

## 1 Use according to specification

The machine presented here is a medical product (laboratory centrifuge) according to the IVD guideline 98/79/EG. The centrifuge is used to separate substances or substance mixtures with a density of max. 1.2 kg/dm<sup>3</sup>. This also includes substances and substance mixtures of human origin. The centrifuge is only intended to be used for this purpose. A different use or application over and above this is deemed not in accordance with the specifications. The company Andreas Hettich GmbH & Co. KG undertakes no liability for damages resulting therefrom.

Belonging to the application according to specification is also the observance of all references contained in the Instruction Manual and compliance with the inspection and maintenance works.

## 2 Residual risks

The machine is constructed according to the state of the art and the recognized technical safety regulations. Improper use and handling can result in dangers to life and limb of the user or third parties and impairments to the machine or to other material assets. The machine is only to be used for the specified applications and only in an impeccable technical safety condition.

Disturbances that can interfere with the safety are to be immediately rectified.

## 3 Technical specifications

Manufacturer	Andreas Hettich GmbH & Co. KG D-78532 Tuttlingen					
Model	ROTINA 380			ROTINA 380 R		
Type	1701-30	1701	1701-01	1706, 1706-50	1706-01	
Mains voltage (± 10%)	200-240 V 1~ / 100-127 V 1~	200-240 V 1~	100-127 V 1~	200-240 V 1~	110-127V 1~	
Mains frequency	50 – 60 Hz	50 – 60 Hz	50 – 60 Hz	50 – 60 Hz	60 Hz	
Connected load	max. 450 VA	650 VA	700 VA	1300 VA	1400 VA	
Current consumption		3.3 A	7.0 A	6.5 A	13.0 A	
Cooling medium	----			R 404A		
Max. capacity	4 x 290 ml					
Allowed density	1.2 kg/dm <sup>3</sup>					
Speed (RPM)	4000	15000				
Force (RCF)	3095	24400				
Kinetic energy	6200 Nm	18500 Nm		35000 Nm		
Obligatory inspection (BGR 500)	no	yes				
Ambient conditions (EN / IEC 61010-1)	<p style="text-align: center;">Indoors only</p> <p style="text-align: center;">Up to 2000 m above sea level</p> <p style="text-align: center;">2°C to 35°C   5°C to 35°C</p> <p style="text-align: center;">Maximum relative humidity 80% for temperatures up to 31°C, linearly decreasing to 50% relative humidity at 40°C.</p> <p style="text-align: center;">II</p> <p style="text-align: center;">2</p>					
Device protection class	I					
Not suitable for use in explosion-endangered areas.						
EMC	EN / IEC 61326-1, Class B; FCC Class B		EN / IEC 61326-1, Class B	FCC Class B	EN / IEC 61326-1, Class B	FCC Class B
– Emitted interference, Interference immunity						
Noise level (dependent on rotor)	≤ 58 dB(A)	≤ 65 dB(A)		≤ 64 dB(A) <sup>1)</sup>		
Dimensions						
– Width	457 mm			457 mm		
– Depth	600 mm			750 mm		
– Height	418 mm			418 mm		
Weight	approx. 58.5 kg	approx. 51 kg	approx. 58.5 kg	approx. 81 kg	approx. 88.5 kg	

1) for rotor 1797 ≤ 70 dB(A)