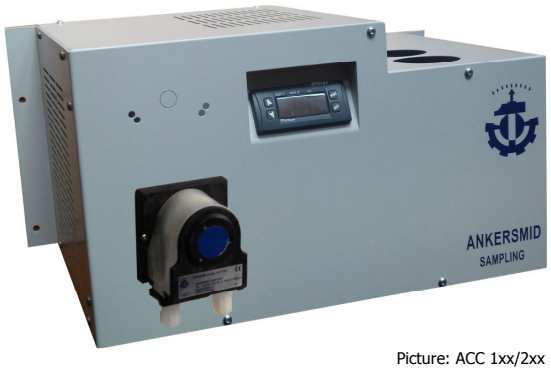
ANKERSMID Compressor cooler

ACC 1xx neo Series



Picture: ACC 1xx/2xx

Application

Ankersmid Compressor Coolers are used to lower the dew point of humid gas to avoid condensate entering into the gas analyser.
This unique micro-processor controlled compressor cooler has been designed with a powerful dew point stabiliser. The dew point is set at 4°C but can be changed at any value between 1 and 15°C.
A good and stable gas dew point avoids cross-interference if the analyser is sensitive to H_2O.

Description

The ACC cooler offers precision, safety and long-term stability for extractive analytics. The very low gas dissolution rate is attained owing to the new cooler technology (Patents applied). Both the permanent separation of the condensate from the gas phase, as well as the shorter contact time of the gas in the system, plays important roles in reducing gas dissolution rates.
The new cooler incorporates an advanced structural design with housing suitable for both wall-mounting (standard) and 19"-racks by using optional brackets. The coolers can be integrated into the analysis cabinet without empty space requirements at the side for a cooling air outlet.
The design enables 1 or 2 heat exchangers to be incorporated either at the factory or at a later time, without any problem. The exchangers can be connected in series or parallel following customer requirements.
An electronic system monitors the dew point and controls the integrated fan.
A temperature alarm output is wired to the terminal block incorporated of the cooler housing for a safe connection without disassembling the cooler.

Available for 230VAC and 115VAC power supply.

The ACC cooler is designed especially for:
- Power Plants
- Waste Incinerators
- Cement Manufacturing
- Chemical Production Plants
- Gas Production Plants
- Glass manufacturing
- Timber Processing
- Food Processing

- **Provide clean dry sample gases to extractive analysers in continuous emission monitoring, process control and engine testing applications**
- **Universal cooler housing for wall-mounting (standard) and 19”-rack version by brackets**
- **Optimise industrial burning processes**
- **Continuously dehumidify gas sample streams**
- **Rapidly separate condensable liquids with a very low dissolution rate**
- **Demountable heat exchanger PFA®-coated**

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Technical data

Model ACC	1x1 neo	1x2 neo
Number of heat exchanger	1	2
Housing version	Wall-mount (standard) / 19”-rack (with optional brackets)	
Housing color	RAL 7035 (light-grey)	
Dimensions (W x H x D)	443,5 x 220 x 270mm (wall-mount) / 491,5 x 220 x 270mm (19”-rack)	
Weight (approximately)	18 kg	
Operation data		
Gas inlet dew-point	Max. 65°C*	
Gas inlet temperature	Max. 190°C*	
Gas outlet temperature	+1°C ..... +15°C, factory setting: +4°C	
Stability	0,1°C	
Ambient temperature	+5°C to +45°C	
General electrical data		
Mains connection	Plug	
Alarm contact	Free programmable switch-over contact 1NO/1NC, rating: 250V, 16A AC	
Alarm set points	< +2°C / > +8°C	
Protection class	IP20 EN 60529 / EN 61010	
Power supply	230V/50Hz (standard), 115V/60Hz	
Power consumption	95W (steady-state)	
Electrical protection	Fuse F1At (230VAC), F2At (115VAC)	
Total cooling capacity	Max. 445BTU/h ≈ 470kJ/h	
Coolant	R134a	

Model ACC	101	102
Power supply	230VAC, 50/60 Hz	

Model ACC	111	112
Power supply	115VAC, 50/60 Hz	

Data per heat exchanger	
Gas flow	Max. 200l/h*
Material of exchanger body	PFA®-coated
Material of exchanger head	PFA®-coated
Sealing	Viton®
Maximum pressure	10 bar a
Pressure drop	2mbar at 200l/h
Dead volume	35ml
Sample gas inlet	1x 1/4”f NPT
Sample gas outlet	1x 1/4”f NPT
Condensate outlet (HE)	1x 3/8”f NPT
Condensate outlet (pump)	PVDF DN4/6

Maximum values in technical data’s must be rated in consideration of total cooling capacity at 25°C ambient temperature and 4°C outlet dew point