computer MAX-f

Fast power factor regulator (Static capacitor banks)

Description

The **computer MAX-f** series of regulators is within the fast regulator range, with a response time of 40 ms, adapted to real time compensation requirements. Main Features:

- Shows by display: cos φ, voltage, current, THD(*I*) and, besides, records in memory maximum values for voltage and current.
- 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 allows viewing in display the variation of cos φ, line current and THD(I), when manually connecting or disconnecting capacitor steps.
- 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.

Application

The **computer MAX-f** system has been designed to compensate installations that have a special load typology and require real time compensation, such as welding units, cranes, lifts and lifting equipment, smelters, hospitals, automotive industry or any other sector/unit that requires a real time compensation. Some of the advantages of this compensation system are as follows:

- Elimination of transients produced by the capacitor's connection.
- The lack of transients in the connection allows us to eliminate gaps, flicker and any other alteration generated by the connection's transient
- Limited switching operations, guaranteeing a longer working life for the unit
- Immediate response to the compensation request
- Lower wear of capacitors and switching elements, due to the elimination of transients and the total absence of mobile mechanical parts
- Eliminates or reduces the effects of voltage drops caused by reactive consumption peaks.

Features

Voltage circuit	**computer MAX 6**	**computer MAX 12**
Power supply	230, 400, 480 Va.c. (accor. to type)	
Tolerance	-10... +15 %	
Consumption	4 VA	64 VA
Frequency	45 ... 65 Hz	
Measurement circuit		
measuring voltage	230, 400, 480 Va.c. (accor. to type)	
Nominal current (I_n)	Current transformer I_n / 5 A	
Output relay	6	12
Maximum voltage	250 Vac	
Nominal current	4 A	
Electrical endurance	$5 * 10^4$ / $5 * 10^6$ opetarions	
Alarm relay		
Relay	Last relay configurable as alarm output	
Alarms	Compensation failure, over-compensation, over-voltage, over-current, C.T. not connected or open and line current below measurable value	
Build features		
Operating temperature	-10 ... +50 ºC	
Assembly	Panel	
Dimensions	144 x 144 mm	
Connection	Connection strip	
Degree of protection	IP 52 (front) / IP 31 (rear)	
Performance		
Measure electric parameters	Voltage, current, THD(*I*), and maximum values of *U* and *I*	
phase selection” function	Selection of the power line phase where the C.T. is placed	
Integrated control system	FCP / 4 quadrants	
Connection programs	1.1.1.1 / 1.2.2.2 / 1.2.4.4 / 1.2.4.8 / 1.1.2.2	
Test Function	Cos φ Correction Test & Harmonic Resonance Test	
T_r Connection delay	40 ms ... 2 s	
T_s Safety delay	40 ms ... 2 s	
Standards		
IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-11		

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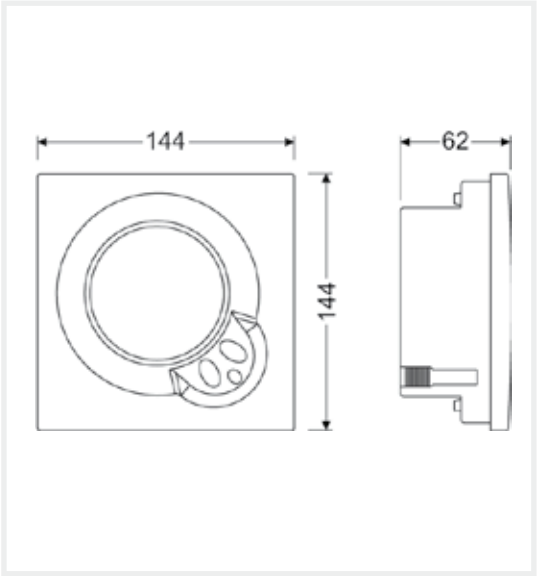
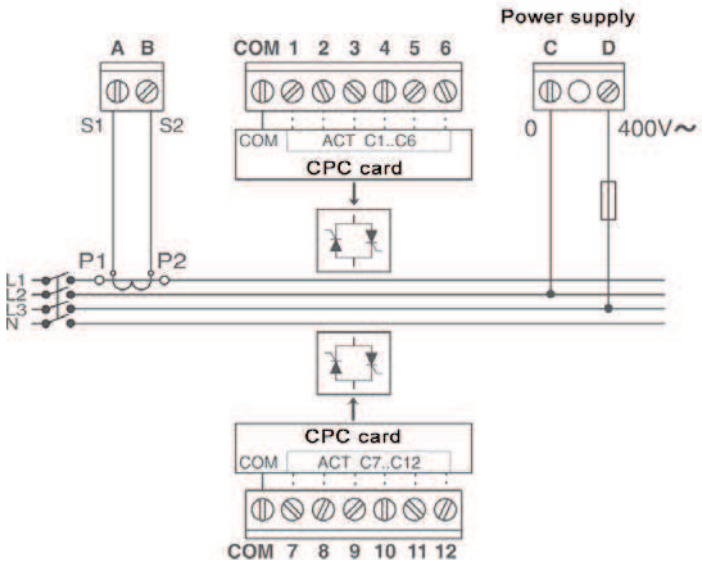
Dimensions



References

Power supply voltage	No. of steps	Alarm	Size	Type	Code
400 V a.c.	6	--	144 x 144	computer MAX 6f	R10851
400 V a.c.	12	--	144 x 144	computer MAX 12f	R10862

Connections



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