

## Automatic Electronic Phase switcher

The HPS-321 is a microprocessor based single-phase unit of automatic throw-over circuit-breaker that performs monitoring of voltage presence & quality on phases. The switch is designed to supply an industrial/ appliance single-phase 220V/50Hz load from three-phase four-wire mains 3 x 415v+N in order to maintain uninterrupted power supply of essential single-phase loads and protect them against unallowable voltage variations in the mains. The HPS-321 provides a simple and correct solution to enhance electric power supply reliability of single phase loads and to protect them from unallowable voltage variations in the mains. By monitoring three phase voltage existence/quality the HPS-321 will select automatically the optimum phase and enables the single-phase load to be activated from it.

### Any power load is energized with HPS-321:

- Power should be less than 3.5 kW (16A), the load is energized from the HPS-321 directly;
- If power is more than 3.5 kW (16A), the HPS-321 controls contactor logic for single phase power.

### Features

- High trip threshold accuracy is provided.
- The option of phase priority bringing in/exclusion is available.
- Switching to the phase with unallowable parameters is not effected.
- Any power load can be energized.
- An automatic selection of the optimum phase.
- A high speed of switching is provided.
- Monitoring of voltage presence & quality on phases.
- Starting transient voltage drops ignoring is provided.
- Voltage hysteresis exists.
- There are four independent wide-ranged adjustments for basic parameters.
- There are three LEDs that indicate the phase the load is energized from and the fault-indicating LED.
- Due to digital technology the relay trip settings are adjusted quite accurate.
- A procedure of trip thresholds setting is very simple.
- A wide range of operating temperatures is provided.
- Mounted on a standard DIN-rail.
- Low power demand.
- Small dimensions and small weight of the relay.

**SUVIK ELECTRONICS PVT. LTD**

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**Technical Specifications**

Nominal Voltage,	220 V
Mains frequency,	45-55 Hz
Trip threshold for Vmin,	160-210 V
Trip threshold for Vmax,	230-280 V
Adjustable reset delay, T-on,	1-600 sec
Return delay range to priority phase, Tr,	5-200, sec
Fixed switch (de-energization) delay for Vmin,	12 sec
Switch delay to reserve phases,	0.2 < sec
Voltage hysteresis,	5-7 V
Accuracy,	+ 3 V
Max. switched current of output contacts, >,	16 A
Operating phase voltage,	400 V
Transient withstand,	450 V
Power consumption (under load),	1.0 < VA
Life of output contacts: Under load 16A, >, operations	100000
Protection degree :	IP 40
Operating temperature,	-25to55 °C
Storage temperature,	-45to70 °C
Weight, no more than,	0.200 Kg
Case dimensions,	52 X 88 X 65 mm

**Mounting 35 mm DIN rail**

**Mounting position arbitrary**

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