

ABSTRACT

REFRIGERATION CYCLE SYSTEM

A condenser (2), an electronic expansion valve (5),
an evaporator (6), and a motorized suction throttle valve
(8) are connected in series with a compressor. When a
5 capacity is increased, the electronic expansion valve (5)
is controlled to be in a throttling direction and the
motorized suction throttle valve (8) is controlled to be
in an unthrottling direction in association with the
control of the electronic expansion valve (5), and when a
10 capacity is decreased, the electronic expansion valve (5)
is controlled to be in an unthrottling direction and the
motorized suction throttle valve (8) is controlled to be
in a throttling direction in association with the control
of the electronic expansion valve (5). While a capacity
15 control of a compressor by a throttle control is been
carried out, such associated control is made between the
electronic expansion valve (5) and the motorized suction
throttle valve (8), realizing a fine temperature control
in a refrigerating machine without hunting.

Figure 1.

