# Technical Data Sheet **Platinum Series Sychroscope**



# Special Features

- Touch Screen Graphics display
- > Potential free Relay Contact.
- Easy Navigation

## Platinum Series Synchroscope



**ST SYNC** displays actual difference of voltage, frequency & phase angle between the BUS (Reference) voltage & generator (Incoming) voltage. When two alternators or sources are to be parallel it is necessary that their frequency & amplitude should be equal and phase difference be near to zero. When all these 3 parameters are within the required limits STSYNC indicates that the two sources can be paralleled.

## **Application Areas**

Synchronizing two different BUS inputs.

Synchronizing two different Generator inputs.

Synchronizing Generator & BUS inputs

#### **Product Features**

#### Touch Screen Graphics display

RISH SYNC has touch sensible color graphics LCD display with resolution of 320 x 240.

#### **Casing Material**

Thick Steel Sheet EDD grade CR material

#### **Graphical Analysis**

Graphical representation of Synchronization status.

Frequency delta & phase angle delta and voltage delta.

#### **Measured Parameters**

Measurement of Frequency difference (BUS & Gen.)  $\Delta f$ .

Measurement of Phase angle difference (BUS & Gen.)  $\Delta\theta$ .

Measurement of Voltage amplitude difference (BUS & Gen.)  $\Delta V$ .

BUS voltageb & BUS Frequency.

Generator Voltage & Generator Frequency.

#### Potential free relay contact

Potential free Relay contact for indicating sync status.

## **Technical Specifications:**

**Network Supported** 

Single phase / Three phase

**Accuracy** 

Phase Angle difference( $\theta$ )

Voltage Difference( $\Delta V$ ) ±1% of Nominal value

Frequency Difference( $\Delta F$ ) ±0.15 Hz

**Reference Conditions for accuracy** 

**Ambient Temperature** 

Input Voltage

23°C +/- 2°C

Rated Voltage ± 2%

**Input Voltage** 

Nominal input voltage (AC RMS)

Max continuous input voltage

**Overload Withstand** 

100 - 500 V

600 V

±2°

2x times of Nominal voltage for 1 second,

repeated 10 times at 10 second intervals

Frequency Measuring Range

Nominal input voltage burden

45Hz to 66Hz

< 0.2 VA approx.

**Auxilliary Supply** 

Auxilliary Voltage & Burden

100-500 V A C / D C , 45-65 Hz , 8VA

Display update rate

Response time to step input

1 sec approx.

**Applicable Standards** 

Safety

IEC 61010-1-2010, Permanently connected use

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IP for water & dust (IP 54 for Front) IEC60529

Pollution degree:

**Installation category:** 

2kV RMS for 1 minute Isolation between running

& incoming circuits

**Environmental Conditions** 

Other information

Operating temperature -10 to +55°C

Storage temperature -20 to +65°C

Relative humidity 0... 95% non condensing Warm up time Minimum 3 minute

Shock 15g in 3 planes

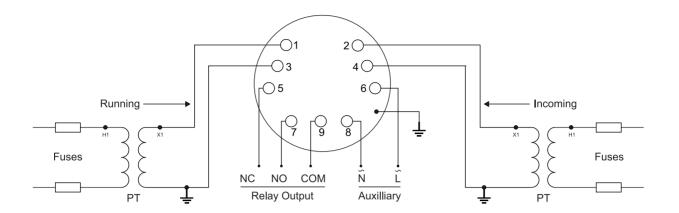
Vibration 10... 150.... 10 Hz, 0.075mm amplitude

0.05%/°C **Temperature Coefficient** 

**Relay Contact (For Sync Status)** 

**Contact Rating** 240 VAC, 5 A

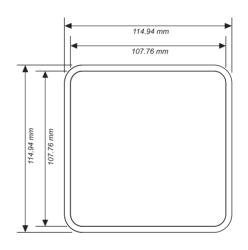
## **Electrical Connections**



# **Dimensional Details**



Side View



Front View

