

# **BEKOKAT®**

**TOP-QUALITY,  
OIL-FREE COMPRESSED AIR**



## BEKOKAT® FOR EXACTING SPECIFICATION

With highly sensitive applications, conventional compressed air treatment has certain technical and economic limits - especially in respect of residual oil content.

This calls for a fresh approach and different technology. BEKO's catalyst technology sets new standards in compressed air quality.

Intensive development work to exploit the potential of catalyst technology has resulted in the BEKOKAT® – a device that combines superior efficiency with high reliability.

The new BEKOKAT® represents a real breakthrough offering truly oil free compressed air from lubricated compressors without compromise.



# + 1 :

**OIL FREE COMPRESSED AIR,  
EVERY TIME. BETTER THAN  
ISO8573-1, CLASS 1 OIL CONTENT**

# + 2 :

**INDEPENDENT OF AMBIENT  
CONDITIONS**

# + 3 :

**ENVIRONMENTALLY FRIENDLY,  
NO HAZARDOUS WASTE.  
NO CARTRIDGES.  
CLEAN, OIL-FREE CONDENSATE**

# + 4 :

**PARTIAL LOAD OPERATION  
WITHOUT RESTRICTION.  
GRANULATE LIFETIME  
≥ 20,000 OPERATING HOURS**

# + 5 :

**FOR ABSOLUTE PROCESS SAFETY.  
FAST RESPONSE TO ANY CHANGE**



BEKOKAT®

## FUNCTION

### COMPLETE CONVERSION

The compressed air of oil-lubricated compressors contains hydrocarbons in the form of lubricants and oil as well as air constituents in the form of gas, vapour and aerosols. The BEKOKAT® system completely transforms hydrocarbons by total oxidation to produce carbon dioxide and water. The air is then cooled down on its way out of the BEKOKAT® by a heat exchanger.

### CONSTANT, EVEN TEMPERATURE

For compressed air treatment using a BEKOKAT® unit, a pressure vessel is filled with a specially developed granulate. The entire vessel is heated to an operating temperature of 150 °C. The oil particles in the compressed air that flows through the heated vessel are completely transformed inside the pores of the catalyst granulate, resulting in water and carbon dioxide.



### ALSO DURING PARTIAL-LOAD OPERATION: TOP-QUALITY COMPRESSED AIR

BEKOKAT® allows consistently oil-free compressed air with a maximum residual oil content of down to a barely measurable 0.001 milligrams per cubic metre of compressed air - a quality that is required in extremely demanding production processes.

The condensate which accumulates during the cooling of the compressed air is also absolutely oil-free and can be introduced into the sewerage system without being processed.

The enormously long service life of the special BEKOKAT® granulate is also extremely advantageous as far as profitability is concerned: it only needs to be replaced after a good 20,000 operating hours.



### OIL-FREE COMPRESSED AIR COOLS, PROTECTS AND SECURES

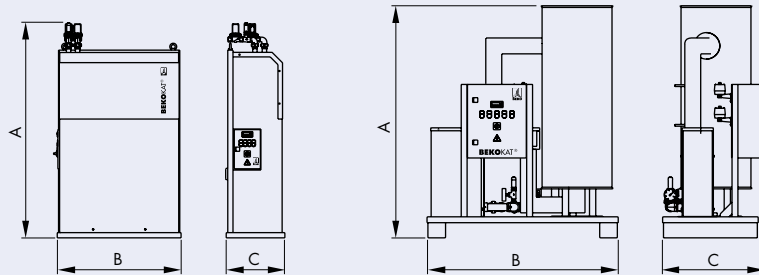
For the automobile industry, the shipbuilding industry, and for the machine-, plant- and tool construction branch, metal parts are produced to demanding specifications. Laser cutting machines are also employed here to cut stainless-steel plates.

Constantly oil-free compressed air, provided by BEKOKAT®, has an important share in the process-reliable operation of laser technology. Compressed air processed in this manner protects gold- or molybdenum-coated mirrors against oil or aerosols, and cools sensitive components.

With this new method, the product quality lies at a constantly high level.

BEKOKAT®

## TECHNICAL DATA



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CC - 060, CC - 120, CC - 180

CC - 360, CC - 720, CC - 1200

Model	Volume flow			max. pressure	Connection	Weight	Dimensions			Installed capacity
	m³/min	m³/h	cfm				A	B	C	
CC - 060	1	60	35	16 (232)	1"	130 (290)	1734	800	420	1.00
CC - 120	2	120	75	16 (232)	1"	200 (441)	1719	950	450	1.64
CC - 180	3	180	106	16 (232)	1"	300 (661)	1482	950	525	2.60
CC - 360	6	360	212	16 (232)	1½"	315 (694)	1578	1300	715	5.10
CC - 720	12	720	424	16 (232)	2"	525 (1157)	1747	1550	850	8.70
CC - 1200	20	1200	706	11 (160)	DN65	805 (1775)	2166	1650	1050	13.80

Attainable oil residue  $\leq 0.003 \text{ mg/m}^3$ , under optimum conditions  $0.001 \text{ mg/m}^3$

The residual oil content can be monitored continuously using BEKO's METPOINT® OCV

Mains voltage: type 060-120: 230 V/1Ph./50Hz, type 180-1200: 400 V/3Ph./50Hz

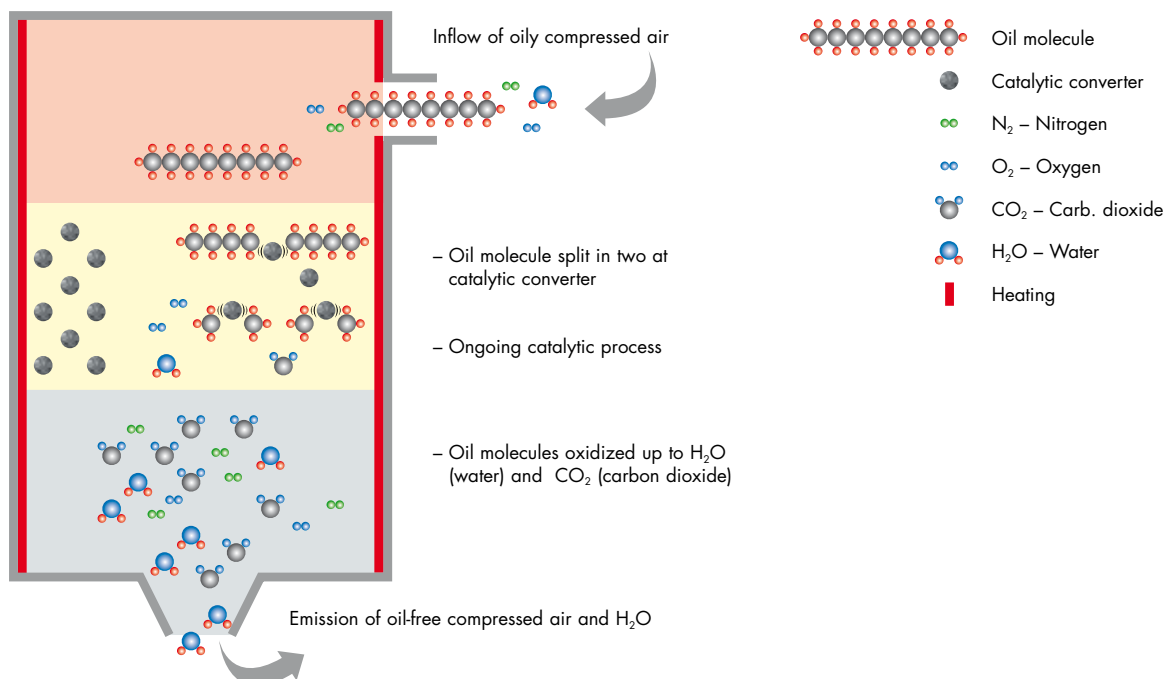
Other models or voltages upon enquiry. Model CC - 360 or higher without housing.

Operating pressure bar (e)	4	5	6	7	8	9	10	11	12	13	14	15	16
Operating pressure psi (g)	58	72.5	87	101.5	116	130.5	145	159.5	174	188.5	203	217.5	232
Correction factor (coefficient)	0.63	0.75	0.88	1	1.13	1.25	1.36	1.5	1.63	1.75	1.88	2	2.1

As a standard, all BEKOKAT® devices are sized on an operating pressure of 7 bar (g).

The performance values refer to an inlet pressure of 7 bar (g). At a deviant inlet pressure, please multiply by the correction factor above.

## CATALYST FUNCTION



**BEKOKAT® -****CONSTANT SUPPLY OF OIL-FREE COMPRESSED AIR FOR:**

**ALWAYS ACCURATELY  
INFORMED: METPOINT® OCV  
ALLOWS PERMANENT  
MONITORING OF THE OIL  
CONTENT IN COMPRESSED AIR  
FLOWS.**

**PHARMACEUTICAL INDUSTRY****CHEMICAL INDUSTRY****FOOD, BEVERAGES AND  
TOBACCO INDUSTRY****MEDICAL TECHNOLOGY****SURFACE TECHNOLOGY****PACKAGING INDUSTRY**

**BEKO**

## **HIGH-QUALITY COMPRESSED AIR**

### **BEKOMAT®**

The convincing concept for condensate discharge

### **ÖWAMAT®**

Clean and safe oil/water separation

### **BEKOSPLIT®**

Splitting plants for the reliable, economic and environmentally friendly treatment of oil-water emulsions

### **CLEARPOINT®**

Flow-optimised, reliable filters and water separators for compressed air and industrial gases

### **DRYPOINT®**

Refrigeration dryers, adsorption dryers, membrane dryers

### **EVERDRY®**

Compressed air drying for large volume flows

### **BEKOKAT®**

Catalytic compressed-air processing for reliable oil-free compressed air.

### **BEKOBLIZZ®**

Optimised cooling processes using deep-cooled, dry compressed air

### **METPOINT®**

For the monitoring, control and optimisation of the compressed-air system



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XP BK00 002 UK  
Edition 2010-11