



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 CO₂ 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

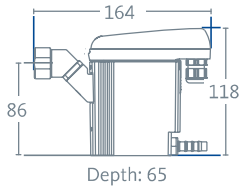
unit stays in place as only the service unit (including all wear and pressure parts) needs to be exchanged.



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

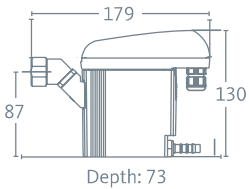
Dimensions in mm



| 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 G½; 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 | 1 bar | 2 bar | 3 bar | 4 bar | 5 bar | 6 bar | > 7 bar |
|--------------------------------------|-------|-------|-------|-------|-------|-------|---------|
| 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 | | | |

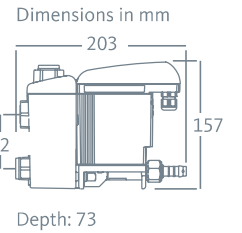
Dimensions in mm



| 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 G½; 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 | 1 bar | 2 bar | 3 bar | 4 bar | 5 bar | 6 bar | > 7 bar |
|--------------------------------------|-------|-------|-------|-------|-------|-------|---------|
| 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 | 1 bar | 2 bar | 3 bar | 4 bar | 5 bar | 6 bar | > 7 bar |
|--|-------|-------|-------|-------|-------|-------|---------|
| 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 | |

* 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.