to four temperatures and the relative time of permanence. When a work program is started the set temperatures will be developed sequentially. The selectable temperatures span from room to 450°C. The time of permanence at a selected temperature spans from 001 to 999 minutes. If the time is set to 000 the corresponding temperature is not developed. It is possible to select a continuous operation.

The **PRINT MENU** allows to collect the data related to the performed tests and then to send them to a computer for their storage according to **Good Laboratory Practice (GLP)**. After the storage the data can be printed.

The **LANGUAGE MENU** allows to choose the language by which the information is shown on the display. It is possible to select one of the following five languages: Italian, English, German, French and Spanish.

The **SYSTEM MENU** allows the choice of unit for the temperature shown by the display (°C or °F). it is possible to modify the data (day) and time (hour) and to control the sending of information to a computer by the serial interface RS 232.

The instrument is equipped by a protection against over temperatures by a thermostat with manual resetting. The sensitive element located on the heating block breaks the power supply when a temperature higher than 500°C is noticed. The manual resetting is located on the rear panel.

3. Control of the instrument when received

The delivered instrument is complete of:

- Power cable

4. Installation

Connect the unit to electric supply according to the values reported on label.

5. Operation controls

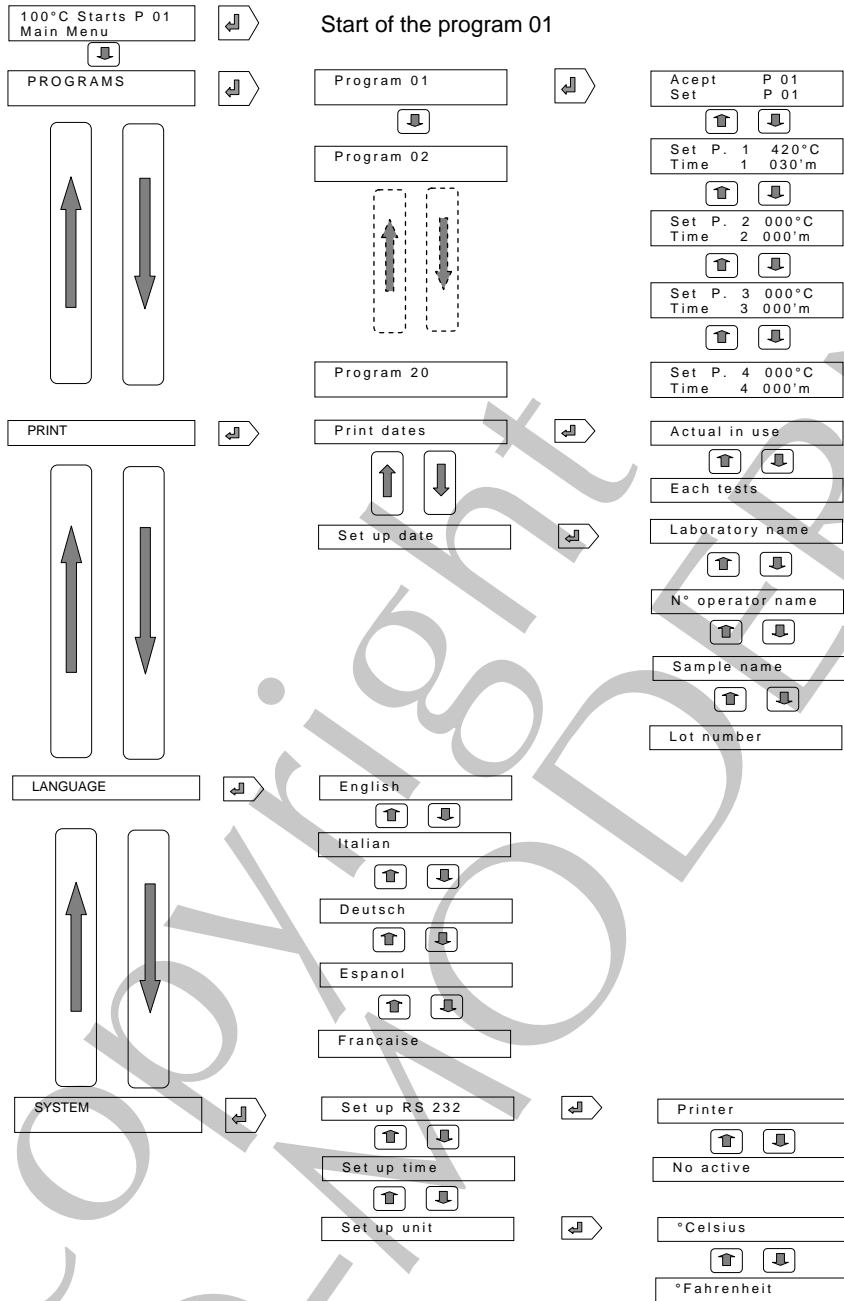
5.1 Description of control board

The control board is composed by a lighted main switch, a display with 32 characters on two lines and by four keys.

Lighted main switch		Feeds the unit
Key Esc	Out of a work cycle	Return to the window of upper level or menu
	During a work cycle	Stops the cycle
Key ↑	Out of a work cycle	Shows in sequence the windows of the selected menu
	In the setting windows	Increases the shown value
	During a work cycle	No effect
Key ↓	Out of work cycle	Shows in sequence the windows of the selected menu
	In the setting windows	Lowers the shown value
	During a work cycle	No effect
Key ↵	In the main window	Starts the shown program
	Out of a work cycle	Enters the menu or the selected setting window
	In the setting windows	Confirms the displayed value
	During the count of time of a work cycle	Changes the operation to continuous.

5.1.1 Rapid guide

This page shows the software of the heating block. The purpose is to help the user to identify the different possibilities of the instrument and how to reach them easily.



10001332/A1

6

5.2 Main menu

When the instrument is turned on by the main switch the display shows during some seconds the type of instrument and the version of installed software.

		D	i	g	e	s	t	e	r						
		V	e	r	s	i	o	n	1.	0					

Then the display shows the main window:

1	0	0°	C		S	t	a	r	t		P	0	1	↵
M	a	i	n		M	e	n	u						↓

The first line shows the number of the program in use (the last used).

The start of a cycle is obtained by pressing the key ↵.

The second line shows that by pressing the key ↓ the main menu is entered.

The main menu is composed by the following windows (subjects) which can be selected by the keys ↓ and ↑:

	P	R	O	G	R	A	M	S							↵
<															>

	P	R	I	N	T										↵
<															>

	L	A	N	G	U	A	G	E							↵
<															>

	S	Y	S	T	E	M									↵
<															>

Pressing the key Esc it returns to the window of upper level or menu.

5.3.3 Setting of values

If the temperature and time of the four work ramps are to be varied the corresponding window is to be visualized and the key ↵ is to be pressed. The temperature value will blink and its value can be modified by the keys ↓ and ↑

S	e	t				1			↓	4	2	0	↑	C	↵
T	i	m	e			1			↓	0	3	0	↑	m	

Confirm the desired value by the key ↵. The display will show:

S	e	t				1			↓	4	2	0	°	C	↵
T	i	m	e			1			↓	0	3	0	↑	m	

The time value will blink and its value can be modified by the keys ↓ and ↑. Confirm the desired value by the key ↵.

Note

The different ramps will be developed in succession from n°1 to n°4. Consequently it is suitable to program temperature values increasing from n°1 to n°4. If this criterion is not respected during programming the display will show:

E	R	R	O	R		S	e	t		n	o	t			
s	e	q	u	e	n	t	i	a	i						

5.4 Print menu

P	R	I	N	T											↵
<															>

The instrument is predisposed for the serial connection RS232, by the socket located on the rear panel, for printing or storing data according to **Good Laboratory Practice (G.L.P.)**. This menu allows to choose the sending of data for every performed program or only after a specific request. It is also possible to set the data related to the examined products and the parameters utilized for each test.

5.4.3 Setting a printer or a PC serial interface

It is possible to store the information related to the performed tests by connecting a printer or a PC by the serial 9 pin socket located on the rear.

If a PC is connected it is possible to use the Hyper Terminal program installed in the software Microsoft Windows 95-98-2000.

The settings of the PC serial connection must be the following:

Baud rate	4800
Data length	8
Parity	Even
Bit of Stop	1
Handshaking	None - Xon/Xoff

Connection to a PC:

For the connection to a PC use a standard cable RS232 with 9 pin with female-male connectors.

Connection to a printer:

For the connection to a printer use a serial cable RS232 with 9 pin with female-male connectors inverting the wires of the pin 2 and 3 on one connector only.

5.4.4 Transmission file

The file contains the following information:

DIGESTER VERSION 1.0		Heading of default report	
Program N°	01	Program in use	
Day (dd/mm/yy)=19/12/00	Hour (hh:mm)=14:53	Data settable in the menu System/Date setting	
Laboratory name	Velp Scientifica	Data settable in the menu Print \ Data setting	
Operator's n° and name	012 Mario Rossi		
Sample name	Milk	Parameters set in the used program	
Lot number	00125		
Set 1	420°C	Time 1	30 min
Set 2	000°C	Time 2	000 min
Set 3	000°C	Time 3	000 min
Set 4	000°C	Time 4	000 min

Or:

		°	F	a	h	r	e	n	h	e	i	t	↵
<													>

*		°	F	a	h	r	e	n	h	e	i	t		
		E	x	e	c	u	t	e	d					

By pressing the key ↵ the display will show for some seconds the confirmation window as for presented.

Note

The numerical range for setting the temperature varies according to the used unit.

Numerical range as °Celsius: from 10°C to 450°C
Numerical range as °Fahrenheit: from 51°F to 842°F

When the change of temperature unit is performed the instrument changes automatically in the various programs the Set point temperatures into the new units.

LABO-MODERNE
Copyright

6. Start

To start a work cycle select the desired program and press the key ↵ of the main window. The instrument keeps memorized the last used program and when turned on the main window shows the last number of program used.

0	2	0	°	C	S	t	a	r	t	P	0	1	↵
M	a	i	n		M	e	n	u					↓

If the key ↵ is pressed the program n°1 (P01) starts and the display shows::

Block temperature					Set temperature									
↓					↓									
0	2	5	⇒	1	°	S	e	t	⇒	1	5	0	°	C
0	0	0	⇒	T	i	m	e		⇒	0	3	0	'	m

when the temperature of the heating block reaches the value of the first active set (set time different from 000) an acoustic signal warns about the reaching of temperature and the time count start. The display will show:

1	5	0		1	°	S	e	t		1	5	0	°	C
0	0	0	⇒	T	i	m	e		⇒	0	3	0	'	m
↑					↑									
Passed time					Set time									

At the end of the set time the instrument starts to perform the following ramp:

1	5	0		2	°	S	e	t		1	5	0	°	C
0	0	0	⇒	T	i	m	e		⇒	0	3	0	'	m

If no other active ramp is present in the work program the instrument stops the heating and warns by an acoustic signal. The end of cycle is also displayed during some seconds.

E	N	D		O	P	E	R	A	T	I	N	G		
				C	Y	C	L	E						

If during the count down of time in any ramp the key ↓ is pressed the unit will operate continuously at the Set temperature value and the display shows:

1	5	0		1	°		S	e	t		1	5	0	°	C
0	0	0	⇒	T	i	m	e			⇒	0	3	0	'	m

If the key Esc is pressed the work cycle is interrupted.

Note:

When a new program is started, if the temperature of heating block is higher than the first active set the work cycle will not start and the display shows:

		N	O	T		R	E	A	D	Y					
T	e	m	p	e	r	a	t	u	r	e	>	S	e	t	

In the case the start of the new cycle is possible only after the cooling of the heating block below the first active value.

STOPS

When a black out or lack of power occurs the instrument keeps the running condition. When the power is again available the work cycle starts from the point of interruption.

7. Maintenance

The instrument does not require any ordinary or extraordinary maintenance. Only a periodical cleaning is suggested as described by this manual.

7.1 Replacement of fuses

The instrument is equipped by two fuses located under the socket on the rear side. To replace a fuse, first unplug the unit and then open the fuse box by levering the cover with a screwdriver.

8. Accessories

DK 6:

Required for digestions

N° 6	Glass test tubes diam. 42x300mm high	A00001080*
N° 1	Stainless steel glassware handle	A00001111
N° 1	Fume suction cup	A00001096
N° 1	Support system	A00001206

Upon request accessories

N° 1	Stainless steel drop collector	A00001200
N° 1	Stainless steel stand for glassware handle	A00001097
N° 1	Printer	A00001009

Upon request accessories for C.O.D.

N° 6	COD test tube diameter 42x200 mm high, 200 ml, 29/32 ,cone	A00001040*
N° 6	Air refrigerators with ground cone	A00001041*
N° 6	PTFE sheats for 29/32 cones	A00001042*
N° 6	Antisplash bells	A00001045*
N° 1	Stainless steel glassware handle for COD	A00001049

** Code number refers to one single piece*

DK 20:**Required for digestions**

N° 20	Glass test tubes diam. 42x300mm high	A00001080*
N° 1	Stainless steel glassware handle	A00001112
N° 1	Fume suction cup	A00001093
N° 1	Support system	A00001204

Upon request accessories

N° 1	Stainless steel drop collector	A00001202
N° 1	Stainless steel stand for glassware handle	A00001094
N° 1	Printer	A00001009

Upon request accessories for C.O.D.

N° 20	COD test tube diameter 42x200 mm high, 200 ml, 29/32 ,cone	A00001040*
N° 20	Air refrigerators with ground cone	A00001041*
N° 20	PTFE sheaths for 29/32 cones	A00001042*
N° 20	Antisplash bells	A00001045*
N° 1	Stainless steel glassware handle for COD	A00001098
N° 1	Stand for glassware handle	A00001094

* Code number refers to one single piece

DK 6/48:**Required for digestions**

N° 6	Glass test tubes diam. 48x250mm high	A00001088*
N° 1	Glassware handle with heat shield	A00001113
N° 1	Fume suction cup	A00001101
N° 1	Stainless steel stand for glassware handle	A00001097

Upon request accessories

N° 1	Stainless steel drop collector	A00001200
N° 1	Printer	A00001009

* Code number refers to one single piece

DK 20/26:**Required for digestions**

N° 20	Glass test tubes diam. 26x300mm high	A00001091*
N° 1	Stainless steel glassware handle	A00001110
N° 1	Fume suction cup	A00109626
N° 1	Support system	A00001206

Upon request accessories

N° 1	Printer	A00001009
------	---------	------------------

** Code number refers to one single piece*

DK 42/26:**Required for digestions**

N° 42	Glass test tubes diam. 26x300mm high	A00001091*
N° 1	Stainless steel glassware handle	A00001109
N° 1	Fume suction cup	A00109326
N° 1	Support system	A00001204

Upon request accessories

N° 1	Printer	A00001009
------	---------	------------------

** Code number refers to one single piece*

When the digestion of samples implies the development of toxic, corrosive fumes (e.g. kjeldahl) the heating block can be connected to Velp Scientifica equipment for fume suction and abatement:

recirculating water vacuum pump type JP	code F30620198
SMS Scrubber	code F307C0199

The use of the heat shields (2 pieces) during digestions is very important, in order to have a more homogeneous heating of the glass test tube containing the sample, in its different parts.

10001332/A2

21

8.1 How to verify the temperature of the heating block

The electronic control of temperature allows a good stability without over temperatures or oscillations around set point. The probe used for the measurement of temperature is a Pt100 which allows a high precision.

The probe does not require a calibration because every time the instrument is turned on the internal software of the microprocessor performs a self calibration. Anyway if a control is required it is possible to measure the temperature of the heating block introducing an original Velp Scientifica thermometer into the hole located in the upper part of the block.

Code Art. 1000282

mercury thermometer 0÷250°C

Code Art. ACTE004

mercury thermometer, pressurized by nitrogen 0÷450°C

9. Spare parts

DK 6:

VELP code	F30100182	F30110182
Power supply (V/Hz)	220-240/50-60	110-120/50-60
Fuse	10000669 (5A)	10000671 (10A)
Electronic resistance	10000744	10000747
Electronic control card	10000531	10000533
Display card	10000583	10000583
Safety thermostat	10001102	10001102
Pt100 probe	10000598	10000598

DK 20:

VELP code	F30100184
Power supply (V/Hz)	220-240/50-60
Fuse	10000678 (5A)
Electronic resistance	10000746
Electronic control card	10000532
Display card	10000583
Safety thermostat	10001102
Pt100 probe	10000598

10001332/A1

22

DK 6/48:

VELP code	F30100188	F30110188
Power supply (V/Hz)	220-240/50-60	110-120/50-60
Fuse	10000669 (5A)	10000671 (10A)
Electronic resistance	10000744	10000747
Electronic control card	10000531	10000533
Display card	10000583	10000583
Safety thermostat	10001102	10001102
Pt100 probe	10000598	10000598

DK 20/26:

VELP code	F30100185	F30110185
Power supply (V/Hz)	220-240/50-60	110-120/50-60
Fuse	10000669 (5A)	10000671 (10A)
Electronic resistance	10000744	10000747
Electronic control card	10000531	10000533
Display card	10000583	10000583
Safety thermostat	10001102	10001102
Pt100 probe	10000598	10000598

DK 42/26:

VELP code	F30100186
Power supply (V/Hz)	220-240/50-60
Fuse	10000678 (12A)
Electronic resistance	10000746
Electronic control card	10000532
Display card	10000583
Safety thermostat	10001102
Pt100 probe	10000598

10001332/A1

23

10. Technical features

DK 6: 6 holes Ø 42 mm

General:		Code F30100182	Code F30110182
Power supply	V/Hz	220-240/50-60	110-120/50-60
Power	W	1.100	
Weight	kg	10	
Dimensions (WxHxD)	mm	293x152x339	
Hole diameter	mm	42 x n°6 holes	
Display		Lighted LCD with 2 lines and 16x2 characters	
Language selection		N° 5: I – UK – F – E – D	
Temperature unit		°C o °F	
Thermoregulation		P.I.D. microprocessor	
Temperature precision	%	± 0.2 end of scale	
Temperature probe		Pt 100 class A	
Temperature calibration		Automatic by software	

Programs:		
Selectable programs	n°	20
Work ramps for each program	n°	1 ÷ 4
Selectable temperatures	°C/°F	10 ÷ 450°C / 51 ÷ 842°F
Temperature selection	°C/°F	1
Selectable times	min.'	from 001 to 999
Selection of time	min.'	1
Continuous operation		Possible

Performance:		
Speed of heating from 20°C to 420°C	min.'	30
Stability of temperature	°C	± 0,5
Homogeneity of temperature.	°C	± 0,5
Precision of temperature	°C	± 0,5

Safeties:		
Against over temperatures		Thermostat with manual reset
Probe out of service		Displayed by the software

Interface		
Serial		RS232 (9 pin)

DK 20: 20 holes Ø 42 mm

General:		Code F30100184
Power supply	V/Hz	220-240/50-60
Power	W	2.100
Weight	kg	24
Dimensions (WxHxD)	mm	393x152x446
Hole diameter	mm	42 x n°20 holes
Display		Lighted LCD with 2 lines and 16x2 characters
Language selection		N° 5: I –UK – F- E – D
Temperature unit		°C o °F
Thermoregulation		P.I.D. microprocessor
Temperature precision	%	± 0.2 end of scale
Temperature probe		Pt 100 class A
Temperature calibration		Automatic by software

Programs:		
Selectable programs	n°	20
Work ramps for each program	n°	1 ÷ 4
Selectable temperatures	°C/°F	10 ÷ 450°C / 51 ÷ 842°F
Temperature selection	°C/°F	1
Selectable times	min.'	from 001 to 999
Selection of time	min.'	1
Continuous operation		Possible

Performance:		
Speed of heating from 20°C to 420°C	min.'	50
Stability of temperature	°C	± 0,5
Homogeneity of temperature.	°C	± 0,5
Homogeneity of temperature	°C	± 0,5

Safeties:	
Against over temperatures	Thermostat with manual reset
Probe out of service	Displayed by the software

Interface	
Serial	RS232 (9 pin)

10001332/A1

25

DK 6/48: 6 holes Ø 48 mm

General:		code F30100188	Code F30110188
Power supply	V/Hz	220-240/50-60	110-120/50-60
Power	W	1.100	
Weight	kg	8.2	
Dimensions (WxHxD)	mm	293x152x339	
Hole diameter	mm	48 x n°6 holes	
Display		Lighted LCD with 2 lines and 16x2 characters	
Language selection		N° 5: I – UK – F – E – D	
Temperature unit		°C o °F	
Thermoregulation		P.I.D. microprocessor	
Temperature precision	%	± 0.2 end of scale	
Temperature probe		Pt 100 class A	
Temperature calibration		Automatic by software	

Programs:		
Selectable programs	n°	20
Work ramps for each program	n°	1 ÷ 4
Selectable temperatures	°C/°F	10 ÷ 450°C / 51 ÷ 842°F
Temperature selection	°C/°F	1
Selectable times	min.°	from 001 to 999
Selection of time	min.°	1
Continuous operation		Possible

Performance:		
Speed of heating from 20°C to 420°C	min.°	30
Stability of temperature	°C	± 0,5
Homogeneity of temperature.	°C	± 0,5
Homogeneity of temperature	°C	± 0,5

Safeties:	
Against over temperatures	Thermostat with manual reset
Probe out of service	Displayed by the software

Interface	
Serial	RS232 (9 pin)

DK 20/26: 20 holes Ø 26 mm

General:		Code F30100185	Code F30110185
Power supply	V/Hz	220-240/50-60	110-120/50-60
Power	W	1.100	
Weight	kg	10	
Dimensions (WxHxD)	mm	293x152x339	
Hole diameter	mm	26 x n°20 holes	
Display		Lighted LCD with 2 lines and 16x2 characters	
Language selection		N° 5: I –UK – F- E – D	
Temperature unit		°C o °F	
Thermoregulation		P.I.D. microprocessor	
Temperature precision	%	± 0.2 end of scale	
Temperature probe		Pt 100 class A	
Temperature calibration		Automatic by software	

Programs:		
Selectable programs	n°	20
Work ramps for each program	n°	1 ÷ 4
Selectable temperatures	°C/°F	10 ÷ 450°C / 51 ÷ 842°F
Temperature selection	°C/°F	1
Selectable times	min.'	from 001 to 999
Selection of time	min.'	1
Continuous operation		Possible

Performance:		
Speed of heating from 20°C to 420°C	min.'	30
Stability of temperature	°C	± 0,5
Homogeneity of temperature.	°C	± 0,5
Homogeneity of temperature	°C	± 0,5

Safeties:	
Against over temperatures	Thermostat with manual reset
Probe out of service	Displayed by the software

Interface	
Serial	RS232 (9 pin)

10001332/A1

27

DK 42/26: 42 holes Ø 26 mm

General:		Code F30100186
Power supply	V/Hz	220-240/50-60
Power	W	2.100
Weight	kg	24
Dimensions (WxHxD)	mm	393x152x446
Hole diameter	mm	26 x n°42 holes
Display		Lighted LCD with 2 lines and 16x2 characters
Language selection		N° 5: I – UK – F – E – D
Temperature unit		°C o °F
Thermoregulation		P.I.D. microprocessor
Temperature precision	%	± 0.2 end of scale
Temperature probe		Pt 100 class A
Temperature calibration		Automatic by software

Programs:		
Selectable programs	n°	20
Work ramps for each program	n°	1 ÷ 4
Selectable temperatures	°C/°F	10 ÷ 450°C / 51 ÷ 842°F
Temperature selection	°C/°F	1
Selectable times	min.'	from 001 to 999
Selection of time	min.'	1
Continuous operation		Possible

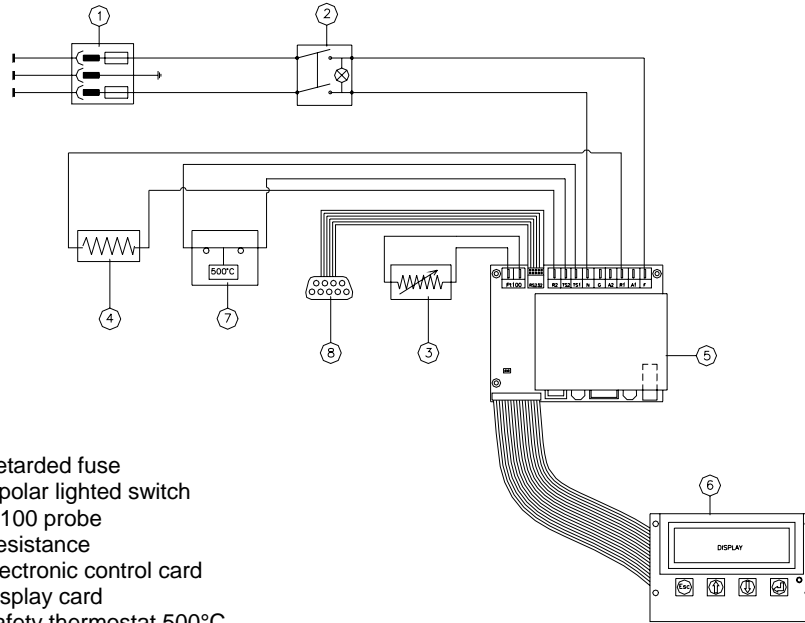
Performance:		
Speed of heating from 20°C to 420°C	min.'	50
Stability of temperature	°C	± 0,5
Homogeneity of temperature.	°C	± 0,5
Homogeneity of temperature	°C	± 0,5

Safeties:	
Against over temperatures	Thermostat with manual reset
Probe out of service	Displayed by the software

Interface	
Serial	RS232 (9 pin)

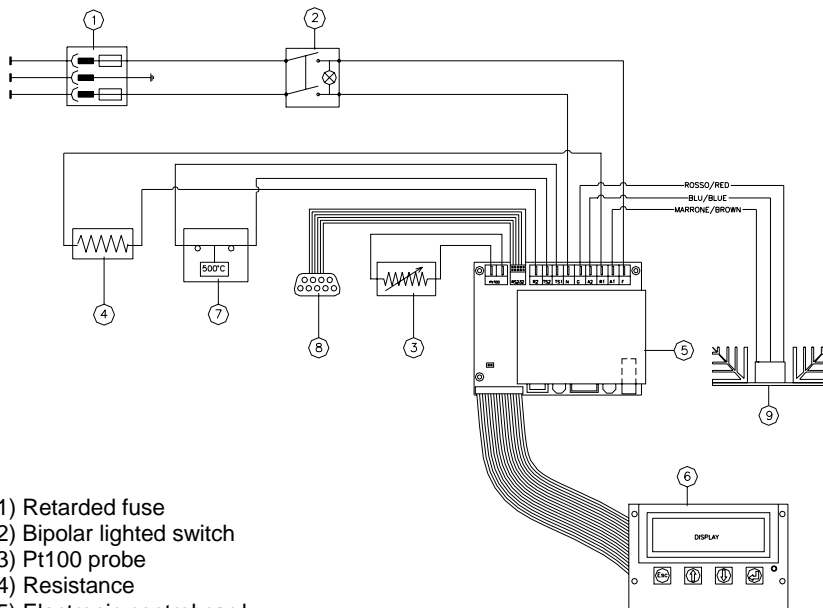
11. Electric scheme

DK 6 – DK 6/48 – DK 20/26:



10001332/A1

29



- 1) Retarded fuse
- 2) Bipolar lighted switch
- 3) Pt100 probe
- 4) Resistance
- 5) Electronic control card
- 6) Display card
- 7) Safety thermostat 500°C
- 8) Serial interface RS232
- 9) Power triac

Declaration of compliance

We
manufacturer
address

VELP SCIENTIFICA s.r.l.
Via Stazione, 16
USMATE (MI)
Italy

Under our responsibility declare that the product is in according with the following standards:

EN 61010-1/2001
EN 61326-1/2000

And satisfies the essential requirements of directives:

Machines directive 98/37/CEE

Low voltage directive 73/23/CEE

Electromagnetic compatibility directive 89/336/CEE

Plus modifications and that the documents listed in the annex V are available at Velp's offices as per the machine directive.

10001332/A2

LABO-MODERNE

37 rue Dombasle - 75015 Paris

Tél. : 01 45 32 62 54

Fax : 01 45 32 01 09

S.A.V. : 01 42 50 21 95

www.labomoderne.com

info@labomoderne.com