

# Technical specification

## Gasketed Plate Heat Exchanger



Project ref. Sala Polivalenta Bucuresti  
 Model AQ6T-BFM  
 No. of units 1

ALICE 5.0.1.01  
 AHRI LLHE PHE 1.4  
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### Design condition

	Hot side	Cold Side
Fluid	Water	35.0% Eth.glycol IIR
Density	999,4 kg/m <sup>3</sup>	1 049,4 kg/m <sup>3</sup>
Specific heat capacity	4,20 kJ/(kg·K)	3,58 kJ/(kg·K)
Thermal conductivity	0,591 W/(m·K)	0,436 W/(m·K)
Viscosity inlet	1,14 cP	3,82 cP
Viscosity outlet	1,31 cP	3,20 cP
Mass flow rate	81 596 kg/h	95 656 kg/h
Volume flow rate	81,70 m <sup>3</sup> /h	91,07 m <sup>3</sup> /h
Inlet temperature	15,0 °C	7,0 °C
Outlet temperature	10,0 °C	12,0 °C

### Heat exchanger calculation

Pressure drop	29,0 kPa	25,7 kPa
Heat exchanged	476,0 kW	
LMTD	3,0 K	
Heat transfer coefficient	2 803 W/(m <sup>2</sup> ·K)	
Heat transfer area	56,61 m <sup>2</sup>	
Relative directions of fluids	Countercurrent	
Connection positions and flow directions	S1->S2	S3->S4
Connections S1,S2,S3,S4	Flange EN 1092-1 PN10 DN150 unlined	
Number of passes	1	1
Effective margin	0,9 %	
Effective fouling resistance * 10000	0,0310 m <sup>2</sup> ·K/W	
External loads according to API	Not specified	
Design pressure (MAWP)	10,0 bar	10,0 bar
Test pressure	14,3 bar	14,3 bar
Design temperature max.	100,0 °C	100,0 °C
Design temperature min. (MDMT)	0,0 °C	0,0 °C
Channel arrangement	1*(15MNa+28LNa)	1*(15MWi+28LWi)
Pressure vessel approval	PED Article 4.3	
Fluid classification group	2	2
Fluid with vapour pressure >0.5 barg at max. design temp.	No	No
Number of plates	87 plates	
Nominal A-measurement	245 mm	
Extension capacity	45 plates	
Plate material/thickness	ALLOY 316/0,4 mm	
Gasket material and attachment	NBRB ClipGrip™	
<b>Dimensions</b>		
Approx. outer dimensions (L x W x H)	1 120 x 620 x 1 820 mm	
Approx. weight, empty/operating	982 / 1 119 kg	
Approx. weight, full of water	1 115 kg	
Type of package	Skid base	

This Heat Exchanger is certified by the AHRI Liquid to Liquid Heat Exchangers 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](http://www.ahridirectory.org).



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Approx. packed weight



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1 063 kg

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### Accessories added to configuration Quantity

#### Accessories

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##### Equipment

Protection tube Plastic 1

#### Documents and services

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##### Documents

Documents English-Alfa Laval-Installation manual 1

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