

BLOOD WARMER
ANDINEC AM-4

# ADIMEC AM-4

The **ANIMEC AM-4** Blood Warmer is an electrically powered, dry warmer for banked blood stored under refrigeration and other I.V. solutions that require warming before use to prevent hypothermia and related problems in the patient.

Combined with **L-FUSION** disposable blood transfusion sets, it is a safe, highly efficient, and easy to use device that can be applied in almost all transfusion and infusion situations.

31-40°C AM-412 30-37°C AM-413 at 0-160ml/min

Designed For

- ① Safety
- ② Quick Set-up
- 3 Simple Operation
- Efficient and Economical Warming













## **BLOOD WARMER** 0-16 ml/min(Max350mmHg) CAPABILITY FOR TRANSFUSION + INFUSION APPLICATIONS

The ANIMEC AM-4 is easy to set up and requires only 2-3 minutes to warm up. The L-FUSION disposable blood transfusion sets are uniquely designed for efficient warming and little waste of fluid. Blood stored at 10°C can be brought up to 31-40°C (AM-412)/30-37°C (AM-413) at flow rates of up to 160ml/min. The top to bottom flow path through the Warmer means there is almost no loss of fluid at the end of the transfusion and L-FUSION sets come in a wide variation of tube configurations to fulfill almost every need. Temperature of the fluid exiting the ANIMEC AM-4 is shown on an easy to read,

digital display on the control panel. Three separate safety circuits guarantee that no overheated solutions will reach the patient. Should the temperature of the fluid exiting the Warmer reach the preset alarm temperature of 41.5°C(AM-412)/39°C(AM-413), an alarm circuit will trigger a flashing light and an electronic buzzer, and shut off power to the heating plates. When the temperature drops back below 41.5°C(AM-412)/39°C (AM-413), normal function of the Warmer resumes automatically. Volume of the alarm buzzer can be adjusted to two different levels by the user.

# EXITING FLUID TEMPERATURE VS. FLOW RATE Room Temperature : 23±2°C Input Fluid Temperature : 10°C 40 (2) 100 150 150 150 150

#### USING THE ANIMEC AM-4

Lightweight, the ANIMEC AM-4 has a carry handle built in on top for ease in handling and set up. A bracket on the side of the Warmer allows you to mount it right on the I.V. pole for convenient placement. The Warmer opens like a book to reveal the two aluminum heating plates. The appropriate L-FUSION disposable blood transfusion set is placed on two support pins and laid flat against the heating plates. Inlet and outlet tubes of the L-FUSION set are placed in their respective holders and the warmer is then closed and secured with a clasp. The transfusion or infusion is set up using standard medical technique. Warm up time is 2-3 minutes. The ANIMEC AM-4/L-FUSION combination will allow a flow rate of up to 60ml/min without a pump. Flow rates of up to 160ml/min require a pump establishing a pressure of 350mmHg.



## ANIMEC AM-4



#### **SPECIFICATIONS**

Model	AM-412	AM-413 (AM-412-T)	
Heat Exchange	Dry Heat Exchange		
Disposable	L-FUSION Blood Transfusion Set		
Flow Rate	Max.60ml/min(at free drop) Max.160ml/min(using pump a 350mmHg)		
Output Temperature Range		30-37±1.5℃	
Temperature Control Principle	PID Control System (Proportional, Integral, Differential)		
Temperature Sensors	3 Thermisters		
Temperature Control System (Back-Up)	1.On-Off Control by Thermistor at 41.5℃(AM-412), 40.5℃(AM-413 · AM-412-T) (Aluminum Heating Plate Temperature)  2.Alarm Control System by Thermistor at 41.5℃(AM-412), 39℃(AM-413 · AM-412-T) (Display Temperature)  3.Quick Response Fuse at 42℃(AM-412), 41℃(AM-413 · AM-412-T) (Aluminum Heating Plate Temperature)		
Output Temperature Display	LED(red) 0-50℃		
Warm-up Time	2-3min		
Heater	2 Silicon Rubber Heaters		
Dimentions( $H \times W \times D$ )	266×182×78.5[mm]		
Weight	3Kg		
Power Requirements	110V~,50/60Hz	230V~,50/60Hz(AM-413) [110V~,50/60Hz(AM-412-T)]	

Specifications subject to change without notice





The automatically contorolled warmer for transfusion and infusion to "science" the ideal



#### **SPECIFICATIONS**

Model	AM-2S-4A [AM-2S-4B]	AM-2S-5A [AM-2S-5B]
Tube Size	$3.0-4.0$ mm $\phi$	4.1–5.0mm φ
Flow Rate	1–12ml/min	
Power Requirements	230V~,50/60Hz Max.60W/hr [115V~,50/60Hz Max.100W/hr]	
Classification	Class I Equipment	
Applied Part Type	Type BF	
Heat Exchange	Dry Heat Exchange	
Operating Condition	0-4 30~95%RH N	Ion Condensing
Body Dimension	176(L)×65(W)×36(H)[mm]	
Weight	560g	

Specifications subject to change without notice

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