



# SHELTON AIR COOLED CHILLERS SAE-IAC10

*with VFD Inverter*

Designed Cooling Capacity of 27.2 kW

Outlet temperature preset of 7°C

Inverter Driven High Efficiency Scroll Compressor

Stainless steel chilled water pump

Stainless steel plate type evaporator

125L expansion water tank

Dual Speed low noise condenser fan

Proudly assembled in Singapore



## COMPRESSOR

1 No of Compressor ( Inverter Driven )

- Japanese Inverter Driven High Efficiency Scroll Compressor
- Power input : 8.1 kW / 16 A

Single refrigerant circuit



## WATER CIRCUIT

1 No of Circulation Water Pump

- Stainless Steel 304 Horizontal Multistage Centrifugal
- Duty Flow rate : 4.7 m<sup>3</sup>/hr ( 20.6 US GPM )
- Duty Pressure : 58 PSI ( 4 Bar )
- Power input : 1.1 kW / 2.6 A

125L Stainless Steel Insulated Buffer Water Tank



## AIR COOLED CONDENSER

Dual Speed Axial Fan, Refrigerant pressure controlled

- 2 No of 525mm Diameter, 900 RPM low noise fan
- Air flow of 12400 m<sup>3</sup>/hr
- Power input : 0.5 kW / 1.6 A

Optimized Copper Tube Aluminum Fin Ambient Air Cooled Condenser



## HEAT EXCHANGER

Stainless Steel 316 Copper Brazed Plate Type

Efficient heat transfer with small footprint



## POWER REQUIREMENTS

Incoming Power : 3 PH 400V 50Hz  
Total Input Power : 9.7 kW  
Total Current : 20.2 A  
Recommended Breaker : 32A TYPE C/D



## CONFIGURATIONS

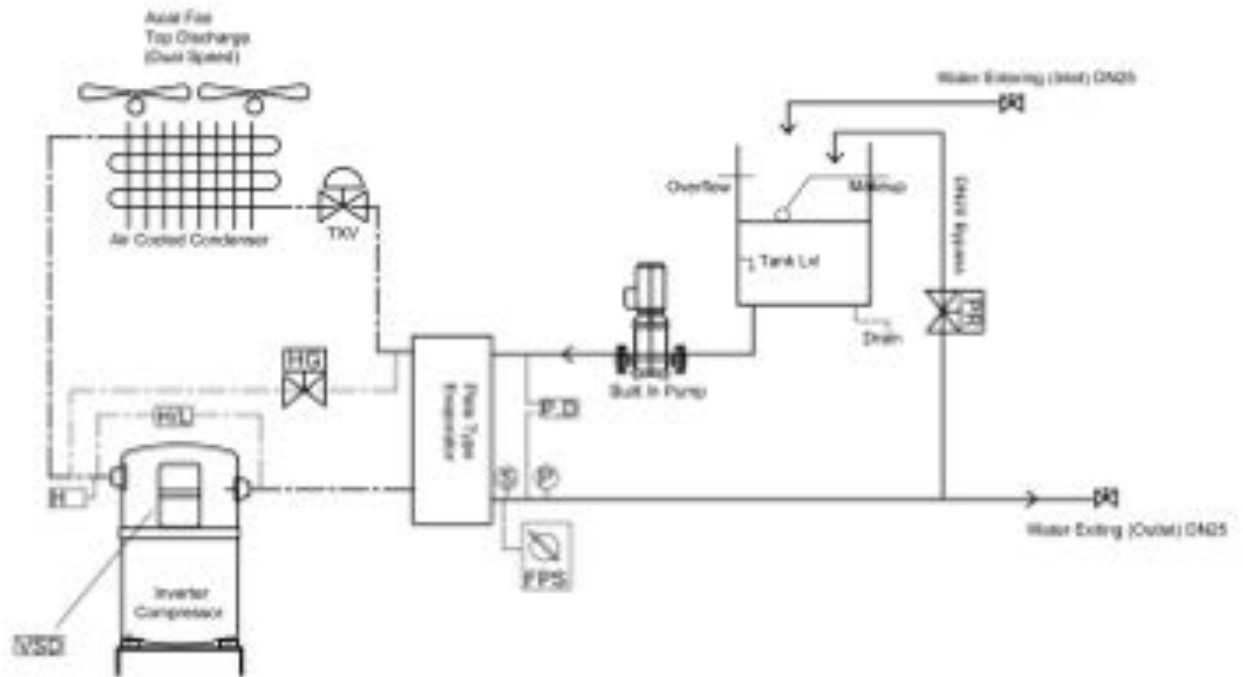
Adjustable Temperature Range : 7°C - 35°C  
Capacity Control : Infinite Step-less  
Inlet Connection : DN25 ( 1 Inch )  
Outlet Connection : DN25 ( 1 Inch )  
Length : 1505 mm  
Width : 850 mm  
Height : 1475 mm  
Weight : 360 kg



## SAFETY PROTECTION DEVICES

High Refrigerant Discharge Pressure Switch  
Low Refrigerant Discharge Pressure Switch  
Condenser Overload  
Water Pumps Overload  
Compressor Overload  
Anti Freeze Backup for Primary Sensor  
Pressure Differential Flow Switch  
Automatic over pressure relief valve

# CHILLER SCHEMATIC DRAWING

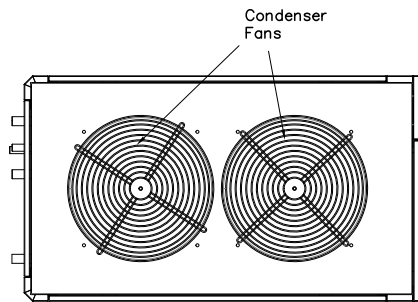
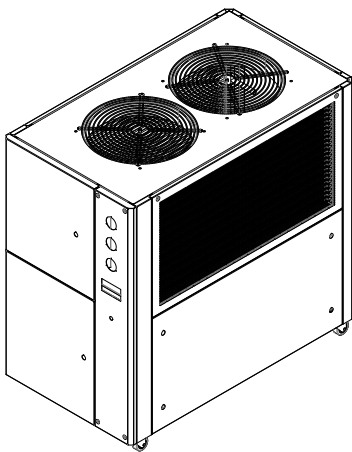
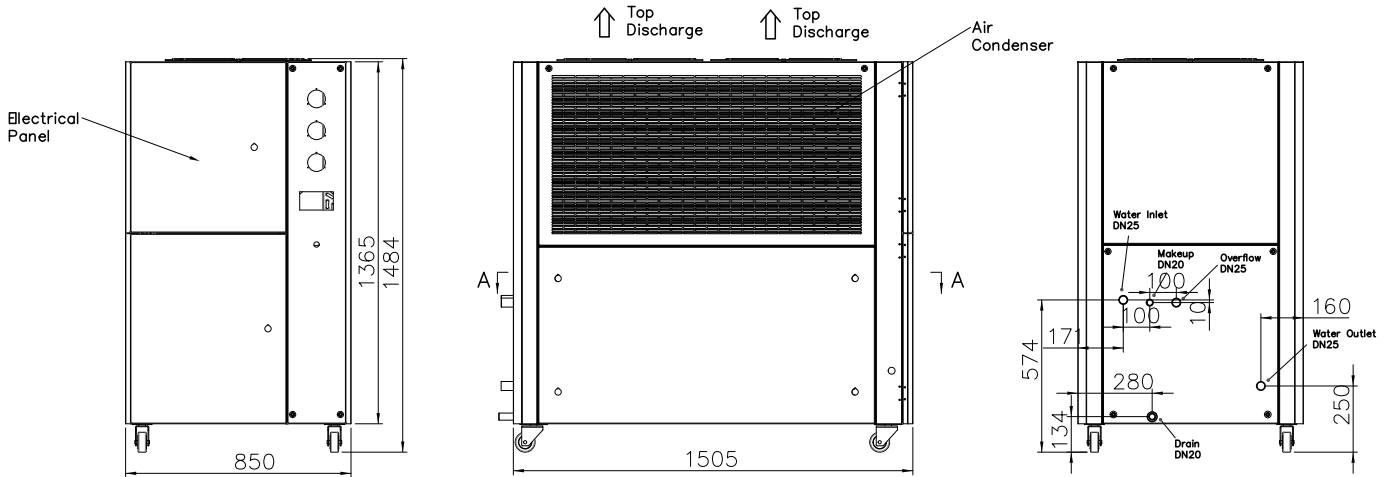


- Pressure Differential Flow Switch
- Refrigerant High / Low Pressure Switch
- Refrigerant High Pressure Switch ( Condenser Fan )
- Thermal Expansion Valve
- Fan Speed Controller
- Variable Frequency Drive

- Freeze Point Sensor
- Water Temperature Sensor (Digital)
- Water Pressure Gauge (Analog)
- Water Isolation Valve
- Water Over Pressure Relief Valve
- Hot Gas Bypass Solenoid Valve

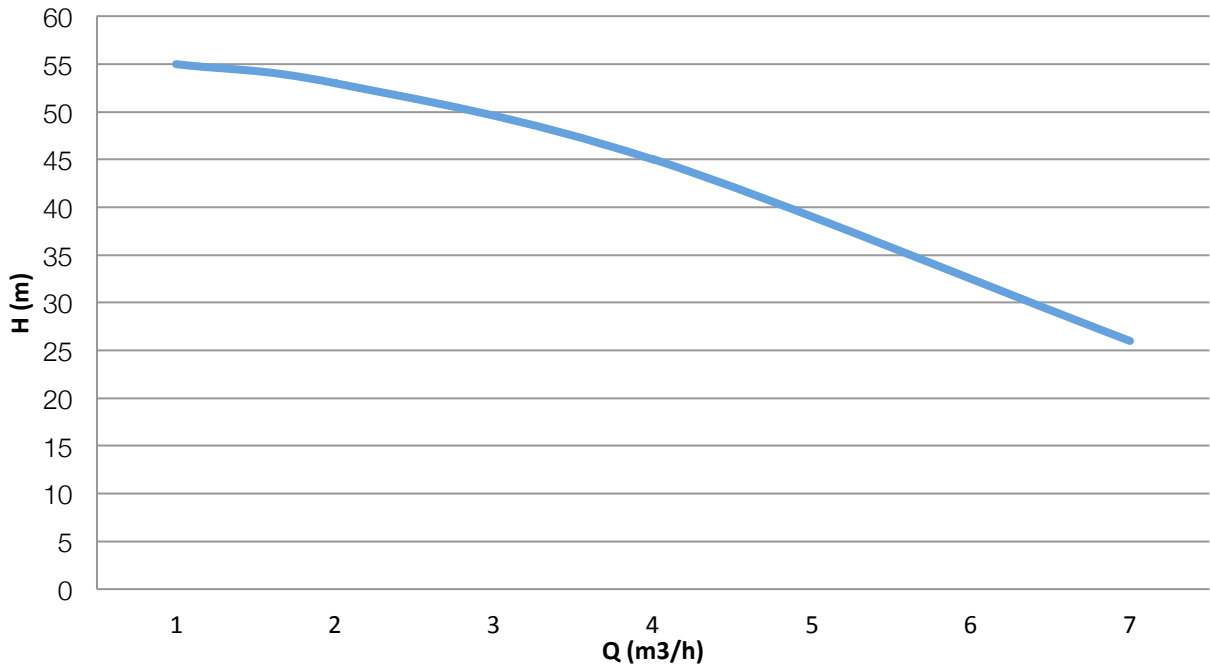
- Refrigerant Circuit
- Water Circuit

# CHILLER DIMENSIONAL DRAWING



# HYDRAULIC PERFORMANCE

SAE WP 4-60



SAE WP 4-60  
1.1 KW / 2.6 A

Q (m³/h)	1	2	3	4	5	6	7
H (m)	55	53	50	45	37	31	26

# NOTES :

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