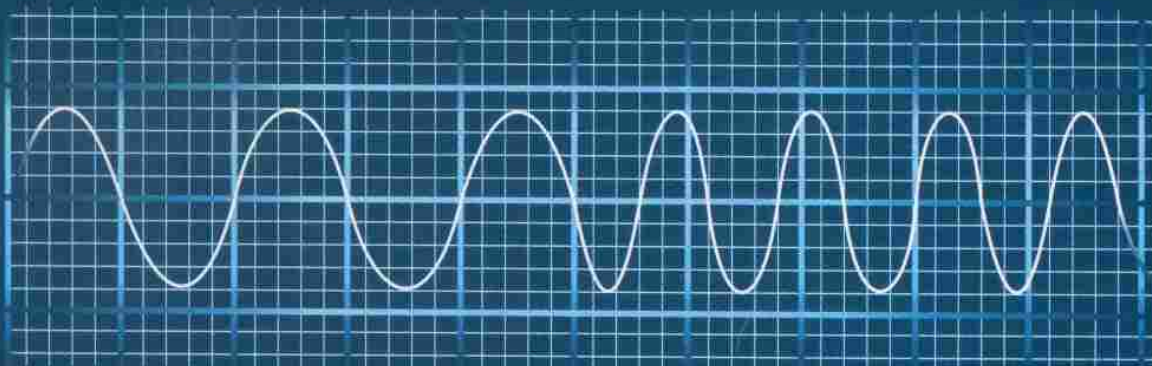


Feel The Pulse Of Your Power



ELECTRONIC FREQUENCY MONITOR

Series RM - 213 / RM - P13

INTRODUCTION

Monitoring the frequency of power supply is most essential while using the modern equipment. Any variation in supply frequency can affect performance of electric motor driven equipment, TV transmission stations, TV receivers. The supply frequency has to be constant to achieve desired performance.

The frequency of generating sets can change due to over / under loading. The Jayashree Electronic Frequency Monitor checks the frequency of output voltage of generator and gives a signal if the same is beyond safety limits.

In case of Slipring Induction Motor the starting operation can be correctly monitored by using the frequency of induced voltage in Rotor circuit. This Rotor frequency monitoring is very useful for sensing direction of movement in hoisting operation of O.H. cranes as a 'wrong motion detector'. The monitor can also be used as plugging switch for stopping Slipring Induction Motors to effect braking by applying voltage with reverse phase sequence.

PRINCIPLE OF OPERATION

The unit incorporates advance solid state circuitry with LSI / Microprocessor as heart. The frequency of input signal is compared with internally generated frequency reference and an effective output signal actuates output relay at preset value or gives a 4-20 mA signal. In case of Slipring Motor starting control, 3 no. different Relays are set to operate at different frequency. These relays are used to 'out' the rotor resistance as the speed increases.

CONSTRUCTION

The units are available in different types of enclosures for different models as specified below :

GENERAL SPECIFICATIONS

The different models described overleaf have general operating specifications as below :

Operating Temperature	0° to 70° C
Repeat Accuracy	Within ± 1% of set value
Output Contact Rating	6 A resistive @ 240 V AC.



SPECIFICATIONS FOR STANDARD MODELS

Model	RM - PI3I / XX*	RM - 213I DD / XX*	RM - 216I DD / XX*	RM - 213Z / XX*
Application	Diesel Genset, Electricity Board Supply UPS	Diesel Genset, Electricity Board Supply UPS	Diesel Genset, Electricity Board Supply UPS	Crane - Hoisting, Plugging, Starting
Circuit Technique	Discrete Component With Linear I C	Discrete Component With Digital I C	Microprocessor Based	Discrete Component With Linear I C
Supply Voltage	110 V / 240 V / 415 V AC	110 V / 240 V / 415 V AC	110 V / 240 V / 415 V AC	110 V / 240 V / 415 V AC
Enclosure	Plastic	M S	M S	M S
Dimensions (mm)	70 H x 60 W x 115 D	96 H x 96 W x 160 D	96 H x 96 W x 160 D	118 H x 218 W x 105 D
Protection Grade	I P 30	I P 30	I P 30	I P 30
Mounting	Channel Mounting	Flush / Panel Front	Flush / Panel Front	Projection / Wall
Sensing Range	45 - 55 Hz 350 - 450 Hz	45 - 55 Hz 350 - 450 Hz	45 - 55 Hz 350 - 450 Hz	45 - 55 Hz
Setting	Internal	External	Key Pad	Internal
Display	LED Red for Supply ON Green for Relay ON	3 Digit 7 Seg. Red Green for Relay ON	3 Digit 7 Seg. Red Green for Relay ON	LED Red for Supply ON Green for Relay ON
Contact Combination	1NO + 1NC, 2 C / 0	1NO + 1NC, 2 C / 0	1NO + 1NC	1NO + 1NC, 2 NO + 2NC
Signal	No Separate Signal Monitors supply voltage frequency.	No Separate Signal Monitors supply voltage frequency.	No Separate Signal Monitors supply voltage frequency.	From Rotor Voltage Max. 700 V.
Optional Features			4-20 mA Output for Process Control	
*DETAILS OF 'XX' : L : Low Frequency H : High Frequency HL : High & Low Frequency				

JAYASHREE ELECTRON PVT. LTD.

Regd. Office : 101, Prabodhan Apartment,
64 / 9 Erandwane, Pune - 411 004. (India)
Tel. : 020 - 5437736.
Fax : 020 - 5437253.

Works : EL - 34, 'J' Block,
MIDC Bhosari, Pune - 411 026.
Tel. : 020 - 7121295.
Fax : 020 - 7121529.

E-mail : jayashree.group@gems.vsnl.net.in
jayashreegroup@hotmail.com

Website : www.jayashree.com