YILMAZ SOĞUTMA A.Ş.

Customer	UNILAB SRL	**Date**	10.07.2014
To the k. a. of	Developers Team	**Our Offer**	-
Your Reference	-	**Description**	ICCS F 063.A13-C3-2,1

CONDENSING COIL - 3228-1/2" CS 30T 3NR 3000A 2,1P 15NC

Geometry	3228-1/2" CS	Coil Length	3000	mm	Nr. of baffles		0
Nr of Tubes per Row	30	Fin Pitch	2,10	mm			
Nr of Rows	3	Nr of Circuits	15		Tube Shape		Circular

Capacity	97,23	kW
Exchange Surface	203,57	m²
Global Exchange Coefficient	60	W/(m² K)
DTML	7,9	°C
Fins Material / Tubes Material	Aluminium / Copper	
Fin Thickness	0,13	mm
Coil Internal Volume	33,7	l
Tubes External Diameter	13,30	mm
Tubes Internal Diameter	12,60	mm
Number of skipped tube	0	

AIR SIDE

Atmospheric Pressure / Altitude	1,0133 / 0,000	bar A / m
Volumetric Air Flow	26280,0	m³/h
Mass Air Flow	30929	kg/h
Face Velocity on the Coil	2,53	m/s
Inlet Air Density	1,18	kg/m³
Inlet Air Temperature	25,0	°C
Inlet Air Relative Humidity	50,00	%
Inlet Air Specific Humidity	9,75	g/kg AS
Inlet Air Enthalpy	50,01	kJ / kg
Outlet Air Temperature	36,1	°C
Outlet Air Relative Humidity	26,55	%
Outlet Air Specific Humidity	9,75	g/kg AS
Outlet Air Enthalpy	61,37	kJ / kg
Pressure Drop	58	Pa
Partial Exchange Coefficient	90	W/(m² K)
Fouling Factor	0,000000	(m² K)/W

REFRIGERANT SIDE — **Manifolds** — Vertical — In: 42x1.5 [1 5/8"] — Out: 35x1.5 [1 3/8"]

Fluid	R404A	
Mass Fluid Flow	2911	kg/h
Fluid Velocity (Gaseous Phase)	3,55	m/s
Fluid Velocity (Liquid Phase)	0,37	m/s
Mass velocity	360	kg/(m² s)
Subcooling Degrees	0,0	K
Overheating Degrees	0,0	°C
Evaporating Temperature - Middle	0,0	°C
Condensing Temperature - Middle	40,0	°C
Fluid Pressure Drop	20,83	kPa
Manifold Pressure Drop	4,999684	kPa
Total Pressure Drop Fluid Side	25,83	kPa
Partial Exchange Coefficient	7298	W/(m² K)
Fouling Factor	0,000000	(m² K)/W