Closed-Loop Cooling System

Manufactured By GlobalTech Motor & Controls



GlobalTech Closed-Loop Cooling System

GlobalTech closed-loop cooling system consists of water to air heat exchanger mounted to the motor. Cool air is ducted from the blower outlet into the motor where it removes heat from the coils and is collected at the motor air exhaust side, the heated air enters the heat exchanger where it blows across the finned tubes through which cooled water is piped. The cooled air is then ducted into the blower inlet where the cycle begins again.

Make up air is constantly added to the system to keep the entire system above atmospheric pressure and to replace the air that is lost through leakage.

The cooling water can be re-circulated fresh water or glycol-water mixture. If re-circulation is utilized, the supply system must be capable of removing enough heat from the fluid to maintain the water inlet temperature below the maximum allowed.

Correct operation is monitored by a system that constantly measures the blower outlet pressure using a static pressure switch and system air flow using a differential pressure switch. The same system controls the start up cycle to ensure that the system is properly purged prior to motor energizing.

The system also includes water detectors that will cause either alarm or immediate motor shut down if water is present inside the cooling system and a temperature sensor that activates a warning light if the air temperature is too high.

This cooling system is available for both AC and DC motors from 500 hp to 5000 hp





