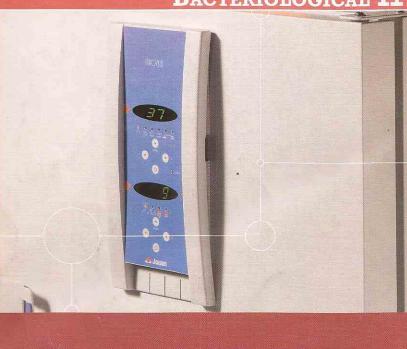
### BACTERIOLOGICAL INCUBATORS



INNOVENS<sup>TM</sup> EB2 / EB3

## Reference For Thermal Performance



#### BACTERIOLOGICAL INCUBATORS

## INNOVENS™

#### JOUAN INNOVENS ™ Guarantees Optimum Regulation

Constant, homogeneous sample temperature is a priority.

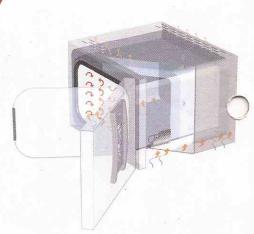
#### Long Term Reliability

Incubation quality is ensured by an original conception based upon triple insulation.

The heating elements are in direct contact with the inner body in order to minimise the response time to any variation from the set value.

The position of the heating elements guarantees excellent temperature homogeneity.

The INNOVENS™ incubators are designed for intensive use.

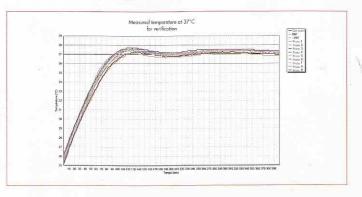


Reproducibility of the protocols is essential for validity of results.

#### **Quality** Results

INNOVENS<sup>TM</sup> EB2 and EB3 incubators establish reference for thermal performance: homogeneity ( $\pm$  0.5°C at 37°C) and stability ( $\pm$  0.1°C at 37°C) are ensured using natural convection thus enabling quality results to be obtained at every stage of the protocol.





# 6.50

#### Which Applications?

Incubation of bacterial cultures and samples for bacterial research. EB3 INNOVENS™ incubators are particularly suited to applications requiring advanced programming and frequent performance validation.



## EB2

## Link Performance to High Level Equipment

The instrument must respond safely to different users and protocols.

#### Time Saving

The control panel is designed to facilitate use of the incubators by different operators. Simplicity, speed and intuitive understanding are inherent.

#### Safe Sample Incubation

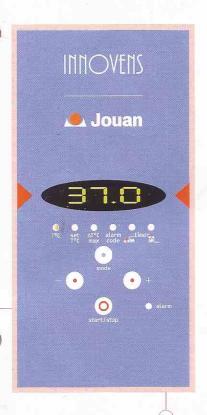
Audible and visual alarms operate in case of any anomaly. A diagnostic menu indicates the nature of the problem on screen and helps the user to analyse and correct the fault.

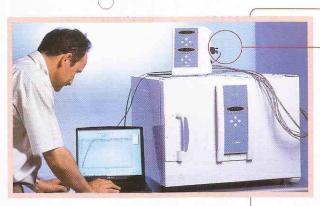
A Class 3.1 safety thermostat protects the samples and the incubator from overheating.

The overtemperature threshold is programmable. The alarms are operated if this value is exceeded.

#### **Custom** Programming

The standard control unit on the INNOVENS<sup>TM</sup> EB2 incubators enables the operating temperature and alarm temperature threshold to be set plus selection of the automatic timer which starts when the set temperature is reached. In addition, the heating can be delayed to start in the absence of the operator.





#### **Specific Monitoring?**

A 9 or 15 point mapping service is available from your JOUAN after sales service engineer. This will enable you to prove conformity with the regulations applicable in your laboratory and international standards such as ISO 9000, GLP, GMP...

## EB3

#### **Control and Check the Results**

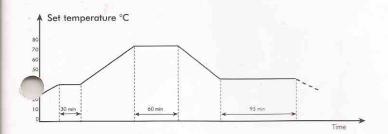
The protocols which have been developed must be programmed and checked with maximum security.

#### Complete Programming

INNOVENS™ EB3 incubators possess the functions of the INNOVENS™ EB2 plus temperature ramp function which gives the possibility to pre-set up to 18 steps, necessary for certain applications.

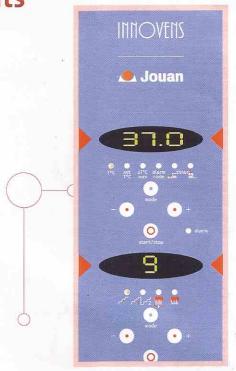
#### Loop Function

INNOVENS<sup>TM</sup> EB3 incubators enable the same protocol of temperature / time values defined by the user to be repeated up to 99 times with automatic storage of the last program used.



#### The INNOVENS™ EB3 Extra:

The operating performance of the instruments can be checked at any time using a data acquisition module built-in as standard. This feature allows mapping via the mapping kit Map IN<sup>TM</sup> (accessory, cat.N° 42700220).



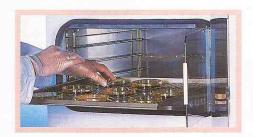
#### Traceability Of Results

INNOVENS™ EB3 incubators incorporate an RS485 interface which enables one or several incubators to be connected to a PC to allow monitoring and recording of the operation on a routine basis. The preset values, alarm history, temperature recording, etc., can be checked easily using the RS 485 interface.

## EB2 & EB3

#### **Convenience and Time Saving**

#### Multiple handling of the samples must not affect their safety.



#### Working Convenience

An anti-tip system for the shelves frees the hands while allowing the handling to be carried out safely. An inner glass door enables the samples to be seen without disturbing the chamber atmosphere.

#### It is essential to have easy access to surfaces to be cleaned.



#### Ease Of Cleaning

Dismounting the shelves and racks is carried in a few seconds, without any tools and giving access to the perfectly smooth and bare stainless steel chamber. There is no fitting device inside. Cleaning is fast and easy.

Laboratory bench space is often limited.

#### Optimised Capacity In a Small Footprint

The conception of the INNOVENS™ EB2 and EB3 incubators provides a large internal surface for the minimum external space. In addition, all the INNOVENS™ machines can be stacked in order to gain more space.



#### What About Ergonomics?

The hands-free opening system Reflex<sup>TM</sup> is as standard on the INNOVENS<sup>TM</sup> EB3 incubators. It improves security of manipulation and is more convenient. The inner door of the IMNOVENS<sup>TM</sup> EB3 incubators has an hands-free opening system too. The INNOVENS<sup>TM</sup> EB3 possess the electronic door lock MemoLock<sup>TM</sup> as an option.

#### **Technical Specifications**

INNOVENSTM	EB - 55	EB - 77	EB - 118	EB - 162	EB - 234
Catalogue N°:					
EB2 (230 V/50-60 Hz) EB2 (120 V/60 Hz) EB3 (230 V/50-60 Hz) EB3 (120 V/60 Hz)	42752000 41872000 NA NA	42753000 41873000 42763000 41883000	42754000 41874000 42764000 41884000	42755000 41875000 42765000 41885000	42756000 41876000 42766000 41886000
Capacity (L)	55	77	118	162	234
Regulation range	Ambient +5°C to 75°C				
Homogeneity	± 0.5°C at 37°C				
Stability	± 0.1°C at 37°C				
Digital display resolution	0.1°C				
Dimensions H x W x D (mm)  Internal  External  Packed	221 x 500 x 500 459 x 635 x 635 644 x 735 x 735	310 x 500 x 500 547 x 635 x 635 733 x 735 x 735	474 x 500 x 500 711 x 635 x 635 896 x 735 x 735	650 x 500 x 500 888 x 635 x 635 1073 x 735 x 735	936 x 500 x 500 1186 x 635 x 635 1371 x 735 x 735
Typical net weight (kg)	40	45	50	55	60
Typical EB 230 V/50-60 Hz power (W) EB 120 V/60 Hz	106 115	126 137	156 <sup>1</sup> 169	203 222	265 288
N° shelves Std/max.	1/3	1/4	1/8	2/11	2/17
Distance between shelves (mm)	45	60	60	60	60
Shelf dimensions W x D (mm)	470 x 467	470 x 467	470 x 467	470 x 467	470 x 467
Usable surface per shelf W x D (mm)	455 x 451	455 x 451	455 x 451	455 x 451	455 x 451
Maximum possible shelf surface (m²)	0.62	0.82	1.64	2.26	3.49
Maximum load per shelf (kg)	10	10	10	10	10

(performance is validated according to the NFX 15140 French Standard)

INNOVENS <sup>TM</sup> ACCESSORIES	Reference
Stainless Steel Shelf for INNOVENS™ 55 L to 234 L	42700200
Gridded Steel Shelf for INNOVENS™ EU 55 L to 234 L	42700201
Lowenstein shelf (63 tubes) for INNOVENS™EB 55-234	42700203
Lowenstein shelf for 170 mm tubes (2 x 21)	42700219
Tor INNOVENS™ EB 55-234	
/2 depth Shelf	42700204
· Standard shelf with no rim on front edge	42700206
Petri dish carrier 2 rows of 2 columns of 6 Petri dishes (90 mm)	42700207
Petri dish carrier 4 rows of 4 columns of 6 Petri dishes (90 mm)	42700205
Caster Stand - for INNOVENS™ 55-234	42700202
7 day battery temperature chart recorder 0-75°C	
for INNOVENS™EB (delivered with 100 recorder discs)	41390024
Pack of 100 recorder discs	42700226
Map'IN™ kit for INNOVENS™ EB3 for 9 points mapping	42700220
(3) and (4) Single internal mains socket 240 V/50 Hz (UK)	42700208
(3) and (4) Double internal mains socket 240 V/50 Hz (UK)	42700216
(3) and (4) Triple internal mains socket 240 V/50 Hz (UK)	42700221
(3) and (4) Quadruple internal mains socket 240 V/50 Hz (UK)	42700222
1 Probe Support System	42700213
1 Extra Pt 500 Probe (0-250°C)	42700214
Stand for under cleaning for INNOVENS 55-234 L	42700215

(3) Internal Mains Sockets : Require an Access Port, Please contact us for other voltages and sockets specific to other countries

(4) Please contact us for other voltages and sockets specific to other countries

INNOVENS™ OPTIONS	Reference	
Mechanical convection (non available for EB - 55 models)	00000001	
Access port	00070004	
Left hand side door hinge	00070008	
MemoLock™ (electronic door lock for EB3)	00070016	
Retrofit kit (2)	Reference	
Access Port Retrofit Kit	42700300	

(i) When ordering, add the option Cat.  $N^{\alpha}$  to the instrument Cat.  $N^{\alpha}$  , except for the fourth digit.

(i) Options manufactured upon request. Please contact us for the delivery time information.

(2) Needs to be installed by a technician







W. Europe (except France): JOUAN Nordic A/S Gydevang 17-19, 3450 ALLERØD Tel +45 48 16 62 00 - Fax +45 48 16 62.97 e-mail: info@jouannordic.com - www.jouan.com France & other countries: JOUAN S.A.

10, rue Duguay Trouin - 44807 Saint-Herblain Cedex
Tel +33 (0) 2 28 03 20 00 - Fax +33 (0) 2 28 03 20 01
e-mail: jouan@jouan.com - www.jouan.com

