

JCL-301 Sample Gas Cooler



JCT

Analysentechnik
GmbH

Gas Sampling
Probes

Heated Sample
Lines

Sample Gas Coolers

Gas
Converters

Accessories

APPLICATION

- Emission and process monitoring
- Continuous gas conditioning in humid and dusty processes
- For extractive gas analysis
- Drying sample gas
- Reducing dew point

BENEFITS

- Very low dissolution rates for water soluble gases
- Small dead space in heat exchanger
- Sustainable reproducible results
- Precise and longterm stable dew point
- Low maintenance
- Long lifetime also in harsh conditions
- Rapid availability

FEATURES

- 1 to 2 separate gas streams
- Modular design from sample gas cooler to gas conditioning unit
- 11 status LEDs with event memory
- 2 status contacts
- Integrated condensate pump(s)
- Additional options:
 - For wall or 19" rack mounting
 - Acid dosing pump
 - Condensate detector
 - Fine dust filter
 - Flow meter with needle valve
 - RS485 interface

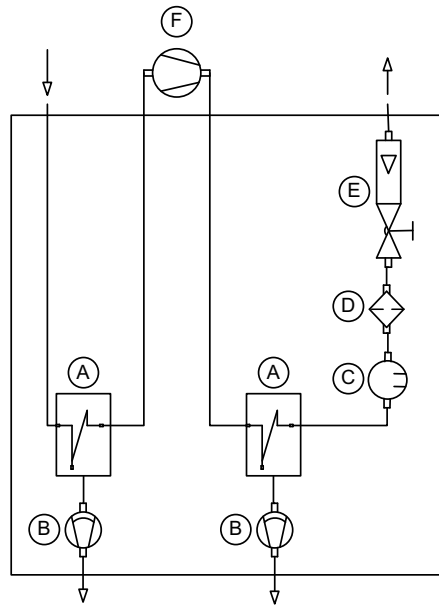


TECHNICAL DATA

Modell	JCL-301
Cooling principle	Compressor with hot gas bypass technology
Number of gas paths	1 - 2
Operation	
Flow rate*	max. 150 l/h
Gas temperature inlet*	max. +140°C
Dew point inlet*	max. +80°C
Dew point outlet*	+3°C
Dew point stability (for constant inlet conditions)	±0,1 K
Ambient temperature*	+5...+45 °C
Operating pressure	0,5...1,5 bar abs.
Ready for operation	< 10 min
Pressure drop at max. flow rate	2 mbar
Construction	
Dimensions over all (W x H x D)	320 x 310 x 328 mm
Mounting position	Stand alone or wall mount
Alignment	horizontal
Weight	approx. 22 kg
Housing, colour	Sheet steel 1,5 mm, powder coated RAL 7035 GS / RAL 1016 S
Heat exchanger material	PVDF
Dead volume per gas path	48 ml
Connection sample gas/ condensate outlet	PVDF hose fitting ID/OD 4/6 mm
Approval / Sign	CE
Electrical	
Supply voltage Option	100-115 VAC 50/60 Hz 220-240 VAC 50/60 Hz
Power consumption (depending on load, ambient temperature and configuration)	200...345 VA
Connection power / status signal	Connector EN175301-803 form A/B with PG9-panduit, 3/4 pole
Fusing	External on installation site, fuse characteristic C: 230 VAC 6A; 115 VAC 10A
Protection class	IP 20 (EN 60529)
On - time	100 %
Alarm set points	<0 / >+10°C
Status relay	volt free changeover contact
Switching capacity relays	max. 250 VAC/8(1,5)A; min. 5 VADC 5mA
Data interface (option)	DB9 female
Interface protocol	RS485 / ST Bus
Bus cable length max.	1000 m

*...may be affected by other values

GAS FLOW DIAGRAM



Part No: JCL-301.2221110

A	Gas heat exchanger
B	Condensate pump
C	Condensate sensor

D	Fine dust filter
E	Flow meter with needle valve
F	External sample gas pump (not included)

ORDER CODE

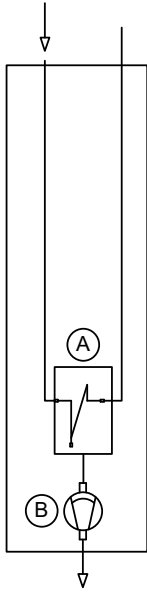
<u>Power supply</u>									
115 VAC 50/60 Hz						1			
230 VAC 50/60 Hz						2			
<u>Gas paths</u>	A								
1 Gas path						1			
2 Gas paths						2			
<u>Condensate pumps</u>	B								
1 Condensate pump JSR25							1		
2 Condensate pumps JSR25							2		
1 Dosing pump JSR25 + 1 condensate pump							3		
<u>Fine dust filter</u>	D								
Without fine dust filter								0	
1 Fine dust filter JF-1 incl. PTFE filter element								1	
<u>Condensate detectors</u>	C								
Without condensate detector									0
1 condensate detector KW-2									1
<u>Flow meter with needle valve</u>	E								
Without flow meter									0
1 Flow meter 10...100 NI/h									1
<u>Option</u>									
Without additional options									0
JCT VISU-System, remote control, RS485 interface									1
Order code	JCL-301.								

Scope of delivery: device, operating manual

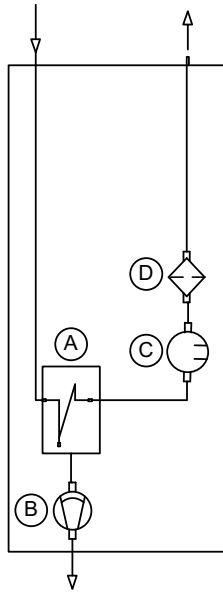
Some possible combinations of options are technically futile and therefore not available.

Please ask the JCT sales team for advise.

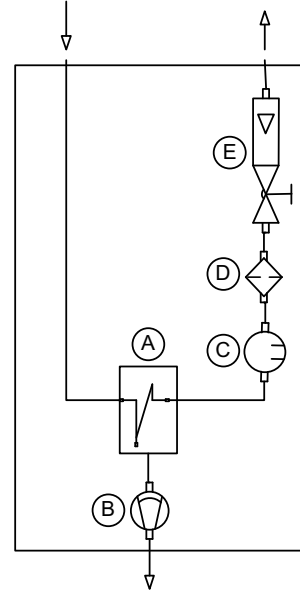
APPLICATION EXAMPLES / GAS FLOW DIAGRAMS



Part No: JCL-301.2110000

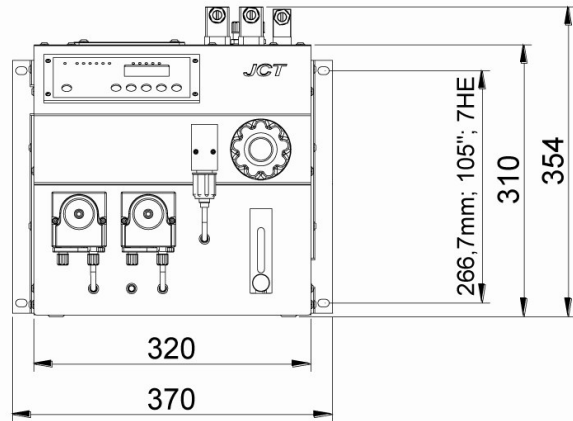
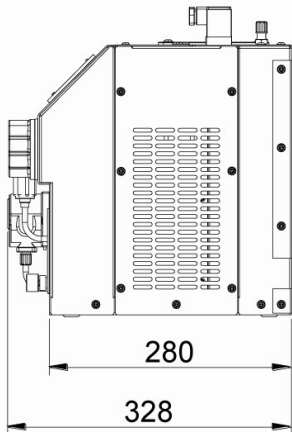


Part No: JCL-301.2111100



Part No: JCL-301.2111110

DIMENSIONS



Specifications are subject to change without notice.

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