

JC-14 and JC-24 Peltier Coolers



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

- Sustainable reproducible results
- Precise and longterm stable dew point
- Low maintenance
- Rapid availability
- Consumable parts are accessible and replaceable without tools

FEATURES

- 1 or 2 separate gas streams
- Status contact
- Integrated condensate pump(s)
- Fine dust filter
- Flow meter with needle valve
- For 19" rack mounting
- Additional options:
 - Condensate detector
 - Sample pump
 - Calibration port
 - Solenoid valve
 - Stainless steel sample gas inlet



TECHNICAL DATA

Model	JC-14	JC-24
Cooling principle	Peltier	
Number of gas paths	1	2

Operation

Flow rate*	max. 240 l/h *1	max. 2 x 240 l/h *1
Gas temperature inlet*	max. +150°C	
Dew point inlet*	max. +70°C	
Dew point outlet*	+5°C	
Dew point stability (for constant inlet conditions)	±0,2 K	
Ambient temperature*	+5...+40 °C	
Operating pressure	0,4...2,2 bar abs.	
Ready for operation	< 15 min	
Pressure drop at max. flow rate	5 mbar	

Construction

Dimensions over all (W x H x D)	483 x 266 x 425 mm	
Mounting position	19" rack mount or stand alone	
Alignment	horizontal	
Weight	9...11 kg (type dependant)	14...16 kg (type dependant)
Housing, colour	Aluminium, nature anodised	
Heat exchanger material	PVDF	
Dead volume per gas path	50 ml	
Connection sample gas/ condensate outlet	PVDF hose fitting ID/OD 4/6 mm	
Option for sample gas inlet	SS 316 hose fitting ID/OD 4/6	
Approval / Sign	CE	

Electrical

Supply voltage Option	230 VAC 50 Hz 115 VAC 60 Hz	
Power consumption (depending on load and ambient temperature)	30...160 VA	60...320 VA
Supply connection	Schuko to IEC Plug, l = 2 m	
Fusing (built in IEC plug)	Lead fuse T2A	Lead fuse T5A
Protection class	IP 20 (EN 60529)	
On-time	100 %	
Diagnostic- / operation indicator	1x bicolour LED	2x bicolour LED
Condensate control indicator	1x bicolour LED	2x bicolour LED
Alarm set points	<0 / >+10°C	
Alarm delay	0,5 sec	
Status / Alarmrelay	Volt free change over contact SPDT	
Connection terminal / clamping range	Screw type terminal 0,08 mm ² - 2,5 mm ²	
Switching capacity relays	Typ. 230 VAC/2A/min.5 VADC/5mA	

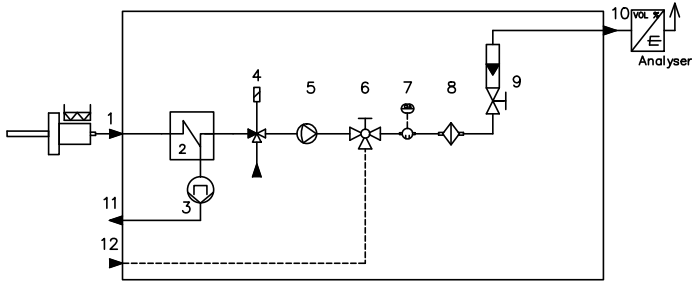
* ... may be affected by other values

*1... adjustment range of flow meter 10...100 NI/h

GAS FLOW DIAGRAM

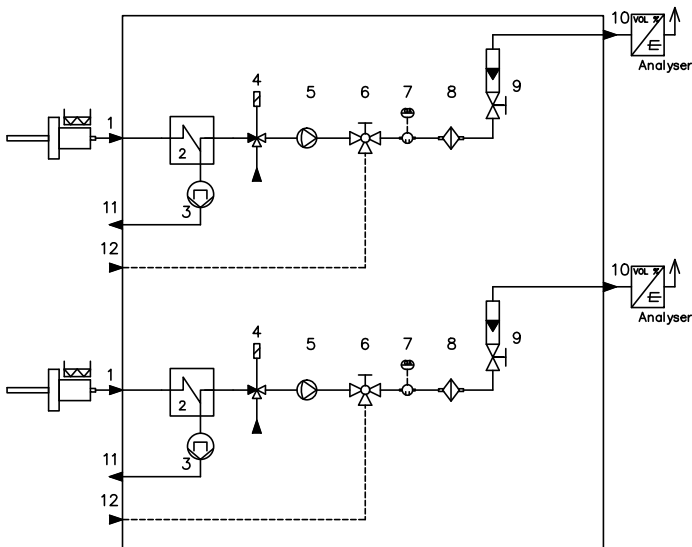
Gaslaufplan JC-14

Flow diagram JC-14



Gaslaufplan JC-24

Flow diagram JC-24



1	Sample gas inlet
2	Gas heat exchanger
3	Condensate pump
4	Solenoid valve (option)
5	Sample gas pump (option)
6	Ball valve for feed of calibration gas (option)
7	Condensate sensor KW1 (option)
8	Fine dust filter
9	Flow meter with needle valve
10	Sample gas outlet
11	Condensate drain
12	Calibration port (AUX) (option)

ORDERCODE

MODELS

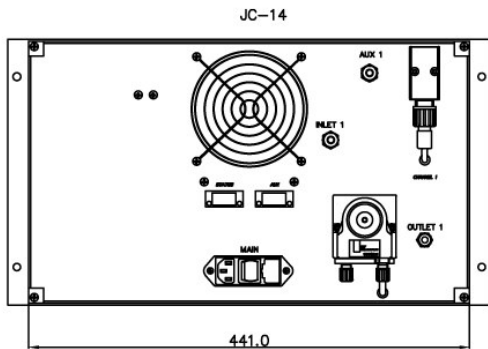
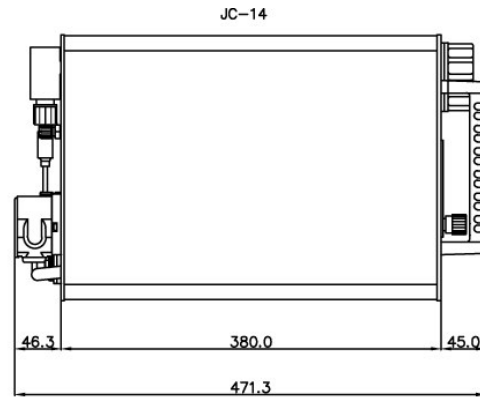
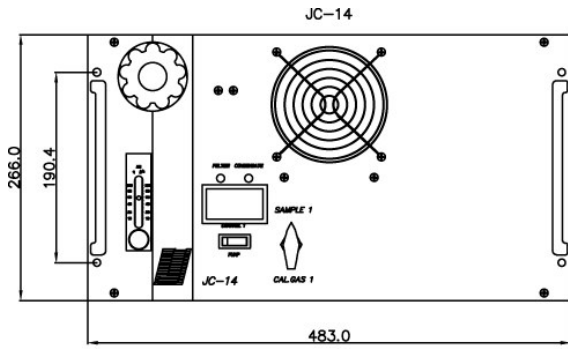
Part No.	Basic Units
12.20010	JC 14, 230 VAC 50 Hz
12.20011	JC 14, 115 VAC 60 Hz
12.21010	JC 24, 230 VAC 50 Hz
12.21011	JC 24, 115 VAC 60 Hz

OPTIONS

Part No.	Description
12.00003	Stainless steel sample gas inlet SS 316
12.00066	Condensate detection
12.00021	Solenoid valve 230 VAC
12.00021S	Solenoid valve 115 VAC
12.00015	Sample gas pump 230 VAC
12.00015S	Sample gas pump 120 VAC
on request	Calibration port with ball valve

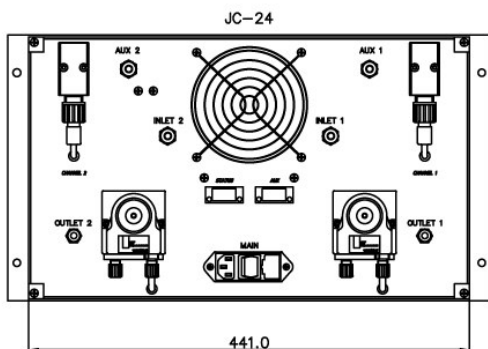
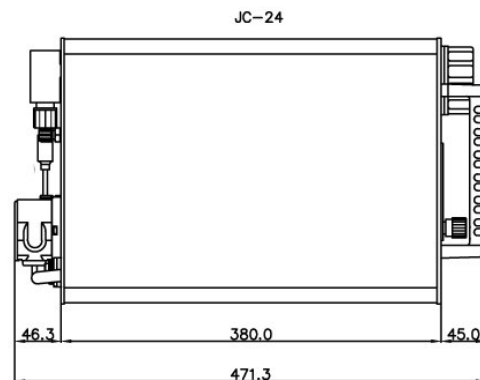
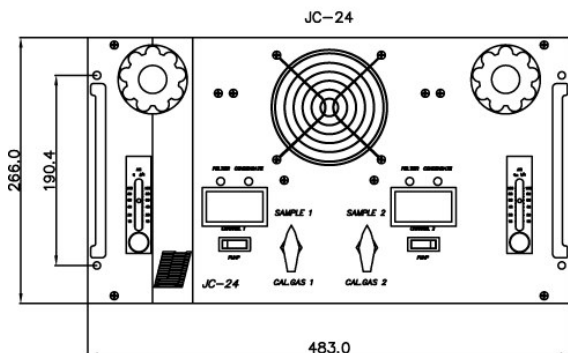
Scope of delivery: device, 2 fuses, power cord, operating manual

DIMENSIONS



Alle Abmaße in mm

All Dimensions in mm



Alle Abmaße in mm

All Dimensions in mm

Specifications are subject to change without notice.

PDS_E_JC14_24_v2.0

JCT Analysetechnik 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

