TRINITY

MAKING ENERGY MATTER

ACCUVAR

POWER FACTOR CORRECTION RELAY

The ACCUVAR controls the automatic system for correction of the power factor. It is a KVAR based controller which controls up to 15 capacitor banks optimally to achieve near unity power factor and also measures/calculates various electrical parameters. ACCUVAR is meant for use in three phase four wire electrical systems. The main features of the ACCUVAR are :

MEASUREMENT

ACCUVAR is three phase measuring controller, and hence need three CT inputs from the mains and also all the three phase and neutral connections. Need a CT input from the Capacitor Bank (for VAR mode operation). The parameters measured and displayed are all voltages, currents, power factor, all powers and all energies, average PF maintained since last reset and up to 15th ODD harmonics and THD figures for voltages and currents.

EASE OF INSTALLATION

CT primary and secondary of Mains as well as Capacitor, PT Gain, target PF are site programmable. ACCUVAR supports auto phase correction feature through programming mode with support of reference three phase capacitor bank. ACCUVAR has an autosense feature, which sense the sizes of the capacitor banks connected on each stage automatically with/without capacitor CT. No need to program bank sizes manually. It also supports ALARM on THD or PF value.

LOW CURRENT OPERATION

In FIFO/SFIFO control, operation requires 1% or 5% of the main load based on programming mode configuration.

CONTROL ACTION

ACCUVAR supports bigger font for Power Factor with inductive/capacitive symbol for LAG/LEAD indication. ACCUVAR supports setting of target PF on lag as well lead side for all type of control action. Out of all supported control action, VAR is intelligent control action.

TRINTIY ENERGY SYSTEMS PVT LTD

386, Savli G.I.D.C. Industrial Estate, Nr. Manjusar, At & Po: Alindra, Tal.: Savli, Dist. Vadodara - 391775 Gujarat, INDIA

Phone: +91-922 800 4452/53/54, Email: info@trinityenergy.co.in | www.trinityenergy.co.in

TECHNICAL DATA SHEET

PARAMETER			
TYPE		NAME	STATISTICS
INPUT		Supply	Three Phase and Neutral of 3P4W system
		Voltage	Direct Voltage Input : Up to 300V L-N Burden : 0.5 VA
		Current	Secondary Current Input : 5A or 1A Range of Reading : 5-5000A Burden : 0.4VA Overload : 5A CT = 6A RMS Continuous 1A CT = 1.2A RMS Continuous
		Power Supply	Self Powered from mains. Wide operating voltage SMPS : 80VAC - 480VAC, 45-65Hz
OUTPUT		Relay	Switching Voltage : Max. 250 VAC Switching Power : Max. 1000W Expected Mechanical Life : >10 X 10^6 switching operations Expected Electrical Life : > 4 X 10^6 switching operations @(Load=200VA, Cosφ=0.5)
MEASUREMENT	True RMS Basic Parameters	Voltage (Volts L-N: VRN, VYN, VBN)	Accuracy : 0.5% of Reading
		Current (Amps IR, IY, IB)	CT Ratio : Site Selectable Accuracy : 0.25% of Reading
		Capacitor Current	CT Ratio : Site Selectable Accuracy : 1.0% of Reading
		Line Frequency	45 to 65 Hz, Accuracy : 0.3% of Reading
	Power	Active Power (P)	Accuracy: 1.0% of Reading (For IPFI>0.9)
		Reactive Power (Q)	Accuracy: 1.5% of Reading (Between 0.5 Lag to 0.8 Lead)
		Apparent Power (S)	Accuracy: 1.0% of Reading
		Power Factor	Accuracy: 1.0% of Reading (IPFI≥0.5) Range of Reading: 0.05 to 1.00 Lag/Lead
	Energy	Total Active Energy (KWh)	Accuracy: 1.0s as per IS13779 Range of Reading: 0 to 9999999.9
		Total Apparent Energy (KVAh)	Accuracy: 1.0% of Reading Range of Reading: 0 to 9999999.9
		Total Reactive Energy (KVARh) (Lag & Lead)	Accuracy: 1.5% of Reading Range of Reading: 0 to 9999999.9
	Power Quality	upto 15th ODD Harmonics with THD for all Voltage	
		upto 15th ODD Harmonics with THD for all Current	
	Misc.	Cap. Bank KVAR	
MISCELLANEOUS	Dimensions	Bezel	144 x 144 mm
		Panel Cutout	138 X 138 mm
		Depth of installation	55 mm
		Operating temp	10ºC to 50ºC
		Weight	0.82 Kgs (Approx.)
		Min. Operating Current	1% or 5% of CT primary for FIFO/SFIFO mode