# JCT-3 Sample Gas Compressor Cooler



## APPLICATION

- Extractive gas analysis
- · Emission and process monitoring
- Continuous drying of sample gas to a precise low and constant outlet dew point
- Minimises water vapour cross sensitivities and volumetric errors

#### BENEFITS

- Extremlely precise long-term stable dew point even under varying loads
- High flow rates and high water vapour dew points possible
- · Easy to change heat exchangers
- · Continuous condensate removal
- Low maintenance operation
- · Easy to maintain design

## FEATURES

- · Proven and reliable technology
- Performance optimised construction
- · High performance heat exchanger
- Heat exchanger material PVDF, Duran glass or stainless steel
- One to four independant gas paths
- · Proportional temperature controller
- Digital temperature indication
- · Integrated condensate pump
- Status contact





Gas Sampling Probes

Heated Sample Lines

#### **Sample Gas Coolers**

Condensate Treatment

**Accessories** 

Gas Conditioning System

> Sample Gas Converters

# **TECHNICAL DATA**

Model	JCT-3										
Description	sample gas compressor cooler										
Cooling principle	compressor cooling										
Number of heat exchangers / gas paths	1 / 1 (Mono)				2 / 2 (Mono)	2 / 4 (Dual)					
Material heat exchangers	PVDF	Duran glass	SS316	PVDF	Duran glass	SS316	PVDF	SS316			
		Operatio	on								
Max. gas flow rate* [Nl/hr]	250	300	500	2 x 250	2 x 300	2 x 500	4 x 125	4 x 150			
max. gas inlet temperature* [°C]	140	160	180	140	160	180	140	180			
Max. gas inlet dew point* [°C]	70	65	80	70	65	80	70	80			
Gas outlet dew point				3°C	;						
Dew point stability (for constant inlet conditions)	±0,3K										
Ambient temperature	+5° to +45 °C										
Cooling capacity	300 W										
Temperature alarm limits	< 0 / > +10°C										
Operating pressure with condensate pump	0,2 to 2,2 bara										
Max. operating pressure without condensate pump [bara]	2,5	2,0	160	2,5	2	160	2,5	160			
Ready for operation				< 20 m	nin						
Pressure drop at 100 Nl/hr				6 mb	ar						
		Construct	tion								
Dimensions over all (W x H x D)	450 x 300 x 300 mm										
Installation			stai	nd alone or w	all mounting						
Mounting position				horizor	ntal						
Weight	21 kg 23 kg							kg			
Housing / Colour	sheet steel 1,5 mm, powder coated / RAL 7035										
Dead volume per gas path	67 ml 2 x 50 ml							50 ml			
Connection sample gas inlet	PVDF and 1.4401: 6 mm tube; glass: GL14 with hose connection										
Connection sample gas outlet and condensate outlet on top (standard)	PVDF: PVDF hose fitting DN 4/6; 1.4401: 6 mm tube; glass: GL14 with hose connection										
Connection condensate outlet at the bottom (on request)	PVDF and 1.4401: 12 mm tube; glass (only Mono available): GL18 with hose connection										
Protection class	IP 20 (EN 60529 / EN 61010)										
Approvals / signs				CE							
		Electric	S								
Power supply		220 to 240 VAC	50 Hz or 2	20 to 240 VA	C 60 Hz or 100 to	0 115 VAC 5	0/60 Hz				
Power consumption (depending on load and ambient temperature)	300 VA										
Connection power / status signal	2,3 m cable, open ends										
Fusing	external on installation site, fuse characteristic C: 230 VAC 6 A; 115 VAC 10 A										
On time	100 %										
Temperature indication	digital										
Status contact	volt free changeover contact max. 230 VAC / 2 A min. 5 VADC / 5 mA										

\* Results from the effective cooling capacity at 25°C ambient temperature and 3°C outlet dew point and can be influenced by further operational parameters

# **ORDER CODE**

## **JCT-3 Grand Class**

Basic Unit	Housing rear panel mounting with 1 gas heat exchanger	1					
	Housing rear panel mounting with 2 gas heat exchangers	2					
	Housing 19" rack mounting with 1 gas heat exchanger	5					
	Housing 19" rack mounting with 2 gas heat exchangers	6					
Gas heat exchanger 1	1 Mono PVDF gas heat exchanger		1				
	1 Mono SS316 gas heat exchanger		2				
	1 Mono Duran glass gas heat exchanger		3				
	1 Dual PVDF gas heat exchanger		4				
	1 Dual SS316 gas heat exchanger		5				
Gas heat exchanger 2	Without gas heat exchanger			0			
	1 Mono PVDF gas heat exchanger			1			
	1 Mono SS316 gas heat exchanger			2			
	1 Mono Duran glass gas heat exchanger			3			
	1 Dual PVDF gas heat exchanger			4			
	1 Dual SS316 gas heat exchanger			5			
Condensate pump	Without condensate pump JSR-25				0		
	1 Condensate pump JSR-25				1		
	2 Condensate pumps JSR-25				2		
	3 Condensate pumps JSR-25				3		
	4 Condensate pumps JSR-25				4		
Power supply	230 VAC 50 Hz					1	
	230 VAC 60 Hz					2	
	115 VAC 50/60 Hz					3	
Options	Standard version						Х
	Special version (on request)						1
		¥	¥	¥	¥	¥	¥

Order code

JCT-3.

## DIMENSIONS

DimeRistensistation





