Condensate technology | BEKOMAT® 31U | 32U | 33U | 33U CO

The quickest route to efficiency: the BEKOMAT® with service unit

During compressed air generation and processing, the optimum quality for the application should be achieved. It is important to remove contaminants and humidity from the compressed air as these can lead to quality problems, failures or loss of production.

Condensate discharge without compressed air loss

The BEKOMAT® drains off condensate without loss of compressed air, thus reducing energy costs and CO_2 emissions. This is made possible by the integrated capacitive sensor, smart electronics for volume-controlled condensate discharge and the proven pilot-controlled solenoid valve.

The BEKOMAT® designed for quick and cost-effective servicing

The innovative design of the BEKOMAT® 31U, 32U, 33U and 33U CO models is optimised for easy handling, installation and maintenance. The devices consist of no more than three assemblies joined together with quick-release connectors. Once installed, the control and sensor unit stays in place as only the service unit (including all wear and pressure parts) needs to be exchanged.

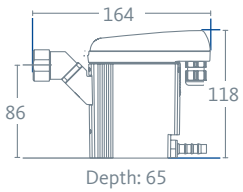
This sturdy condensate drain is suitable for both oil-contaminated and oil-free, aggressive condensate.

- **No loss of compressed air during draining**
  - Low operating costs
- **Outstanding reliability**
  - Durable and resistant to dirt
  - Large valve diameters prevent the formation of emulsions
  - No delicate mechanical components
  - Suitable for temperatures up to +70 °C
- **Easy to install and virtually maintenance-free**
  - Versatile connection options
  - Easy exchange of service unit, even where space is confirmed with even in small areas
  - Servicing requires no installation work
- **Automated operation and monitoring**
  - Ready for integration into modern system monitoring installations
  - Automatic start of self-cleaning process based on dirt particle load
  - Service indicator warns operators in advance when the service unit needs to be replaced

Better through Responsibility

BEKO

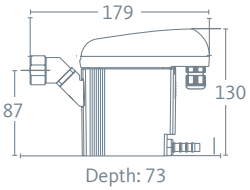
Dimensions in mm



Technical data	BEKOMAT® 31U
Max. compressor performance*	■ 3 m³/min | ▲ 2.5 m³/min | ● 1.5 m³/min
Max. refrigeration dryer performance*	■ 6 m³/min | ▲ 5 m³/min | ● 3 m³/min
Max. filter performance*	■ 30 m³/min | ▲ 25 m³/min | ● 15 m³/min
Min./max. operating pressure	0.8 ... 16 bar (gauge) [optional: 1.2 ... 16 bar (gauge)]
Housing	aluminium + plastic, glass fibre reinforced
Diaphragm	AU [optional: FKM]
Ambient temperature	+1 °C ... +60 °C [optional: +1 °C ... +70 °C]
Weight (empty)	0.8 kg
Condensate inlet	1 x G½ (inside) [optional: NPT thread]
Condensate discharge	1 x G¼; hose connector, hose Ø = 10 mm (inside)
Operating voltage	95 ... 240 VAC ±10% (50 ... 60 Hz) / 100 ... 125 VDC ±10% or 24...48 VAC ±10% (50...60 Hz) / 18...72 VDC ±10%
Power consumption	P = 0.6...3 VA (W)
Protection class	IP 67
Wire cross-section (mains connection)	0.75 ... 2.5 mm² (AWG 14...20)
Condensate	oil-contaminated condensate oil-free, aggressive condensate

Discharge performance							
Operating pressure bar (gauge)	1 bar	2 bar	3 bar	4 bar	5 bar	6 bar	> 7 bar
Max. discharge rate (short-term) l/h	4.5			5.5			
Ø discharge rate l/h	0.51			0.63			

Dimensions in mm



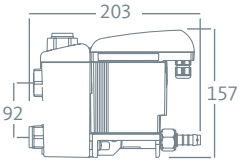
Technical data	BEKOMAT® 32U
Max. compressor performance*	■ 6 m³/min | ▲ 5 m³/min | ● 3.5 m³/min
Max. refrigeration dryer performance*	■ 12 m³/min | ▲ 10 m³/min | ● 7 m³/min
Max. filter performance*	■ 60 m³/min | ▲ 50 m³/min | ● 35 m³/min
Min./max. operating pressure	0.8 ... 16 bar (gauge) [optional: 1.2 ... 16 bar (gauge)]
Housing	aluminium + plastic, glass fibre reinforced
Diaphragm	AU [optional: FKM]
Ambient temperature	+1 °C ... +60 °C [optional: +1 °C ... +70 °C]
Weight (empty)	1 kg
Condensate inlet	1 x G½ (inside) [optional: NPT thread]
Condensate discharge	1 x G¼; hose connector, hose Ø = 10 mm (inside)
Operating voltage	95 ... 240 VAC ±10% (50 ... 60 Hz) / 100 ... 125 VDC ±10% or 24 ... 48 VAC ±10% (50 ... 60 Hz) / 18 ... 72 VDC ±10%
Power consumption	P = 0.6 ... 3 VA (W)
Protection class	IP 67
Wire cross-section (mains connection)	0.75 ... 2.5 mm² (AWG 14 ... 20)
Contact load	max. AC 250 V, DC 30 V / 1A; min. DC 5V / 10 mA
Condensate	oil-contaminated condensate oil-free, aggressive condensate

Discharge performance							
Operating pressure bar (gauge)	1 bar	2 bar	3 bar	4 bar	5 bar	6 bar	> 7 bar
Max. discharge rate (short-term) l/h	10						
Ø discharge rate l/h	1.14						

Data	BEKOMAT® 33U	BEKOMAT® 33U CO
Max. compressor performance*	■ 12 m³/min | ▲ 10 m³/min | ● 7 m³/min	
Max. refrigeration dryer performance*	■ 24 m³/min | ▲ 20 m³/min | ● 14 m³/min	
Max. filter performance*	■ 120 m³/min | ▲ 100 m³/min | ● 70 m³/min	
Min./max. operating pressure	0.8 ... 16 bar (gauge) [optional: 1.2 ... 16 bar (gauge)]	
Housing	aluminium + plastic, glass fibre reinforced	Aluminium, hard-coated + plastic, glass fibre reinforced
Diaphragm	AU [optional: FKM]	
Ambient temperature	+1 °C ... +60 °C [optional: +1 °C ... +70 °C]	
Weight (empty)	1.65 kg	
Condensate inlet	3 x G½ (inside) [optional: NPT thread]	
Condensate discharge	1 x G½; hose connector Ø = 13mm (inside)	
Operating voltage	95 ... 240 VAC ±10% (50 ... 60 Hz) / 100 ... 125 VDC ±10% or 24 ... 48 VAC ±10% (50 ... 60 Hz) / 18 ... 72 VDC ±10%	
Power consumption	P = 0.6...3 VA (W)	
Protection class	IP 67	
Wire cross-section (mains connection)	0.75 ... 2.5 mm² (AWG 14 ... 20)	
Contact load	max. AC 250 V , DC 30 V / 1A; min. DC 5 V / 10 mA	
Condensate	oil-contaminated condensate	oil-contaminated condensate oil-free, aggressive condensate

Discharge performance							
Operating pressure bar (gauge)	1 bar	2 bar	3 bar	4 bar	5 bar	6 bar	> 7 bar
Max. discharge rate (short-term)** l/h	25		33	40	45	50	60
Ø discharge rate l/h	1.59		2.06	2.51	2.85	3.17	3.8

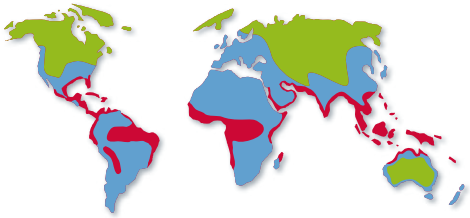
Dimensions in mm



Depth: 73

* For more information on climate zones (■ | ▲ | ●) see reverse
** Short-term peak volume can only be achieved if the device is correctly installed according to the operating manual. If in doubt, a install venting line.

Climate – a key factor



The general climate and the ambient temperature are important factors for the formation of condensate in compressed air systems. That is why we quote separate performance data of our BEKOMAT® models for three climate zones:

- ■ e.g. Northern Europe, Canada, Northern USA, Central Asia
- ▲ e.g. Central and Southern Europe, Central America
- ● e.g. South-East Asian coastal regions, Oceania, Amazon and Congo regions

Temperature range: 1 to + 60 °C

Service unit

Like all high-performance devices, the BEKOMAT® needs to be serviced from time to time. This is done with our service unit containing all the necessary wearing parts. If you require assistance, contact our service technicians, who are also qualified to examine and assess your entire compressed air system for further optimisation.

For BEKOMAT®	31U	32U	33U	33U CO
Service unit	4023607	4023571	4023633	4023635

Do you have questions about the best way of processing your compressed air?

We have the answers! We offer efficient solutions for any type of processing chain. Please contact us with all your queries. We would be delighted to tell you more about our condensate treatment, filtration, drying, measuring and process technology, and our comprehensive services.

Visit us at

YouTube

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