

Coolselector2

Project information

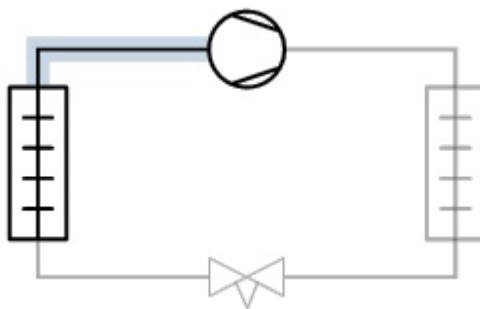
Project name: Unit B - Evaporator 10
 Comments:
 Created by:
 Coolselector2 version: 3.7.1. Database: 52.52.2.23.8.33
 Printed: Wednesday, February 5, 2020
 Preferences used: All applications

Line 2

Operating conditions

Refrigerant:	R744	Cooling capacity:	17.00 kW
Mass flow in line:	0.06779 kg/s	Heating capacity:	21.23 kW
Evaporating temperature:	-35.0 °C	Condensing temperature:	-2.0 °C
Evaporating pressure:	12.05 bar	Condensing pressure:	33.05 bar
Useful superheat:	5.0 K	Subcooling:	2.0 K
Additional superheat:	0 K	Additional subcooling:	0 K
Discharge temperature:	54.5 °C		

System and line: Dry - Suction line



Line total

Pressure drop 0.183 bar
 Saturation temperature drop 0.4 K

Position 1. Piping: Stainless steel pipe DIN-EN SS 15



Length	0.10 m
Angle	0 deg
Pressure drop	0.002 bar
Saturation temperature drop	0.0 K
Velocity, in	10.23 m/s
Connection	OK

Coolselector2

Position 2. Stop valve: SVA SS 15 straight



Pressure drop	0.083 bar
Saturation temperature drop	0.2 K
Velocity, in	10.23 m/s
Valve state	Open
Connection	OK

Position 3. Piping: Stainless steel pipe DIN-EN SS 15



Length	0.17 m
Angle	0 deg
Pressure drop	0.004 bar
Saturation temperature drop	0.0 K
Velocity, in	10.31 m/s
Connection	OK

Position 4. Piping: Stainless steel bend 90 DIN-EN SS 15-3



Number	1
Pressure drop	0.003 bar
Saturation temperature drop	0.0 K
Velocity, in	10.31 m/s
Connection	OK

Position 5. Piping: Stainless steel pipe DIN-EN SS 15



Length	1.07 m
Angle	0 deg
Pressure drop	0.024 bar
Saturation temperature drop	0.1 K
Velocity, in	10.31 m/s
Connection	OK

Position 6. Piping: Stainless steel bend 90 DIN-EN SS 15-3



Number	1
Pressure drop	0.003 bar
Saturation temperature drop	0.0 K
Velocity, in	10.33 m/s
Connection	OK

Coolselector2

Position 7. Piping: Stainless steel pipe DIN-EN SS 15



Length	2.89 m
Angle	0 deg
Pressure drop	0.064 bar
Saturation temperature drop	0.2 K
Velocity, in	10.34 m/s
Connection	OK