

# **RV 10 Rotary Evaporator**





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Subject to technical changes.
Indications not binding for delivery.



Choke valve, filter, pressure regulating valve,

vacuum controller

Vacuum pump, chillers

Start-up packages

## You can change states of aggregation. Or the way you work with them.

With the new RV 10 range of rotary evaporators, IKA® has confirmed that there is always room for improvement, even when it comes to one of the oldest of chemical processes: distillation. The RV 10 Rotary Evaporators set new standards for safety, efficiency and ease of use. Great attention is paid to the issue of safety, from the Basic version upwards. Every model features a lifting mechanism that raises the evaporator piston out of the heating bath in case of power failure. The comprehensive safety features also include interval operation, smooth start, end position recognition for the evaporator piston, and a timer function. The Digital version also provides a digital temperature display and an RS 232 interface. For fully automated distillation, IKA® offers the Control version complete with integrated vacuum controller, USB interface and graphical display.



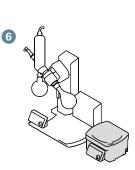
- No spare part costs during lifetime No repair costs during lifetime
- parts excluded
- \* 10 years, glassware and wearing



#### Overview of components

- Diagonal or vertical glassware
- 2 Various flask sizes
- 3 Vacuum connection plus Woulf bottle
- 4 Adjustable height limit
- 5 Two displays for optimal view

- 6 Heating bath can be used separately
- 7 Can be moved by 150 mm to accommodate different flasks
- 8 Motorised height-adjustable lift
- 9 Choice of angle
- Ergonomic carrying handles on heating bath
- Lift raised automatically in case of power outage
- Highly solvent-resistant PTFE seal



### RV 10 basic and RV 10 digital

The basic system and the digital system complete with glassware set



#### RV 10 basic

The RV 10 basic rotary evaporator with integrated HB 10 heating bath is the basic version of IKA®'s new distillation system. The RV 10 basic is available with either diagonal or vertical glassware, and as either a coated or an uncoated model.

- Analogue heating bath with adjustable safety circuit, "stand alone" operation is possible, pivoting safety hood as an accessory
- Safe and simple operation by means of ergonomically shaped control unit in the front
- Motorised lift (stroke 140 mm) with "safety stop" function, if the power cuts out the evaporator flask is automatically lifted out of the heating bath
- Adjustable end position recognition to protect the glass from breaking
- Speed range from 20 to 270 rpm
- Smooth start from 100 rpm
- Digital speed display
- Moves right and left in interval operation for the drying process
- Timer function for time lapse control
- Heats up quickly because of optimised bath volumes
- Push-off mechanism to loosen tightly fitting flasks

RV 10 basic		
Model	Description	Ident-No.
RV 10 basic V	with heating bath HB 10 basic and vertical glassware RV 10.1	8022300
RV 10 basic V-C	with heating bath HB 10 basic and vertical glassware, coated RV 10.10	8022900
RV 10 basic D	with heating bath HB 10 basic and diagonal glassware RV 10.2	8022400
RV 10 basic D-C	with heating bath HB 10 basic and diagonal glassware, coated RV 10.20	8023000



#### RV 10 digital

IKA®'s RV 10 digital combines the performance, reliability and versatility of the RV 10 basic with the precision of an accurate digital temperature control. The perfectly coordinated data transfer between the heating bath and the drive unit as well as the option of remote operation from a PC ensure results that can be reproduced any time.

Properties as RV 10 basic, with the following additional functions:

- Digital water/oil heating bath with integrated carrying handles
- Temperature control of the heating bath by a micro controller
- Digital temperature display
- Infrared interface for data transfer from the heating bath to the drive unit
- RS232 interface for PC remote operation with labworldsoft®
- Automatic operation with labworldsoft®

RV 10 digital		
Model	Description	Ident-No
RV 10 digital V	with heating bath HB 10 digital and vertical glassware RV 10.1	802250
RV 10 digital V-C	with heating bath HB 10 digital and vertical glassware, coated RV 10.10	802290
RV 10 digital D	with heating bath HB 10 digital and diagonal glassware RV 10.2	802260
RV 10 digital D-C	with heating bath HB 10 digital and diagonal glassware, coated RV 10.20	802320

#### **RV 10 control**

The fully automated rotary evaporator complete with glassware set



#### RV 10 control

The RV 10 control is the flagship of the new rotary evaporator series by IKA®. It offers all the functions of the RV 10 basic coupled with the advantages of the RV 10 digital. But the IKA® RV 10 control goes one step further. Like the RV 10 digital, it can be precision controlled via the RS 232 interface for remote PC operation with IKA®'s labworldsoft and is thus ideal for automatic operation. And that's not all: the control functions also enable completely automatic distillation both for volume-based processes and full drying depending on the area of application. The expandable solvent library also allows you to incorporate new processes in the future safely, reliably and with a full log.

#### Functions and benefits

- Integrated vacuum controller with central display
   Display of distillation curves for automatic distilling and ramp programming
- Integrated solvent library, which can be extended by the user
- Distillation specific parameters stored for standard distillation
- Automatic transfer of measurements and distillation type with one key press
- Programmable volume controlled distillation
- Automatic boiling point recognition
- Colour graphic display for safe and comfortable operation

- Multiple languages
- Automatic ventilation at the end of the test
- Cooling water switched off automatically at the end of the test
- Integrated cooling water monitoring
- Heating bath safety management: automatic heating bath monitoring with distillation stop in case of temperature errors
- Heating bath switched off automatically at the end of the test
- USB interface

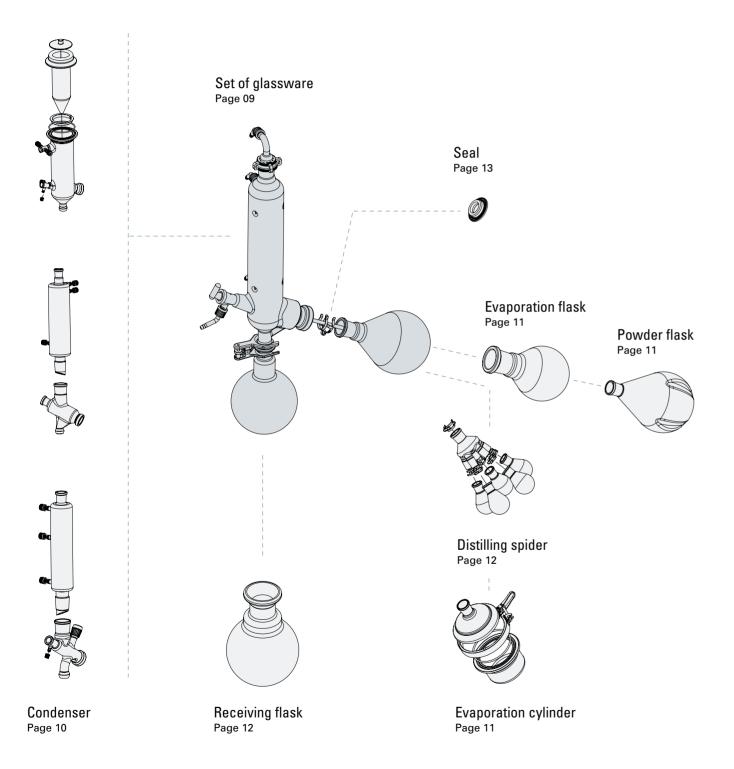
RV 10 control		
Model	Description	Ident-No
RV 10 control V	with heating bath HB 10 control and vertical glassware RV 10.1	802270
RV 10 control V-C	with heating bath HB 10 control and vertical glassware, coated RV 10.10	802330
RV 10 control D	with heating bath HB 10 control and diagonal glassware RV 10.2	802280
RV 10 control D-C	with heating bath HB 10 control and diagonal glassware, coated RV 10.20	802340

	RV 10 basic	RV 10 digital	RV 10 control
Variants	RV 10 basic V RV 10 basic V-C RV 10 basic D	RV 10 digital V RV 10 digital V-C RV 10 digital D	RV 10 control V RV 10 control V-C RV 10 control D
	RV 10 basic D-C	RV 10 digital D-C	RV 10 control D-C
Cooler type	V=vertical V-C=vertical coated D=diagonal D-C=diagonal coated	V=vertical V-C=vertical coated D=diagonal D-C=diagonal coated	V=vertical V-C=vertical coated D=diagonal D-C=diagonal coated
Cooling surface	1.200 cm <sup>2</sup>	1.200 cm <sup>2</sup>	1.200 cm <sup>2</sup>
Drive			
Motor type	brushless DC drive motor	brushless DC drive motor	brushless DC drive motor
Motor rating input	50 W	50 W	50 W
Speed range	20 to 270 rpm	20 to 270 rpm	20 to 270 rpm
Speed display	digital	digital	digital
Right and left movement / interval operation	yes	yes	yes
Smooth start	yes	yes	yes
Head angle adjustable	0 to 45°	0 to 45°	0 to 45°
Stroke displacement	140 mm, motorised	140 mm, motorised	140 mm, motorised
Setting of lower end stop	60 mm, contact-free	60 mm, contact-free	60 mm, contact-free
Vacuum controller	accessories	accessories	integrated
Heating bath	HB 10 basic	HB 10 digital	HB 10 control
Temperature range	RT to 180 °C	RT to 180 °C	RT to 180 °C
Heating power	1.300 W	1.300 W	1.300 W
Controller	capillary tube controller	micro controller	micro controller
Temperature display	scale	digital	digital
Setting accuracy	scale	1 K	1 K
Control deviation	± 5 K	± 1 K	± 1 K
Required accessories for an existing vacu			
Magnetic valve in-house vacuum	1)	1)	RV 10.4001
Magnetic valve laboratory vacuum	1)	1)	RV 10.4002
Pump control incl. magnetic valve	1)	1)	RV 10.4003
General data			
Dimensions without glassware $(W \times D \times H)$	530 x 410 x 570 mm	530 x 410 x 570 mm	530 x 410 x 570 mm
RV 10 diagonal (W x D x H)	890 x 410 x 670 mm	890 x 410 x 670 mm	890 x 410 x 670 mm
RV 10 vertical (W x D x H)	680 x 410 x 990 mm	680 x 410 x 990 mm	680 x 410 x 990 mm
Weight of evaporator incl. heating bath without glass parts	20 kg	20 kg	21,5 kg
Permitted ambient temperature	5 to 40 °C	5 to 40 °C	5 to 40 °C
Protection class acc. to DIN FN 60529	IP 20	IP 20	IP 20

<sup>&</sup>lt;sup>1)</sup> no accessories required for vacuum pump connection (vacuum level must be controlled on the external system)

#### **Overview**

Featured glass accessories



### **RV 10 Glassware accessories**

Set of glassware, protective cover

General data	
Condenser type	vertical
Cooling surface	1.200 cm <sup>2</sup>
Model	Ident-No.
RV 10.1 Set of glassware, vertical	3655300
RV 10.10 Set of glassware, vertical, coated	3755400

#### RV 10.1 Set of glassware, vertical

Vertical condenser for all standard distillations, compact. The solvent to be distilled can be continuously fed in through the PTFE inlet tube.

A 1.000 ml evaporator and 1.000 ml receiving flask are included.

Also available with coating. Condenser and receiving flask coated for shatter protection (accessory: HB 10.2 Protective cover).

Glassware included in package.



#### RV 10.2 Set of glassware, diagonal

Diagonal condenser for all standard distillations. The solvent to be distilled can be continuously fed in through the PTFE

A 1.000 ml evaporator and 1.000 ml receiving flask are included. Also available with coating. Condenser and receiving flask coated for shatter protection (accessory: HB 10.2 Protective cover).

Glassware included in package.

General data	
Material	Polycarbonate
Model	Ident-No.
HB 10.1 Shield for heating bath	3641800

#### HB 10.1 Shield for heating bath

For optimal protection against splashes of hot liquid.

General data	
Material	Polycarbonate
Model	Ident-No.
HB 10.2 Protective cover for heating bath	3641000

#### HB 10.2 Protective cover for heating bath

Essential accessory if it is not possible to work in an extractor hood. Protects the user against splashes of hot liquid and in the event of the evaporator flask breaking.

Should be used with the coated glass version.















### RV 10.3 Vertical-intensive condenser with manifold

Vertical-intesive condenser with double jacket and manifold for particularly efficient condensation. The solvent to be distilled can be continuously fed in at the manifold using the PTFE inlet tube.

Also available with coating. Condenser and receiving flask coated for shatter protection (accessory: HB 10.2 protective cover).

RV 10.4 Dry	ice condenser

Dry ice condenser for distilling low-boiling solvents. The solvent to be distilled can be continuously fed in through the PTFE inlet tube. Cooling by dry ice, no cooling water required. Max. condensation thanks to low temperatures. Also available with coating. Condenser and receiving flask coated for shatter protection (accessory: HB 10.2 protective cover).

Not possible with autodistillation mode on RV 10 control.

## RV 10.5 Verical-condenser with manifold and cut-off valve for reflux distillation

The solvent to be distilled can be continuously fed in through the PTFE inlet tube. Also available with coating. Condenser and receiving flask coated for shatter protection (accessory: HB 10.2 protective cover).

#### RV 10.6 Vertical-intensive condenser with manifold and cut-off valve for reflux distillation

The manifold features a condensate cover and an outlet channel which prevent the condensate from coming into contact with the seal. The solvent to be distilled can be continuously fed in through the PTFE inlet tube. Also available with coating. Condenser and receiving flask coated for shatter protection (accessory: HB 10.2 protective cover).

General data	
Condenser type	vertical-intensive
Cooling surface	1.400 cm <sup>2</sup>
Model	Ident-No.
RV 10.3 Vertical-intensive condenser with manifold	3741000
RV 10.30 Vertical-intensive condenser with manifold, coated	3741100

General data	
Condenser type	Dry ice condenser
Cooling surface	620 cm <sup>2</sup>
Model	Ident-No.
RV 10.4 Dry ice condenser	3742000
RV 10.40 Dry ice condenser, coated	3742100

General data	
Condenser type	vertical
Cooling surface	1.200 cm <sup>2</sup>
Model	Ident-No.
RV 10.5 Verical-condenser with manifold and cut-off valve for reflux distillation	3743000
RV 10.50 Verical-condenser with manifold and cut-off valve for reflux distillation, coated	3743100

General data	
Condenser type	vertical-intensive
Cooling surface	1.400 cm <sup>2</sup>
Model	Ident-No.
RV 10.6 Vertical-intensive condenser with manifold and cut-off valve for reflux distillation	3744000
RV 10.60 Vertical-intensive condenser with manifold and cut-off valve for reflux distillation, coated	3744100

### **RV 10 Glassware accessories**

Vapor tube, evaporation flasks, additional accessories

General data	
Material	Borosilicate glass
Model	Ident-No.
RV 10.70 Vapor tube	3812200

#### RV 10.70 Vapor tube NS 29/32

For all glassware.



General data	
Volume (in ml)	50, 100, 250, 500, 1.000, 2.000, 3.000
Material	Borosilicate glass
Model	Ident-No.
RV 10.80 Evaporation flash	k, 50 ml 3740100
RV 10.81 Evaporation flash	k, 100 ml 3740200
RV 10.82 Evaporation flash	k, 250 ml 3740300
RV 10.83 Evaporation flash	k, 500 ml 3740400
RV 10.84 Evaporation flask	x, 1.000 ml 3740500
RV 10.85 Evaporation flask	x, 2.000 ml 3740600
RV 10.86 Evaporation flask	x, 3.000 ml 3740700

#### Evaporation flask NS 29/32

The flask, which is made of high quality borosilicate glass, is available in seven different sizes.



General data	
Volume (in ml)	500, 1.000, 2.000
Material	Borosilicate glass
Model	Ident-No.
RV 10.300 Powder flask, 500 ml	3738200
RV 10.301 Powder flask, 1.000 ml	3738300
RV 10 302 Powder flask 2 000 ml	3738400

#### Powder flask NS 29/32

The flask, which is made of high quality borosilicate glass, is available in three different sizes.



General data	
Volume (in ml)	500, 1.500
Material	Borosilicate glass
Model	Ident-No.
RV 10.400 Evaporation cylinder, 500 ml	3738800

3738900

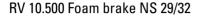
RV 10.401 Evaporation cylinder, 1.500 ml

#### Evaporation cylinder NS 29/32

The cylinder, which is made of high quality borosilicate glass, is available in two different sizes.



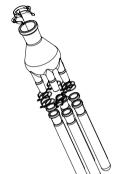


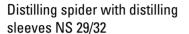


The rising foam produced bursts in the glass ball extension. This stops foam from entering the receiving flask.

Note: when using a 3 litre evaporation flask, a RV 10.3000 Extension plate is required.

General data	
Material	Borosilicate glas
Model	Ident-No
RV 10.500 Foam brake	373920





For simultaneous distillation in 6, 12 or 20 distilling sleeves, included with purchase.

General data	
Material	Borosilicate glass
Model	Ident-No.
RV 10.600 Distilling spider with 6 distilling sleeves	3739400
RV 10.601 Distilling spider with 12 distilling sleeves	3739500
RV 10.602 Distilling spider with 20 distilling sleeves	3739600
RV 10.610 Distilling sleeve, 20 ml	3919400



#### Distilling spider with 5 flasks NS 29/32

For simultaneous distillation in 5 evaporation flasks, included with purchase.

General data	
Material	Borosilicate glass
Model	Ident-No.
RV 10.606 Distilling spider with 5 flasks, 50 ml	3740800
RV 10.607 Distilling spider with 5 flasks, 100 ml	3740900
RV 10.90 Evaporation flask, 50 ml	3741200
RV 10.91 Evaporation flask, 100 ml	3741300



#### Receiving flask KS 35/20

The flask, which is made of high quality borosilicate glass, is available in six different sizes, either coated or uncoated.

General data	
Volume (in ml)	100, 250, 500, 1.000, 2.000, 3.000
Material	Borosilicate glass uncoated/coated
Model	Ident-No.
RV 10.100 Receiving flask, 100 m	3742200

Model	Ident-No.
RV 10.100 Receiving flask, 100 ml	3742200
RV 10.101 Receiving flask, 250 ml	3742300
RV 10.102 Receiving flask, 500 ml	3742400
RV 10.103 Receiving flask, 1.000 ml	3742500
RV 10.104 Receiving flask, 2.000 ml	3742600
RV 10.105 Receiving flask, 3.000 ml	3742700
RV 10.200 Receiving flask, coated 100 ml	3743200
RV 10.201 Receiving flask, coated 250 ml	3743300
RV 10.202 Receiving flask, coated 500 ml	3743400
RV 10.203 Receiving flask, coated, 1.000 ml	3743500
RV 10.204 Receiving flask, coated, 2.000 ml	3743600
RV 10.205 Receiving flask, coated, 3.000 ml	3743700

### **RV 10 Accessories**

Miscellaneous accessories, software labworldsoft®

General data	
Dimensions (W x D x H)	200 x 270 x 27 mm
Model	Ident-No.
RV 10.3000 Extension plate	3859000

#### RV 10.3000 Extension plate

Accessories required when using the RV 10.500.

Note: Allows the heating bath to be moved 150 mm horizontally. Accessory required when using the RV 10.500 Foam brake and 3 litre evaporation flask.



General data	
Material	FKM with PTFE- coating
Model	Ident-No.
RV 06.13 Seal	1907800

#### RV 06.13 Seal

Ideal for standard distillation procedures.



General data	
Material	PTFE
Model	Ident-No.
RV 06.15 Seal	2114700

#### RV 06.15 Seal

Particularly solvent-resistant. Included in delivery.



Model	Ident-No.
labworldsoft®	2970000

#### Software labworldsoft®

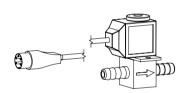
With this laboratory software you can network up to 64 laboratory devices simultaneously via one PC. That makes the automation of your laboratory experiments and processes possible. Measurements and processes may be run independently from one another. This helps to avoid long waits and you increase your productivity. The communication between PC and laboratory device is performed via the serial interface RS 232 (COM1 or COM2).





Required accessories for an existing vacuum   19				
Magnetic valve in-house vacuum system         11         RV 10.4001           Magnetic valve laboratory vacuum         13         II         RV 10.4002           Pump control incl. magnetic valve         19         II         RV 10.4003           Recommended accessories for tap water (faucet) connection           Choke water valve         -         RV 10.5001           Filter         -         RV 10.5002           Pressure regulating valve         RV 10.5003         RV 10.5003         RV 10.5003           Supplementary vacuum system           Vacuum pump         K 920 KT.29.18         K 920 KT.29.18         K 920 KT.29.18           Vacuum controller         VC 2         VC 2         integrated           Pump control incl. magnetic valve         RV 10.4003         RV 10.4003         RV 10.4003		RV 10 basic	RV 10 digital	RV 10 control
Magnetic valve laboratory vacuum       10       RV 10.4002         Pump control incl. magnetic valve       10       10       RV 10.4003         Recommended accessories for tap water (faucet) connection         Choke water valve       –       RV 10.5001         Filter       –       RV 10.5002         Pressure regulating valve       RV 10.5003       RV 10.5003       RV 10.5003         Supplementary vacuum system         Vacuum pump       K 920 KT.29.18       K 920 KT.29.18       K 920 KT.29.18         Vacuum controller       VC 2       VC 2       integrated         Pump control incl. magnetic valve       RV 10.4003       RV 10.4003       RV 10.4003	Required accessories for an existing vacuum	1		
Pump control incl. magnetic valve 10.4003  Recommended accessories for tap water (faucet) connection  Choke water valve RV 10.5001  Filter RV 10.5002  Pressure regulating valve RV 10.5003 RV 10.5003 RV 10.5003  Supplementary vacuum system  Vacuum pump K 920 KT.29.18 K 920 KT.29.18 K 920 KT.29.18  Vacuum controller VC 2 VC 2 integrated  Pump control incl. magnetic valve RV 10.4003 RV 10.4003  Additional chiller system	Magnetic valve in-house vacuum system	1)	1)	RV 10.4001
Recommended accessories for tap water (faucet) connection   Choke water valve	Magnetic valve laboratory vacuum	1)	1)	RV 10.4002
Choke water valve         -         -         RV 10.5001           Filter         -         -         RV 10.5002           Pressure regulating valve         RV 10.5003         RV 10.5003           Supplementary vacuum system           Vacuum pump         K 920 KT.29.18         K 920 KT.29.18         K 920 KT.29.18           Vacuum controller         VC 2         VC 2         integrated           Pump control incl. magnetic valve         RV 10.4003         RV 10.4003         RV 10.4003	Pump control incl. magnetic valve	1)	1)	RV 10.4003
Choke water valve         -         -         RV 10.5001           Filter         -         -         RV 10.5002           Pressure regulating valve         RV 10.5003         RV 10.5003           Supplementary vacuum system           Vacuum pump         K 920 KT.29.18         K 920 KT.29.18         K 920 KT.29.18           Vacuum controller         VC 2         VC 2         integrated           Pump control incl. magnetic valve         RV 10.4003         RV 10.4003         RV 10.4003				
Filter         -         -         RV 10.5002           Pressure regulating valve         RV 10.5003         RV 10.5003           Supplementary vacuum system           Vacuum pump         K 920 KT.29.18         K 920 KT.29.18           Vacuum controller         VC 2         VC 2           Pump control incl. magnetic valve         RV 10.4003         RV 10.4003           Additional chiller system	Recommended accessories for tap water (fau	ucet) connection		
Pressure regulating valve         RV 10.5003         RV 10.5003           Supplementary vacuum system         Vacuum pump         K 920 KT.29.18         K 920 KT.29.18         K 920 KT.29.18         K 920 KT.29.18           Vacuum controller         VC 2         VC 2         integrated           Pump control incl. magnetic valve         RV 10.4003         RV 10.4003         RV 10.4003	Choke water valve	_	_	RV 10.5001
Supplementary vacuum system  Vacuum pump K 920 KT.29.18 K 920 KT.29.18 K 920 KT.29.18  Vacuum controller VC 2 VC 2 integrated  Pump control incl. magnetic valve RV 10.4003 RV 10.4003 RV 10.4003  Additional chiller system	Filter	_	_	RV 10.5002
Vacuum pump         K 920 KT.29.18         K 920 KT.29.18         K 920 KT.29.18           Vacuum controller         VC 2         VC 2         integrated           Pump control incl. magnetic valve         RV 10.4003         RV 10.4003         RV 10.4003	Pressure regulating valve	RV 10.5003	RV 10.5003	RV 10.5003
Vacuum pump         K 920 KT.29.18         K 920 KT.29.18         K 920 KT.29.18           Vacuum controller         VC 2         VC 2         integrated           Pump control incl. magnetic valve         RV 10.4003         RV 10.4003         RV 10.4003				
Vacuum controller VC 2 VC 2 integrated Pump control incl. magnetic valve RV 10.4003 RV 10.4003 RV 10.4003  Additional chiller system	Supplementary vacuum system			
Pump control incl. magnetic valve RV 10.4003 RV 10.4003 RV 10.4003  Additional chiller system	Vacuum pump	K 920 KT.29.18	K 920 KT.29.18	K 920 KT.29.18
Additional chiller system	Vacuum controller	VC 2	VC 2	integrated
·	Pump control incl. magnetic valve	RV 10.4003	RV 10.4003	RV 10.4003
·				
For one rotary evaporator KV 700 KV 700 KV 700	Additional chiller system			
	For one rotary evaporator	KV 700	KV 700	KV 700
For two rotary evaporators UC 006 UC 006 UC 006	For two rotary evaporators	UC 006	UC 006	UC 006

<sup>1)</sup> no accessories required for vacuum pump connection (vacuum level must be controlled on the external system)



### RV 10.4001 Magnetic valve in-house vacuum

Industrial vacuum source for many different in-house users; usually fixed pipes.

 Accessory required for an existing vacuum.

General data	
Power	24 V / 9 W
Model	Ident-No.
RV 10.4001 Magnetic valve in-house vacuum	3902600
Accessory for	
RV 10 control	

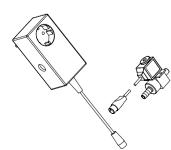


### RV 10.4002 Magnetic valve laboratory vacuum

Vacuum pump installed at laboratory with several similar users e.g. 2 rotary evaporators / 1 pump.

Accessory required for an existing vacuum.

General data	
Power	24 V / 9 W
Model	Ident-No.
RV 10.4002 Magnetic valve laboratory vacuum	3880300
Accessory for	
BV 10 control	



## RV 10.4003 Pump control incl. magnetic valve

One rotary evaporator at one pump / tabletop operation. Pump stops when the set pressure is reached and automatically switches back on again.

Accessory required for an existing vacuum.

General data	
Power magnetic valve	24 V / 6 W
Power pump control	100-240 V, 50 / 60 Hz
Model	Ident-No.
RV 10.4003 Pump control incl. magnetic valve	3900200
Accessory for	
RV 10 control	

### **RV 10 System accessories**

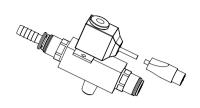
Choke valve, filter, pressure regulating valve, vacuum controller

General data	
Power	24 V / 6 W
Connection diameter	10 mm
Model	Ident-No.
RV 10.5001 Choke water valve	3902700
Accessory for	
BV 10 control	

#### RV 10.5001 Choke water valve

To regulate the water flow. The integrated magnetic valve closes/opens the water circuit during automatic distillation.

Accessory recommended for tap water (faucet) connection.

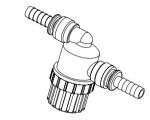


General data	
Mesh thickness	100 µm
Connection diameter	10 mm
Pressure	max. 11 bar
Model	Ident-No.
RV 10.5002 Filter	3903800
Accessory for	
RV 10 control	

#### RV 10.5002 Filter

To prevent contamination of the water pipes. With removable filter for easy cleaning.

 Accessory recommended for tap water (faucet) connection.

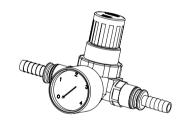


General data	
Connection diameter	10 mm
Pressure	max. input 25 bar, max. output 1 bar
Model	Ident-No.
RV10.5003 Pressure regulating	valve 3907100
Accessory for	
RV 10 basic RV 10 digit	tal RV 10 control

### RV 10.5003 Pressure regulating valve

For adjusting the cooling water pressure when operating at the water pipe.

Accessory recommended for tap water (faucet) connection.



General data	
Power input	14 W
Control range	1 – 1.200 mbar
Setting accuracy	1 mbar
Display	digital (LED)
Dimensions (W x D x H)	150 x 57 x 85 mm
Weight	1,0 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 50
Model	Ident-No.
VC 2 IKAVAC® Vacuum controller	2300000
Accessory for	
RV 10 basic RV 10 digital	

#### VC 2 IKAVAC® Vacuum controller

Used to create a controlled partial vacuum in laboratory applications. Typical tasks are the evacuation of desiccators, vacuum apparatus, etc. Solvent recovery rates of up to 99% are possible if rotary evaporators are used.

- Microprocessor-controlled
- Minimum solvent loss
- Considerable reductions in water costs
- Integrated air release valve
- Easy operation
- Space-saving stand-supported instrument
- Automatic setpoint correction
- Clearly organized membrane keyboard





#### N 920 KT.29.18 Diaphragm vacuum pump

- 100% oil-free transfer
- pure transfer, evacuation and compression
- KNF Stabilization system, allows high suction speed even in the low-vacuum range
- Version for slightly aggressive or corrosive gases and vapours
- Maintenance-free, environmentally friendly and gastight (leakage rate approx. 6 x 10-3 mbar x l/s, not tested in serial production)

General data	
Delivery (Delivery at atm. pressure)	1,3 m³/h
Ultimate vacuum	2,0 mbar abs
Operating pressure	0,5 bar
Connectors for tube	ID 9 mm
Permissible ambient temperature	+5+40 °C
Mains	90-230 V 50-60 Hz
Motor protection	IP 20
Power P <sub>1</sub>	135 W
Operating current	1,4 A
Weight	8,6 kg
Dimensions (W x D x H)	324 x 226 x 158 mm
Model	Ident-No.
N 920 KT.29.18 Diaphragm vacuum pump	3919100





#### KV 700 Circulation chiller

- Chiller with air-cooled refrigerating unit and circulation pump
- Evaporator (cooler) and housing made of stainless steel
- Pressure-suction pump made of industrial plastic material
- Temperature adjustment and digital display
- Temperature constancy 1 K
- Modern and easy to use microprocessor controller
- Large temperature display
- LED indicators for pump, cooling and
- Simple operation using only 3 keys

General data	
Operating temperature range	4 to 35 °C
Temperature display	digital
Cooling power at 15°C	0,35 kW
Refrigerant	R507
Pump connection for hose	NW8/12
Min. filling capacity	21
Overall dimensions (W x D x H)	255 x 450 x 400 mm
Net weight	28 kg
Power supply requirement	230 V 50 Hz
Min. ambient temperature	5 °C
Max. ambient temperature	40 °C
Model	Ident-No.
KV 700 Chiller (230 V 50 Hz)	3918900
Accessory for	
RV 10 basic RV 10 digital	RV 10 control



#### UC 006 Unichiller

- Chiller with air-cooled refrigerating unit and circulation pump
- Evaporator (cooler), tank, housing and pressure-suction pump made of stainless
- Digital temperature adjustment and digital temperature display
- Level indicator with sight glass
- Low-Cost-Controller: Modern and easy to use microprocessor controller with a large temperature display
- Large temperature display
- LED indicators for pump, cooling and heating
- Simple operation using only 3 keys

General data	
Operating temperature range	-20 to 40 °C
Temperature display	digital
Cooling power at 15°C	0,6 kW
Refrigerant	R134a
Pump connection for hose	NW8/12
Min. filling capacity	1,25 l
Overall dimensions (W x D x H)	277 x 490 x 414 mm
Net weight	37 kg
Power supply requirement	230 V 50/60 Hz
Min. ambient temperature	5 °C
Max. ambient temperature	40 °C
Model	Ident-No.
UC 006 Unichiller (230 V 50 Hz)	3919000
Accessory for	

RV 10 basic RV 10 digital RV 10 control

Package	Ident-No. package	Quantity	Description
DV 10 basis V C Baskage 1	8025300	1	RV 10 basic
RV 10 basic V-C Package 1	8023300		HB 10 basic Heathing bath
			RV 10.10 Set of glassware, vertical, coated
			N 920 KT.29.18 Diaphragm vacuum pump
RV 10 basis V-C Package 2	8025400		RV 10 basic
RV 10 basic V-C Package 2  RV 10 digital V-C Package 1	0023400		HB 10 basic Heathing bath
			RV 10.10 Set of glassware, vertical, coated
			N 920 KT.29.18 Diaphragm vacuum pump
			KV 700 Circulation chiller
	8025500		RV 10 digital
RV 10 digital V-C Package I	6023300		-
			HB 10 basic Heathing bath
			RV 10.10 Set of glassware, vertical, coated
			VC 2 IKAVAC® Vacuum controller
			RV 10.4003 Pump control incl. magnetic valve
N/40 II II IV 0 D . I	0005000		N 920 KT.29.18 Diaphragm vacuum pump
RV 10 digital V-C Package 2	8025600		RV 10 digital
			HB 10 basic Heathing bath
			RV 10.10 Set of glassware, vertical, coated
			VC 2 IKAVAC® Vacuum controller
		1	RV 10.4003 Pump control incl. magnetic valve
		1	N 920 KT.29.18 Diaphragm vacuum pump
		1	KV 700 Circulation chiller
RV 10 control V-C Package 1	8025700	1	RV 10 control
		1	HB 10 control Heathing bath
		1	RV 10.10 Set of glassware, vertical, coated
		1	RV 10.4003 Pump control incl. magnetic valve
		1	N 920 KT.29.18 Diaphragm vacuum pump
RV 10 control V-C Package 2	8025800	1	RV 10 control
		1	HB 10 control Heathing bath
		1	RV 10.10 Set of glassware, vertical, coated
		1	RV 10.4003 Pump control incl. magnetic valve
		1	N 920 KT.29.18 Diaphragm vacuum pump
		1	KV 700 Circulation chiller
RV 10 basic V-C Duo Package	8027700	2	RV 10 basic
		2	HB 10 basic Heathing bath
		2	RV 10.10 Set of glassware, vertical, coated
		1	N 920 KT.29.18 Diaphragm vacuum pump
		1	UC 006 Unichiller
RV 10 digital V-C Duo Package	8027800	2	RV 10 digital
		2	HB 10 digital Heathing bath
			RV 10.10 Set of glassware, vertical, coated
			VC 2 IKAVAC® Vacuum controller
			RV 10.4003 Pump control incl. magnetic valve
			N 920 KT.29.18 Diaphragm vacuum pump
			UC 006 Unichiller
RV 10 control V-C Duo Package	8027900		RV 10 control
			HB 10 control Heathing bath
			RV 10.10 Set of glassware, vertical, coated
			RV 10.4003 Pump control incl. magnetic valve
			N 920 KT.29.18 Diaphragm vacuum pump
			UC 006 Unichiller

additional packages on request