



## ANKERSMID Compressor cooler ACC 82x/83x Ex Series



### 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 3°C. A good and stable gas dew point avoids cross-interference if the analyser is sensitive to H<sub>2</sub>O.

### Description

The cooler offers precision, safety and long-term stability for extractive analytics. The cooler incorporates a housing suitable for wall-mounting as standard.

The design enables up to 2 heat exchangers. The exchangers can be connected in series or parallel following customer requirements.

The controller is self-checking and provides an analogue display indicating the operating temperature.

Condensate is removed either into condensate vessels or by automatic condensate drainers which can be attached to the heat exchangers within the cooler's outer contour.

Available for 230VAC and 115VAC power supply.

- **Provide clean dry sample gases to extractive analysers in continuous emission monitoring, process control and engine testing applications**
- **Optimise industrial burning processes**
- **Continuously dehumidify gas sample streams**
- **Environment-friendly (CFC free)**
- **Intended for use in Potentially Explosive Atmospheres**
- **For use in hazardous area Zone 1/2**



**ANKERSMID Compressor cooler**  
ACC 82x/83x Ex Series



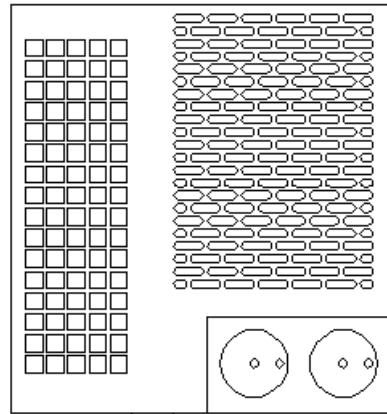
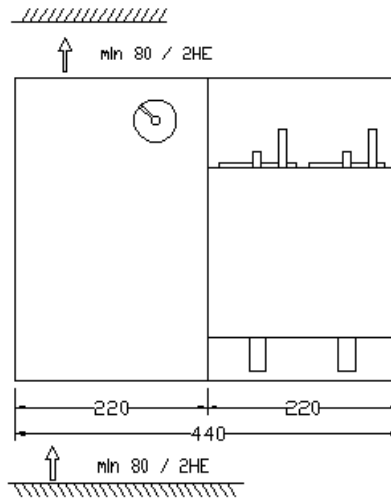
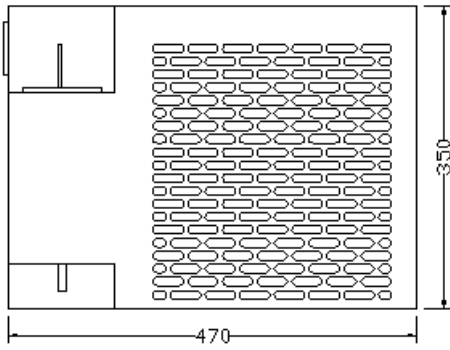
**Technical data**

Model ACC	820Ex	830Ex
<b>Number of heat exchangers</b>	1	2
<b>Flow rate</b>	1x 350NI/h	2x 350NI/h
<b>Material of gas wetted parts</b>	PFA® (standard), SS316 (optional)	
<b>Housing version</b>	Wall-mount or stand alone	
<b>Housing material</b>	Stainless steel / Polyester	
<b>Dimensions (H x W x D)</b>	370mm x 435mm x 470mm	
<b>Weight (approximately)</b>	39kg	
<b>Operation data</b>		
<b>Gas outlet temperature</b>	factory setting: +3°C	
<b>Dew point stability</b>	±0,5K	
<b>Ambient temperature</b>	+10°C to +40°C	
<b>Cooling capacity (at 25°C)</b>	1080kJ/h (300W)	
<b>General electrical data</b>		
<b>Marking</b>	II 2G Ex px d e [ia] IIC T4 for Zone 1 or 2	
<b>Power supply</b>	230V/50-60Hz (standard) or 115V/50-60Hz	
<b>Electrical protection</b>	External on installation site	
<b>Power consumption</b>	220 Watt at 230V; starting current 6,3 Amp.	
<b>Protection class electrically</b>	IP20 / acc. EN 60529 / EN 61010	
<b>Coolant</b>	R134a	



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**Dimensions**





## ANKERSMID Compressor cooler ACC 85x/86x Ex Series



### 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 3°C. A good and stable gas dew point avoids cross-interference if the analyser is sensitive to H<sub>2</sub>O.

### Description

The cooler offers precision, safety and long-term stability for extractive analytics. The cooler incorporates a housing suitable for wall-mounting as standard.

The design enables one heat exchanger (mono or dual gas path). The exchanger can be connected in series or parallel following customer requirements.

An electronic system not only monitors the dew point, but also the ambient temperature.

An isolated temperature alarm output for high and low temperature alarm is included as standard.

Available for 230VAC and 115VAC power supply.



\* Picture may vary

- **Provide clean dry sample gases to extractive analysers in continuous emission monitoring, process control and engine testing applications**
- **Cooler housing for wall-mounting**
- **Optimise industrial burning processes**
- **Continuously dehumidify gas sample streams**
- **Environment-friendly (CFC free)**
- **Intended for use in Potentially Explosive Atmospheres**
- **According to Directive 94/9/EC**
- **For use in hazardous area Zone 2**



**ANKERSMID Compressor cooler**  
ACC 85x/86x Ex Series



**Technical data**

Model ACC	85x	86x Ex
<b>Number of gas paths</b>	1 (standard), max. 2 (with double heat exchanger)	
<b>Housing version</b>	Wall-mount or stand alone	
<b>Housing color</b>	RAL 7035 (light-grey)	
<b>Dimensions (W x H x D)</b>	230 x 300 x 355 mm	
<b>Weight (approximately)</b>	18,5 kg	
<b>Peristaltic pump ASR25 for condensate removal</b>	1 pc. (standard)	2 pcs. (standard)
<b>Data per heat exchanger</b>		
<b>Gas flow</b>	1x 250l/h or 2x 125l/h	1x 500l/h or 2x 250l/h
<b>Material of heat exchanger</b>	PVDF	Stainless steel
<b>Maximum pressure</b>	1,5 bar a	100bar a
<b>Pressure drop</b>	6 mbar	8 mbar
<b>Dead volume</b>	67ml (singer heat exchanger), 55ml (double heat exchanger)	
<b>Sample gas inlet</b>	Tube DN 4/6mm	
<b>Sample gas outlet</b>	Tube DN 4/6mm	
<b>Condensate outlet</b>	Tube DN 10/12mm	
<b>Operation data</b>		
<b>Gas inlet dew-point</b>	Max. 70°C	Max. 80°C
<b>Gas inlet temperature</b>	Max. 140°C	Max. 180°C
<b>Cooler capacity</b>	90W	160W
<b>Gas outlet temperature</b>	factory setting: +3°C	
<b>Dew point stability</b>	±1K	
<b>Ambient temperature</b>	+10°C to +40°C	
<b>General electrical data</b>		
<b>Mains connection</b>	approx. 2,3m open wire ends	
<b>Alarm contact</b>	Voltage-free changeover contact, max. 250VAC/2A, min. 5VADC/5mA	
<b>Alarm set points</b>	<0 / >+10°C	
<b>Protection class</b>	IP 20 (EN60529)	
<b>Marking</b>	Ex II 3G Ex ma IIA T3 Ex II 3D Ex ma IIIB T180°C (IEc respectively EN60079)	
<b>Power supply</b>	220...240VAC/50Hz (standard) or 100...115VAC/60Hz	
<b>Electrical protection</b>	External on installation site, fuse characteristic C; 230VAC 6A; 115VAC 10A	
<b>Power consumption</b>	190 VA (depending on configuration, ambient temperature & load)	
<b>Coolant</b>	R134a	



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**Dimensions**

