

3PHASES

Three-Phase Electronic Protector



IDEAL FOR:

Refrigeration and Ventilation, Air Conditioners, Engines, Elevators, Lights, Control Panels, Industrial Transportation, Pumps, etc.

BREAKERMATIC® 3PHASES is an electronic protector that supervises the voltage feed line of three-phased equipment.

It prevents damages in three-phase equipment disconnecting them automatically when the voltage line is too high or too low for the equipment to operate safely. It also prevents the engine to restart when the phase sequence has been inverted or when one of the phases is off.

BREAKERMATIC® 3PHASES/M (Intelligent Version), has a microprocessor that checks, besides the voltage and phase sequence, the unbalance between the line voltage, the frequency and the angle between the phases, disconnecting the output, in case they reach harmful levels for the equipment it's protecting. Protection against this unbalance is important in sensitive equipment, because the overheating of the engines increases rapidly when the phases are not in balance.

When normal conditions are re-established; both models will wait for an adjustable time that will be used to avoid the simultaneous start of several loads, and the premature start, in case of

3FASES/M INTELIGENTE

Three-Phase Electronic Protector with a Microprocessor



refrigeration equipment or any other pertinent applications.

BREAKERMATIC® 3PHASES has trimmers that adjust the voltage limits and the maximum allowed unbalance (in /M version) to the desired values; it also has a delay time adjuster.

It has in its frontal panel; different light signals conveniently located that show the condition of the line and of the timer. It can handle any load operated by an external **contactor**, by interrupting the control current. Most of the Three-Phased equipment have their own **contactor**. See the connection chart on the reverse.

BREAKERMATIC® 3PHASES is available in different models for Three-Phase, Three-wire systems in: 208, 220, 440 and 480VAC. Connection is conveniently performed through a high capacity line outlet covered by a security cap. The equipment is built with a high resistance, fire-retardant plastic material, approved for its use in electrical panels and equipment.

Check the technical specifications on the reverse for more details.

the best line of electronics protectors ...

MODELS:

PTE-208/PTE-440/PTE-480
PTE-208M/PTE-440M

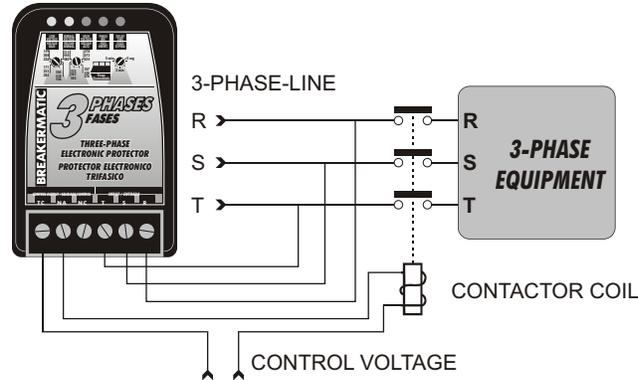
APPLICATION:

INDUSTRIAL

CATEGORY:

PROTECTOR

INSTALLATION:



PTE-208M / PTE-440M CHARACTERISTICS*		MINIMUM	TYPICAL	MAXIMUM	UNITS	TOLERANCES
Nominal Voltage Phase-phase (Vn)	PTE-208M		208-220		V r.m.s.	
	PTE-440M		440-480		V r.m.s.	
Output current @ cos = 0.5				5	A r.m.s.	
Switch type			Dry Relay			
Contact type			SPDT			
Minimum Frequency			45		Hz	
Phase angle range		91		148	degree	3%
Unbalance range		5		35	V r.m.s.	2%
Low voltage limits.	PTE-208M	165	190	215	V. r.m.s.	3%
	PTE-440M	360	410	460	V. r.m.s.	3%
High voltage limits.	PTE-208M	215	240	260	V. r.m.s.	2%
	PTE-440M	460	505	550	V. r.m.s.	2%
Delay-on-make time		10		300	sec.	5%
Response time			1		sec.	5%
Weight			260		gr.	+/-10
Operating temperature range		0		65	°C	

PTE-208, 440, 480 CHARACTERISTICS*		MINIMUM	TYPICAL	MAXIMUM	UNITS	TOLERANCES
Nominal Voltage Phase-phase (Vn)	\208		208		V r.m.s.	
	\440		440		V r.m.s.	
	\480		480		V r.m.s.	
Output current @ cos = 0.5				5	A r.m.s.	
Switch type			Dry Relay			
Contact type			SPDT			
Low voltage limits	\208	167	190	213	V. r.m.s.	2%
	\440	354	390	440	V. r.m.s.	2%
	\480	382	430	479	V. r.m.s.	2%
High voltage limits	\208	213	235	260	V. r.m.s.	2%
	\440	440	480	525	V. r.m.s.	2%
	\480	479	530	581	V. r.m.s.	2%
Delay-on-make time		20		300	sec.	20%
Response time		0.5		3	sec.	5%
Dimensions	Length		150		mm.	
	Width		82		mm.	
	Height		33		mm.	
Weight			260		gr.	+/-10
Operating temperature range		0		65	°C	

*Technical specifications will vary according to the model and can be changed without notice.