

Technical specification

Brazed Plate Heat Exchanger



Project ref: Östvala 125
 Line ref: Värme
 Model: CB60AQ-40L
 Item Id: 3287167805
 No of units: 1

AHRI LLBF BHE 1.3
 Page: 1(2)
 Date: 2024-02-28

		Hot side S4 -> S3	Cold Side S2 -> S1
Process data			
Capacity:	kW	90.0	
Fluid:		Water	Water
Duty type:		Liquid cooling	Liquid heating
Volume flow rate:	dm³/s	0,569	1,28
Inlet temperature:	°C	80,0	38,0
Outlet temperature:	°C	41,0	55,0
Tot pr drop calc (allowed)	kPa	3,1 (30,00)	11,5 (30,00)
Velocity connections:	m/s	1,37	1,82
Effective margin:	%	17	
Effective fouling resistance * 10000:	m²·K/W	0,4	
LMTD:	K	10,4	
Overall heat trans coef, service:	W/(m²·K)	3 935,5	

Heat exchanger specification			
Heat transfer area:	m²	2,2	
Relative directions of fluids:		Countercurrent	
Number of plates:		40	
Number of passes:		1	1
Channel arrangement:		1*19L	1*20L
Channel volume:	dm³	2,0	2,1
Number of circuits:		1	1
Design pressure at -196 °C	bar	40	40
Design pressure at 225 °C	bar	32	32
Design temperature (min/max):	°C	-196 / 225	
Pressure vessel code:		PED	
Material Channel plates / Sealing:		ALLOY 316 / Cu	
Connection S4 (Hot-In):		Threaded (External) ISO 228/1-G 1" ALLOY 316	
Connection S3 (Hot-Out):		Threaded (External) ISO 228/1-G 1" ALLOY 316	
Connection S2 (Cold-In):		Threaded (External) ISO 228/1-G 1 1/4" ALLOY 316	
Connection S1 (Cold-Out):		Threaded (External) ISO 228/1-G 1 1/4" ALLOY 316	
Connection diameter In / Out:	mm	30,0 / 30,0	23,0 / 23,0
Unit dimensions (length x width x height):	mm	151 x 113 x 527	
Net weight, empty / operating:	kg	9,8 / 13,73	
Packed length x width x height:	mm	160,0 x 125 x 579,0	
Packed weight:	kg	9,96	

This Heat Exchanger is certified by the AHRI Liquid to Liquid Brazed & Fusion Bonded Plate Heat Exchangers (LLBF) Certification Program, based on AHRI Standard 400. AHRI certified units are subject to rigorous and continuous testing, have performance ratings independently measured and are third-party verified. Certified units may be found in the AHRI Directory at www.ahridirectory.org



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Page: 2(2)
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Fluid properties		Hot side	Cold Side
Density (in/out):	kg/m ³	971,50/990,44	991,58/984,53
Specific heat capacity:	kJ/(kg·K)	4,18	4,18
Thermal conductivity:	W/(m·K)	0,651	0,638
Viscosity (in/out):	cP	0,3534/0,6417	0,6797/0,5031

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