

computer MAX

Power Factor Relay:
Top features, accuracy and technology

Technical features

Power supply circuit	Supply voltage	230, 400, 480 Va.c. (according to the model)	
	Tolerance	-10...+15%	
	Consumption	4 VA (computer MAX 6) 6 VA (computer MAX 12)	
	Frequency	45...65 Hz	
Measuring circuit	Measuring voltage	230, 400, 480 Va.c. (according to the model)	
	Measuring current	.../ 5 A ±20%	
Output relays	Number of outputs	6 or 12 (according to the model)	
	Maximum voltage	230 Va.c.	
	Thermal current	10 A	
	Electrical endurance	5 · 10 ⁴ operations	
	Mechanical endurance	5 · 10 ⁶ operations	
Main features	Measurement of electrical parameters: cos φ, voltage, current, THDI, maximum values of U and I		
	"Phase selection" function	Selection of the power line phase where the C.T. is placed	
	Sequence programs	1.1.1.1 / 1.2.2.2 / 1.2.4.4 / 1.2.4.8 / 1.1.2.2	
	Connection delay time (TR)	4 ... 999 s	
	Security delay time (TS)	5 x TR	
	Test abilities	Correction Test & Harmonic Resonance Test	
	Alarms	Last relay configurable as alarm output	
		Compensation failure, over-compensation, over-voltage, over-current, C.T. not connected or open and line current below measurable value	
	Working conditions	Working temperature	-10...+50 °C
		Humidity	5...95% without condensation
Maximum altitude		2000 m	
Integrated control system	FCP (Program that minimises the number of operations)		
Safety	Insulation	Category III Class II	
	Protection degree	IP 52 mounted IP 31 not mounted	
Standards	IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-11		

Accuracy at your reach



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CIRCUTOR

Technology for energy efficiency

User-friendly and fully intuitive installation

Computer MAX provides the “phase selection” function, that allows the user choosing the power line phase where the measuring current transformer (C.T.) has been placed in. This option eliminates the difficulty in placing the C.T. in a specific phase of the power line.



TEST abilities

Computer MAX's display shows the behavior of the current, THDI and $\cos \phi$ at the manual connection and disconnection of capacitors.

- Correction Test
- Harmonic Resonance Test

High accuracy regulation

Computer MAX incorporates the **FCP** system (Fast Computerized Program), characteristic from **CIRCUTOR**, making a regulator with unique capabilities.

- Reduction of switching operations, so increasing the capacitor bank life span
- Increase of response speed, leading to higher energy savings
- Accurate measuring method, avoiding unnecessary connections / disconnections of capacitors
- 4-quadrant compensation, assuring counteraction of reactive energy both in consuming and generating processes

Accuracy at your reach

Measurement of basic electrical parameters

Computer MAX shows by display: $\cos \phi$, voltage, current, THD(I) and, besides, records in memory maximum values for voltage and current.



Voltage measurement



Current measurement



THD(I) measurement



Current maximum value



Voltage maximum value

Built-in alarms

Computer MAX automatically assigns the alarm conditions to the last output relay (relay 6 or 12), provided that this is not used for switching a capacitor step.

Indication by display or through relay output of following alarm conditions:

- Compensation failure
- Over-compensation
- Over-voltage
- Over-current
- C.T. not connected or open
- Line current below measurable value

