

JCL-304 / -319 Sample Gas Cooler



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 4 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
 - Built-in sample pump
 - RS485 interface



JCT

Analysentechnik
GmbH

Gas Sampling
Probes

Heated Sample
Lines

Sample Gas Coolers

Gas
Converters

Accessories



TECHNICAL DATA

Modell	JCL-304	JCL-319
Cooling principle	Compressor with hot gas bypass technology	
Number of gas paths	1 - 4	
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)	440 x 300 x 408 mm	483 x 310 x 408 mm
Mounting position	Stand alone or wall mount	19" rack
Alignment	horizontal	
Weight	25...31 kg (depending on configuration)	
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 / sample gas pump	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 / sample pump relay	Two volt free changeover contacts	
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

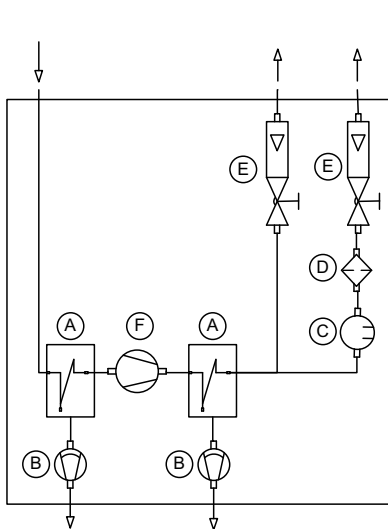
ORDERCODE

<u>Basic unit</u>										
Stand alone / wall mount										304.
19" rack mount										319.
<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
3 Gas paths										3
4 gas paths										4
<u>Condensate pumps</u>	B									
1 Condensate pump JSR25										1
2 Condensate pumps JSR25										2
3 Condensate pumps JSR25										3
4 Condensate pumps JSR25										4
1 Dosing pump JSR25 + 1 condensate pump										5
1 Dosing pump JSR25 + 2 condensate pumps										6
1 Dosing pump JSR25 + 3 condensate pumps										7
<u>Fine dust filter</u>	D									
Without fine dust filter										0
1 Fine dust filter JF-1 incl. PTFE filter element										1
2 Fine dust filters JF-1 incl. PTFE filter element										2
<u>Condensate detectors</u>	C									
Without condensate detector										0
1 condensate detector KW-2										1
2 condensate detectors KW-2										2
<u>Flow meter with needle valve</u>	E									
Without flow meter										0
1 Flow meter 10...100 NI/h										1
2 Flow meters 10...100 NI/h										2
<u>Sample gas pump</u>	F									
Without sample gas pump										0
1 sample gas pump JSP86										1
<u>Option</u>										
Without additional options										0
JCT VISU-System, remote control, RS485 interface										1
Order code	JCL-	↓	↓	↓	↓	↓	↓	↓	↓	↓

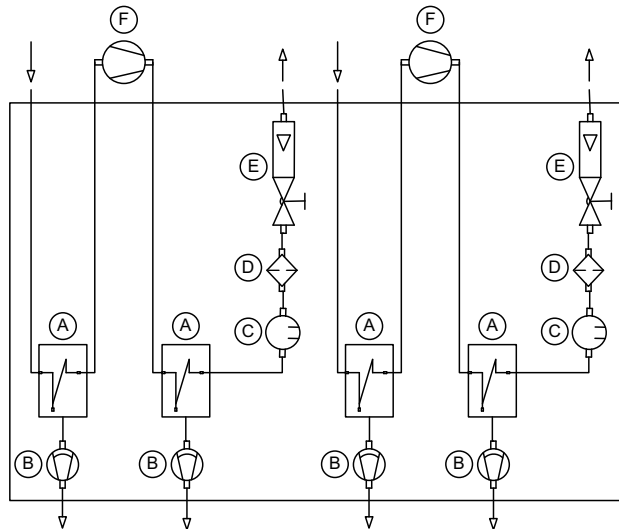
Scope of delivery: device, operating manual

Some possible combinations of options are technically futile and therefore not available.
Please ask the JCT sales team for advise.

GAS FLOW DIAGRAM



Part No.: JCL-304.22211210
JCL-319.22211210



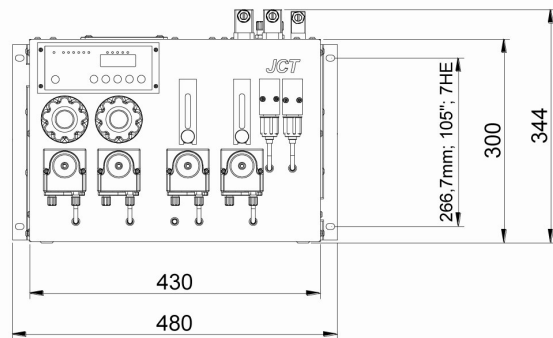
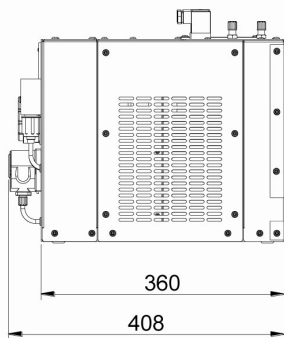
Part No.: JCL-304.24422200
JCL-319.24422200
(external sample gas pumps not included)

A	Gas heat exchanger
B	Condensate pump
C	Condensate sensor

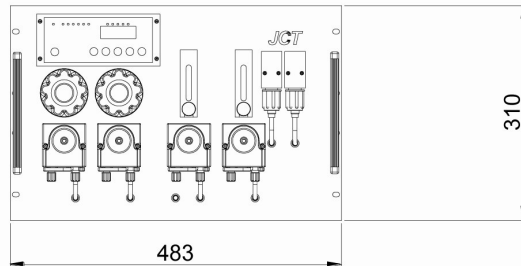
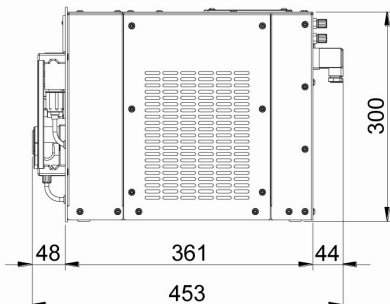
D	Fine dust filter
E	Flow meter with needle valve
F	Sample gas pump

DIMENSIONS

JCL-304



JCL-319



Specifications are subject to change without notice.

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