



JCE-2 Ex Sample Gas Compressor Cooler



JCT
Analysentechnik

Gas Sampling
Probes

Heated Sample
Lines

Sample Gas Coolers

Condensate
Treatment

Accessories

Gas Conditioning
System

Sample Gas
Converters

APPLICATION

- Operation in Ex zone 2
- 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 with ATEX approval
- Performance optimized construction
- High performance heat exchanger with flow rates up to 350 NI/hr
- Heat exchanger material PVDF or stainless steel
- One or two independent gas paths
- Proportional temperature controller
- Digital temperature display
- Integrated condensate pumps
- Status contact
- Compact design

TECHNICAL DATA

Model

JCE-2 Ex

Description	explosion proof sample gas compressor cooler for Ex zone 2			
Cooling principle	compressor cooling			
Number of heat exchangers / gas paths	1 / 1 (Mono)		1/2 (Dual)	
Material heat exchangers	PVDF	SS316	PVDF	SS316
Operation				
Max. gas flow rate* [NI/hr]	250	350	2 x 125	2 x 180
Max. Gas inlet temperature* [°C]	140	180	140	180
Max. Gas inlet dew point* [°C]	70	80	70	80
Gas outlet dew point	+3°C			
Dew point stability (for constant inlet conditions)	±0,3K			
Ambient temperature	+5° to +40°C			
Cooling capacity	90 W	160 W	90 W	160 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]	2,2	100	2,2	100
Ready for operation	< 20 min			
Pressure drop at 100 NI/hr	ca. 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 panel)			
Mounting position	horizontal			
Weight	19 kg			
Housing / Colour	stainless steel / natural			
Dead volume per gas path	67 ml			
Connection sample gas inlet	6 mm tube			
Connection sample gas outlet and condensate outlet on top (standard)	PVDF: PVDF hose fitting DN 4/6; 1.4401: 6 mm tube			
Connection condensate outlet at the bottom (on request)	12 mm tube			
Protection class	IP 20 (EN 60529 / EN 61010)			
Type of protection	⚠ II 3G Ex ma IIA T3; ⚠ II 3D Ex ma IIIB T180°C (EN60079)			
Approvals / signs	CE			

Electrics

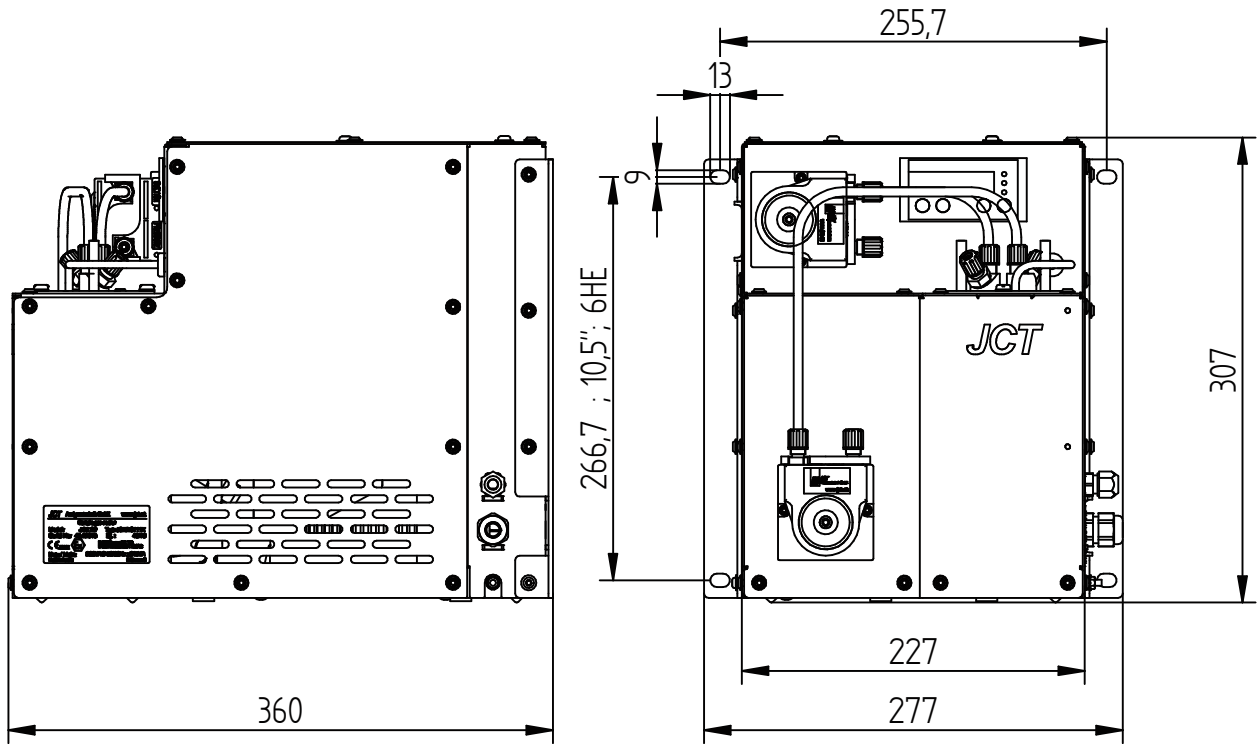
Power supply	220 to 240 VAC 50/60 Hz or 100 to 115 VAC 50/60 Hz			
Power consumption (depending on load and ambient temperature)	190 W			
Connection power / status signal	2,3 m cable, open ends			
Fusing	external on installation site, fuse characteristic C: 230 VAC 6 A; 115 VAC 10 A			
On time	100 %			
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

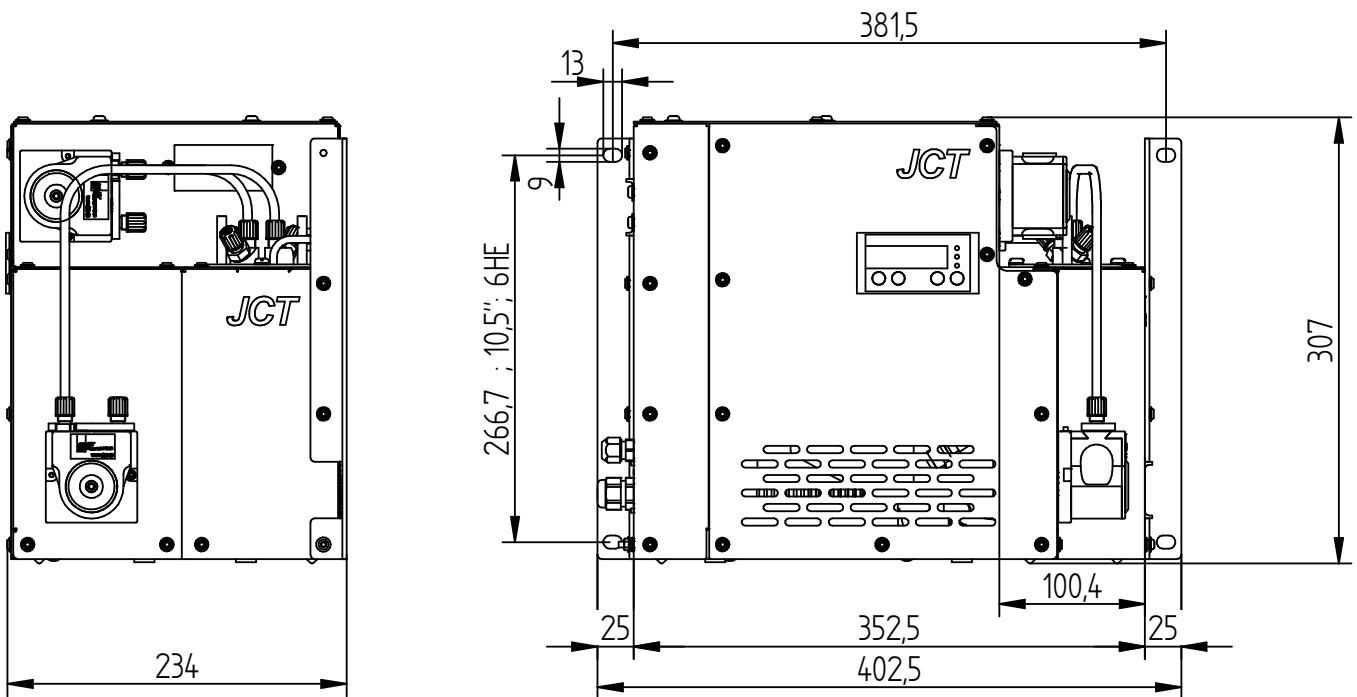
DIMENSIONS

Dimensions in mm

JCE-2 Ex for rear panel mounting



JCE-2 Ex for side panel mounting



ORDER CODE

JCE-2 Ex

Basic unit	for rear panel mounting	S							
	for side panel mounting	Q							
Gas heat exchanger with condensate outlet on top	1 Mono PVDF gas heat exchanger							1	
	1 Mono SS316 gas heat exchanger							2	
	1 Dual PVDF gas heat exchanger							4	
	1 Dual SS316 gas heat exchanger							5	
Gas heat exchanger with condensate outlet at bottom (only without condensate pump)	1 Mono PVDF gas heat exchanger							A	
	1 Mono SS316 gas heat exchanger							B	
	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

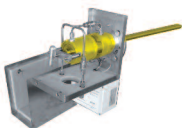
JCE-2.



Accessories

Order code	Description
K9521500	Automatic liquid drainer 11-LD, completely out of stainless steel, connections 1/2" NPT female (further information see data sheet in chapter 4).
K1738066	Male connector 1/2" NPT, 12 mm tube for connection of the 11-LD at the heat exchanger

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Heated Sample **Lines**



Sample Gas **Coolers**



Gas Conditioning **Systems**



NOx **Converter**



and **solutions** for

