

# COOLING TOWER SPECIFICATIONS SHEET

## FACTORY ASSEMBLED CROSS FLOW

2013-07-12

CUSTOMER:	ITEM NO.:
MAIN CONTRACTOR: DAEIL AQUA CO., LTD.	MANUFACTURER: DAEIL AQUA CO., LTD.

<b>DESIGN &amp; OPERATING CONDITIONS</b>	
Model No. .... DI-LXP-150RT	Relative Humidity (%) ..... 80
Cooling Capacity (kal/hr) ..... 585000	Evaporation Loss (%) ..... 0.74
Water Flow Rate (m <sup>3</sup> /hr) ..... 117 (1950lpm)	Drift Loss (%) ..... 0.01
Inlet / Outlet Water Temp. (°C) .. 37 / 32	Number of Cell..... 1
Dry / Wet Bulb Temp. (°C) ..... 29.93 / 27	Total Fan Horse Power (hp) ..... 4.46

<b>DIMENSION DETAILS</b>	
Fan Diameter (mm) ..... 1500	Number of Water Outlet (ea)..... 1
Overall Tower Height (mm) ..... 3310	Outlet Pipe Diameter (A)..... 150
Fan Stack Height (mm)..... 700	Number of OverFlow (ea)..... 1
C/T Bottom to Fan Deck ..... 2610	OverFlow Nozzle Size (A)..... 65
Nominal Cell Dimensions (mm)..... 1790x3950	Number of Make-up (Auto/Man.)(ea)·· 1 / 1
Overall Tower Dimensions (mm)..... 1790x3950	Make-Up Size (Auto/Man.)(A)..... 32
Access to Top of Tower ..... LADDER	Number of Drain (ea) ..... 1
Number of Hot Water Inlet (ea)..... 2	Drain Size (A) ..... 80
Inlet Pipe Diameter (A)..... 100	Net Weight (kg) ..... 1290
	Operating Weight (kg) ..... 3540

<b>MATERIALS OF CONSTRUCTIONS</b>	
Casing ..... FRP	Cold Water Basin..... FRP
Fill ..... PVC	Water Distribution Box..... FRP
Fill Support... ..... SS400+HDG	FrameWorks..... SS400+HDG
Hot Water Basin ..... FRP	Bolts, Nuts and Washers ..... STS 304
Nozzle..... PP	Anchor Bolts ..... SS400
	Anchor Bolts Furnished by ..... <input checked="" type="checkbox"/> Maker <input type="checkbox"/> Owner

<b>MECHANICAL EQUIPMENT</b>	
<b>FAN</b>	
Number of Fan (set) ..... 1	Tip Speed (m/s) ..... 38.147
Type ..... Axial Flow	Fan BHP ..... 4.46
Manufacturer ..... DAEILAQUA	Blade Material ..... AL-ALLOY
Diameter (mm) ..... 1500	Hub Material ..... AL-ALLOY
Number of Blades (ea) ..... 6	Air Delivery per Fan (CMM) ..... 1056
Fan Speed (rpm) ..... 486	Fan Total Efficiency (%) ..... 66.0
<b>SPEED REDUCER</b>	
Number of Speed Reducer (set)..... 1	Reduction Ratio ..... 1 / 3.56
Type ..... V-BELT	Number of Reductions ..... 1
Manufacturer ..... DAEIL AQUA	Rated H.P (hp) ..... 5
Model of Fan Drive Shaft Pulley ··· 1602B	
Model of Motor Shaft Pulley ..... 452B	
Belt Number..... BP74	
<b>MOTOR</b>	
Number of motor (set) ..... 1	Rated H.P (hp) ..... 5
Type ..... TEFC	Electric Char. : Phase (Φ)·· 3 : Pole(P) ..... 4
Manufacturer ..... HHI OR EQUAL	: Cycle (Hz) ..... 60
Full Load Speed (rpm) ..... 1730	: Voltage ..... 220/380 VAC

**DAEIL AQUA CO., LTD.**

# COOLING TOWER SPECIFICATIONS SHEET

## FACTORY ASSEMBLED CROSS FLOW

2013-07-12

CUSTOMER:	ITEM NO.:
MAIN CONTRACTOR: DAEIL AQUA CO., LTD.	MANUFACTURER: DAEIL AQUA CO., LTD.

<b>DESIGN &amp; OPERATING CONDITIONS</b>	
Model No. .... DI-LXP-150RT 2CELLS	Relative Humidity (%) ..... 80
Cooling Capacity (kal/hr) ..... 1170000	Evaporation Loss (%) ..... 0.74
Water Flow Rate (m <sup>3</sup> /hr) ..... 234 (3900lpm)	Drift Loss (%) ..... 0.01
Inlet / Outlet Water Temp. (°C) .. 37 / 32	Number of Cell..... 2
Dry / Wet Bulb Temp. (°C) ..... 29.93 / 27	Total Fan Horse Power (hp) ..... 8.92

<b>DIMENSION DETAILS</b>	
Fan Diameter (mm) ..... 1500	Number of Water Outlet (ea)..... 2
Overall Tower Height (mm) ..... 3310	Outlet Pipe Diameter (A)..... 150
Fan Stack Height (mm)..... 700	Number of OverFlow (ea)..... 2
C/T Bottom to Fan Deck ..... 2610	OverFlow Nozzle Size (A)..... 65
Nominal Cell Dimensions (mm)..... 1790x3950	Number of Make-up (Auto/Man.)(ea).... 2 / 2
Overall Tower Dimensions (mm).... 3580x3950	Make-Up Size (Auto/Man.)(A)..... 32
Access to Top of Tower ..... LADDER	Number of Drain (ea) ..... 2
Number of Hot Water Inlet (ea)..... 4	Drain Size (A) ..... 80
Inlet Pipe Diameter (A)..... 100	Net Weight (kg) ..... 2580
	Operating Weight (kg) ..... 7080

<b>MATERIALS OF CONSTRUCTIONS</b>	
Casing ..... FRP	Cold Water Basin..... FRP
Fill ..... PVC	Water Distribution Box..... FRP
Fill Support..... SS400+HDG	FrameWorks..... SS400+HDG
Hot Water Basin ..... FRP	Bolts, Nuts and Washers ..... STS 304
Nozzle..... PP	Anchor Bolts ..... SS400
	Anchor Bolts Furnished by ..... <input checked="" type="checkbox"/> Maker <input type="checkbox"/> Owner

<b>MECHANICAL EQUIPMENT</b>	
<b>FAN</b>	
Number of Fan (set) ..... 2	Tip Speed (m/s) ..... 38.147
Type ..... Axial Flow	Fan BHP ..... 4.46
Manufacturer ..... DAEILAQUA	Blade Material ..... AL-ALLOY
Diameter (mm) ..... 1500	Hub Material ..... AL-ALLOY
Number of Blades (ea) ..... 6	Air Delivery per Fan (CMM) ..... 1056
Fan Speed (rpm) ..... 486	Fan Total Efficiency (%) ..... 66.0
<b>SPEED REDUCER</b>	
Number of Speed Reducer (set).... 2	Reduction Ratio ..... 1 / 3.56
Type ..... V-BELT	Number of Reductions ..... 1
Manufacturer ..... DAEIL AQUA	Rated H.P (hp) ..... 5
Model of Fan Drive Shaft Pulley ... 1602B	
Model of Motor Shaft Pulley ..... 452B	
Belt Number..... BP74	
<b>MOTOR</b>	
Number of motor (set) ..... 2	Rated H.P (hp) ..... 5
Type ..... TEFC	Electric Char. : Phase (Φ) ... 3 : Pole(P) ..... 4
Manufacturer ..... HHI OR EQUAL	: Cycle (Hz) ..... 60
Full Load Speed (rpm) ..... 1730	: Voltage ..... 220/380 VAC

**DAEIL AQUA CO., LTD.**

# COOLING TOWER SPECIFICATIONS SHEET

## FACTORY ASSEMBLED CROSS FLOW

2013-07-12

CUSTOMER:	ITEM NO.:
MAIN CONTRACTOR: DAEIL AQUA CO., LTD.	MANUFACTURER: DAEIL AQUA CO., LTD.

<b>DESIGN &amp; OPERATING CONDITIONS</b>	
Model No. .... DI-LXP-150RT 3CELLS	Relative Humidity (%) ..... 80
Cooling Capacity (kal/hr) ..... 1755000	Evaporation Loss (%) ..... 0.74
Water Flow Rate (m <sup>3</sup> /hr) ..... 351 (5850lpm)	Drift Loss (%) ..... 0.01
Inlet / Outlet Water Temp. (°C) .. 37 / 32	Number of Cell..... 3
Dry / Wet Bulb Temp. (°C) ..... 29.93 / 27	Total Fan Horse Power (hp) ..... 13.38

<b>DIMENSION DETAILS</b>	
Fan Diameter (mm) ..... 1500	Number of Water Outlet (ea)..... 3
Overall Tower Height (mm) ..... 3310	Outlet Pipe Diameter (A)..... 150
Fan Stack Height (mm)..... 700	Number of OverFlow (ea)..... 3
C/T Bottom to Fan Deck ..... 2610	OverFlow Nozzle Size (A)..... 65
Nominal Cell Dimensions (mm)..... 1790x3950	Number of Make-up (Auto/Man.)(ea).... 3 / 3
Overall Tower Dimensions (mm)..... 5370x3950	Make-Up Size (Auto/Man.)(A)..... 32
Access to Top of Tower ..... LADDER	Number of Drain (ea) ..... 3
Number of Hot Water Inlet (ea)..... 6	Drain Size (A) ..... 80
Inlet Pipe Diameter (A)..... 100	Net Weight (kg) ..... 3870
	Operating Weight (kg) ..... 10620

<b>MATERIALS OF CONSTRUCTIONS</b>	
Casing ..... FRP	Cold Water Basin..... FRP
Fill ..... PVC	Water Distribution Box..... FRP
Fill Support..... SS400+HDG	FrameWorks..... SS400+HDG
Hot Water Basin ..... FRP	Bolts, Nuts and Washers ..... STS 304
Nozzle..... PP	Anchor Bolts ..... SS400
	Anchor Bolts Furnished by ..... <input checked="" type="checkbox"/> Maker <input type="checkbox"/> Owner

<b>MECHANICAL EQUIPMENT</b>	
<b>FAN</b>	
Number of Fan (set) ..... 3	Tip Speed (m/s) ..... 38.147
Type ..... Axial Flow	Fan BHP ..... 4.46
Manufacturer ..... DAEIL AQUA	Blade Material ..... AL-ALLOY
Diameter (mm) ..... 1500	Hub Material ..... AL-ALLOY
Number of Blades (ea) ..... 6	Air Delivery per Fan (CMM) ..... 1056
Fan Speed (rpm) ..... 486	Fan Total Efficiency (%) ..... 66.0
<b>SPEED REDUCER</b>	
Number of Speed Reducer (set).... 3	Reduction Ratio ..... 1 / 3.56
Type ..... V-BELT	Number of Reductions ..... 1
Manufacturer ..... DAEIL AQUA	Rated H.P (hp) ..... 5
Model of Fan Drive Shaft Pulley .... 1602B	
Model of Motor Shaft Pulley ..... 452B	
Belt Number..... BP74	
<b>MOTOR</b>	
Number of motor (set) ..... 3	Rated H.P (hp) ..... 5
Type ..... TEFC	Electric Char. : Phase (Φ).... 3 : Pole(P) ..... 4
Manufacturer ..... HHI OR EQUAL	: Cycle (Hz) ..... 60
Full Load Speed (rpm) ..... 1730	: Voltage ..... 220/380 VAC

**DAEIL AQUA CO., LTD.**

# COOLING TOWER SPECIFICATIONS SHEET

## FACTORY ASSEMBLED CROSS FLOW

2013-07-12

CUSTOMER:	ITEM NO.:
MAIN CONTRACTOR: DAEIL AQUA CO., LTD.	MANUFACTURER: DAEIL AQUA CO., LTD.

<b>DESIGN &amp; OPERATING CONDITIONS</b>	
Model No. ....DI-LXP-150RT 4CELLS	Relative Humidity (%) ..... 80
Cooling Capacity (kal/hr) .....2340000	Evaporation Loss (%) ..... 0.74
Water Flow Rate (m <sup>3</sup> /hr) .....468 (7800lpm)	Drift Loss (%) ..... 0.01
Inlet / Outlet Water Temp. (°C) .. 37 / 32	Number of Cell..... 4
Dry / Wet Bulb Temp. (°C) ..... 29.93 / 27	Total Fan Horse Power (hp) ..... 17.84

<b>DIMENSION DETAILS</b>	
Fan Diameter (mm) .....1500	Number of Water Outlet (ea)..... 4
Overall Tower Height (mm) ..... 3310	Outlet Pipe Diameter (A)..... 150
Fan Stack Height (mm)..... 700	Number of OverFlow (ea)..... 4
C/T Bottom to Fan Deck ..... 2610	OverFlow Nozzle Size (A)..... 65
Nominal Cell Dimensions (mm)..... 1790x3950	Number of Make-up (Auto/Man.)(ea).... 4 / 4
Overall Tower Dimensions (mm)..... 7160x3950	Make-Up Size (Auto/Man.)(A)..... 32
Access to Top of Tower ..... LADDER	Number of Drain (ea) ..... 4
Number of Hot Water Inlet (ea)..... 8	Drain Size (A) ..... 80
Inlet Pipe Diameter (A)..... 100	Net Weight (kg) ..... 5160
	Operating Weight (kg) ..... 14160

<b>MATERIALS OF CONSTRUCTIONS</b>	
Casing ..... FRP	Cold Water Basin..... FRP
Fill .....PVC	Water Distribution Box..... FRP
Fill Support..... SS400+HDG	FrameWorks..... SS400+HDG
Hot Water Basin ..... FRP	Bolts, Nuts and Washers ..... STS 304
Nozzle..... PP	Anchor Bolts ..... SS400
	Anchor Bolts Furnished by ..... <input checked="" type="checkbox"/> Maker <input type="checkbox"/> Owner

<b>MECHANICAL EQUIPMENT</b>	
<b>FAN</b>	
Number of Fan (set) ..... 4	Tip Speed (m/s) ..... 38.147
Type ..... Axial Flow	Fan BHP ..... 4.46
Manufacturer ..... DAEIL AQUA	Blade Material ..... AL-ALLOY
Diameter (mm) ..... 1500	Hub Material ..... AL-ALLOY
Number of Blades (ea) ..... 6	Air Delivery per Fan (CMM) ..... 1056
Fan Speed (rpm) ..... 486	Fan Total Efficiency (%) ..... 66.0
<b>SPEED REDUCER</b>	
Number of Speed Reducer (set).... 4	Reduction Ratio ..... 1 / 3.56
Type ..... V-BELT	Number of Reductions ..... 1
Manufacturer ..... DAEIL AQUA	Rated H.P (hp) ..... 5
Model of Fan Drive Shaft Pulley .... 1602B	
Model of Motor Shaft Pulley ..... 452B	
Belt Number..... BP74	
<b>MOTOR</b>	
Number of motor (set) ..... 4	Rated H.P (hp) ..... 5
Type ..... TEFC	Electric Char. : Phase (Φ).... 3 : Pole(P) ..... 4
Manufacturer ..... HHI OR EQUAL	: Cycle (Hz) ..... 60
Full Load Speed (rpm) ..... 1730	: Voltage ..... 220/380 VAC

**DAEIL AQUA CO., LTD.**

# COOLING TOWER SPECIFICATIONS SHEET

## FACTORY ASSEMBLED CROSS FLOW

2013-07-12

CUSTOMER:	ITEM NO.:
MAIN CONTRACTOR: DAEIL AQUA CO., LTD.	MANUFACTURER: DAEIL AQUA CO., LTD.

### DESIGN & OPERATING CONDITIONS

Model No. .... DI-LXP-150RT 5CELLS	Relative Humidity (%) ..... 80
Cooling Capacity (kal/hr) ..... 2925000	Evaporation Loss (%) ..... 0.74
Water Flow Rate (m <sup>3</sup> /hr) ..... 585 (9750lpm)	Drift Loss (%) ..... 0.01
Inlet / Outlet Water Temp. (°C) .. 37 / 32	Number of Cell..... 5
Dry / Wet Bulb Temp. (°C) ..... 29.93 / 27	Total Fan Horse Power (hp) ..... 22.3

### DIMENSION DETAILS

Fan Diameter (mm) ..... 1500	Number of Water Outlet (ea)..... 5
Overall Tower Height (mm) ..... 3310	Outlet Pipe Diameter (A)..... 150
Fan Stack Height (mm)..... 700	Number of OverFlow (ea)..... 5
C/T Bottom to Fan Deck ..... 2610	OverFlow Nozzle Size (A)..... 65
Nominal Cell Dimensions (mm)..... 1790x3950	Number of Make-up (Auto/Man.)(ea) ... 5 / 5
Overall Tower Dimensions (mm)..... 8950x3950	Make-Up Size (Auto/Man.)(A)..... 32
Access to Top of Tower ..... LADDER	Number of Drain (ea) ..... 5
Number of Hot Water Inlet (ea)..... 10	Drain Size (A) ..... 80
Inlet Pipe Diameter (A)..... 100	Net Weight (kg) ..... 6450
	Operating Weight (kg) ..... 17700

### MATERIALS OF CONSTRUCTIONS

Casing ..... FRP	Cold Water Basin..... FRP
Fill ..... PVC	Water Distribution Box..... FRP
Fill Support... .. SS400+HDG	FrameWorks..... SS400+HDG
Hot Water Basin ..... FRP	Bolts, Nuts and Washers ..... STS 304
Nozzle..... PP	Anchor Bolts ..... SS400
	Anchor Bolts Furnished by ..... <input checked="" type="checkbox"/> Maker <input type="checkbox"/> Owner

### MECHANICAL EQUIPMENT

#### FAN

Number of Fan (set) ..... 5	Tip Speed (m/s) ..... 38.147
Type ..... Axial Flow	Fan BHP ..... 4.46
Manufacturer ..... DAEILAQUA	Blade Material ..... AL-ALLOY
Diameter (mm) ..... 1500	Hub Material ..... AL-ALLOY
Number of Blades (ea) ..... 6	Air Delivery per Fan (CMM) ..... 1056
Fan Speed (rpm) ..... 486	Fan Total Efficiency (%) ..... 66.0

#### SPEED REDUCER

Number of Speed Reducer (set)..... 5	Reduction Ratio ..... 1 / 3.56
Type ..... V-BELT	Number of Reductions ..... 1
Manufacturer ..... DAEIL AQUA	Rated H.P (hp) ..... 5
Model of Fan Drive Shaft Pulley ... 1602B	
Model of Motor Shaft Pulley ..... 452B	
Belt Number..... BP74	

#### MOTOR

Number of motor (set) ..... 5	Rated H.P (hp) ..... 5
Type ..... TEFC	Electric Char. : Phase (Φ) ... 3 : Pole(P) ..... 4
Manufacturer ..... HHI OR EQUAL	: Cycle (Hz) ..... 60
Full Load Speed (rpm) ..... 1730	: Voltage ..... 220/380 VAC

**DAEIL AQUA CO., LTD.**