



JCT-1 and JCT-2 Sample Gas Compressor Coolers

JCT
Analysentechnik



Gas Sampling
Probes

Heated Sample
Lines

Sample Gas Coolers

Condensate
Treatment

Accessories

Gas Conditioning
System

Sample Gas
Converters

APPLICATION

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

BENEFITS

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

FEATURES

- Proven and reliable technology
- Performance optimized construction
- High performance heat exchanger
- Heat exchanger material PVDF, Duran glass or stainless steel
- One or two independent gas paths
- Proportional temperature controller
- Digital temperature indication
- Integrated condensate pump
- Status contact
- Compact design

TECHNICAL DATA

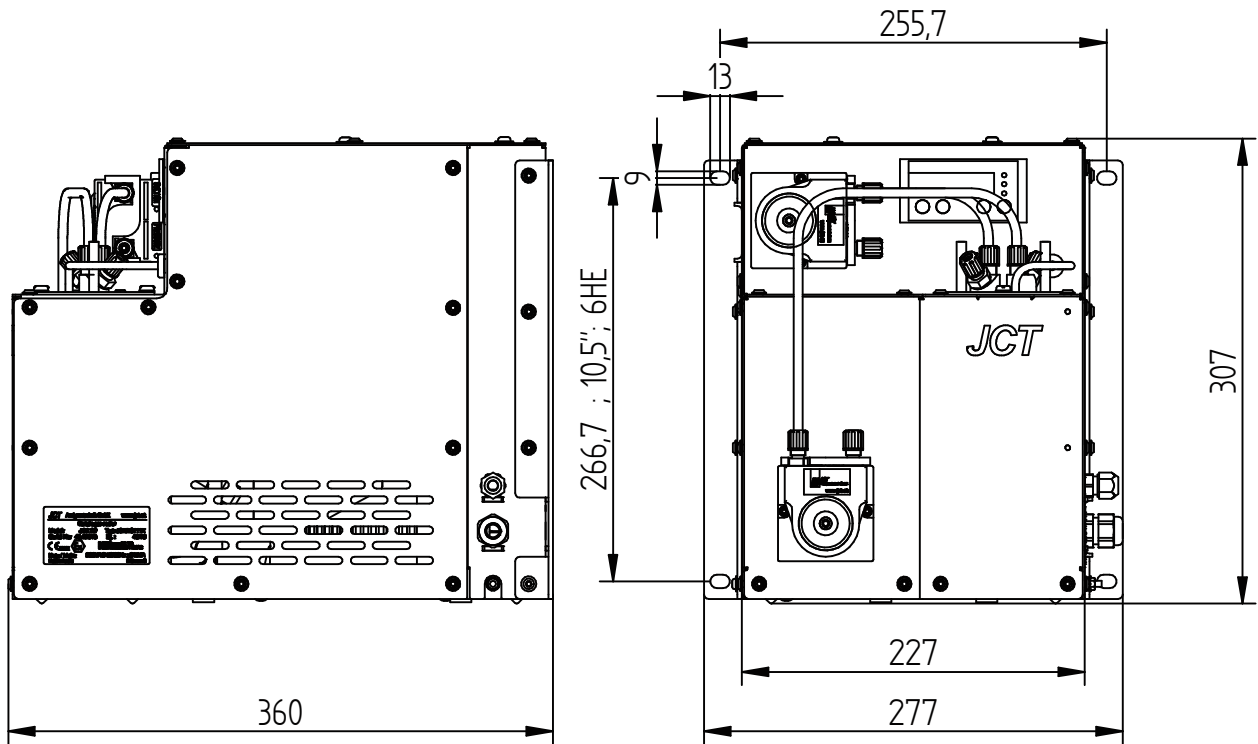
Model	JCT-1			JCT-2				
Description	sample gas compressor coolers							
Cooling principle	compressor cooling							
Operating principle	hotgas bypass			hotgas bypass with solenoid valve				
Number of heat exchangers / gas paths	1 / 1 (Mono)			1 / 1 (Mono)			1 / 2 (Dual)	
Material heat exchangers	PVDF	Duran glass	SS316	PVDF	Duran glass	SS316	PVDF	SS316
Operation								
Max. gas flow rate* [NI/hr]	125	150	250	180	200	350	2 x 90	2 x 160
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	90 to 215 W depending on gas heat exchanger							
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 min.							
Pressure drop at 100 NI/hr	approx. 6 mbar							
Construction								
Dimensions over all (W x H x D)	rear panel mounting: 277 x 307 x 360 mm side panel mounting: 403 x 307 x 234 mm							
Installation	stand alone or wall mounting (rear or side)							
Mounting position	horizontal							
Weight	17,5 kg			18 kg				
Housing / Colour	stainless steel / natural							
Dead volume per gas path	67 ml						2 x 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							
Electrics								
Power supply	220 to 240 VAC 50/60 Hz or 100 to 115 VAC 50/60 Hz							
Power consumption (depending on load and ambient temperature)	300 W							
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

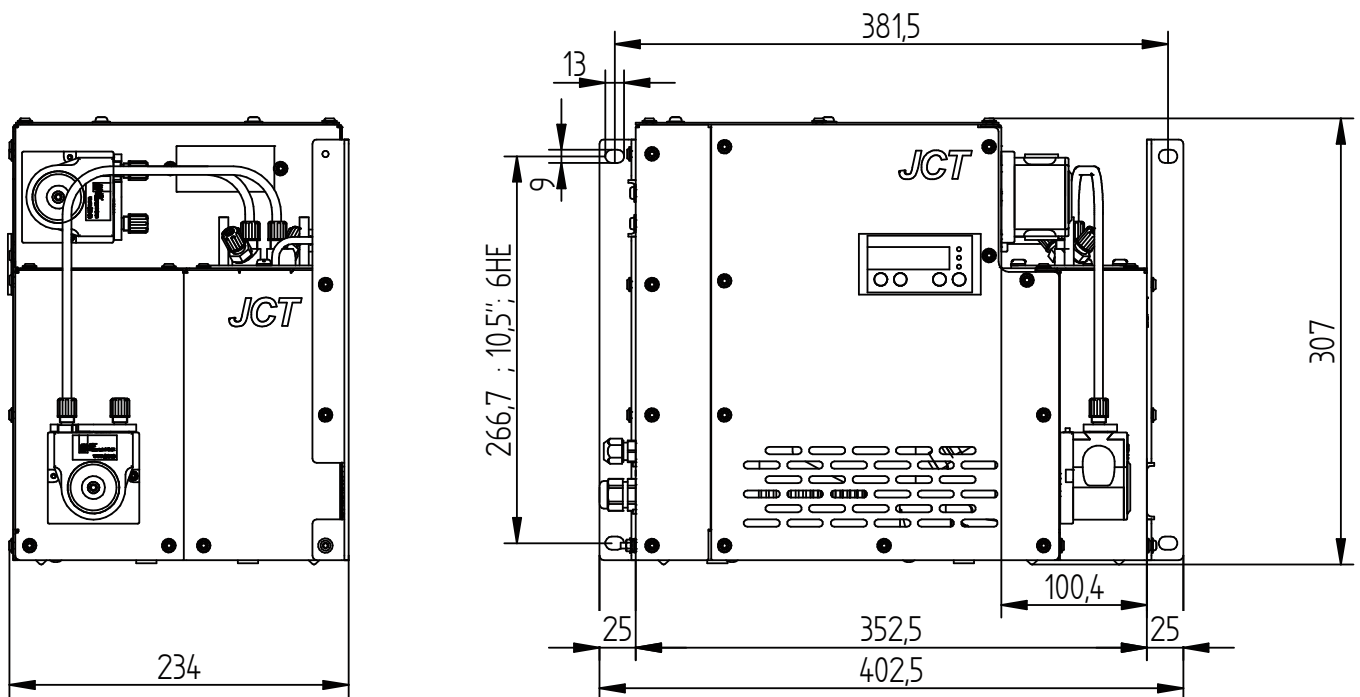
DIMENSIONS

Dimensions in mm

For rear panel mounting



For side panel mounting



ORDER CODE

JCT-1

Basic unit	for rear panel mounting	S						
	for side panel mounting	Q						
Gas heat exchanger	<u>Gas heat exchanger exit on top</u>							
	1 Mono PVDF gas heat exchanger		1					
	1 Mono SS316 gas heat exchanger		2					
	1 Mono Duran glass gas heat exchanger		3					
	<u>Gas heat exchanger exit on bottom</u>							
	1 Mono PVDF gas heat exchanger		A					
	1 Mono SS316 gas heat exchanger		B					
	1 Mono Duran glass gas heat exchanger		C					
	Condensate pump	without condensate pump JSR-25			0			
1 condensate pump JSR-25				1				
Power supply	230 VAC 50/60 Hz				1			
	115 VAC 50/60 Hz				3			
Options	Standard version						X	
	Special version (on request)							1

Order code

JCT-1.

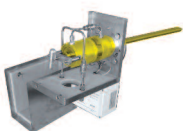
JCT-2

Basic unit	for rear panel mounting	S						
	for side panel mounting	Q						
Gas heat exchanger	<u>Gas heat exchanger exit on top</u>							
	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					
	<u>Gas heat exchanger exit on bottom</u>							
	1 Mono PVDF gas heat exchanger		A					
	1 Mono SS316 gas heat exchanger		B					
	1 Mono Duran glass gas heat exchanger		C					
	1 Dual PVDF gas heat exchanger		D					
	1 Dual SS316 gas heat exchanger		E					
Condensate pump	without condensate pump JSR-25			0				
	1 condensate pump JSR-25			1				
	2 condensate pumps JSR-25			2				
Power supply	230 VAC 50/60 Hz				1			
	115 VAC 50/60 Hz				3			
Options	standard version						X	
	special version (on request)							1

Order code

JCT-2.

Gas Sampling **Probes**



Heated Sample **Lines**



Sample Gas **Coolers**



Gas Conditioning **Systems**



NOx **Converter**



and **solutions** for

