



TEMPERATURE CONTROLLERS... PORTABLE CHILLERS... CENTRAL CHILLERS... PUMP TANK STATIONS... TOWER SYSTEMS...

SUBJECT: BLOWERS VS. FANS ON AIR-COOLED CHILLERS

#3-A-256 12/7/2001

All air-cooled **IK** and **MK** portable chillers through 10 tons are equipped with propeller type fans for moving the required condenser airflow. MK air-cooled portable chillers from 15-30 tons are equipped with centrifugal blowers.

Both the fan and blower units move approximately 1,000 cfm of air per ton of rated cooling capacity. It is important that adequate space be provided around the chiller to freely move this volume of air.

Both the fan and blower units will add heat back into the surrounding environment. Approximately 1.25 tons of heat will be added for every 1 ton of rated cooling capacity. Air-cooled chillers will add substantial cooling load to air-conditioned space. Be sure the air-conditioning system will handle the additional load provided by the chiller.

Both the fan and blower units are rated for 95°F ambient conditions. Above 95°F a loss of capacity will occur and the chiller may have difficulty running.



Fan unit

MK-10A shown



Blower unit

MK-30A shown

Units that use a fan for air movement cannot be ducted to non-conditioned or outside space without the addition of a supplemental air-handler.

Units that use a blower for air movement can be ducted to non-conditioned or outside space without the addition of a supplemental air-handler.