



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

SUBJECT: THREE PHASE MOTOR PROTECTOR /POWER MONITOR

FYI #281 9/9/05



Model DTP-3, Three Phase Motor Protector /Power Monitor.

**ECONOMICAL  
PROTECTION FROM  
POOR QUALITY POWER  
CONSISTENCY**

**PROTECTS  
THREE PHASE  
ELECTRICAL DEVICES  
FROM DAMAGE CAUSED  
BY SURGES, SAGS AND  
BLACKOUTS.**

**WHERE & WHY**

The **DTP-3 Three Phase Motor Protector** is an automatic voltage monitor and control for three-phase power equipment. It prevents costly component failure that can occur when incoming three-phase power surges, sags or drops a phase.

The DTP-3 voltage monitor can be installed in most **ADVANTAGE** equipment that uses three-phase power. The monitor takes up minimal panel space (approximately 5"H x 9"W) so it can be easily installed in most central cooling equipment and some portable equipment.

**ADVANTAGE** installs the DTP-3 to monitor the main incoming power supply protecting all the three-phase devices in the machine. For example, a 3-circuit Titan chiller with process, evaporator and standby pumps need only one DTP-3 monitor, yet it protects all 6 motors.

**HOW IT WORKS**

By continuously measuring the incoming line voltage, this monitor will detect voltage outside the tolerances that are set. Each of the three-line voltage pairs are checked for voltage level and phase-to-phase balance.

If the limits set are exceeded, the response timer begins counting. If the voltage remains outside the tolerance after the response time has elapsed, the DTP-3 will turn off its output relay which shuts down the machine and protects the three-phase devices.

You also have the flexibility to set the response timer - a short time may be desired for a quick response or long time may be desired to avoid nuisance tripping.

While the output is off, a delay timer is activated to avoid rapid re-starts.

**KEY FEATURES**

- **DIGITAL VOLTMETER** displays instantaneous line voltage for all 3 phase pairs.
- **AUTOMATIC VOLTAGE TESTER** adjusts from 160 - 600 volts.
- **ADJUSTABLE RESPONSE TIMER** (.1 to 20 seconds) prevents nuisance tripping.
- **DIGITAL DISPLAY** makes for easy viewing and operation.
- **FAULT MEMORY** records up to 25 fault causes.

