Coolselector2



Project information

Project name: Evaporator 8 - Unit H

Comments: Created by:

Coolselector2 version: 3.7.1. Database: 52.52.2.23.8.33
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Preferences used: All applications

Evap. 8

Operating conditions				
Refrigerant: R134a		Cooling capacity:	15.60	kW
Mass flow in line: 0.1178	kg/s	Heating capacity:	21.09	kW
Evaporating temperature: -2.0	°C	Condensing temperature:	50.0	°C
Evaporating pressure: 2.722	bar	Condensing pressure:	13.17	bar
Useful superheat: 5.0	K	Subcooling:	2.0	K
Additional superheat: 0	K	Additional subcooling:	0	K
Discharge temperature: 70.5	°C			
System and line: Dry - Suction line				

Line total

Pressure drop 0.564 bar Saturation temperature drop 6.1 K

Position 1. Piping: Copper pipe DIN-EN 35

 \rightarrow

Length0.10 mAngle0 degPressure drop0.000 barSaturation temperature drop0.0 KVelocity, in11.16 m/sConnectionOK

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Position 2. Control valve: KVP 35				
	Offset	1.096	har	
\sim 1	Pressure drop	0.553		
W	·			
200	Saturation temperature drop	6.0	K	
	Velocity, in	11.16	m/s	
	Valve state	Open		
	Connection	OK		

Position 3. Piping: Copper pipe DIN-EN 35					
	Length	0.17	m		
\rightarrow	Angle	0) deg		
	Pressure drop	0.001	bar		
	Saturation temperature drop	0.0) K		
	Velocity, in	14.15	5 m/s		
	Connection	OK			

Position 4. Piping: Copper bend 90 DIN-EN 35					
Number	1				
Pressure drop	0.002	bar			
Saturation temperature drop	0.0	K			
Velocity, in	13.31	m/s			
Connection	OK				
	Number Pressure drop Saturation temperature drop Velocity, in	Number 1 Pressure drop 0.002 Saturation temperature drop 0.0 Velocity, in 13.31	Number 1 Pressure drop 0.002 bar Saturation temperature drop 0.0 K Velocity, in 13.31 m/s		

Position 5. Piping: Copper pipe DIN-EN 35					
	Length	0.95	m		
\rightarrow	Angle	0	deg		
	Pressure drop	0.004	· bar		
	Saturation temperature drop	0.1	K		
	Velocity, in	14.17	m/s		
	Connection	OK			

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ibei	1	
ssure drop (0.002	bar
ration temperature drop	0.0	K
ocity, in	13.35	m/s
nection	OK	
	ssure drop gration temperature drop poity, in	ssure drop 0.002 pration temperature drop 0.0 poity, in 13.35

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Position 7. Piping: Copper pipe DIN-EN 35					
	Length	0.52	? m		
\rightarrow	Angle	0) deg		
	Pressure drop	0.002	2 bar		
	Saturation temperature drop	0.0) K		
	Velocity, in	14.21	m/s		
	Connection	OK			

