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conditioning systems

# CONDITIONING SYSTEMS

## JCT Gas Coolers



### FEATURES

- ◆ ATEX certified BVS 08 ATEX E 096
- ◆  II 2G Ex px d e [ia] IIC T4
- ◆ Up to 4 gas paths
- ◆ Stable dew point +3°C
- ◆ Temperature display
- ◆ Compact construction
- ◆ Maximum availability
- ◆ Reliable and robust
- ◆ Environment-friendly (CFC free)

### GENERAL

The JCT Sample Gas Cooler Series EX Class is a necessary component to complete a reliable Analytical Measuring System. The cooling-system, consisting of a high performance heat exchanger in combination with the performance oriented compressor, is designed to dry the sample gas to a stable dew point and provide it to the analyser systems. Dry sample gas is necessary for clear and reproducible measurements.

### TECHNOLOGY

The Main Parts of the compact and maintenance-free JCT EX Class Sample Gas Cooler are the high performance gas heat exchanger and the ingenious compressor regulation for the cooling system. The unique pressure and temperature controlled power regulation and the use of superior and excellent components are responsible for a constant and stable dew point.

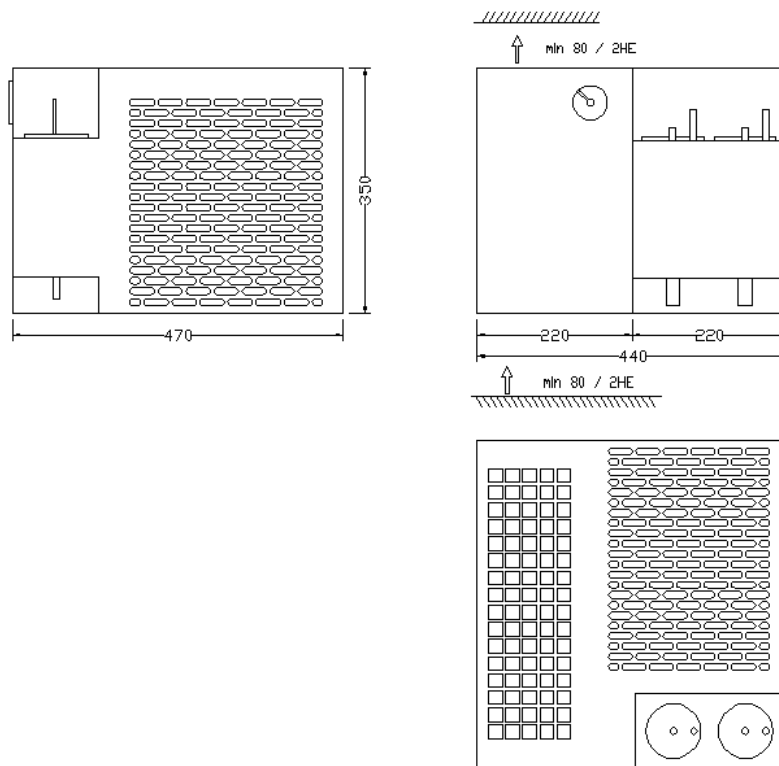
The clever construction of the heat exchanger allows a high flow rate and is a guarantee for optimum separation of sample gas and condensate. The JCT Sample Gas Cooler provides proven and reliable technology and is corrosion resistant. The EX Class Sample Gas Cooler is built for use in hazardous areas such as Zone 1 or Zone 2 and is certified and approved by ATEX.

### FEATURES

The cooling system is filled with environmentally friendly R134a. The EX Class Sample Gas Cooler is available with replaceable heat exchangers, either with a MONO or DUAL gas paths. Materials can be chosen between PVDF, Stainless Steel 1.4571 or Duran glass. Gas Flow is possible up to 400 l/h for each gas path. An analogue temperature display is fitted as standard. An isolated contact for remote fault indication is as an option available.

## TECHNICAL DATA

Dimension Ex Cooler



### SPECIFICATIONS

		1			2			4	
Gas path									
Heat exchanger		1 x MONO			2 x MONO			2 x DUAL	
Material of heat exchanger		PVDF	GLASS	SS316	PVDF	GLASS	SS316	PVDF	SS316
Gas flow	L/h	250	300	400	2x250	2x200	2x400	4x125	4x200
Gas inlet dew-point (max.)	°C	70	65	80	70	65	80	70	80
Gas inlet temperature (max.)	°C	135 for PVDF, 180 for SS316							
Gas outlet temperature	°C	3°C at standard conditions*							
Dead volume per gas duct	ml	67	98	67	2 x 67	2 x 98	2 x 67	4 x 55ml	
Max. pressure	bar	100bar for SS316 / 2bar for PVDF and Glass							
Gas connection (tube)	mm	gas inlet + gas outlet 6mm, condensate drain 12mm AD							
Ambient temperature	°C	+ 10 to 40°C							
Cooling power	W	300 Watt at Ta 25°C							
Mounting / Colour of Housing		Rear Panel / RAL7035							
Dimension / Weight	mm	435 x 370 x 470 mm (WxHxD) / approx. 38,5 kg			435 x 370 x 470 mm (WxHxD) / approx. 40,5 kg				
Temperature indication		Analog display of gas temperature							
Protection rate / electrical standards		IP20 / acc. EN 60529 / EN 61010							
Certifications		II 2G Ex px d e [ia] IIC T4 for Zone 1 or 2							
Power supply		230V 50/60Hz or 115V 50/60Hz, protection 10A at 230V							
Power consumption	W	220 Watt at 230V; starting current 6,3 Amp.							

\* At 20°C ambient, TP in 60°C, at 150 NI/h

## ORDER CODE

JCT-5 Ex-Cooler			
<b>Housing</b>	Standard with 1 evaporator	1	
	Standard with 2 evaporators	2	
<b>Gas Path 1</b>	1 Mono PVDF heat-exchanger without condensate pump	1	
	1 Mono SS heat-exchanger without condensate pump	2	
	1 Mono Glas heat-exchanger without condensate pump	3	
	1 DUAL PVDF heat-exchanger without condensate pump	4	
	1 DUAL SS heat-exchanger without condensate pump	5	
<b>Gas Path 2</b>	without heat-exchanger	0	
	1 Mono PVDF heat-exchanger without condensate pump	1	
	1 Mono SS heat-exchanger without condensate pump	2	
	1 Mono Glas heat-exchanger without condensate pump	3	
	1 DUAL PVDF heat-exchanger without condensate pump	4	
	1 DUAL SS heat-exchanger without condensate pump	5	
<b>Power Supply</b>	230V 50Hz	1	
	230V 60Hz	2	
	115V 50/60Hz	3	
<b>Mounting</b>	without		X
	with mounting bracket for wall mounting		1
<b>Alarm Contact</b>	without		X
	with isolated alarm contact for high and low temp. Alarm		A
<b>Fan</b>	without		X
	incl. condenser fan for higher ambient temperature EEX		F
<b>Option</b>	No		X
	Special		1

ORDER CODE:

JCT5- 

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Specification subject to change without notice.

PDS\_E\_Ex Class\_04/09\_Rev.5

### **JCT Analysentechnik GmbH**

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