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## WATER CHILLER



## IPT Series

- For Industrial Use
- Air Cooled & Water Cooled Type



\*All Models Discharge Heat From The Top Of The Machine



Been one of the leading professional manufacturer, distributor of air dryers, chillers, heat pumps, and air systems. We market both domestically and internationally (Asia and Europe) and are the biggest exporter of the field to Europe.

We are supported by the Board of Investment of Thailand (BOI) with ISO 9001:2008 certified; Therefore our quality standard level is assured.

**QUALITY POLICY:**

**PRODUCE QUALITY PRODUCTS  
CONTINUAL DEVELOPMENT**

**PROVIDE QUICK SERVICE  
HIGH STANDARDS FOR CUSTOMER SATISFACTION**

**The evolution of perfection – IPT**

- ▶ The new IPT air/water cooled chillers, specifically designed for use industrial applications, are compact units equipped, as standard, with an internal strong tank and pump, offering a tried and tested solution that has received customer acclaim. "IPT" chillers guarantee energy efficiency levels at the top of the category.
- ▶ The innovation evaporator-in-tank configuration ensures reduced ambient heat gain and a steady temperature of the process fluids.
- ▶ The use of components sourced from premium manufacturers and extensive factory testing of all units make for highest reliability levels, minimizing the risks of unplanned stoppages and increasing productivity levels. An extensive range of accessories, Coupled with operating limits among the most generous available on the market, allow "IPT" to be personalized to a variety of industrial applications.
- ▶ This unit has a water tank inside , water temperature can be maintained at 1~2 °C

**Microprocessor control**

- Chilled water temperature control due to compressor's ON/OFF regulation system or activation of capacity step
- Compressor-start timing and control of inrush number limitation
- Anti-freeze protection
- Digital display operator interface



**Compact electrical panel**

High quality components allow 30% free space.  
Follow European standard



**Fans section**

- Axial fans directly coupled to the electric motor, External rotor type, with special watertight, Bearings free from servicing and incorporated Thermal protection.
- Fans have blades with haul profile , dynamically and Statically balanced and equipped with accident Prevention grill on air inlet.



**Water pressure gauge**

-protects against low water flow by monitoring the pressure between the buffer tank entry and the pump outlet



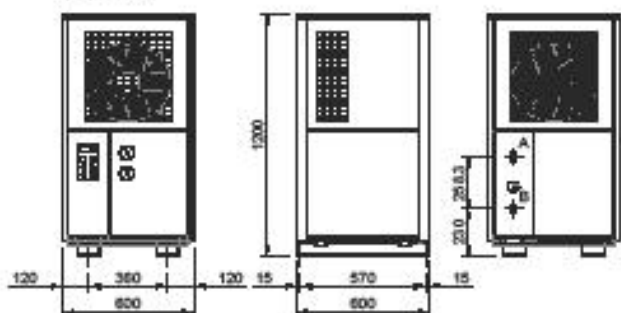
**Compressor**

-Depending on model semi-hermetic or Advanced hermetic scroll compressor generates satisfied Cooling capacity with low power consumption.  
 -simple construction , fewer moving parts and high reliability  
 -Low noise level and minimal vibration.

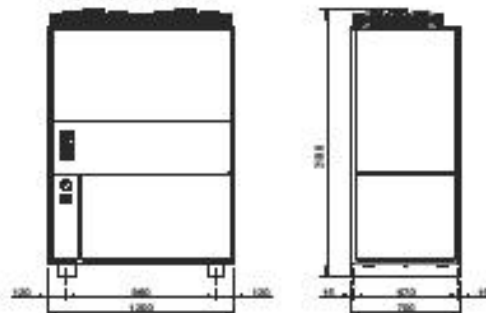


**DIMENSIONS (mm) AIR COOLED TYPE**

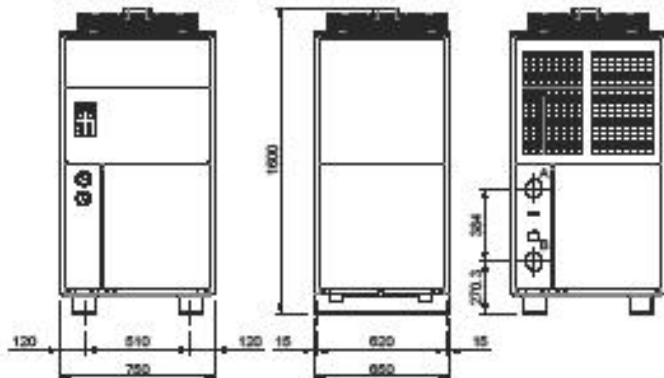
**IPT 015**



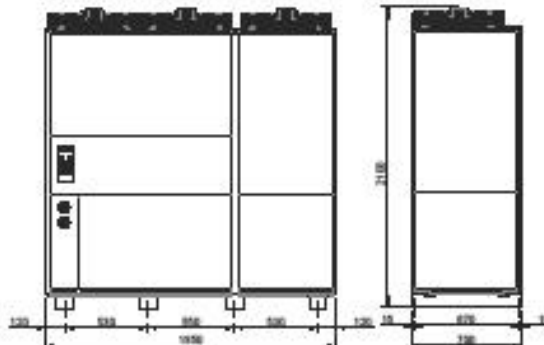
**IPT 101 ~ 151**



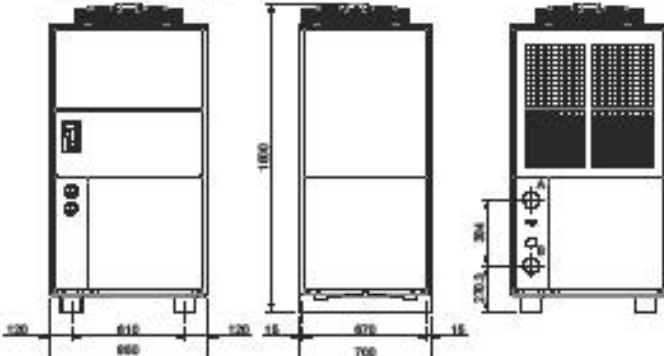
**IPT 020 ~ 030**



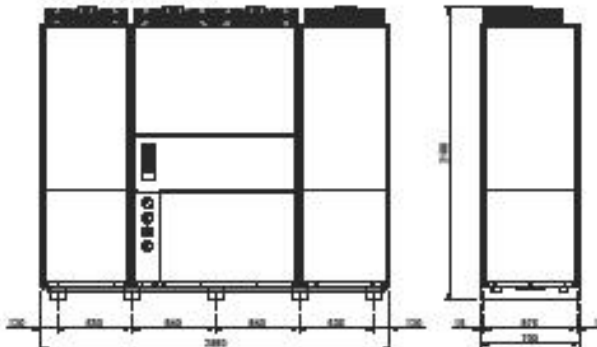
**IPT 202 ~ 252**

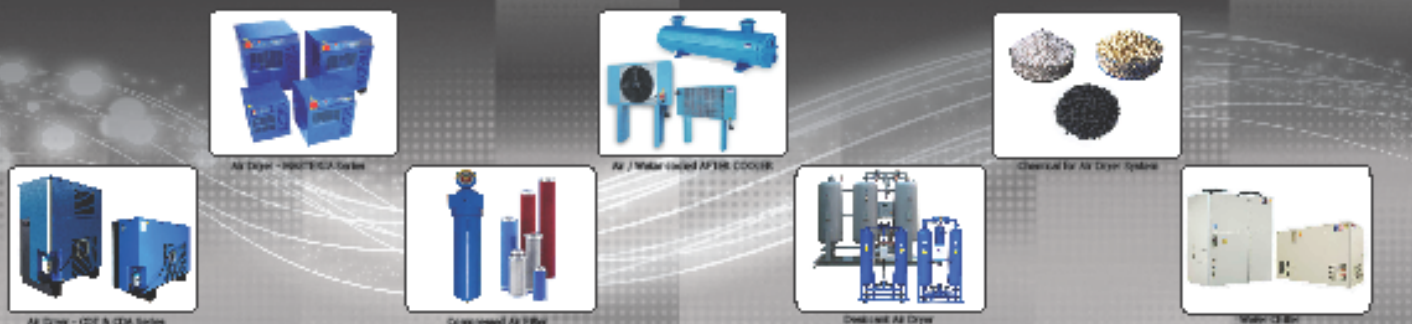


**IPT 050 ~ 080**



**IPT 302 ~ 352**





## Standard Specifications

| Model          |                         | IPT   | 015   | 020   | 030   | 050    | 080    | 101    | 121    | 151    | 202    | 252    |        |
|----------------|-------------------------|---|---|---|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| IPT-A          | Cooling Capacity        | KW  | 5.3   | 6.4   | 10    | 16     | 25     | 31     | 42     | 49     | 65     | 82     |        |
|                |                         | Kcal  | 4,500   | 5,500   | 9,000 | 13,500 | 21,500 | 26,500 | 36,500 | 42,000 | 56,000 | 69,000 |        |
|                | Power Input             | KW  | 1.2   | 2.3   | 3.7   | 5.3    | 8.4    | 10     | 11     | 13     | 19     | 23     |        |
|                | Current                 | A   | 7   | 11  | 6     | 9      | 13     | 16     | 18     | 20     | 30     | 35     |        |
|                | Air Cooled              | Fan no.   |   | 2   | 2     | 3      | 4      | 5      | 2      | 2      | 2      | 3      | 3      |
|                |                         | Air Flow m <sup>3</sup> /h  |   | 2,100   | 4,000 | 6,300  | 8,000  | 8,500  | 12,000 | 14,000 | 16,500 | 20,000 | 25,000 |
|                | Dimensions              | Weight Kg   |   | 140   | 180   | 220    | 270    | 350    | 580    | 620    | 680    | 810    | 940    |
| Length mm      |                         |   | 600   | 650   |       | 700    |        | 700    |        |        | 700    |        |        |
| Width mm       |                         |   | 600   | 750   |       | 850    |        | 1200   |        |        | 1850   |        |        |
| Height mm      |                         |   | 1200  | 1600  |       | 1800   |        | 2100   |        |        | 2100   |        |        |
| IPT-W          | Cooling Capacity        | KW  | 5.7   | 6.9   | 11    | 17     | 27     | 34     | 45     | 53     | 70     | 88     |        |
|                |                         | Kcal  | 5,000   | 6,000   | 9,500 | 15,000 | 23,000 | 29,000 | 39,000 | 45,000 | 60,000 | 76,000 |        |
|                | Power Input             | KW  | 1   | 2   | 3.4   | 4.8    | 8      | 9      | 10     | 11     | 18     | 20     |        |
|                | Current                 | A   | 6   | 10  | 5     | 7      | 10     | 14     | 15     | 16     | 28     | 30     |        |
|                | Water Cooled            | Type  |   | Standard Stainless Plate Heat Exchanger (Option Shell & Tube) |       |        |        |        |        |        |        |        |        |
|                |                         | Connect   | inch  | 1/2"  | 1"    | 1"     | 1"     | 1"     | 1-1/2" | 1-1/2" | 1-1/2" | 2"     | 2"     |
|                | Dimensions              | Water Flow L/min  |   | 30  | 35    | 50     | 65     | 110    | 150    | 170    | 220    | 280    | 330    |
| Weight Kg      |                         |   | 110   | 150   | 185   | 225    | 300    | 530    | 570    | 610    | 740    | 860    |        |
| Length mm      |                         |   | 600   | 650   |       | 700    |        | 700    |        |        | 700    |        |        |
| Width mm       |                         |   | 600   | 750   |       | 850    |        | 1200   |        |        | 1850   |        |        |
| Chiller        | Height mm               |   | 800   | 1000  |       | 1200   |        | 1400   |        |        | 1400   |        |        |
|                | Tank Capacity           | L   | 30  | 60  | 60    | 100    | 100    | 160    | 160    | 180    | 300    | 300    |        |
|                | Water Flow              | L/min   | 20  | 25  | 30    | 50     | 75     | 100    | 130    | 150    | 190    | 230    |        |
|                | Connect Size            | inch  | 1/2"  | 1"  | 1"    | 1"     | 1"     | 1-1/2" | 1-1/2" | 1-1/2" | 2"     | 2"     |        |
|                | Standard Pump (2.5 bar) | HP  | 0.5   | 1   | 1     | 1      | 1.5    | 1.5    | 1.5    | 1.5    | 2      | 2      |        |
|                | Circuit Quantity        | no  | 1   | 1   | 1     | 1      | 1      | 1      | 1      | 1      | 2      | 2      |        |
|                | Capacity Step           | %   | 0 / 100   |   |       |        |        |        |        |        |        |        |        |
|                | Evaporator Type         | -   | Standard Stainless Plate Heat Exchanger (Option Shell & Tube) |   |       |        |        |        |        |        |        |        |        |
|                | Compressor Type         | -   | Rotary / Hermetic Scroll                                      |   |       |        |        |        |        |        |        |        |        |
|                | Refrigerant             | -   | R407c / R22 / R407c (Option)                                  |   |       |        |        |        |        |        |        |        |        |
|                | Power Source            | -   | 1Ph / 220V / 50Hz / 3Ph / 380V / 50Hz                         |   |       |        |        |        |        |        |        |        |        |
|                | Max Power Input         | KW  | 2   | 3   | 6     | 7      | 14     | 17     | 20     | 25     | 33     | 38     |        |
|                | Max Current             | A   | 10  | 19  | 10    | 11     | 21     | 27     | 31     | 38     | 50     | 59     |        |
| Safety Devices | -                       | High / Low Pressure Switch, Chilled Water Low Temp. Switch, Thermal Overload, Compressor Internal Thermostat, Phase Reverse Relay, Water By-Pass, Water Flow Switch |   |   |       |        |        |        |        |        |        |        |        |

| Model          |                         | IPT   | 302   | 352   | 402     | 502     | 603     | 703     | 804     | 1004    | 1204    | 1404    |         |
|----------------|-------------------------|---|---|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| IPT-A          | Cooling Capacity        | KW  | 91  | 105   | 120     | 155     | 182     | 210     | 240     | 310     | 364     | 420     |         |
|                |                         | Kcal  | 78,000  | 90,000  | 103,000 | 130,000 | 156,000 | 180,000 | 206,000 | 280,000 | 312,000 | 360,000 |         |
|                | Power Input             | KW  | 26  | 30  | 38      | 46      | 52      | 60      | 76      | 80      | 100     | 115     |         |
|                | Current                 | A   | 40  | 49  | 60      | 70      | 80      | 98      | 120     | 135     | 145     | 180     |         |
|                | Air Cooled              | Fan no.   |   | 4   | 4       | 6       | 6       | 8       | 8       | 8       | 8       | 8       | 8       |
|                |                         | Air Flow m <sup>3</sup> /h  |   | 30,000  | 33,000  | 45,000  | 50,000  | 60,000  | 68,000  | 69,000  | 90,000  | 105,000 | 120,000 |
|                | Dimensions              | Weight Kg   |   | 1,050   | 1,250   | 1,450   | 1,650   | 1,850   | 2,250   | 2,600   | 2,800   | 3,350   | 3,950   |
| Length mm      |                         |   | 700   |   | 1400    |         | 1400    |         | 1800    |         | 1800    |         |         |
| Width mm       |                         |   | 2580  |   | 1850    |         | 2580    |         | 3700    |         | 5000    |         |         |
| Height mm      |                         |   | 2100  |   | 2100    |         | 2100    |         | 2100    |         | 2100    |         |         |
| IPT-W          | Cooling Capacity        | KW  | 98  | 115   | 130     | 167     | 198     | 230     | 260     | 334     | 390     | 460     |         |
|                |                         | Kcal  | 85,000  | 99,000  | 110,000 | 140,000 | 170,000 | 198,000 | 220,000 | 280,000 | 335,000 | 400,000 |         |
|                | Power Input             | KW  | 22  | 28  | 36      | 40      | 44      | 56      | 70      | 70      | 11      | 18      |         |
|                | Current                 | A   | 32  | 42  | 56      | 60      | 64      | 84      | 110     | 16      | 28      | 30      |         |
|                | Water Cooled            | Type  |   | Standard Stainless Plate Heat Exchanger (Option Shell & Tube) |         |         |         |         |         |         |         |         |         |
|                |                         | Connect   | inch  | 2-1/2"  | 2-1/2"  | 3"      | 3"      | 4"      | 4"      | 4"      | 4"      | 4"      | 4"      |
|                | Dimensions              | Water Flow L/min  |   | 380   | 430     | 560     | 660     | 760     | 860     | 1,200   | 1,350   | 280     | 330     |
| Weight Kg      |                         |   | 950   | 1,125   | 1,300   | 1,400   | 1,620   | 1,950   | 2,300   | 2,610   | 3,010   | 3,550   |         |
| Length mm      |                         |   | 700   |   | 900     |         | 900     |         | 1500    |         | 2000    |         |         |
| Width mm       |                         |   | 2850  |   | 1850    |         | 2850    |         | 1850    |         | 2850    |         |         |
| Chiller        | Height mm               |   | 1400  |   | 1400    |         | 1400    |         | 1400    |         | 1400    |         |         |
|                | Tank Capacity           | L   | 460   | 460   | 600     | 600     | 1,000   | 1,000   | 1,400   | 1,400   | 2,000   | 2,000   |         |
|                | Water Flow              | L/min   | 280   | 320   | 380     | 460     | 560     | 640     | 780     | 900     | 1,120   | 1,280   |         |
|                | Connect Size            | inch  | 2-1/2"  | 2-1/2"  | 3"      | 3"      | 4"      | 4"      | 5"      | 5"      | 6"      | 6"      |         |
|                | Standard Pump (2.5 bar) | HP  | 3   | 3   | 4       | 4       | 5.5     | 5.5     | 7.5     | 7.5     | 10      | 10      |         |
|                | Circuit Quantity        | no  | 2   | 2   | 2       | 4       | 4       | 4       | 4       | 4       | 4       | 4       |         |
|                | Capacity Step           | %   | 0 / 50 / 100  |   |         |         |         |         |         |         |         |         |         |
|                | Evaporator Type         | -   | Standard Stainless Plate Heat Exchanger (Option Shell & Tube) |   |         |         |         |         |         |         |         |         |         |
|                | Compressor Type         | -   | Hermetic Scroll   |   |         |         |         |         |         |         |         |         |         |
|                | Refrigerant             | -   | R22 / R407c (Option)  |   |         |         |         |         |         |         |         |         |         |
|                | Power Source            | -   | 3Ph / 380V / 50Hz   |   |         |         |         |         |         |         |         |         |         |
|                | Max Power Input         | KW  | 46  | 57  | 62      | 78      | 92      | 109     | 120     | 145     | 170     | 205     |         |
|                | Max Current             | A   | 71  | 87  | 95      | 119     | 140     | 167     | 180     | 210     | 260     | 310     |         |
| Safety Devices | -                       | High / Low Pressure Switch, Chilled Water Low Temp. Switch, Thermal Overload, Compressor Internal Thermostat, Phase Reverse Relay, Water By-Pass, Water Flow Switch |   |   |         |         |         |         |         |         |         |         |         |

- Cooling capacity is based on : chiller water inlet temperature 12 °C , outlet temperature 7 °C
- Operating limitation : ambient temperature 15 °C ~ 43 °C ; Chiller water temperature 5 °C ~ 16 °C
- IPT-A ambient temperature, 35 °C ; IPT-W cooling water Inlet 30 °C , outlet 35 °C
- Every Model has Pressure Switch ; Model Over 050 will include Pressure Gauge