

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

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|--|--|
| Model No. DI-LXP-400RT 1CELL | Relative Humidity (%) 80 |
| Cooling Capacity (kal/hr) 1560000 | Evaporation Loss (%) 0.74 |
| Water Flow Rate (m ³ /hr) 312 (5200lpm) | 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) 16.54 |

DIMENSION DETAILS

| | |
|--|---|
| Fan Diameter (mm) 2400 | Number of Water Outlet (ea)..... 1 |
| Overall Tower Height (mm) 3610 | Outlet Pipe Diameter (A)..... 250 |
| Fan Stack Height (mm)..... 750 | Number of OverFlow (ea)..... 1 |
| C/T Bottom to Fan Deck 2910 | OverFlow Nozzle Size (A)..... 100 |
| Nominal Cell Dimensions (mm)..... 2790x5325 | Number of Make-up (Auto/Man.)(ea) ... 1 / 1 |
| Overall Tower Dimensions (mm)..... 2790x5325 | Make-Up Size (Auto/Man.)(A)..... 50 |
| 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)..... 200 | Net Weight (kg) 2090 |
| | Operating Weight (kg) 7280 |

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) 1 | Tip Speed (m/s) 50.525 |
| Type Axial Flow | Fan BHP 16.54 |
| Manufacturer DAEILAQUA | Blade Material AL-ALLOY |
| Diameter (mm) 2400 | Hub Material AL-ALLOY |
| Number of Blades (ea) 6 | Air Delivery per Fan (CMM) 2466 |
| Fan Speed (rpm) 402.3 | Fan Total Efficiency (%) 77.0 |

SPEED REDUCER

| | |
|--|-------------------------------|
| Number of Speed Reducer (set)..... 1 | Reduction Ratio 1 / 4.4 |
| Type V-BELT | Number of Reductions 1 |
| Manufacturer DAEIL AQUA | Rated H.P (hp) 20 |
| Model of Fan Drive Shaft Pulley ... 5V2203 | |
| Model of Motor Shaft Pulley 5V503 | |
| Belt Number..... 5VX1060 | |

MOTOR

| | |
|----------------------------------|--|
| Number of motor (set) 1 | Rated H.P (hp) 20 |
| Type TEFC | Electric Char. : Phase (Φ) ... 3 : Pole(P) 4 |
| Manufacturer HHI OR EQUAL | : Cycle (Hz) 60 |
| Full Load Speed (rpm) 1770 | : Voltage 220/380 VAC |

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| | |
|---|--|
| DESIGN & OPERATING CONDITIONS | |
| Model No. DI-LXP-400RT 1CELL | Relative Humidity (%) 80 |
| Cooling Capacity (kal/hr) 3120000 | Evaporation Loss (%) 0.74 |
| Water Flow Rate (m ³ /hr) 624 (10400lpm) | 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) 33.08 |

| | |
|--|---|
| DIMENSION DETAILS | |
| Fan Diameter (mm) 2400 | Number of Water Outlet (ea)..... 2 |
| Overall Tower Height (mm) 3660 | Outlet Pipe Diameter (A)..... 250 |
| Fan Stack Height (mm)..... 750 | Number of OverFlow (ea)..... 2 |
| C/T Bottom to Fan Deck 2910 | OverFlow Nozzle Size (A)..... 100 |
| Nominal Cell Dimensions (mm)..... 2790x5325 | Number of Make-up (Auto/Man.)(ea) ... 2 / 2 |
| Overall Tower Dimensions (mm)..... 5580x5325 | Make-Up Size (Auto/Man.)(A)..... 50 |
| 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)..... 200 | Net Weight (kg) 4180 |
| | Operating Weight (kg) 14560 |

| | |
|-----------------------------------|--|
| 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) 2 | Tip Speed (m/s) 50.525 |
| Type Axial Flow | Fan BHP 16.54 |
| Manufacturer DAEIL AQUA | Blade Material AL-ALLOY |
| Diameter (mm) 2400 | Hub Material AL-ALLOY |
| Number of Blades (ea) 6 | Air Delivery per Fan (CMM) 2466 |
| Fan Speed (rpm) 402.3 | Fan Total Efficiency (%) 77.0 |
| SPEED REDUCER | |
| Number of Speed Reducer (set)..... 2 | Reduction Ratio 1 / 4.4 |
| Type V-BELT | Number of Reductions 1 |
| Manufacturer DAEIL AQUA | Rated H.P (hp) 20 |
| Model of Fan Drive Shaft Pulley ... 5V2203 | |
| Model of Motor Shaft Pulley 5V503 | |
| Belt Number..... 5VX1060 | |
| MOTOR | |
| Number of motor (set) 2 | Rated H.P (hp) 20 |
| Type TEFC | Electric Char. : Phase (Φ) ... 3 : Pole(P) 4 |
| Manufacturer HHI OR EQUAL | : Cycle (Hz) 60 |
| Full Load Speed (rpm) 1770 | : Voltage 220/380 VAC |

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DESIGN & OPERATING CONDITIONS

| | |
|---|--|
| Model No. DI-LXP-400RT 3CELLS | Relative Humidity (%) 80 |
| Cooling Capacity (kal/hr) 4680000 | Evaporation Loss (%) 0.74 |
| Water Flow Rate (m ³ /hr) 936 (15600lpm) | 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) 49.62 |

DIMENSION DETAILS

| | |
|--|---|
| Fan Diameter (mm) 2400 | Number of Water Outlet (ea)..... 3 |
| Overall Tower Height (mm) 3660 | Outlet Pipe Diameter (A)..... 250 |
| Fan Stack Height (mm)..... 750 | Number of OverFlow (ea)..... 3 |
| C/T Bottom to Fan Deck 2910 | OverFlow Nozzle Size (A)..... 100 |
| Nominal Cell Dimensions (mm)..... 2790x5325 | Number of Make-up (Auto/Man.)(ea)·· 3 / 3 |
| Overall Tower Dimensions (mm)..... 8370x5325 | Make-Up Size (Auto/Man.)(A)..... 50 |
| 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)..... 200 | Net Weight (kg) 6270 |
| | Operating Weight (kg) 21840 |

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) 3 | Tip Speed (m/s) 50.525 |
| Type Axial Flow | Fan BHP 16.54 |
| Manufacturer DAEILAQUA | Blade Material AL-ALLOY |
| Diameter (mm) 2400 | Hub Material AL-ALLOY |
| Number of Blades (ea) 6 | Air Delivery per Fan (CMM) 2466 |
| Fan Speed (rpm) 402.3 | Fan Total Efficiency (%) 77.0 |

SPEED REDUCER

| | |
|--|-------------------------------|
| Number of Speed Reducer (set)..... 3 | Reduction Ratio 1 / 4.4 |
| Type V-BELT | Number of Reductions 1 |
| Manufacturer DAEIL AQUA | Rated H.P (hp) 20 |
| Model of Fan Drive Shaft Pulley ... 5V2203 | |
| Model of Motor Shaft Pulley 5V503 | |
| Belt Number..... 5VX1060 | |

MOTOR

| | |
|----------------------------------|--|
| Number of motor (set) 3 | Rated H.P (hp) 20 |
| Type TEFC | Electric Char. : Phase (Φ)·· 3 : Pole(P) 4 |
| Manufacturer HHI OR EQUAL | : Cycle (Hz) 60 |
| Full Load Speed (rpm) 1770 | : Voltage 220/380 VAC |

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| MAIN CONTRACTOR: DAEIL AQUA CO., LTD. | MANUFACTURER: DAEIL AQUA CO., LTD. |

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|--|---------------------|----------------------------------|-------|
| DESIGN & OPERATING CONDITIONS | | | |
| Model No. | DI-LXP-400RT 4CELLS | Relative Humidity (%) | 80 |
| Cooling Capacity (kal/hr) | 6240000 | Evaporation Loss (%) | 0.74 |
| Water Flow Rate (m ³ /hr) | 1248 (20800lpm) | 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) | 66.16 |

| | | | |
|-------------------------------------|------------|--------------------------------------|-------|
| DIMENSION DETAILS | | | |
| Fan Diameter (mm) | 2400 | Number of Water Outlet (ea)..... | 4 |
| Overall Tower Height (mm) | 3360 | Outlet Pipe Diameter (A)..... | 250 |
| Fan Stack Height (mm)..... | 750 | Number of OverFlow (ea)..... | 4 |
| C/T Bottom to Fan Deck | 2910 | OverFlow Nozzle Size (A)..... | 100 |
| Nominal Cell Dimensions (mm)..... | 2790x5325 | Number of Make-up (Auto/Man.)(ea)... | 4 / 4 |
| Overall Tower Dimensions (mm)..... | 11160x5325 | Make-Up Size (Auto/Man.)(A)..... | 50 |
| 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)..... | 200 | Net Weight (kg) | 8360 |
| | | Operating Weight (kg) | 29120 |

| | | | |
|-----------------------------------|-----------|---------------------------------|--|
| 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) | 4 | Tip Speed (m/s) | 50.525 |
| Type | Axial Flow | Fan BHP | 16.54 |
| Manufacturer | DAEIL AQUA | Blade Material | AL-ALLOY |
| Diameter (mm) | 2400 | Hub Material | AL-ALLOY |
| Number of Blades (ea) | 6 | Air Delivery per Fan (CMM) | 2466 |
| Fan Speed (rpm) | 402.3 | Fan Total Efficiency (%) | 77.0 |
| SPEED REDUCER | | | |
| Number of Speed Reducer (set)..... | 4 | Reduction Ratio | 1 / 4.4 |
| Type | V-BELT | Number of Reductions | 1 |
| Manufacturer | DAEIL AQUA | Rated H.P (hp) | 20 |
| Model of Fan Drive Shaft Pulley ... | 5V2203 | | |
| Model of Motor Shaft Pulley | 5V503 | | |
| Belt Number..... | 5VX1060 | | |
| MOTOR | | | |
| Number of motor (set) | 4 | Rated H.P (hp) | 20 |
| Type | TEFC | Electric Char. : Phase (Φ)... | 3 : Pole(P) |
| Manufacturer | HHI OR EQUAL | : Cycle (Hz) | 60 |
| Full Load Speed (rpm) | 1770 | : Voltage | 220/380 VAC |

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| MAIN CONTRACTOR: DAEIL AQUA CO., LTD. | MANUFACTURER: DAEIL AQUA CO., LTD. |

| | |
|--|---------------------------------------|
| DESIGN & OPERATING CONDITIONS | |
| Model No. DI-LXP-2000 | Relative Humidity (%) 80 |
| Cooling Capacity (kal/hr) 7800000 | Evaporation Loss (%) 0.74 |
| Water Flow Rate (m ³ /hr) 1560 (26000lpm) | 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) 82.7 |

| | |
|---|---|
| DIMENSION DETAILS | |
| Fan Diameter (mm) 2400 | Number of Water Outlet (ea)..... 5 |
| Overall Tower Height (mm) 3360 | Outlet Pipe Diameter (A)..... 250 |
| Fan Stack Height (mm)..... 750 | Number of OverFlow (ea)..... 5 |
| C/T Bottom to Fan Deck 2910 | OverFlow Nozzle Size (A)..... 100 |
| Nominal Cell Dimensions (mm)..... 2790x5325 | Number of Make-up (Auto/Man.)(ea) ... 5 / 5 |
| Overall Tower Dimensions (mm)..... 13950x5325 | Make-Up Size (Auto/Man.)(A)..... 50 |
| 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)..... 200 | Net Weight (kg) 10450 |
| | Operating Weight (kg) 36400 |

| | |
|-----------------------------------|--|
| 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) 50.525 |
| Type Axial Flow | Fan BHP 16.54 |
| Manufacturer DAEILAQUA | Blade Material AL-ALLOY |
| Diameter (mm) 2400 | Hub Material AL-ALLOY |
| Number of Blades (ea) 6 | Air Delivery per Fan (CMM) 2466 |
| Fan Speed (rpm) 402.3 | Fan Total Efficiency (%) 77.0 |
| SPEED REDUCER | |
| Number of Speed Reducer (set)..... 5 | Reduction Ratio 1 / 4.4 |
| Type V-BELT | Number of Reductions 1 |
| Manufacturer DAEIL AQUA | Rated H.P (hp) 20 |
| Model of Fan Drive Shaft Pulley ... 5V2203 | |
| Model of Motor Shaft Pulley 5V503 | |
| Belt Number..... 5VX1060 | |
| MOTOR | |
| Number of motor (set) 5 | Rated H.P (hp) 20 |
| Type TEFC | Electric Char. : Phase (Φ) ... 3 : Pole(P) 4 |
| Manufacturer HHI OR EQUAL | : Cycle (Hz) 60 |
| Full Load Speed (rpm) 1770 | : Voltage 220/380 VAC |

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