



JCM-3PC Pre-Cooler Unit



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 condensate pre-separation
- Minimizes water vapour cross sensitivities and volumetric errors
- Drainage of contaminations
- Upstream discharge of sample gas coolers

FEATURES

- New modular designed compact construction
- New heat exchanger JHEX-4 in different materials
- Reliable condensate pre-separation due to cooling the sample gas down to ambient temperature
- Integrated condensate pump as option

BENEFITS

- Very powerful compact complete unit with condensate removal and monitoring
- High flow rates of up to 250 NI/h
- High separation rate
- Very low wash out ratios even at high water vapour concentrations in the sample gas
- High inlet dew points possible
- Reliable condensate separation
- Low maintenance operation
- Easy to maintain design

TECHNICAL DATA

Model	JCM-3PC
Cooling principle	forced fan cooling
Number of gas paths	1
Integrated condensate pump	option

Operation

Gas flow per gas path*	max. 250 NI/hr
Gas inlet temperature*	max. 140 °C; SS heat exchanger: max. 180 °C
Ambient temperature	+5° to +45 °C
Operating pressure with condensate pump	0,2 to 2,2 bara
Max. operating pressure without condensate pump	4,0 bara; SS heat exchanger: max. 19 bara
Pressure drop at max. flow rate	3 mbar

Construction

Dimensions over all (W x H x D)	244 x 308 x 220 mm
Installation	wall mounting
Mounting position	horizontal
Weight**	approx. 4,5 kg
Housing / Colour	stainless steel / natural
Gas wetted materials (depending on configuration)	PVDF, SS316Ti, FFKM, Duran glass
Dead volume per gas path	67 ml
Connection sample gas and condensate outlet with condensate pump	PVDF-hose fitting DN 4/6 for SS: pipe 6 mm
Condensate outlet without condensate pump	1/4" NPTf or 3/8" NPTf for SS: pipe 12 mm
Approvals / Signs	CE

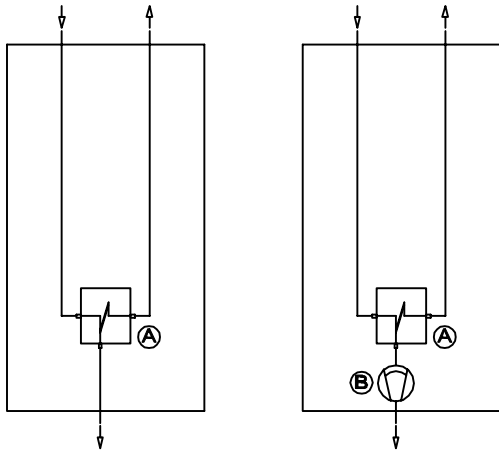
Electrics

Power supply	230 VAC 50/60 Hz +/- 10 % or 115 VAC 50/60 Hz +/- 10 %
Power consumption (depending on load and ambient temperature)	20 VA
Connection power	IEC plug
Protection class (in default mounting position)	IP 20 (EN 60529)
Fusing	lead fuse T1A in IEC plug
On time	100 %

* Results from the effective cooling capacity at 20 °C ambient temperature and 5 °C outlet dew point and can be influenced by further operational parameters.

** Dependent on configuration

GAS FLOW DIAGRAMS



A	Actively cooled heat exchanger
B	Condensate pump (option)

ORDER CODE

JCM-3PC series

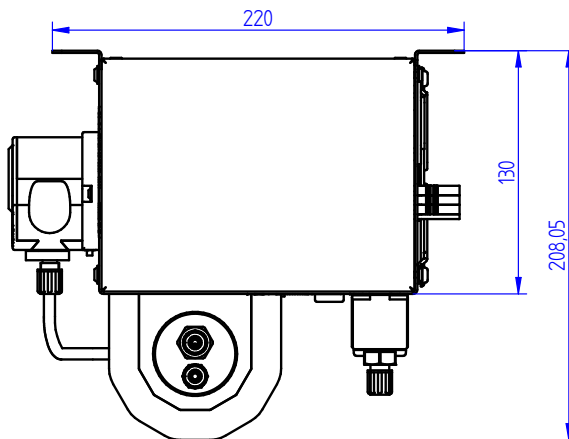
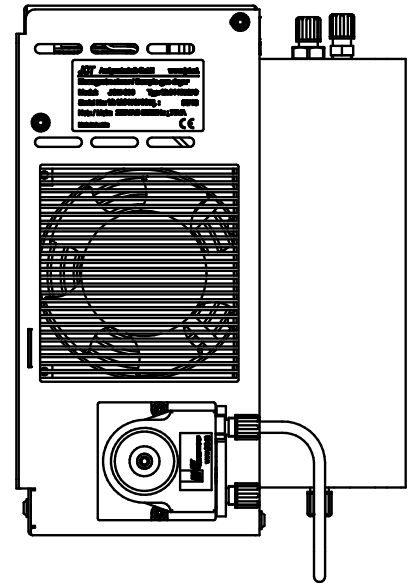
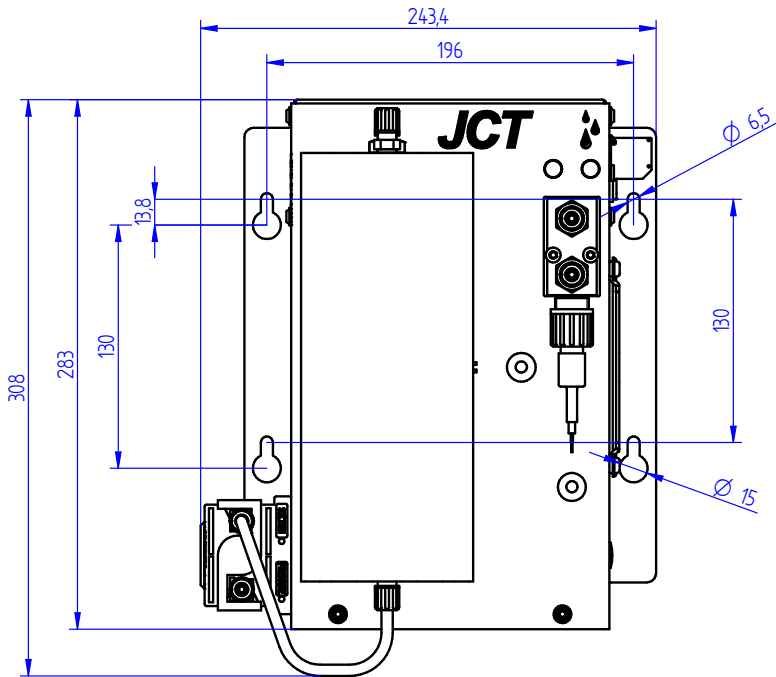
Heat exchanger	JHEX-4 heat exchanger PVDF	2		
	JHEX-4 heat exchanger Duran glass	3		
	Heat exchanger SS-GLY (helical style)	5		
Condensate pump	with condensate pump JSR-25		1	
	without condensate pump JSR-25, 1/4" NPTf outlet		3	
	without condensate pump JSR-25, 3/8" NPTf outlet		4	
Power supply	230 VAC 50/60 Hz			A
	115 VAC 50/60 Hz			B

Order code

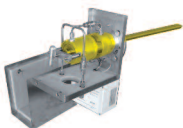


DIMENSIONS

Dimensions in mm



Gas Sampling Probes



Heated Sample Lines



Sample Gas Coolers



JCT
Analysentechnik

Gas Conditioning Systems



NOx Converter



and solutions for

