



EX-A

SERIES COOLING TOWER

SINGLE-CELL UP TO 300HRT COOLING CAPACITY

Modular Design Crossflow Type

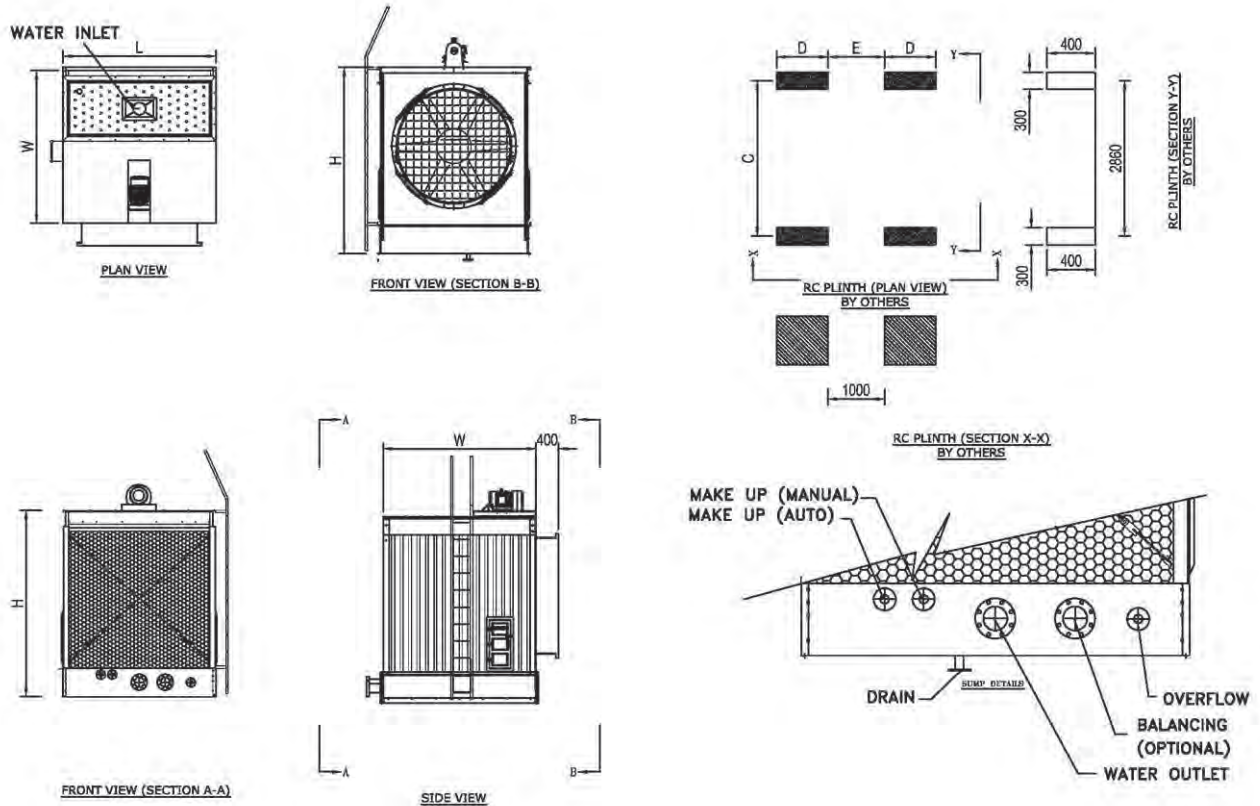


ENERGY CONSERVATION • SPACE SAVING • DESIGN FLEXIBILITY



CERTIFICATE NUMBER : AJA11/15152

OUTLINE AND FOUNDATION DRAWING (SINGLE CELL)



NOTE : ALL DIMENSION IN MM.

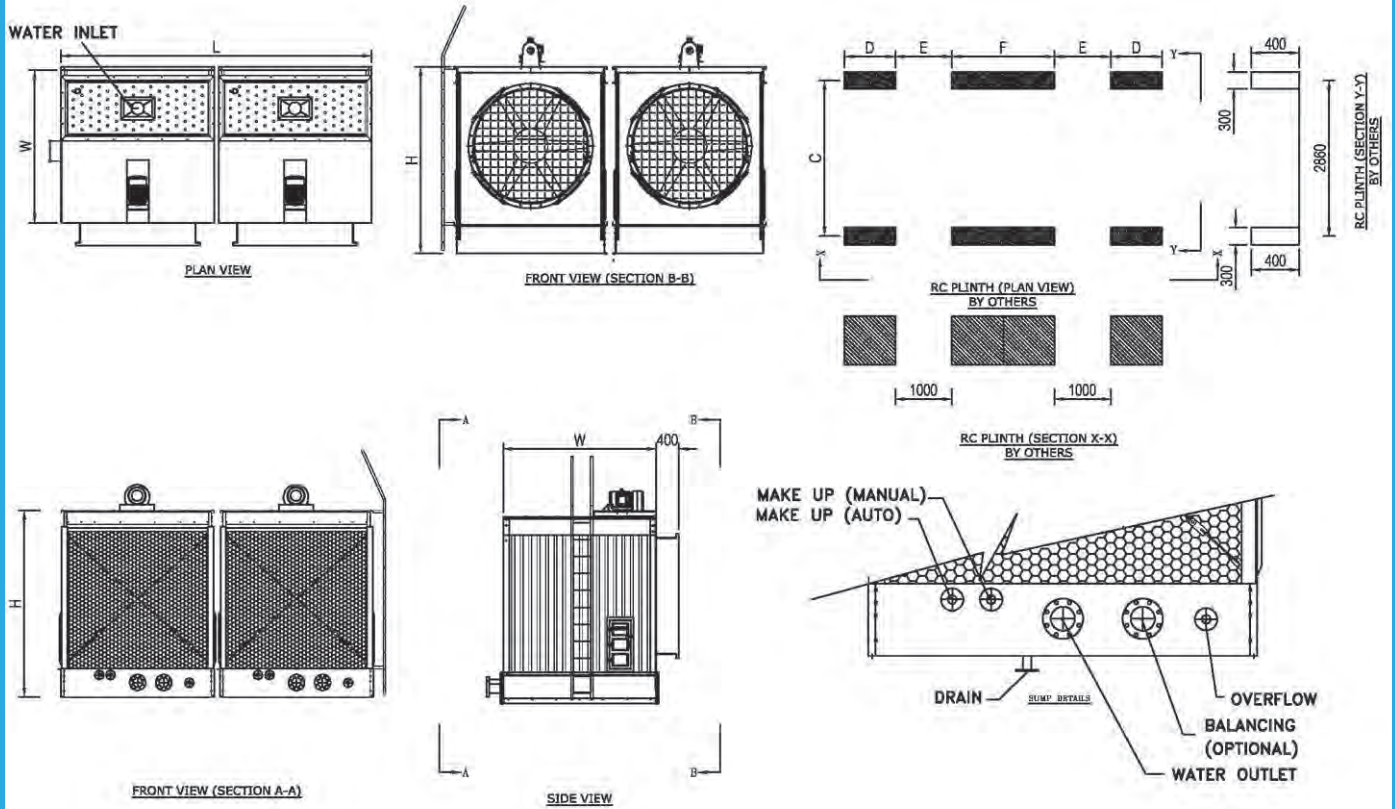
EX-A SERIES (SINGLE CELL)

Tower Model	OVERALL DIMENSION			MOTOR				AXIAL FLOW FAN			
	L	W	H	Rated Output kW	Rated Current (A 50/60Hz)	Type	Power Source	Diameter, A (mm)	Fan Speed	No of blades	Drive System
EXA-1											
0908A-1	2850	2810	3040	3.7 x 1	7.35 / 6.95	TEFC, outdoor, 3 phase, induction motor, 4 pole	3ph / 380V / 50Hz or 3ph / 415V / 50Hz	2000	450	4-6	V Belt and Pulley
0908B-1	2850	2810	3040	5.5 x 1	11.0 / 9.93			2000	450	4-6	
0908C-1	2850	2810	3040	7.5 x 1	13.9 / 12.44			2000	450	4-6	
1009B-1	3050	2810	3340	5.5 x 1	11.0 / 9.93			2000	450	4-6	
1009C-1	3050	2810	3340	7.5 x 1	13.9 / 12.44			2000	450	4-6	
1009D-1	3050	2810	3340	11 x 1	20.1 / 18.56			2135	428	4-6	
1009E-1	3050	2810	3340	15 x 1	26.8 / 24.05			2135	428	4-6	

EX-A SERIES (2 CELLS)

Tower Model	OVERALL DIMENSION			MOTOR				AXIAL FLOW FAN			
	L	W	H	Rated Output kW	Rated Current (A 50/60Hz)	Type	Power Source	Diameter, A (mm)	Fan Speed	No of blades	Drive System
EXA-2											
0908A-2	5800	2810	3040	3.7 x 2	7.35 / 6.95	TEFC, outdoor, 3 phase, induction motor, 4 pole	3ph / 380V / 50Hz or 3ph / 415V / 50Hz	2000	450	4-6	V Belt and Pulley
0908B-2	5800	2810	3040	5.5 x 2	11.0 / 9.93			2000	450	4-6	
0908C-2	5800	2810	3040	7.5 x 2	13.9 / 12.44			2000	450	4-6	
1009B-2	6200	2810	3340	5.5 x 2	11.0 / 9.93			2000	450	4-6	
1009C-2	6200	2810	3340	7.5 x 2	13.9 / 12.44			2000	450	4-6	
1009D-2	6200	2810	3340	11 x 2	20.1 / 18.56			2135	428	4-6	
1009E-2	6200	2810	3340	15 x 2	26.8 / 24.05			2135	428	4-6	

OUTLINE AND FOUNDATION DRAWING (MULTIPLE CELL)



NOTE : ALL DIMENSION IN MM.

EX-A SERIES (SINGLE CELL)

Tower Model	FOUNDATION DIMENSION				PIPING SIZE					WEIGHT(KG)	
	C	D	E	F	Water Inlet	Water Outlet	Overflow	Drain	Make Up Auto & Manual	Dry Weight	Oper. Weight
EXA-1	C	D	E	F	Water Inlet	Water Outlet	Overflow	Drain	Make Up Auto & Manual	Dry Weight	Oper. Weight
0908A-1	2860	975	1000	-	100 x 1	100 x 1	50 x 1	50 x 1	25 x 1	1550	3689
0908B-1	2860	975	1000	-	125 x 1	125 x 1	50 x 1	50 x 1	25 x 1	1600	3808
0908C-1	2860	975	1000	-	125 x 1	125 x 1	50 x 1	50 x 1	25 x 1	1650	3927
1009B-1	2860	1075	1000	-	125 x 1	150 x 1	50 x 1	50 x 1	50 x 1	1800	4284
1009C-1	2860	1075	1000	-	150 x 1	200 x 1	50 x 1	50 x 1	50 x 1	1900	4522
1009D-1	2860	1075	1000	-	150 x 1	200 x 1	50 x 1	50 x 1	50 x 1	2000	4760
1009E-1	2860	1075	1000	-	200 x 1	250 x 1	50 x 1	50 x 1	50 x 1	2250	5355

EX-A SERIES (2 CELLS)

Tower Model	FOUNDATION DIMENSION				PIPING SIZE					WEIGHT(KG)	
	C	D	E	F	External Piping	Water Outlet	Overflow	Drain	Make Up Auto & Manual	Dry Weight	Oper. Weight
EXA-2	C	D	E	F	External Piping	Water Outlet	Overflow	Drain	Make Up Auto & Manual	Dry Weight	Oper. Weight
0908A-2	2860	975	1000	1950	100 x 2	100 x 2	50 x 2	50 x 2	25 x 2	3100	7378
0908B-2	2860	975	1000	1950	125 x 2	125 x 2	50 x 2	50 x 2	25 x 2	3200	7616
0908C-2	2860	975	1000	1950	125 x 2	125 x 2	50 x 2	50 x 2	25 x 2	3300	7854
1009B-2	2860	1075	1000	2150	125 x 2	150 x 2	50 x 2	50 x 2	50 x 2	3600	8568
1009C-2	2860	1075	1000	2150	150 x 2	200 x 2	50 x 2	50 x 2	50 x 2	3800	9044
1009D-2	2860	1075	1000	2150	150 x 2	200 x 2	50 x 2	50 x 2	50 x 2	4000	9520
1009E-2	2860	1075	1000	2150	200 x 2	250 x 2	50 x 2	50 x 2	50 x 2	4500	10710

EX-A SERIES CROSSFLOW COOLING TOWER SPECIFICATION

1.0 GENERAL

The cooling tower shall be induced-draft, crossflow, rectangular, film filled, HDGS Cooling Tower with single side air intake and side air discharge. Cooling tower shall be Truwater EXA Series or approved equivalent.

2.0 CAPACITY

Cooling Tower shall be capable of providing the thermal performance

3.0 PERFORMANCE WARRANTY

The cooling tower manufacturer shall guarantee that tower supplied will meet the specified performance conditions when the tower is installed according to plans.

4.0 CONSTRUCTION

The cooling tower mainframe structure shall be hot dipped galvanized steel (HDGS). The casing shall be made of Fiberglass Reinforced Polyester (FRP).

5.0 MECHANICAL EQUIPMENT

5.1 Fan(s) shall be propeller-type, incorporating heavy-duty blades of alluminium alloy. Blades shall be individually adjustable. Fan blades shall be factory balanced and assembled. Pitch angle should be variable to allow flexibility.

5.2 The V-belts shall be of rubber with fabric impregnated able to withstand the adverse ambient conditions of 50°C and 100% R.H. The pulleys shall be cast iron with the grooves of standard dimensions.

5.3 Motor(s) shall be TEFC, weatherproff sq. caged induction type suitable for 3ph/50Hz/415V power supply and with 1450 rpm. Motor shall be installed outside the discharge air stream.



PVC Casing



HDG Steel Structure



Mechanical Equipment



Hot Water Basin

6.0 FILL AND DRIFT ELIMINATORS

6.1 Infill shall be high efficiency film type, rigid, corrugated PVC sheets with integral louver and drift eliminator that are conducive to cooling water and UV protected. The design shall meet 0.02% drift loss of the circulation water flow.

7.0 HOT WATER DISTRIBUTION SYSTEM

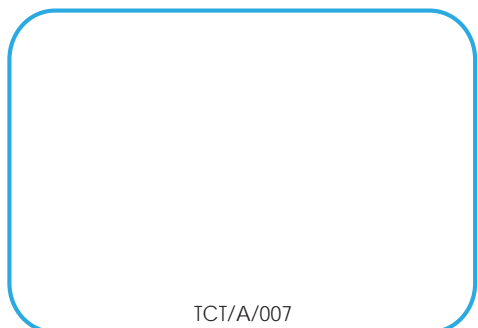
The hot water distribution shall be of open gravity type basin. It shall be made of FRP material. It shall be light weight and non-corrosive to maintain stable water sprinkling effect.

8.0 COLD WATER BASIN

The cold-water basin shall be of FRP and supported on HDG steel framework. The basin shall be designed with sufficient water capacity to avoid air entrainment in the outlet during operating conditions. The basin shall be equipped with suction strainer, makeup ball valve, overflow and drain. For multiple tower arrangement, equalizing pipes between basins shall be provided to maintain the same level of water in each basin.

9.0 ACCESS AND SAFETY

Ladder shall be provided for inspection and maintenance purposes. HDG steel fan guard shall be provided over each fan cylinder.



TCT/A/007



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