

v.1.5.6

SWEP International AB
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 Sweden

SWEP SSP CBE

HEAT EXCHANGER: V120Tx48H/1P

EVAPORATOR - Performance

Customer:
 Reference:

Date: 11/11/2009
 Our Ref.:

DUTY REQUIREMENTS

		SIDE 1	SIDE 2
Fluid Side 1	R22		
Fluid Side 2	Water		
Inlet temperature	°C	: 2.00	12.00
Evaporation temperature (dew)	°C	: 2.00	
Outlet temperature	°C	: 7.00	7.00
Flow rate	kg/s	: .2888	2.861
- inlet vapor	kg/s	: -.001848	
Fluid vaporized	kg/s	: .2907	
Max. pressure drop		:	
Operating pressure – outlet	bar(a)	: 5.30	

PHYSICAL PROPERTIES

Reference temperature	°C	: 2.57	9.46
Liquid	Dynamic viscosity	cP	: .211
	Density	kg/m ³	: 1272
	Specific heat capacity	kJ/kg,°C	: 1.185
	Thermal conductivity	W/m,°C	: .09417
Vapor	Dynamic viscosity	cP	: .0117
	Density	kg/m ³	: 22.43
	Specific heat capacity	kJ/kg,°C	: .7165
	Thermal conductivity	W/m,°C	: .009258

PLATE HEAT EXCHANGER

Heat load	kW	: 60.00
Total heat transfer area	m ²	: 6.07
Heat flux	kW/m ²	: 9.885
Mean temperature difference	K	: 7.65
Overall H.T.C. (available/required)	W/m ² ,°C	: 1300/1290
Pressure drop - total	kPa	: 15.4
- in ports	kPa	: 1.62
Port diameter	mm	: 39.0
Number of channels		: 23
Number of plates		: 48
Oversurfacing	%	: 0
Fouling factor	m ² ,°C/kW	: 0

Note: 1. Thermosyphon option used.

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