MEDICOR

MEDICOR ELEKTRONIKA

BABYLIFE®

MEDICOR | AUTHENTIC
EUROPEAN MANUFACTURER OF
MEDICAL EQUIPMENT AND
DEVICES FOR NEONATES

BLR-2100 TYPE
NEONATAL WARMING
AND RESUSCITATION
TABLE FAMILY

HUNGARY

100 years experience in the field of medical device manufacturing
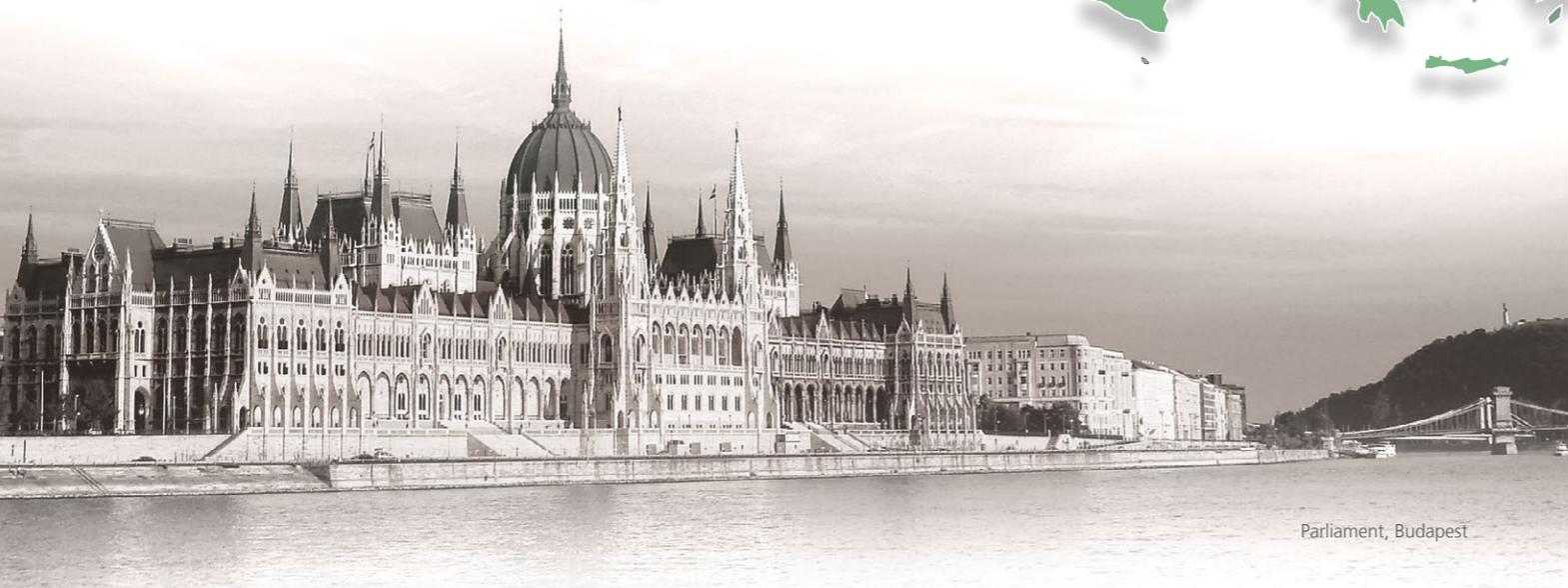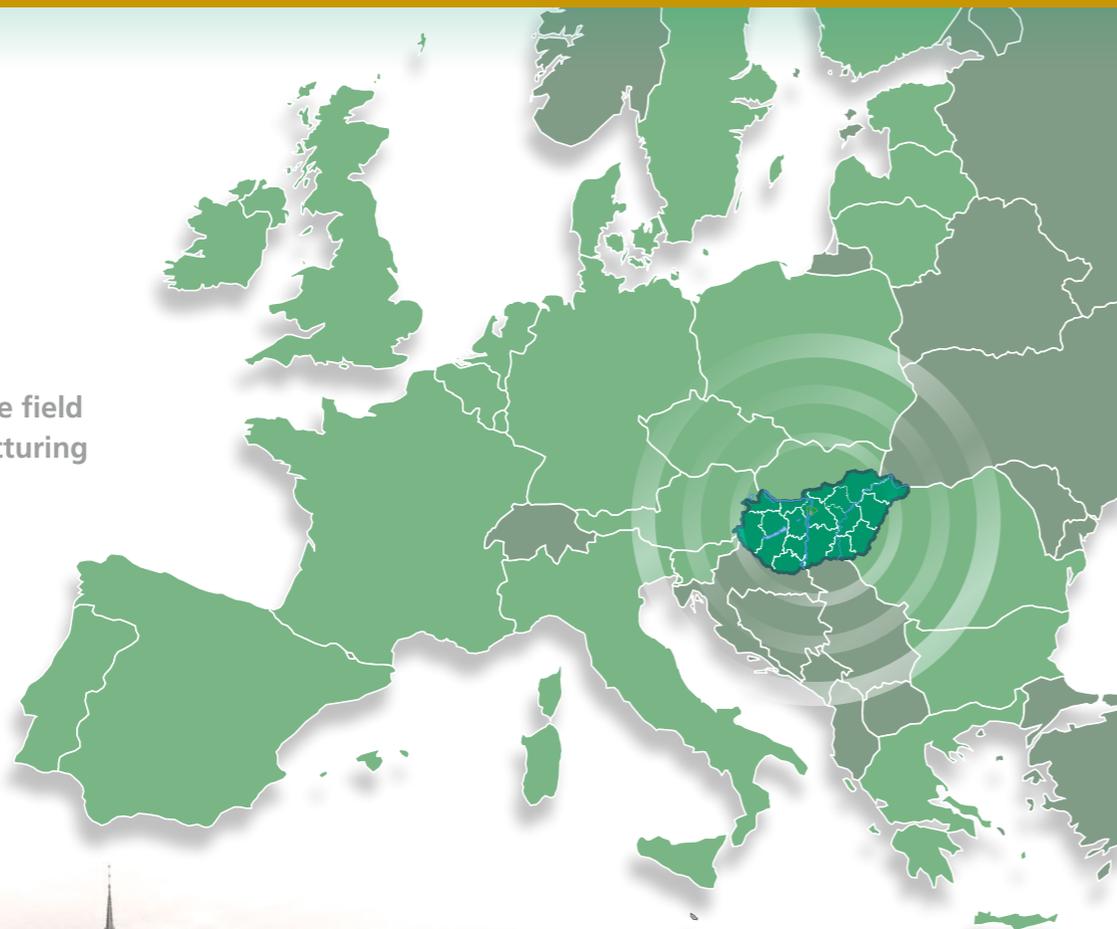
Parliament, Budapest

Dr Steiner Arnold
CEO, President

Steiner András Arnold
Deputy CEO, Vice President

Ahmad Mihyar
MENA Regional Manager

Dear Partners,

Medical device manufacturing is one of the oldest and at the same time most innovative branches of Hungarian industry. Being among the oldest participants, MEDICOR gathered great experience in the field of neonatal care over the past decades. Thank to our partners in four continents, nowadays we are present in more than 100 countries. Due to its continuous development, MEDICOR BABYLIFE product line offers the latest cutting-edge technology in the field of neonatal care. Our results reflect our participation in countless successful national and international public tenders and business orders. We are especially proud of the fact that UNICEF and WHO have has found our products worthy of a long-term supply agreement. The catalogue you are holding in your hands will introduce our company and the BLR-2100 Neonatal warming and resuscitation table to you. Thank you for your attention.

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Building on the past

In Hungary the dawn of medical device manufacturing dates back to the early 20th century.

The mid-20th century

• Development and manufacturing were carried out by small and medium-size enterprises – or SMEs, in today's terminology – in other fields of medical technology continued until the Soviet occupation of 1945, or rather the beginning of the Communist dictatorship in 1948-49, when small companies were nationalised and consolidated. In 1933, Magyar Siemens-Reiniger Művek Rt. became the only company on the Hungarian market; from 1956 on, operating under the name Medicor.

• In the 1960s, semi-conductor technology and microprocessors made it possible to manufacture larger and more complex systems. The companies Elektronikus Mérőkészülékek Gyára (EMG) and Gamma Művek (Gamma) were pioneers in this field: EMG specialised in ECG and EEG technology, while Gamma developed a range of nuclear medical systems. Another company, the Medical Aids Factory played a major role in aiding rehabilitation by mass producing a variety of equipment to assist patients suffering from different types of disabilities.

The late 20th century

• Since the fall of Communism, the market for medical technology has undergone significant changes. New ownership and manufacturing structures have evolved and stabilised as large domestic companies were privatised and split up.

• In the period following the transition to democracy some 100 small and medium-size companies were established. Many of those continue to cherish and promote the strong traditions of the field, the majority remaining in Hungarian ownership even to date.

Széchenyi Chain Bridge, Budapest

MEDICOR: Then and now

MEDICOR Művek was formed from Hungary's medical technology companies in 1963. The company, whose operation involved development, manufacturing and trading, played a dominant role in the domestic industry for some 30 years.

MEDICOR Művek continued to expand and develop into the 1980s. At its peak, the company employed more than 10,000 people in its factories, research and development institute, as well as domestic and export trading branches. In this period, MEDICOR accounted for more than half of Hungary's medical technology manufacturing and had representation in 35 countries around the world. Some 85 to 90 percent of the production was made for export predominantly to COMECON countries.

Today, the manufacturing and service companies operating within MEDICOR Group are almost entirely Hungarian-owned and serve as the centre for the production of medical instruments and related services in Hungary.

MEDICOR ELEKTRONIKA has an equity of EUR 1,000,000 as a 100-percent Hungarian-owned company. The stock company plays a key role in the design and production of neonatal medical equipment relying on a global distribution network covering more than 100 countries all over the world. Its home treatment products also generate considerable revenue, particularly in Hungary.

MEDICOR ELEKTRONIKA's leading products include hospital equipment as well as home diagnosis and therapy products.

Hungarian Quality Product Award

BABYLIFE® BLF-2001
Neonatal incubator family

BABYLIFE® BLR-2100
Neonatal warming and resuscitation tables

MEDICOR

prompt service

reliable operation   easy to use

reliable spare parts supply

built-in protection functions

MEDICOR ELEKTRONIKA ZRT.

BABYLIFE® **BLR-2100**

Neonatal warming
and resuscitation table family

- **Exceptional safety**
- **Easy access to the baby**
- **Pre-warm/Manual/Skin/Surface control**
- **Apgar timer**
- **Variable oxygen supply**
- **Micro-computer controlling**
- **Graphical LCD display of trend**
- **Numerous options**

CE 2409

MEDICOR

www.medicor.hu

ISO 9001   ISO 13485

BABYLIFE® BLR-2100
Neonatal warming and resuscitation tables

The new BABYLIFE® product, Neonatal Warming and Resuscitation Table, Model BLR-2100 released by MEDICOR ELEKTRONIKA is a cutting-edge device to be used in obstetric wards and intensive care units. The temperature provided by BABYLIFE® BLR-2100 through thermo-radiation is adjustable within a wide range, while the radiator with its physiologically optimal wave length prevents the neonate from cooling down in the course of and following necessary interventions.

Features of Model BLR-2100
Microprocessor control, graphic LCD display, touch display-control board, alarm with LED display, APGAR display, ceramic heating elements, x-ray tray.

Operating modes:
• Automatic pre-warm of lying surface temperature
• Manual temperature control of lying surface
• Automatic temperature control of lying surface
• Automatic skin temperature control

The following parameters are digitally displayed on graphic LCD:
• Set (required) value of lying surface or skin temperature,
• Current value of lying surface or skin temperature
• Set (required) temperature of heatable mattress (optional),
• Current temperature of heatable mattress (optional),
• Current value of second (skin or rectal) body temperature (optional),
• Set (required) oxygen concentration of the air in the neonatal headhood (optional),
• Current oxygen concentration of the air in the neonatal head-hood (optional)
• APGAR time
• Current date and time
• Heating intensity in %
• Reason for possible warnings and alarms
• Retrospectively, trend of values measured every 3/24/170 hrs
• Lighting: SPOT lamp with adjustable light intensity

Options:
• Rectal and second skin temperature sensor
• O2 servo in head-hood up to 75 (90)%
• Heatable oxygen humidifier
• Injection or compression suction unit
• Gel mattress and heated mattress
• LED phototherapy unit
• SpO2 (pulse oximeter)
• 7" standard and 10.4" touchscreen LCD
• Storing cabinet with two drawers
• Instrument shelf with IV pole
• Head fixing unit
• Computer software for remote control
• Eye mask for phototherapy

The manufacturer reserves the right to continuous improvement of the product.

Advantages of the device

safety
• The electronic thermometer and thermo-regulator are highly accurate and absolutely safe
• Required thermo-regulation modes and SET values are easy to select by pressing the relevant touch buttons and may be changed by entering the relevant code
• The device measures and indicates APGAR time
• Several alarm and warning signals

comfort
• Freely tiltable treatment table toward head and leg
• Electric adjustment of treatment table-floor distance (optional)
• Rotation of radiating head by 30° with a locking push-button, then freely by 120°
• Heated mattress, heating regulation within limits set by manufacturer (optional)
• Washable lying surface, sponge cushion with skin-friendly cover, gel cushion for heated mattress (optional)
• Easy to clean touch button display and control board
• Lying surface illuminated with SPOT light of adjustable light intensity

variability
• Heatable oxygen vaporizing unit (optional)
• Head hood oxygen-air mixing unit servo-controlling also the required oxygen concentration (optional)
• Phototherapy unit with LEDs is also available (optional)
• Lying surface with mattress suitable for operation (optional)

OPTIONS
BABYLIFE® BLR-2100

OSZ(R)
Complete oxygen servo control 21–75 (90)% in head-hood (with head-hood and heated oxygen humidifying unit, but without oxygen cylinder) and digital display of trend

EFE(R)
Additional built-in trolley for free adjustment of height of lying surface with electrical movement (Lifting of lying plate possible between 870–1020 mm)

KLD

LED operated phototherapy system, mounted on the radiant head of the resuscitation unit

FSZ

Additional built-in lower cabinet with drawers

MF

Adjustable mattress heating between 30–33 (36)°C.

GM

Gel mattress
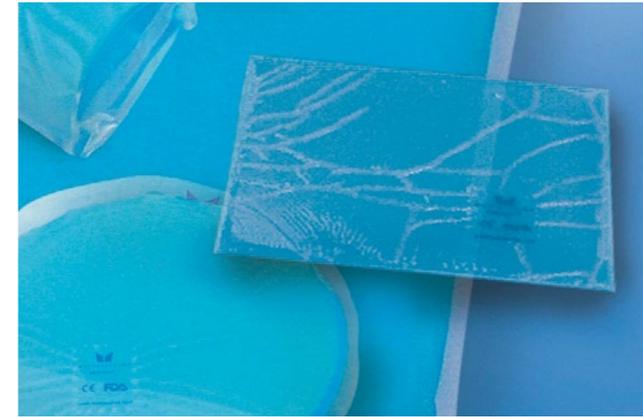
ESZ

Low pressure aspirator: pressure can be adjusted freely, electric magnetic pump, low noise, bottle for 500cc liquid

RCS

Neonate Resuscitation Bag: auto-decompress, silicon mask for premature or neonate, can be sterilized at high temperature.

SZM

Neonate Eye Mask: special material, creative design, soft, comfortable, two sizes: 24cm~33cm, 30cm~38cm.

FF

Head Frame: used to fix newborn baby's head during injections

IRU

Integrated Neonatal T-piece Resuscitator with PIP and PEEP control

Standard Features and Options of BABYLIFE® BLR-2100 Neonatal Warming and Resuscitation Table (Standard Version)*

Versions: **S** Standard
Features: x Standard o Optional

STAND / IV POLE / MONITOR SHELF / DRAWER	S
Heavy duty stand with 4 castors (2 lockable, 150 mm)	x
Electric height adjustment with foot pedal 870 - 1020 mm	o
Instrument shelf on the stand (350x790 mm)	o
Monitor shelves (two) on the column	x
Cupboard with two drawers (300x300x90 mm) on the stand	x
Cupboard with four drawers (300x300x90 mm) on the stand	o
Gas cylinder holders (two) on the stand	x
Protector bumpers on each side	x
Handle for movement	x
IV pole	x

LYING SURFACE (BED) / X-RAY CASSETTE TRAY	
Foldable side walls (4 pcs, height 17,5 cm)	x
Measure line on two side walls	x
Tube ports on side walls	x
Name plate on front wall	x
Lying surface with anti-decubitus mattress, x-ray compatible	x
Lying surface with foam mattress, x-ray compatible	o
Gel mattress	o

	S
Net mattress	o
Mechanical cradle tilting (continuous, up to 10 degree, both direction)	x
Drawable x-ray casette tray (35 x 65 cm)	x

HEAD / HEATER / OBSERVATION LIGHTS	
Turnable head by 30 / 90 / 120 degree both direction	x
Ceramic heaters (two) with protecting grid	x
Bright and soft lighting	x
Dimmable halogen light	x
LED procedure light	x

DISPLAY / CAMERA / OPERATION / SAFETY / NETWORK	
5" LCD display	x
7" colour LCD display	o
10.4" colour touchscreen monitor	o
Set / Display of date / time /temperature, etc.	x
Ambient temperature monitoring	o
APGAR timer	x
CPR mode	x
Display of heating intensity, 3/24/170 hours trend, real and measured values	x
Integrated camera	o
Waterresistant, foil-covered keypad with lock	x
State-of-the-art microprocessor controller	x
UPS (Uninterruptible Power Supply) from 30 min operation time	o
Visual and audible alarms and backup sensors	x
Continuous self-test function during operation	x
Test button / Self test / Silence / Reset button	x
Text / icon messages	x
RS-232 connector	x
LAN connection	o
WIFI connection	o

TEMPERATURE REGULATION	S
Automatic warmup	x
Pre-warm mode (33 °C)	x
Manual mode (10-80%)	x
Surface temperature servo control (30-38 °C)	x
Skin temperature servo control (34-38 °C)	x
Adjustable mattress heating (30-33 °C)	o
Peripherial skin temperature sensor	o
Peripherial rectal temperature sensor	o
Reusable / Disposable skin temperature sensor	x/o
Reusable / Disposable rectal temperature sensor	o

OXYGEN REGULATION / RESUSCITATOR / SCALE / SPO2 / SUCTION UNIT / PHOTOTHERAPY / NEONATAL MONITOR	
Flowmeter with heated humidifier	o
Oxygen servo in head-hood (21-90%)	o
NeoTee disposable infant T-piece resuscitator with PIP and PEEP control	o
Integrated Neonatal T-piece Resuscitator with PIP and PEEP control	o
Auto NeoBreath Integrated Neonatal T-piece Resuscitator with PIP and PEEP control	o
Air / Oxygen Blender	o
Weighing scale with display (0-8 kg)	o
Built-in pulseoximeter with colour LCD	o
Reusable / Disposable SpO$_2$ sensor	o
SpO$_2$ extension cord	o
Suction unit with jar (venturi / electromechanical)	o
Integrated LED phototherapy unit	o
Neonatal Monitor	o

ACCESSORIES	
Fixing head frame / Tube holder	o
Head-hood	o
Neonate protecting eyemask (disposable, 10 pcs)	o
Reusable textile cover	o

LANGUAGE (SOFTWARE / USER MANUAL / SERVICE MANUAL)	S
Language English	x
Language CN/DE/ES/FR/HU/RU	o

*Additional features in case of demand. The models illustrated in this brochure show the specifications of neonatal warming and resuscitation table produced by MEDICOR for the European market. In part, they include optional equipment and accessories not fitted as standard. According to the specific requirements of other markets, alterations in models, standard and optional equipment, as described in this brochure, may occur. For more precise information about country-specific product versions, please contact your local partner. Subject to change in design, specification and options without prior notice.

Technical data of BABYLIFE® BLR-2100 Neonatal warming and resuscitation table (Standard Version)*

PHYSICAL ATTRIBUTES (STANDARD VERSION)

Height / Adjustable / Packing	185/185-200/112 cm (72,8/72-78,7/44,1 in)
Width / Packing	120/127 cm (47,2/50 in)
Depth / Packing	71/81 cm (28/31,9 in)
Bed to Floor (fix)	87 cm (33,5 in)
Bed to Floor (adjustable)	87 – 102 cm (33,5 – 39,4 in)
Weight / Packing approx.	90/120 kg (199/265 lbs)
Mains voltage	220/230V ±10% (default), 110/120V ±10% (upon request)
Mains frequency	50 Hz (default), 60 Hz (upon request)
Nominal power consumption	1100W
Nominal power of ceramic heaters (2 pcs)	400 W both
Operating ambient temperature range	+20°C - +30°C (68oF – 86oF)
Storage/transport ambient temperature range	-40°C - +70°C (-40oF - 158oF)
Operating (Storage) ambient RH range	30% - 75% (10% - 100%)
Operating (Storage) air pressure range	700 hPa - 1060 hPa (500 hPa - 1060 hPa)

LYING SURFACE (BED) SPECIFICATION

Surface size	61 x 76 cm (24 x 29,9 in)
Mattress size	60 x 75 x 2 cm (23,6 x 29,5 x 0,8 in)
Mattress to head height	80 cm (31,5 in)

TEMPERATURE CONTROL MODES

Pre-warm mode	33.0°C (91.4°F)
Manual control temperature mode	10%-80%, in 5% increments
Surface control temperature range	30.0°C (86°F) to 38.0°C (100.4°F), in 0.1°C increments
Skin control temperature range	34.0°C (93.2°F) to 38.0°C (100.4°F), in 0.1°C increments
Mattress heating temperature range	30.0°C (86°F) to 33.0°C (91.4°F), in 1°C increments
Peripherial skin / Rectal temperature monitoring	Yes

PERFORMANCE

Temperature rise time at	25 °C (77°F) ambient < 30 min
Temperature variability	< 0.5°C (0.9°F)

Temperature uniformity with a level mattress	< 0.7°C (1.2°F)
Correlation of the indicated air temperature to the actual surface temperature	≤ 0.7°C (1.2°F)
Display precision of skin temperature	< ±0.1°C (0.1°F)
Measuring precision of skin temperature sensor	< ±0.3°C (0.5°F)
APGAR warning signal after	1 / 5 / 10 min

OXYGEN SERVO CONTROL

Oxygen control range	21% to 75 / 90%
Oxygen control accuracy of full scale	± 3%
Oxygen display accuracy (100% calibration)	± 3%
Oxygen display accuracy (21% calibration)	± 3%
Oxygen display resolution	1%

WEIGHING SCALE

Weight range	0 to 8 kg (17,1 lbs)
Weight display resolution	5 gr or 0,2 oz
Weight accuracy up to	5 kg ± 5 gr, over 5 kg ± 10 gr
Low voltage alarm	

LOADING

Possible load of mattress max.	10 kg (22,1 lbs)
Possible load of IV pole max.	2 kg (4,7 lbs)
Possible load of shelves max.	2 kg (4,7 lbs)

DEVICE CLASSIFICATION

Protection class	Class I, Type BF, continuous operation
Ingress of liquids	IP 20
Electric safety	IEC 60601-1; IEC 60601-2-21

TREND PARAMETERS

3/24/170-hour trend	– Surface temperature
	– Skin temperature
	– Mattress temperature
	– Peripherial temperature
	– Oxygen concentration
	– SpO2 (Pulse Oximeter)
	– Heater power

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Certificates

BABYLIFE® selection

BLF-2001
type infant
incubator family

BLF-2001 TI
type transport
incubator

KLA-145
type fluorescent and LED
phototherapy unit family

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