

JCS-100 Sample Gas Compressor Coolers



APPLICATION

- For extractive gas analysis
- For 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

- High flow rates and water vapour dew points possible
- Easy to change heat exchangers
- Continuous condensate removal
- Low maintenance operation

FEATURES

- Proven and reliable technology
- Various heat exchanger materials
- One or two independent gas paths
- Digital temperature indication
- Integrated condensate pump
- Status contact with acoustic feedback
- Hot gas bypass compressor technology
- Temperature sensor monitoring
- High current volt free status relay outputs (direct pump switching)
- Long life fan with ball bearing
- Wall mount, optional free stand
- Fully encapsulated temperature sensor
- Small footprint
- Stainless steel housing
- Light weight



JCT

Analysentechnik
GmbH

Gas Sampling Probes

Heated Sample Lines

Sample Gas Coolers

Condensate
Treatment

Accessories

Gas Conditioning
Systems

Sample Gas
Converters

MADE IN AUSTRIA



TECHNICAL DATA

Model

Description	sample gas compressor coolers
Cooling principle	compressor cooling
Number of heat exchangers / gas paths	1 or 2
Material heat exchangers	Aluminium coated, PVDF, Duran glass, SS316

Operation

Max. gas flow rate* [NI/hr]	250
Max. Gas inlet temperature* [°C]	140
Max. Gas inlet dew point* [°C]	80
Gas outlet dew point	3°C
Dew point stability (for constant inlet conditions)	±0,2K
Ambient temperature	+5....+45 °C
Cooling capacity	160 W
Temperature alarm limits	<0 / >+10°C
Operating pressure with condensate pump	0,2...2,2 bara
Max. operating pressure without condensate pump [bara]	2,5
Ready for operation	< 20 min.
Pressure drop at 100 NI/hr	2 mbar

Construction

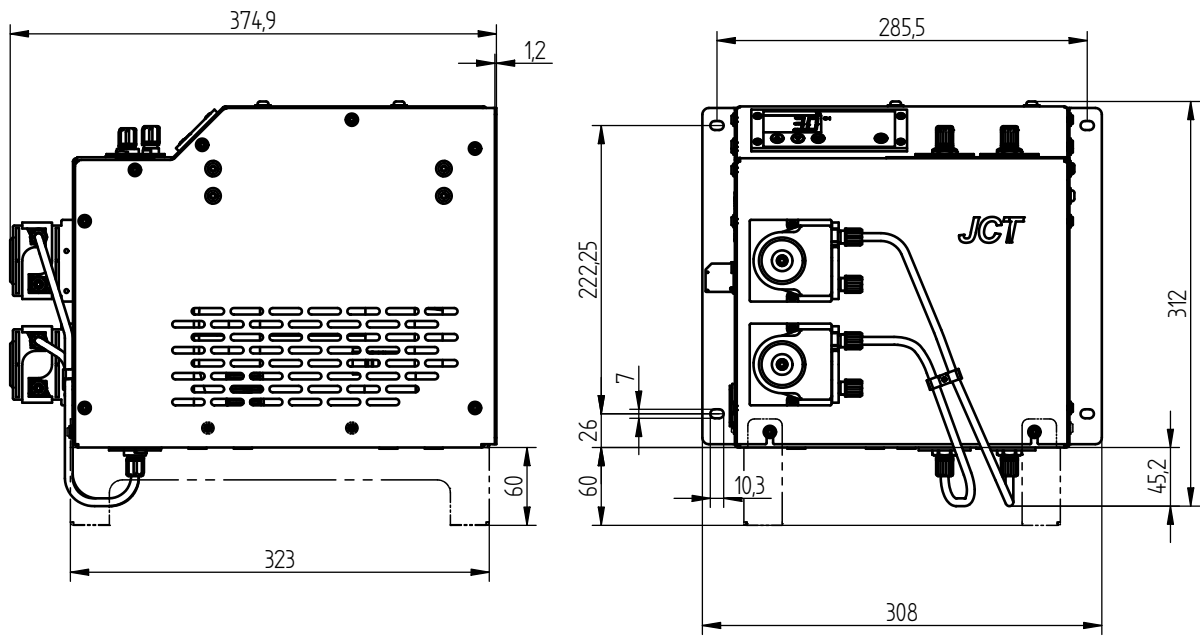
Dimensions over all (W x H x D)	308 x 312 x 375 mm
Installation	stand alone or wall mounting
Mounting position	horizontal
Weight	17 kg
Housing, colour	stainless steel
Dead volume per gas path	67 ml
Connection sample gas and condensate outlet with condensate pump	PVDF-hose fitting DN 4/6
Condensate outlet without condensate pump	1/4" NPTi or 3/8" NPTi
Protection class	IP 20 (EN 60529)
Approvals / signs	CE

Electrics

Power supply	220....240 VAC 50/60 Hz or 100....115 VAC 50/60 Hz
Power consumption (depending on load and ambient temperature)	190 VA
Connection power / status signal	IEC plug
Fusing	6,3AT in IEC plug
On-time	100 %
Temperature indication	digital display
Status threshold	<0 / >+10°C
Status delay	0,5 s
Status relay	volt free contact max. 230 VAC / 6 A min. 5 VADC / 5 mA
Connection terminals / clamping range	spring type terminals 0,5 mm ²2,5 mm ²

* 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

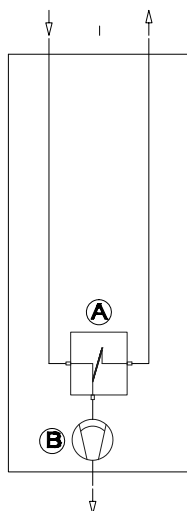
DIMENSIONS



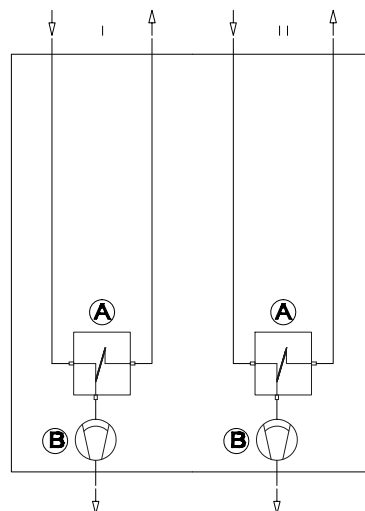
Dimensions in mm

GAS FLOW

1 gas path



2 gas paths



A	Actively cooled heat exchanger
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B	Condensate pump (option)
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ORDER CODES

JCS-100 Series

Number of gas paths	1 gas path MONO					1.				
	2 gas paths DUO					2.				
Heat exchanger 1	1 heat exchanger Aluminium coated							1		
	1 heat exchanger PVDF							2		
	1 heat exchanger glass							3		
	1 heat exchanger SS							4		
Heat exchanger 2	no heat exchanger								0	
	1 heat exchanger Aluminium coated								1	
	1 heat exchanger PVDF								2	
	1 heat exchanger glass								3	
	1 heat exchanger SS								4	
Condensate pump	1 condensate pump JSR-25								1	
	2 condensate pumps JSR-25								2	
	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	
Option	no cooler stand								0	
	cooler stand								S	
Order code										
	JCS-10									

JCT Analysentechnik GmbH

Werner Heisenberg-Straße 4 A-2700 Wiener Neustadt
 Tel. +43 (0) 2622 / 87201 Fax +43 (0) 2622 / 872011
 E-Mail: sales@jct.at Web: www.jct.at

