



- 1 Cooling load
- 2 Chilled water pump (primary)
- 3 Chilled water pump (secondary)
- 4 Bypass valve
- 5 Supply header
- 6 Return header
- 7 Expansion tank

- 8 Hot water supply
- 9 Cooling tower
- 10 Cooling water pump
- 11 Blow down valve
- 12 Bypass valve
- 13 Make up water supply
- 14 Minimum tank capacity 1 m<sup>3</sup>

- 15 Hot water return
- 16 Hot water control 3 way valve
- 17 To drain channel

- Thermometer
- Pressure gauge
- Flow meter
- Strainer
- Valve
- Thermostat

#### General remarks on piping

- 1) Equipment and parts outside the area surrounded by the broken line are not supplied by SANYO/Carrier.
- 2) For pipe connections and diameter refer to the dimensional drawings and specification tables.
- 3) Ensure that chilled water flow rate, cooling water flow rate are in conformity with the standard value. If the chilled water flow rate sinks to under 50% of the standard value, the chiller will stop.
- 4) Position the chilled water pump, cooling water pump, hot pump and expansion tank correctly so that the chiller pressure does not exceed the set value.
- 5) For cooling water temperature control refer to the drawing "Cooling water temperature control method".
- 6) Separate chilled, cooling and hot water pumps should be provided for each chiller.
- 7) Provide a cooling water blow-down valve in the cooling tower inlet for water quality control.
- 8) Install a filter in the chilled water, cooling water and hot water pipes (10 mesh).
- 9) Install stop valves on the chilled, cooling and hot water inlet and outlet.
- 10) Provide a thermometer and pressure gauge at the chilled, cooling and hot water inlet and outlet.
- 11) Provide an air vent valve in each of the chilled, cooling and hot water line at point higher than the header.
- 12) Install drain valves at the lowest positions between absorption chiller and the stop valves of the chilled water, cooling water and hot water, and pipe them to the drain channel.
- 13) Provide an expansion tank at highest position in the chilled water line.
- 14) Install a cooling tower away from any exhaust gas outlet.
- 15) Connect the pipe from rupture disk to tank.
- 16) Install stop valves between the absorption chiller and stop valves of all inlets and outlets for chemical cleaning of the water circuit system.
- 17) When two way valve is used, there is the case that hot water outlet temperature is different from the specifications.