Kunde		
Abteilung		
Bearbeiter		
Telefon/Fax		

VDL Delmas GmbH
Wärmetauscher+Kühlanlagen

TECHNICAL DATA FOR HEAT EXCHANGER AIR/WATER

General information

(Description, Function, Operating conditions, Assembly conditions, Permissible limits, VDE degree of protection)

Regulations for acceptance

(f. e..: TÜV / ASME / TEMA / Germanischer Lloyd / American Bureau of Shipping / Det Norske Veritas / Bureau Veritas)

transfer capacity	☐*incl../* ☐*excl. capacity of blowers+pumps*	kW		
No. of heat exchanger elements for 100% transfer capacity		piece		
operating altitude of the plant		m.o.N.N.		
Data for the air side				
data for the air quality (rel. humidity, aggressiveness)		% rel.humidity		
air flow rate		m³/h		
reference condition for the nominal circulating air		°C, mbar	°C	mbar
inlet/outlet temperature of the heat exchanger		°C	in=	out=
contamination factor (fouling factor) or surface reserve		m²*K/W or %		
permissible pressure drop in the heat exchanger		mbar		
Data for the water side				
data for the type of water and the water quality (results of water analysis)				
anti-freezing portion		%		
total flow rate		m³/h		
inlet/outlet temperature of heat exchanger		°C	in=	out=
contamination factor (fouling factor) or surface reserve		m²*K/W or %		
permissible pressure drop in heat exchanger		mbar		
design overpressure in heat exchanger		bar		
test overpressure		bar		
design temperature		°C		

Selection of the cooling system

☐	***single finned tube system***	☐ fins coiled up	☐ fin base soldered up	☐ extruded fins
	fin material	☐ copper	☐ aluminium	☐ steel
☐	***compound finned tube system***	☐ connection fin / tube by dip-tinning	☐ connection fin / tube by dip-zincing	
	fin material	☐ copper	☐ steel	☐
☐	***lamella tube system***	☐ connection lamella / pipe by hydromechanical tube expansion		
	lamella material	☐ copper (CuZn0.5)	☐ aluminium (AlMg3)	☐
☐ plain tube system			☐ safety double tube system	
☐ header screwed to tube plate			☐ headers welded to tube plates (can not be dismantled)	

Selection of the material for the water side

	☐ *distilled water*	☐ *fresh water*	☐ *sea water*	☐ *brack water*
tubes	☐ 1.4404	☐ Cu DHP	☐ CuZn20Al	☐ CuNi10Fe
	☐	☐	☐ CuNi10Fe	☐ CuNi30Fe
tube plates	☐ 1.4571	☐ carbon steel + epoxy coating	☐ CuZn38SnAl (Ms60K)	☐ CuNi10Fe
	☐		☐ CuNi10Fe	☐ CuNi30Fe
headers	☐ 1.4404	☐carbon steel+coating	☐ carbon steel+coating	☐ cast iron chamber
(with connection/	☐	❍ epoxy ❍ Rilsan	❍ epoxy ❍ Rilsan	❍ red brass ❍ GSnBz 12
venting/draining)			☐ CuNi10Fe+Rg.fitting	☐ CuNi10Fe+Rg.fitting