



“Asian - The indicating panel meters” provides a wide range of digital panel meters for accurate & reliable measurement of almost all electrical quantities with class 1.0 & 0.5 accuracy. The series contains various models of AC/DC versions for industrial / Commercial applications with high resolution display feature. Asian Series models are compact digital meters incorporated with the unique feature of onsite CT & PT ratio programmability.

## ASIAN SERIES OFFERS

- True RMS Measurement
- Accuracy class 0.5 and 1.0 for 5% to 120% of AMP Input range
- Available in AC/DC Variants
- On site CT/PT ratio programmability.
- On site connection configuration from 3 phase 3 wire & 3 Phase 4 wire and vice versa in three phase meters.
- High resolution LED
- Provides range of Auxiliary supply from 80V-300V AC
- Continuous Overload of 1.2 times the nominal value display 9999 count.
- 4KV insulation withstands capability
- Comply with international safety standards

### Single Phase Variants

1. Volt Meters
2. Ammeters
3. Frequency meters

### Three Phase Variants

1. Volt Meters
2. Ammeters
3. Power factor meters
4. Active power meters
5. Meters (kWh)

### DC Variants

1. Volt Meters
2. Ammeters

## APPLICATION SUMMARY

- Laboratory test benches.
- Industrial automation
- Power control panels
- Generator control panels
- Substation panels
- Co-generation
- Switch board instruments
- Power distribution Panels
- Sub Stations, Machine Control
- Motor Control, Center Panels

## TECHNICAL SPECIFICATION

### Electrical Mechanical

|                               |           |
|-------------------------------|-----------|
| Auxiliary supply              | 90-270VAC |
| Burden on aux supply          | <3VA      |
| Burden on measuring terminals | 0.5 VA    |

### Measuring Ranges

|                            |         |
|----------------------------|---------|
| AC Volt Meter              | 0-63.5V |
| (Single Phase/Three Phase) | 0-110V  |
|                            | 0-240V  |
|                            | 0-415V  |

|                            |         |
|----------------------------|---------|
| AC Ammeter                 |         |
| (Single Phase/Three Phase) | 1A/5A   |
| Frequency Meter            | 40-70Hz |
| Power Factor Meter         |         |
| (Single Phase three Phase) | 0-415V  |
| (3 Ph Active/Reactive)     | 1A/5A   |

|                            |          |
|----------------------------|----------|
| Multi Function Meter       | 0 to 360 |
| (Single Phase/Three Phase) |          |

### Energy Meter

|                                   |                          |
|-----------------------------------|--------------------------|
| Three Phase Active / Reactive     | Voltage & Current values |
| Input Voltage (3Ph 3 wire/4 wire) | 0-415V                   |
| Input Current                     | 1A/5A site selectable    |

### Mechanical Size

|              |                |
|--------------|----------------|
| Panel cutout | 96x96mm        |
| Enclosure    | 92x92mm        |
| Terminals    | Poly carbonate |
| Weight       | Tag screw      |
|              | <300gms        |

### Environmental

|                         |                              |
|-------------------------|------------------------------|
| Temperature             | -10° C to +50° C (Operating) |
|                         | -25° C to +70° C (Storage)   |
| Humidity                | 95% non- condensing          |
| Temperature Coefficient | 0.01% per C Tropical         |

### Display

|             |      |
|-------------|------|
| Digit Range | 9999 |
|-------------|------|

|                    |                                 |
|--------------------|---------------------------------|
| Display Resolution | 0.001 auto decimal              |
|                    | 0.000001 (For Energy Meter)     |
|                    | auto decimal and LED indication |
| Digital Height     | 14.2 mm / 7 Segments            |

### DC Voltmeter

|                       |
|-----------------------|
| 0-200mV, 0-2V, 0-20V  |
| 0-200V, 0-75V, 0-750V |

### DC Ammeter

|                                 |
|---------------------------------|
| 0-200mA, 4-20mA                 |
| 0-2A, 0-5V, 0-20A (with Shunt)  |
| 0-9999A (External Shunt) 0-75mV |

### Protection Class

|                           |
|---------------------------|
| IP 20 as Per IEC 60529    |
| (for Terminals)           |
| Device Safety             |
| Insulation Level          |
| IP 50 as Per IEC EN 60529 |
| As per IEC 61010          |
| 4.0 KV                    |

## DIGITAL AVF METER

### SPECIFICATION GUIDE

| Models  | Single Phase |   |   |    | Three Phase |   |     |    | DC |   |
|---------|--------------|---|---|----|-------------|---|-----|----|----|---|
|         | V            | A | F | PF | V           | A | KWh | kW | A  | V |
| AM 2121 | ✓            |   |   |    |             |   |     |    |    |   |
| AM 2123 |              | ✓ |   |    |             |   |     |    |    |   |
| AM 2124 |              |   | ✓ |    |             |   |     |    |    |   |
| AM 3021 |              |   |   | ✓  |             |   |     |    |    |   |
| AM 2041 |              |   |   |    | ✓           |   |     |    |    |   |
| AM 2043 |              |   |   |    |             | ✓ |     |    |    |   |
| AM 3320 |              |   |   |    |             |   | ✓   |    |    |   |
| AM 1123 |              |   |   |    |             |   |     |    | ✓  |   |
| AM 1121 |              |   |   |    |             |   |     |    |    | ✓ |
| AM 4032 |              |   |   |    |             |   |     | ✓  |    |   |

Note :- Auxiliary Supply Required Except Ammeter & Voltmeter

### DESCRIPTION

Multifunction Meters are based on 32Bit, 100Pin Microprocessor, with 24 Bit Six Channel Sigma Delta Front end Analog to Digital Converters. The Measurement accuracy of Class 0.5 can be achieved on the practical range of operation. The TVM (Trivector Meter) are 4 Quadrant True RMS Meter and have advanced feature of Maximum Demand and RTC Based Load Surveys.

### SPECIAL FEATURES:-

- 32Bit, 100 Pin, Processor
- SMT Technology
- Various Choice of Bright FND/LCD STN display
- 2-4 keys for programming input
- Higher Class of Accuracy
- 2 Quadrants to 4 Quadrants
- Provision of RTC based Load Survey
- RS 232/RS 485 interface
- MODBUS Protocol
- Integration of 1 or 2 Potential free contacts

### APPLICATION:-

- Industrial Control Panels
- Power Project Control Panels
- Energy Auditing and Data Logging
- Industrial Automization
- Smart Building Control Panels
- Energy Managing and Monitoring Equipments
- Testing Laboratories
- Diesel Generator Control Panels



Asian Meter and metering system comes from a state of art & metering company following ergonomics, our philosophy is to offer high quality, innovative products at reasonable price. MF Range is a 96\*96 panel mounted polyphase digital meters are suitable for various applications like high voltage and low voltage switchgear panels, control and relay panels and online energy monitoring systems (SCADA/EMS/DAS)

## FEATURES

- Compact and easy installation
- CT/PT Ratio Programmable
- Precise Metering
- Easy to read display
- Better accuracy & reliability than analog meter
- Color- coded terminal board label helps ensure accurate wiring
- Safeguard access to setup parameters with unique password protection
- Accuracy class : 0.5 and 1.0
- True four quadrant metering
- Metrology LED output configurable for active, reactive and apparent energy
- Accuracy readings even at very low current
- Favourite page can be selected
- Reverse polarity indication
- Support of MODBUS RTU on RS 485 / RS 232



|   | Am2081 | Am4081 | Am5011 | Am4011 |
|---|--------|--------|--------|--------|
| Use on LV and HV system   | ✓      | ✓      | ✓      | ✓      |
| Accuracy of the meter class 1.1/1.5   | □      | □      | □      | □      |
| Instantaneous & rms values  |        |        |        |        |
| Current, Total, per phase & Neutral   | ✓      | ✓      | ✓      | ✓      |
| Voltage, Average, Phase to Neutral & Phase  | ✓      | ✓      | ✓      | ✓      |
| Frequency, to Phase   | ✓      | ✓      | ✓      | ✓      |
| Active power (W) Total & per Phase  |        | ✓      | ✓      | ✓      |
| Reactive power (Var) Total & per phase  |        | ✓      | ✓      | ✓      |
| Apparent power (VA) Total & per phase   |        | ✓      | ✓      | ✓      |
| Power factor Total & per phase  |        | ✓      | ✓      | ✓      |
| RPM, Between V & I, Ph1, Ph2, Ph3<br>For generator only, speed calculated on generator voltage output and number of machine poles | ✓      | ✓      | ✓      | ✓      |
| Energy values   |        |        |        |        |
| Active (Wh)   |        |        | ✓      | ✓      |
| Reactive (VARh)   |        |        | ✓      | ✓      |
| Apparent energy (Vah)   |        |        | ✓      | ✓      |
| Export/Import   |        |        |        |        |
| Power quality measurement   |        |        |        |        |
| Total harmonic distortion % current, voltage, per phase   |        |        |        | ✓      |
| Other measurements  |        |        |        |        |
| Run hours Operating time for meter in hours   | ✓      | ✓      | ✓      | ✓      |
| Load hours Operating time for load in hours   |        | ✓      | ✓      | ✓      |
| INTR Number of interrupts   | □      | □      | □      | □      |
| Communication   |        |        |        |        |
| RS-485 port   | □      | □      | □      | □      |
| Modbus protocol   | □      | □      | □      | □      |
| <div> <span>✓ By Default</span> <span>□ Optional Features</span> <span>— Not Available</span> </div>                              |        |        |        |        |

## TECHNICAL FEATURES

|                             |  |
|-----------------------------|--|
| Family                      | Am5011   |
| Rating/ Phase / Class       | 3x230V, 3Ph, 3X -/5Amp, CI-1, 50Hz                 |
| Size                        | 96x96  |
| Display Type                | FND Display  |
| CT Ratios                   | Password Protected Field Programmable CT           |
| Auxiliary Supply            | 230Vac/ 24V Dc                                     |
| Power Supply                | Switch Mode Power Supply with Dual Isolated Output |
| Parameters                  | Auto & Manual Scroll                               |
| 1                           | Vr/Vy/Vb   |
| 2                           | Vry/Vyb/Vbr  |
| 3                           | Ir/Iy/Ib   |
| 4                           | Frequency in Hz                                    |
| 5                           | Pfr/ Pfy/Pfb/Pf                                    |
| 6                           | KWr/KWy/KWb/KW                                     |
| 7                           | KVAr/r/KVAry/KVArb/KVAr                            |
| 8                           | KVAr/KVAy/KVAb/KVA                                 |
| Annunciators                | Customized on LCD                                  |
| Customization of parameters | Single Line Customized FND is optional             |

The kVR Controller is used to control the demand of a system. The Applicant is use to secure the system at overload conditions and also helps in saving the MD penalties

## UNIQUE FEATURES

- Programmable kVR Setting
- Programmable CTR Ratio
- Password Protected
- Alarms & Controls
- Relay Outputs
- Meter Reset Option
- Bright Three Line FND / LCD Display

## RPM METER AM-2500 - AM2501

**AM-2500** Ready to use display solution for all the analog data coming from your 4-20mA sensors.

**AM-2501** Ready to use display solution for all the analog data coming from your 0-10mA sensors.

Accuracy: Class 1 & 0.5. Password protected programming. 0V value can be programmed from 0 to 9999K. 10V value can be programmed from 0 to 9999K. Lower value to higher value & vice versa can be set using password protected programming. Optional programmable relay and tripping time up to 180 seconds. Auto-scanning time less than 1 seconds. Data logging facility can also be provided as Optional. Aux: 90-300V AC. Sunlight readable display for mounting outdoors and viewing indirect sunlight Metering Standard: IEC 62053-10

## HOUR METER AM-2100

Displays Run Hour of any system.

Accuracy: 1 sec.

Resolution: 1minute or 1hour(i.e HH.MM or HHHH) .

Relay Output for alarm can be provided.(optional)

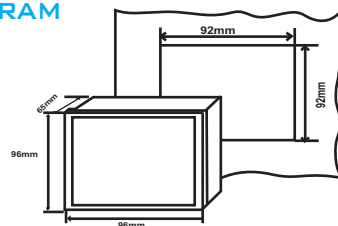
Metering Standard: IEC62052-11



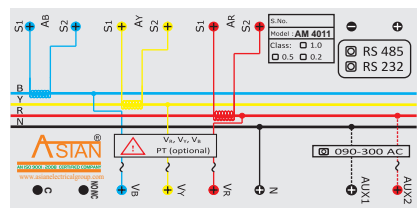
## SPECIAL FEATURES

Sampling Rate  
Communication Rs485  
Protocol  
Relays  
Potential free Contacts  
Controlling Triacs  
Microprocessor  
Memory Load Survey  
Password  
Protection  
Error Display  
RTC  
IS  
PCB  
IP  
Insulation

## CUTOUT DIAGRAM



## CONNECTION DIAGRAM





The Asian Energy Meter series are easy to operate, compacting size, cost effective meters that offer the basic measurement capabilities required to monitor an electrical installation.

Characterized by their rugged construction, compact size, and low installation costs, these state-of-the-art energy meters are ideal for control panel, residential apartments, malls and housing society

The Asian Energy Meter series are available in four different versions to better fit specific applications:

- AM Series      - AM 3320, AM 3310
- AM Series      - AM 3041, AM 3040

## APPLICATION

- Single Source Metering - Dual Source Metering - Separate Load Control Limits for EB & DG

## ENERGY SAVINGS

- Measure efficiency, reveal opportunities and verify savings.
- Sub-bill tenants for energy costs.
- Allocate energy costs to departments or processes.
- Reduce peak demand surcharges.
- Reduce power factor penalties.
- Leverage existing infrastructure capacity and avoid over- building.

## MAIN CHARACTERISTICS ACCURATE METERING

The Meter Conforms To Accuracy Class 1.0/0.5

## EASY TO READ DISPLAY

The bright, alphanumeric, 15mm high LED display provides 2 lines for measurement values with 4 digits per line. The display auto-scales for Kilo, Mega and Giga values. Auto scrolling mode allows for easy reading.

## QUICK AND EASY INSTALLATION

Setup is done through the front panel keys. Direct connection for metering voltage inputs up to 480 Vac L-L.

## COLOR-CODED TERMINAL BOARD LABELLING

The color-coded label on the terminal board helps ensure accurate wiring.

## SECURE SETTINGS

Safeguard access to setup parameters with unique password protection.

A key pad lock lets you display a user selected page by default.

## TECHNICAL SPECIFICATION

### Electrical

|                      |                                    |
|----------------------|------------------------------------|
| Connection type      | CT / PT operated                   |
| CT /PT Programming   | Primary/Secondary (1/5A)           |
| Wiring configuration | 3 Phase 3/4 wire                   |
| Voltage range        | 240V (L-N), 110V (L-L), 63.5 (L-N) |
| Aux. Power Supply    | 80-240V                            |
| Current range        | 1-1.2A, 5-6A                       |
| Accuracy Class       | 0.5, 1.0                           |
| Main frequency       | 50 Hz + 5%                         |
| Burden               | As per standards                   |

### APPROVALS

|           |                  |
|-----------|------------------|
| Standards | IS13779, ISI4697 |
|-----------|------------------|

### MECHANICAL

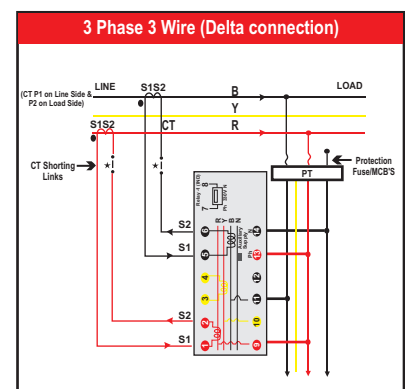
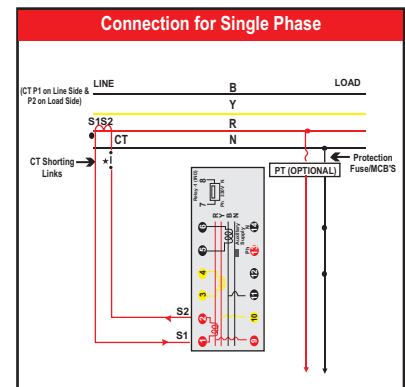
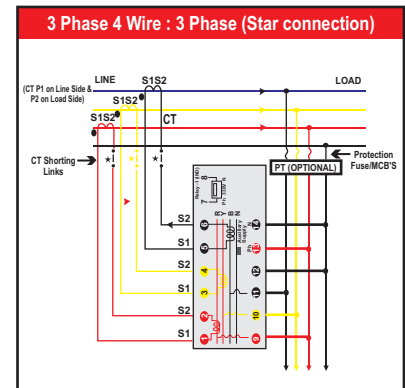
|                    |                     |
|--------------------|---------------------|
| Dimensions (WXHxD) | 96x96x65mm          |
| Cut out size       | 92x92mm             |
| Weight             | 0.45+0.1kg          |
| Terminals          | Comb icon connector |
| Max conductor size | 2.5mm               |

### ENVIRONMENTAL

|                    |  |
|--------------------|--|
| Ingress protection | IP 50  |
| Insulation class   | 4kVRMS 50 Hz   |
| Impulse withstand  | 6kV  |
| Temperature        | -100C to 600C (operating)<br>-250C to 700C (storage) |
| Humidity           | 95% non-condensing                                   |
| Flame retardation  | UL 94 VO   |

### FEATURES

|               |                                      |
|---------------|--------------------------------------|
| Favorite page | Configurable through keypad          |
| CT/PT primary | Configurable in field through keypad |
| Communication | Rs485                                |
| Baud rate     | 1200-19200bps (selectable)           |
| (MODBUS port) | Configurable in field through keypad |





RS 485 / RS 232 Converter



RS 485



RS 485



RS 485



RS 485

## DESCRIPTION

Data Loggers are intelligent with networking capabilities on RS 485 Bus and MODBUS Protocols. Additionally the meters have an inbuilt memory and RTC to record the stamp of electrical parameters on a specific date & time. Energy Audit Software "Tarang" can be used to download the data from the meters memory to laptop and can be utilized for data analysis and control.

## SPECIAL FEATURES

- Compact with integration of external CT/PT Inputs
- Customized recording of parameters through RS 485 Modem
- Choice of recording intervals - High accuracy RTC - User interactive "Tarang" Software

File Edit View Help

### ASIAN ELECTRICAL & ELECTRONICS

A-1/8, Sec B1, Tronics City, UPSIDC Ind. Area, Loni Ghaziabad

AN ISO 9001  
CERTIFIED COMPANY

Print Date : 18-7-2013

|      |      | KW   |      |      |      | KVAr   |        |        |        | System Parameters |     |         |     |
|------|------|------|------|------|------|--------|--------|--------|--------|-------------------|-----|---------|-----|
| Date | Time | Kw R | Kw Y | Kw B | Kw C | KVAr.R | KVAr.Y | KVAr.B | KVAr.C | KWH               | CTR | PI Sign | PF  |
| OFF  | OFF  | OFF  | OFF  | OFF  | OFF  | OFF    | OFF    | OFF    | OFF    | OFF               | OFF | OFF     | OFF |
| OFF  | OFF  | OFF  | OFF  | OFF  | OFF  | OFF    | OFF    | OFF    | OFF    | OFF               | OFF | OFF     | OFF |
| OFF  | OFF  | OFF  | OFF  | OFF  | OFF  | OFF    | OFF    | OFF    | OFF    | OFF               | OFF | OFF     | OFF |
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| OFF  | OFF  | OFF  | OFF  | OFF  | OFF  | OFF    | OFF    | OFF    | OFF    | OFF               | OFF | OFF     | OFF |
| OFF  | OFF  | OFF  | OFF  | OFF  | OFF  | OFF    | OFF    | OFF    | OFF    | OFF               | OFF | OFF     | OFF |
| OFF  | OFF  | OFF  | OFF  | OFF  | OFF  | OFF    | OFF    | OFF    | OFF    | OFF               | OFF | OFF     | OFF |

Rs. 485 Multi Point Communication (MODBUS)

9 object(s)



## ANALOG PANEL METER



The DIN series consists of meters in sizes of (1) 72 x 72 (2) 96 x 96 (3) 144 x 144 mm. The wide view meters are in sizes of 2½, 3½ and 4½ sizes. Meters M065 having round barriers.

These meters are of moving iron or moving coil type and their variants. All these meters have inter changeable dial, Protection cover, different scale pattern and suppressions. These are type tested as per 1248. The normal class of accuracy is 1.5 (1.0 optional).

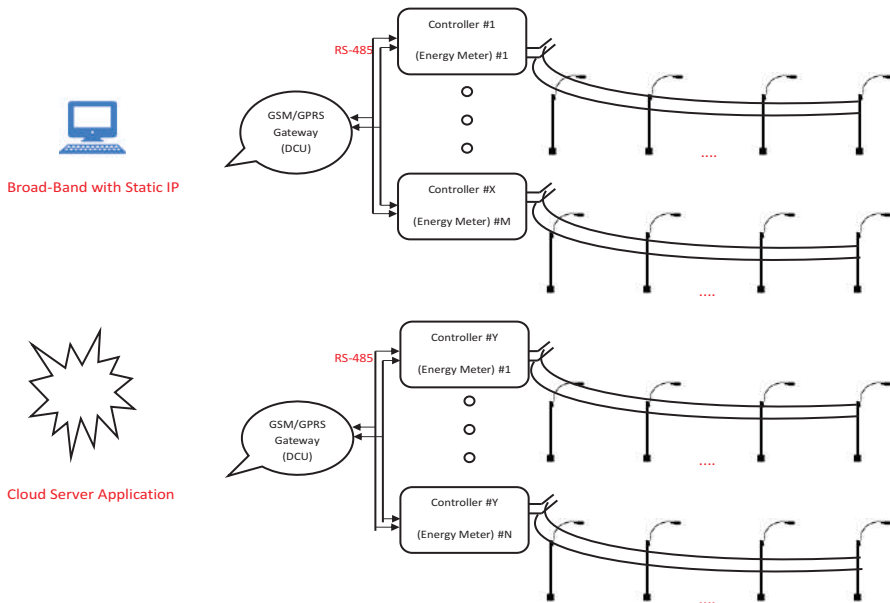
## MOVING IRON / COIL / CIRCULAR SCALE / DOUBLE SCALE

- Oil damped movement with recessed jewels
- Shock & vibration Proof
- Very High torque to weight ratio
- Shielded movement
- As per is standard
- Range 50mA to 100A (Direct) & CTR / 5A or 1A & 50V - 600V/PTR

## SPECIFICATIONS:

### Network Elements:

- 1) Lighting Management Server Software
- 2) GSM/GPRS Gateway
- 3) Controller (Energy Meter)
- 4) Wired Communication (RS-485) among Meters and GSM/GPRS MODEM
- 5) Broad-Band Internet Connection with Static IP or else Cloud Server Account



## WORKING PRINCIPLE:

Lighting Management Server Software (LMSS) will monitor the entire network of Street Lights. As depicted in the above diagram, group of Street Lights will be connected to a Controller (Energy Measuring and Controlling Meter). Group of Controllers will be connected to GSM / GPRS Gateways (DCUs) through RS-485 wired bus. All these GSM / GPRS Gateways will be communicated to a Remote Server where the LMSS is installed either in local pc (Must have Internet with Static IP) or Cloud Server. All the Street Lights will be controlled and monitored through a Controller. All the details of Energy of grouped Street lights will be available with Controllers, Controllers will pass this information to Servers through Network Elements like Gateways etc. All Street Lights Configurations can be done in LMSS Terminal. Street Light ON and OFF timings can be programmed in LMSS. The following are the Technical Specifications.

### Technical Specifications of Controller

#### Technical Specifications Gateway:

| S.No | Parameter            | Details                     | Remarks |
|------|----------------------|-----------------------------|---------|
| 1    | AC-DC Power Adaptor  | 5V, 2A                      |         |
| 2    | GSM/GPRS             | 2G and 3G                   |         |
| 3    | Display              | LCD with Backlit            |         |
| 4    | Keypad               | 4x3 Keypad                  |         |
| 5    | LEDs                 | Status Indication (N/W etc) |         |
| 6    | Meters Side COM Port | RS-485                      |         |
| 7    | Server Side COM Port | GSM/GPRS                    |         |

| S.No | Parameter                   | Details                    | Remarks |
|------|-----------------------------|----------------------------|---------|
| 1    | Supply Voltage              | 240Vac (-40% to +30%)      |         |
| 2    | Current Basic               | 10A                        |         |
| 3    | Current Maximum             | 60A                        |         |
| 4    | Current Rating              | 10A-60A                    |         |
| 5    | Class of Accuracy           | Class 1.0                  |         |
| 6    | Starting Current            | 0.2% of Basic Current @UPF |         |
| 7    | Rated Frequency             | 50Hz +/- 5%                |         |
| 8    | Power Factor Range          | 0 to 1 (Lagging & Leading) |         |
| 9    | Power Loss                  | As per IS-13779            |         |
| 10   | Resistance to Surge Voltage | As per IS-13779            |         |
| 11   | Temperature                 | As per IS-13779            |         |
| 12   | Power Consumption           | As per IS-13779            |         |
| 13   | Load Control                | Through Latching Relay     |         |
| 14   | Clock Accuracy              | +/- 5% at 25 C             |         |
| 15   | Load ON/OFF Control         | Through Serial Port        |         |
| 16   | Enclosure Material          | Engineering Plastic        |         |
| 17   | Degree of Protection        | IP51                       |         |
| 18   | Weight                      | 600 grams (approx)         |         |
| 19   | Display                     | LCD with Backlit           |         |
| 20   | COM Port to Gateway         | RS-485 (Wired)             |         |

Lighting Management Server Software: Storage on local PC with Internet Connection with Static IP or Cloud Server Space



## ASIAN INDOOR TAPE WOUNDED RING TYPE LOW TENSION CURRENT TRANSFORMERS



| RATIO   | APPROXIMATE DIMENSION IN MM |         |            | RATED BURDEN<br>IN VA | ACCURACY<br>CLASS |
|---------|-----------------------------|---------|------------|-----------------------|-------------------|
|         | I.D.(A)                     | O.D.(B) | HEIGHT (C) |                       |                   |
| 10/5    | 30                          | 65      | 45         | 5                     | 1                 |
| 20/5    | 30                          | 65      | 45         | 5                     | 1                 |
| 25/5    | 30                          | 65      | 45         | 5                     | 1                 |
| 30/5    | 30                          | 65      | 45         | 5                     | 1                 |
| 40/5    | 30                          | 65      | 45         | 5                     | 5                 |
| 50/5A   | 30                          | 65      | 45         | 5                     | 5                 |
| 60/5A   | 30                          | 65      | 45         | 5                     | 5                 |
| 75/5A   | 30                          | 65      | 45         | 5                     | 5                 |
| 100/5A  | 30                          | 65      | 45         | 5                     | 1                 |
| 100/5A  | 30                          | 65      | 45         | 15                    | 1                 |
| 150/5A  | 30                          | 65      | 45         | 5                     | 1                 |
| 150/5A  | 30                          | 65      | 45         | 15                    | 1                 |
| 200/5A  | 45                          | 85      | 33         | 10                    | 1                 |
| 200/5A  | 45                          | 85      | 38         | 15                    | 1                 |
| 250/5A  | 45                          | 85      | 33         | 10                    | 1                 |
| 250/5A  | 45                          | 85      | 38         | 15                    | 1                 |
| 300/5A  | 55                          | 95      | 30         | 10                    | 1                 |
| 300/5A  | 55                          | 95      | 35         | 15                    | 1                 |
| 400/5A  | 65                          | 100     | 30         | 15                    | 1                 |
| 500/5A  | 65                          | 100     | 30         | 15                    | 1                 |
| 600/5A  | 65                          | 100     | 30         | 15                    | 1                 |
| 800/5A  | 105                         | 135     | 30         | 15                    | 1                 |
| 1000/5A | 105                         | 135     | 30         | 15                    | 1                 |
| 1200/5A | 105                         | 135     | 30         | 15                    | 1                 |
| 1500/5A | 105                         | 135     | 30         | 15                    | 1                 |
| 1600/5A | 118                         | 158     | 30         | 15                    | 1                 |
| 2000/5A | 118                         | 158     | 30         | 15                    | 1                 |
| 2400/5A | 130                         | 155     | 30         | 15                    | 1                 |
| 3000/5A | 150                         | 175     | 30         | 15                    | 1                 |
| 3200/5A | 150                         | 175     | 30         | 15                    | 1                 |
| 4000/5A | 180                         | 205     | 40         | 15                    | 1                 |
| 5000/5A | 200                         | 225     | 40         | 15                    | 1                 |

### NOTE :

- The Accuracies Listed above are as per I.S.S. • The General Tolerance for Dimension A, B & C Shall be + be 3mm
- 1 Amp. Secondary Current Can Also Supplied



## TYPE

Block Type (Wound Primary), Bar Type (Embedded)

### OPERATING VOLTAGE (MAXIMUM)

3.6 KV, 7.2 KV

**PRIMARY CURRENT : 10000 Amps**

### SECONDARY CURRENT

5 A OR 1 A (Others on request)

### SHORT TIME THERMAL CURRENT & ITS DURATION

Up to 40 KA for 1 second (Others on request)

### RATED BURDEN

5, 10, 15, 20, 30 VA (Others on request)

### ACCURACY CLASS

0.2, 0.5, 1.0, 5P10, 5P15, 50, 20 (others on request).

For Differential Protection Bus Bar Protection,  
CT with accuracy class PS can be offered

### FREQUENCY

50Hz

THE TEST RESULTS INDICATE THAT THE SAMPLE  
TESTED COMPLIES WITH THE REQU

CI. 7.3.5 of IS : 16227 (Part-2), 2016 / IEC : 61869-2, 2012

## FEATURES:

- Manually Operated Control Transformer (Variable auto-transformer) with zero interlock facility.
- Double range (0-2kV/0-5kV) voltmeter provided to read H.T. Voltage.
- Double range (0-100mA) A.C millimeter provided in the earth and of the H.T winding to read H.T. Current.
- Automatic tripping circuit is provided for isolation of supply, in the event of failure of the object under test.
- Rotary Switch with four different settings of 5, 10, 50 & 100mA is provided on failure of the object under test.
- M.C.B. for short circuit protection
- H.T. On push button. Mains ON & H.T. On LED indication.
- Range selection switch to select 2.5kV or 5kV range with LED indication
- Two spring loaded test prods with 1 meter long cable for safe & easy connection of high voltage to test object.
- Applications - Testing of Insulation of electrical apparatus at high voltage values recommended by applicable relevant.

# CURRENT BALANCE CURRENT TRANSFORMER

## MODELS

- CBCT 30 {30mm ID}
- CBCT 100 {100mm ID}
- CBCT 150 {150mm ID}
- CBCT 200 {200mm ID}
- Any other Size circular/ Rectangular
- CBCT on request

## FEATURES

- All Current ratios available to match
- Commonly available ELR's
- Slim Design
- Light weight
- Encapsulated CBCT
- Terminals are finger proof touch as per IEC class
- Highly Cost effective
- Compact in Size

## SPECIFICATION

System Voltage : 720 V maximum  
Insulation voltage : 3kV for 1 minute  
System Frequency : 50Hz or 60Hz  
Max. Permissible Current : 1kA continues  
5KA for 1.5 sec.  
Terminal Conductor : 2.5 mm<sup>2</sup>  
Current ratio : 1/1000, 1/600 any other on request  
Distance Between Toroid and relay : 50 meters  
Operation Temperature:- 20° C to 70° C  
Humidity: 95%RH (non condensing)  
Enclosure: Flame retardant glass filled ABS  
Complaint with : IEC 44-1 and IEC 185  
Mounting : Four Fixing Slot



- On and off times individually settable
- Calibrated knob for accurate On time and Off time setting
- Rugged design suitable for 24 hrs
- Wide temperature withstand range
- Accurate timing & repeat cycle accuracy
- Suitable for mounting inside panel

## GENERAL DESCRIPTION

Asian Electronic timer finds application in automatic starting and stopping of Diesel priming pumps Genets, fire engines. Also used in continuous on & off cycles of motors, pumps, etc in pumping or any industrial use also used in all industrial timing applications. The internal system is derived from a series of clocks which when triggered start the timing cycle and trip after the present time as follows

|            |   |
|------------|---|
| On timing  | Initially on and after preset time settable on facia timer turns off.         |
| Off timing | After on time is over the off time timer takes over settable by knob on facia |

Two sets of changeover contacts changeover at end of every timing cycle i.e. On or off.

Time delay is as per orders which are

|            |             |
|------------|-------------|
| 0 - 10 sec | 0 - 100 sec |
| 0 - 60 sec | 0 - 3 min   |
| 0 - 10 min | 0 - 1hrs.   |

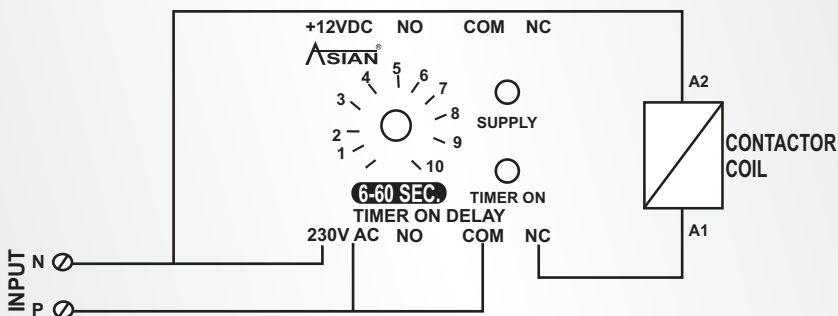
Any of these times can be specified while ordering two models:

- (1) 230V/12V DC timers using either 230 Vac or 24 V DC
- (2) 24 V DC using 24 V DC supply

## SPECIFICATIONS

|                      |   |
|----------------------|---|
| Size                 | 70x45x110mm   |
| Voltage rating       | 230V AC / 12V DC  |
| On/Of Time setting   | As per order 0-10, 0-100, 0-60 sec<br>0-3, 0-10 min, 0-60 min |
| Off / Time setting   | same as on above  |
| Burden               | 5VA at setting  |
| Temperature range    | -20+55°C  |
| Repeat time accuracy | ± 2% of setting   |
| Contact rating       | 5A Max  |
| Thermal rating       | Relay will withstand continuously rated voltage.              |
| Surge capacity       |   |

## Connection Diagram



## SALIENT FEATURES

- Three Kick attempt timer relay
- Auto lockout after three kicks
- Rugged design suitable for 24 hrs
- Wide temperature withstand range
- Accurate timing & repeat cycle accuracy
- Suitable for mounting inside panel

## GENERAL DESCRIPTION

Asian Engine starting relays find application in automatic starting of Diesel/petrol engines or Genets and fire engines. Also used in AMF panels for captive power plants. The internal system is derived from a series of clocks which remain on for durations is stable by two calibrated potentiometers settable from 0-30 seconds. Two sets of changeover contacts are provided. One set is used for cranking or sequencing operation to start the diesel or petrol engine/genet. The other set of contacts is provided for lockout in case the engine/genet does not start in three attempts. After the lockout phase the relay stops functioning. The external supply is required to be cut to reset the relay after lockout.

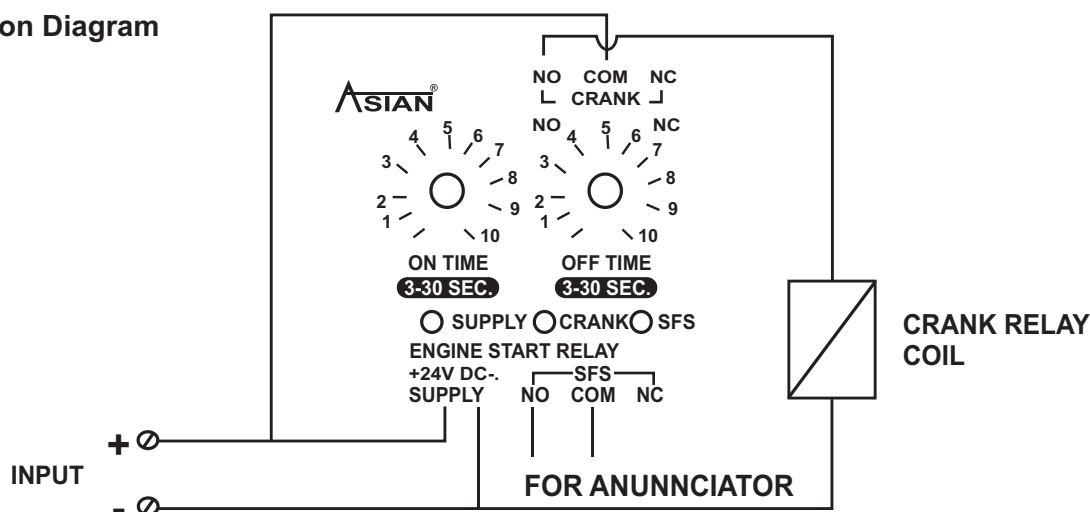
## SPECIFICATIONS

- |                        |                                   |
|------------------------|-----------------------------------|
| - Voltage rating       | 12 or 24 Vdc Specify During Order |
| - On time setting      | 0-30 sec                          |
| - Off time setting     | 0-30 sec                          |
| - Burden               | 5VA at setting                    |
| - Temperature range    | -20 + 55°C                        |
| - Repeat time accuracy | ± @% of setting                   |
| - Contact rating       | 5A max                            |
| - Thermal rating       | Relay will withstand              |

Continuously rated voltage. Surge capacity is twice rated voltage



## Connection Diagram



## SALIENT FEATURES

- Validates all three phases simultaneously
- Precise circuits enable high accuracy
- Rugged design suitable for 24 hrs
- Filtering & harmonic suppression to Enable precise comparison of Measurement
- Built in timer for delay applications
- Suitable for mounting inside panel

## GENERAL DESCRIPTION

Asian Under + Over voltage relay find application in effective protection of equipments such as genet, motors, pumps, trans, Shunt capacitors etc. from damage due to transient under voltages. These are also used to sense blackouts and brownouts and to control auto start stops of engines and genet's e.g. In AMF panel. The input voltage is continuously checked and the value measured is compared against a preset generates a changeover signal. Two sets of potential free changeover contacts are provided for breaker tripping. The relay resets automatically when the input is within limits. A fixed time delay of 2-4 sec on low and high signal is also given after comparison to suppress false tripping as in case of transients. Under and over voltage are externally suitable on front facia by two potentiometers. A hysteresis of about 5-15.

Volts between dropout and pickup is provided to avoid sharp cutoffs. The relay remains off when is low or zero or high than set limit and when voltage is healthy the relay is on. (This care of no volt operation) LED indicator Display the status.

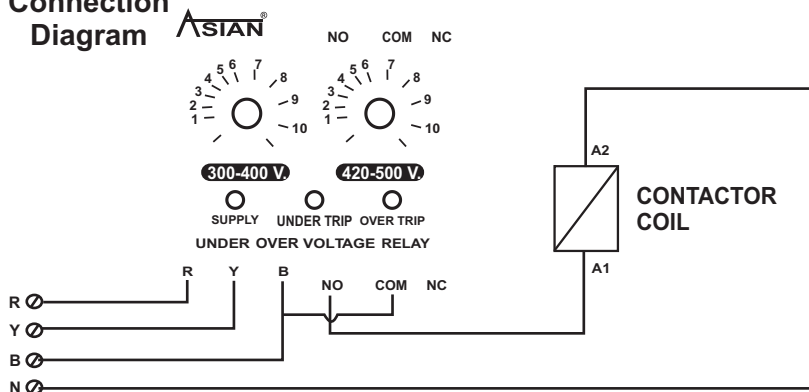
## SPECIFICATION

- |                     |                       |
|---------------------|-----------------------|
| - Voltage rating    | 3 ph 415 Vac, 110V ac |
| - Frequency         | 50 Hz                 |
| - Voltage setting   | Under 70-90%          |
|                     | Over 100-130%         |
|                     | Under 300-400V        |
|                     | Over 420-500V         |
| - Time setting      | 2-4 sec fixed         |
| - Burden            | 5VA at setting        |
| - Temperature range | -20+55°C              |
| - Repeat accuracy   | ± 3% of setting       |
| - Contact rating    | Relay will withstand  |

Continuously rated voltage. Surge capacity is twice rated voltage.



## Connection Diagram



## SALIENT FEATURES

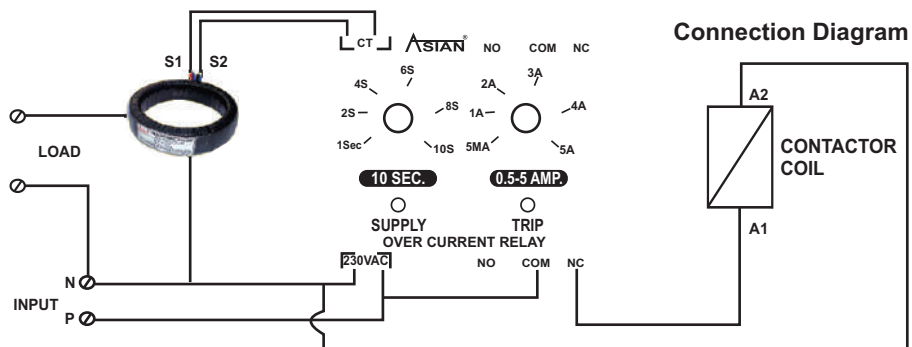
- Validates Current through CT continuously
- Precise circuits enable high accuracy
- Rugged design suitable for 24 hrs
- Filtering & harmonic suppression to enable precise comparison of Measurement
- Built in time for Delay applications
- Suitable for mounting inside panel

## GENERAL DESCRIPTION

Asian series of over current relays are ideal for sensing over current faults in anyone phase for protection of AC machines. Transformers, Feeders Generators etc. The relay monitors the current passing in any feeder secondary of the CT in that phase. Over currents in any phase can be ensured by appropriately connecting the CT's the resultant current thus ensed in converted through sensitive electronic circuits and digitally compared to the preset reference also suitable through a potentition meter on the facia. A higher than limit condition triggers a timer which can be set from 0-10sec also on the facia. If the Over current condition persists for more than the time duration a contact changeover occurs and a led on facia glows to indicate a trip condition. This can be used to trip the breaker. The time trip helps toward of transcend currents so the time must be set according to the system requirements. Two sets of changeover contacts are available.

## SPECIFICATIONS

|   |                      |
|---|----------------------|
| Voltage (aux) rating  | 230VAc               |
| Frequency   | 50Hz                 |
| CT secondary current  | 5A max               |
| Over Current setting  | 0.5 - 5A             |
| Time Setting  | 0 - 10sec            |
| Burden Voltage Coil   | 2 VA at setting      |
| Current coil  | 3 VA at setting      |
| Temperature range   | -20 + 550C           |
| Repeat time accuracy  | ± 2% of setting      |
| Contact rating  | 5A max               |
| Thermal rating  | Relay will withstand |
| continuously rated voltage. Surge capacity is twice rated voltage |                      |



## SALIENT FEATURES

- Validates Current through CT continuously
- Precise circuits enable high accuracy
- Rugged design suitable for 24 hrs
- Filtering & harmonic suppression to enable precise comparison of Measurement
- Built in time for Delay applications
- Suitable for mounting inside panel

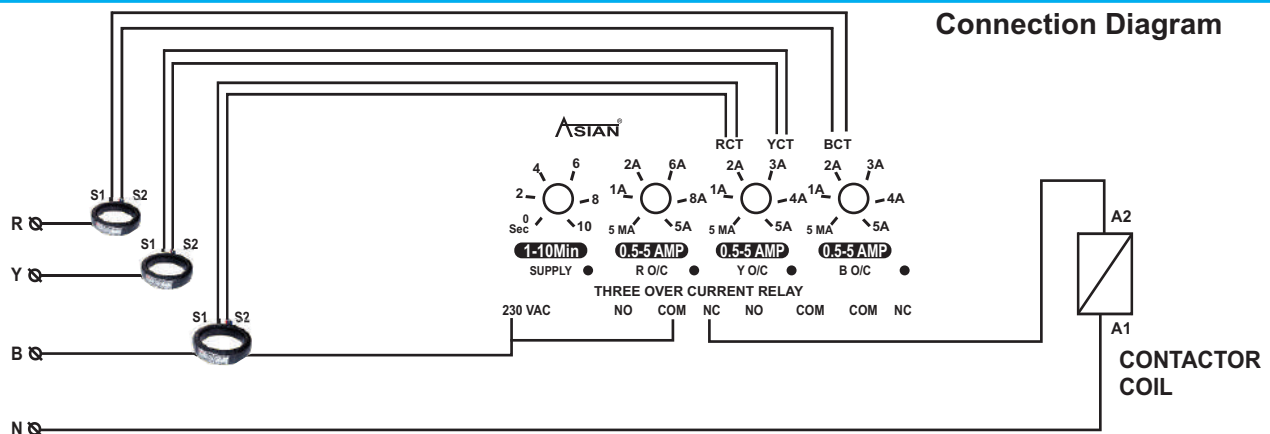
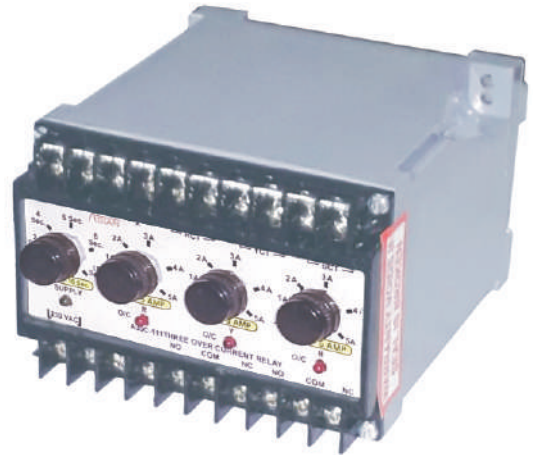
## GENERAL DESCRIPTION

Asian series of over current relays are ideal for sensing over current faults in any one phase for protection of AC machines, Transformers, Feeders Generators etc. The relay monitors the current passing in any feeder secondary of the CT in that phase. Over currents in any phase can be measured by appropriately connecting the CT's the resultant current thus sensed is converted through sensitive electronic circuits and digitally compared to the preset reference also suitable through a potentiometer meter on the fascia. A higher than limit condition triggers a timer which can be set from 0-10sec also on the fascia. If the Over current condition persists for more than the time duration a contact changeover occurs and a led on fascia glows to indicate a trip condition. This can be used to trip the breaker. The time trip helps toward of transient currents so the time must be set according to the system requirements. Two sets of changeover contacts are available.

## SPECIFICATIONS

|                      |                      |
|----------------------|----------------------|
| Size                 | 100x70x110mm         |
| Voltage (aux) rating | 230VAc               |
| Frequency            | 50Hz                 |
| CT secondary current | 5A max               |
| Over Current setting | 0.5 -5A Per Phase    |
| Time Setting         | 0-10 Sec             |
| Burden Voltage Coil  | 2 VA at setting      |
| Current coil         | 3 VA at setting      |
| Temperature range    | - 20 + 55°C          |
| Repeat time accuracy | ± 2% of setting      |
| Contact rating       | 5A max               |
| Thermal rating       | Relay will withstand |

continuously rated voltage. Surge capacity is twice rated voltage



## SALIENT FEATURES

- Validates Frequency through Frequency of Voltage Supplied (Self Powered)
- Precise circuits enable high accuracy
- Rugged design suitable for 24 hrs
- Filtering & harmonic suppression to enable precise comparison of Measurement
- Built in time for Delay applications
- Suitable for mounting inside panel

## GENERAL DESCRIPTION

ASIAN AF-115 series frequency relay are used for sensing frequency supplied in the supply network and tripping incase the frequency goes above the desired limit. These relays are used for protection of sensitive equipments due to under or over frequency when the equipments is being supplied from a source whose frequency may be erratic. The relay monitors the frequency of the supply / signal and digitally compares the measured frequency with the preset able limit governed by a potentiometer on the facia A lower or higher than limit condition triggers a timer which is internally set between 1-2 sec toward of transients. If the under or over condition persists for more than 1 or 2 sec a contact changeover occurs and an led on facia glows to indicate a trip condition This can be used to trip the breakers / supply. Two sets of changeover contact are available. The relay auto resets on normal signal / supply AF-115 has three models

Type 1 : Over 50-55Hz

Type 2 : Under 45-50Hz

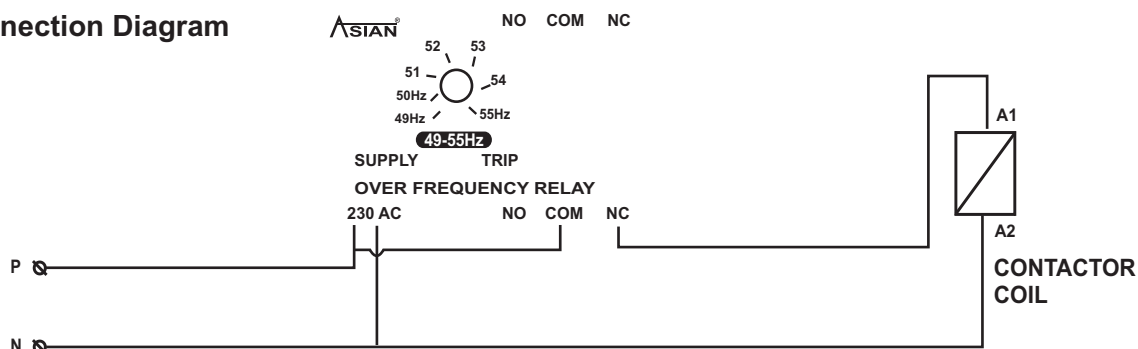
Type 3 : Under 45-55Hz

## SPECIFICATIONS

|                      |  |
|----------------------|--|
| Size                 | 100x70x110mm   |
| Voltage (aux) rating | 230VAc   |
| Frequency            | 50Hz   |
| Frequency sensing    |  |
| Range                |  |
| Frequency setting    | Over 50-55 Hz<br>Under 45-50 Hz<br>Under / over 45-55 Hz |
| Burden Voltage Coil  | 2VA at setting   |
| Temperature range    | -20 + 55C  |
| Contact rating       | 5A max   |
| Thermal rating       | Relay will withstand                                     |
|                      | continuously rated voltage. Surge capacity               |
|                      | is twice rated voltage                                   |



## Connection Diagram



## SALIENT FEATURES

- Validates Current through CT continuously
- Precise circuits enable high accuracy
- Rugged design suitable for 7x24 hrs
- Filtering & harmonic suppression to Enable precise comparison of Measurement
- Built in time for Delay applications
- Suitable for mounting inside panel

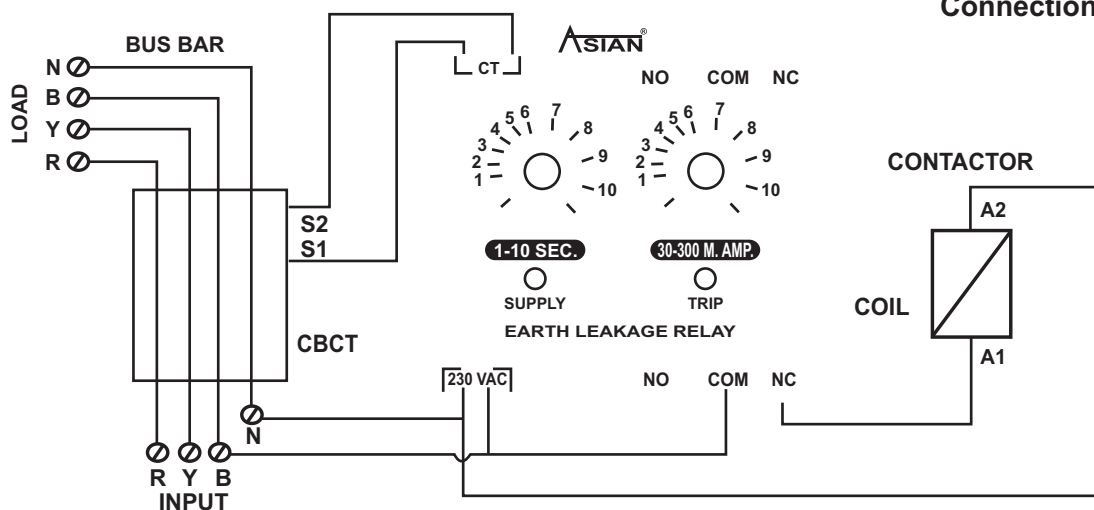
## GENERAL DESCRIPTION

Asian series of Earth Leakage relays are ideal for sensing leakage current flowing through the systems for protection of AC machines just as transformers, Feeders, Generators, electric current passing through an entire system. Leakage currents in the system can be measured by appropriately connecting the CT's. The resultant current thus sensed is converted through sensitive electronic circuits and digitally compared to the preset reference also set able through a potentiation meter on the facia. A higher than limit condition triggers a timer which can be set from 0-10sec also on the facia. If the leakage currents persists for more than the time duration a contact changeover occurs and a led on facia glows to indicate a trip condition. This can be used to trip the breaker. The time trip helps to ward of transient currents so the time must be set according to the system requirements. Two sets of changeover contacts are available.

## SPECIFICATIONS

|                         |                      |
|-------------------------|----------------------|
| - Voltage (aux) rating  | 230VAc               |
| - Frequency             | 50Hz                 |
| - CT secondary current  | 5A max               |
| - Earth Leakage Current | 1-10% IE             |
| Setting                 | 50mA-500mA           |
| - Time Setting          | 0-10 Sec             |
| - Burden Voltage Coil   | 2 VA at setting      |
| - Current coil          | 3 VA at setting      |
| - Temperature range     | -200+550C            |
| - Repeat time accuracy  | ± 2% of setting      |
| - Contact rating        | 5A max               |
| - Thermal rating        | Relay will withstand |

Continuously rated voltage. Surge capacity is twice rated voltage





Asian Toggler Relay Suitable for Operating Two or Three Devices, Toggles Power Supply, Each Output Electronically Interlocked To Prevent Simultaneous Outputs, Ideal For Fire Fighting Pumps, Water Pumps and Air Conditioners Etc. All Contacts Are 5a Potential Free

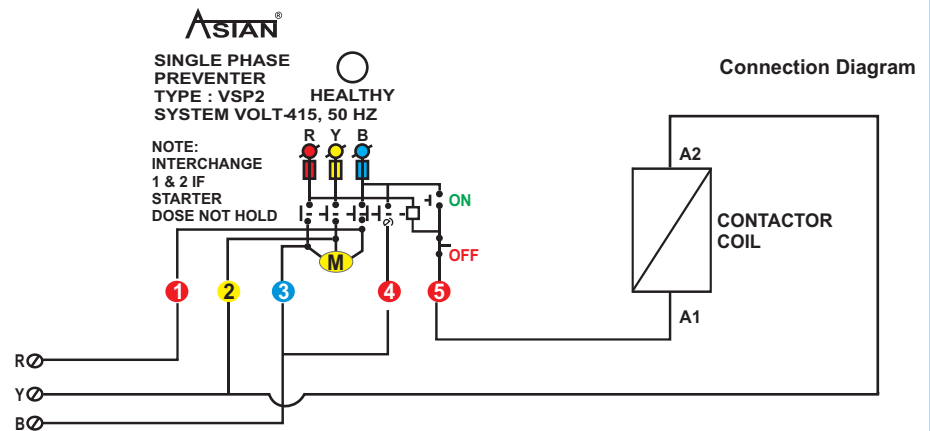
## SINGLE PHASE PREVENTER

Description / Specification

Smallest Size of Single Phasing, Reverse Phasing Unbalanced Supply. Auto Reset 1 No Output Contact Suitable For Any Hp/kw Rating.

### APPLICATIONS:

- Agriculture pump starters - 3 ph split machines
- Hoist motor control - Valve Actuator motor
- Machine tools - Injection molding machine



## SPECIFICATIONS

|                      |                      |
|----------------------|----------------------|
| Size                 | 96x96mm              |
| Voltage (aux) rating | 230VAc               |
| Frequency            | 50Hz                 |
| CT secondary current | 5A max / 1A          |
| Over Current setting | 0.5 -5A Per Phase    |
| Time Setting         | 0-10 Sec             |
| Burden Voltage Coil  | 2 VA at setting      |
| Current coil         | 3 VA at setting      |
| Temperature range    | - 20 + 550C          |
| Repeat time accuracy | ± 2% of setting      |
| Contact rating       | 5A max               |
| Thermal rating       | Relay will withstand |

continuously rated voltage. Surge capacity is twice rated voltage

4, 6, 8, 10, 12, 16  
Window Available Here

## SALIENT FEATURES

- Integrated unit having full feature set
- Additional lamp test provision enables diagnostics
- Incorporates digital technology
- Rugged design suitable for 7x24 hrs operation
- Any number of Units can be wired in parallel to increase the number of fault points.

## GENERAL DESCRIPTION

These annunciation units AA24 are digital units with front end lit by LED's. Applications are in monitoring fault conditions in any process, equipments etc. A fault condition then triggers a buzzer, trip contact and additional contact for Additional hooter in case an external hooter is desired.

On receipt of a potential free signal, the corresponding window flashes, two changeover contacts changeover to signal trip indication and an internal electronic buzzer beeps to signal fault condition. One additional contact is provided for hooter in case external hooter is desired

When the acknowledge pushbutton on AA24 is pressed the flashing becomes steady, the buzzer stops and the hooter contact is released. After the removal of fault the unit can be reset by the reset pushbutton.

On pressing lamp test all the windows glow simultaneously and the buzzer sound. This is a diagnostics tool.

## SPECIFICATIONS

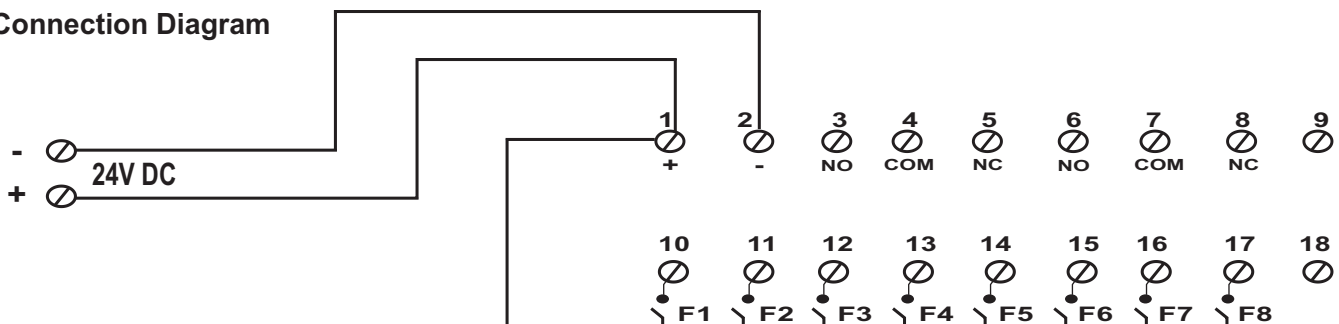
- Voltage rating 12V, 24V DC
- Voltage range +/- 20% of rated voltage
- Frequency 50HZ
- Buzzer rating continuous
- Lamp Rating LED's continuous
- Window flash time 1 sec on, 1 sec off
- Push buttons Test, Ask, Reset on front facia of
- Annunciator
- Temperature range -20 + 55°C
- Trip Contact rating 5A max
- Thermal rating Relay will withstand continuously

## APPLICATION

These units can be used for fault annunciation in any environment. Being solid state digital units rating are 7x24 hrs. Operating. These units are also available as standard 4 Fault, 8 Fault, 10 Fault units. (Multi Fault Unit Standard Unit) Refer to separate catalogue for each



## Connection Diagram



## SALIENT FEATURES

- Validates all three phases simultaneously
- Precise circuits enable high accuracy
- Rugged design suitable for 7x24hrs
- Filtering & harmonic suppression to Enable precise comparison of Measurements
- Built in timer for delay applications
- Suitable for mounting inside panel

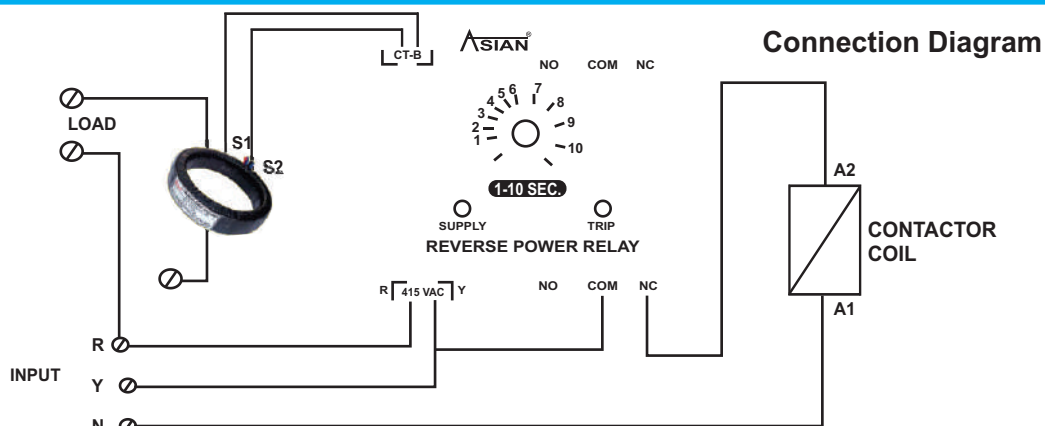
## GENERAL DESCRIPTION

ASIAN series RPR relay monitors the power flowing in the line. The direction of the power is checked. The relay essentially monitors the current supplied by / flowing through the alternator on B phase through the secondary of metering CT. Current is squared with the voltage output of the alternator in RY phase and motoring condition detected if it exists. The Squared output is compared to a preset level and a timer is triggered above limit. Timer can be set 0-10 sec. Contacts changeover occurs on timeout and an led indication signals closure. Relay gets relay automatically if the prime mover is stopped. The reverse power is typically set between 6 - 10% but fixed internally. This setting can be changed on demand but will not be variable. Setting cannot be changed once set.

These relays are ideal for generator, transformer etc. Reverse power protection and to prevent motoring in prime movers.

## SPECIFICATIONS

|                        |                      |
|------------------------|----------------------|
| - Voltage rating       | 3ph 415 Vac          |
| - Frequency            | 50 Hz                |
| - Current              | 5A max               |
| - Time setting         | 0 - 10 sec           |
| - Reverse power        | 6 - 10% fixed        |
| - Burden               | 5VA at setting       |
| - Temperature range    | - 20 + 55°C          |
| - Repeat time accuracy | ± 2% of setting      |
| - Contact rating       | 5A max               |
| - Thermal rating       | Relay will withstand |



Water Level indicator are home automatic product which helps a customer to completely eliminate manual intervention that is required every day in every home to fill water. Now no more losing sleep over filling your water tank. Be in night or day or you are away, water level controller ensures your water tank is filled at the right time & not even a single drop is wasted

### (FULLY AUTOMATIC WATER LEVEL CONTROLLER)

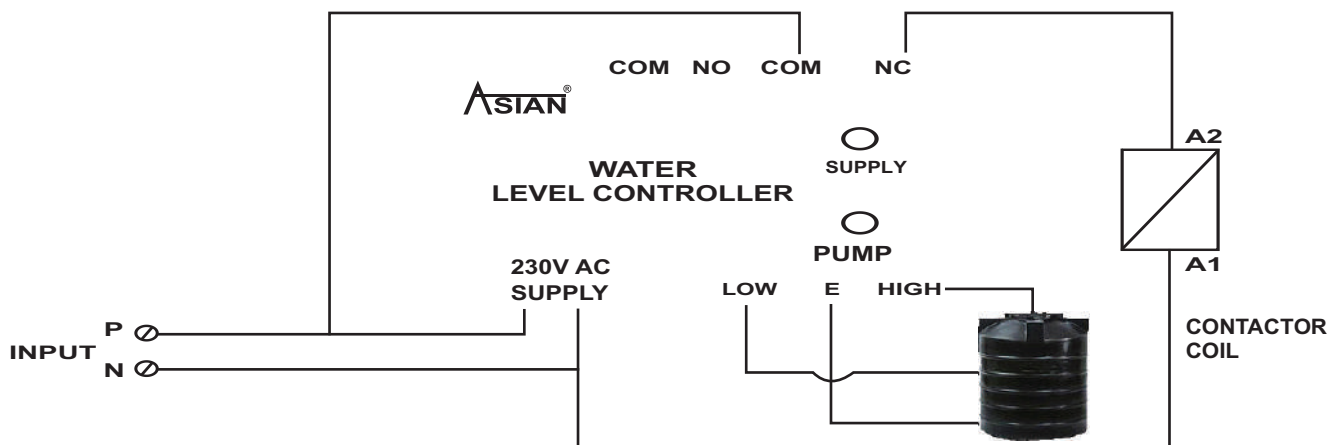
- Auto Start when Water comes to reserves level.
- Auto off when tank gets Full.
- Automatic off when upper tank full
- Auto on when lower tank Empty
- Auto on when water comes in corporation line
- Auto off when water supply interrupts
- It control all types of single Phase / Submersible Phase / Submersible and all other motors.

### FEATURES & BENEFITS

- Motor switches on automatically when less water in tank and water is available at source.
- Daily water filling convenience- No worries/ Tensions when to fill water tank.
- Motor is switched ON only if water is available at source- No dry run allowed.
- Motor switches off automatically when tank is full
- No worries of water overflow - preserves construction quality as there is no water spread.
- Water Level & control display installed at a convenient location in the house



### Connection Diagram





## FEATURES:

- State of Art Microcontroller Based Design
- 4 Line 3 Digit ultra bright LED display
- Site selectable CT (Primary & Secondary)
- True RMS measurement
- Password Protection
- Universal Aux. Supply
- Bargraph Indication of Load current

## ALARM/TRIPS:

- Under Voltage • Over Voltage
- Voltage Asymmetry/Unbalance
- Phase Loss • Phase Reversal
- Under Current • Over Current
- Current Phase Loss
- Current Imbalance
- Under Frequency
- Locked Rotor
- Rotor Earth Fault
- No Load Run/Dry Run Indication

## PARAMETERS:

- VOLTAGE :
  - o RY (Phase- Phase)
  - o YB (Phase- Phase)
  - o BR (Phase- Phase)
  - o Average (Phase- Phase)
  - o RN (Phase- Neutral)
  - o YN (Phase- Neutral)
  - o BN (Phase- Neutral)
  - o Average (Phase- Neutral)
- AMPERE :
  - R Phase
  - Y Phase
  - B Phase
  - Average
- Frequency
- Run Hour
- System Power Factor
- Kilo-watt

## TECHNICAL SPECIFICATION

|              |   |
|--------------|---|
| Input        | : 3 phase 4 wire  |
| Volts        | : Range 40-500V for 415 V model   |
| Amps         | : 0.1 -6.0 Amps   |
| Freq         | : Through R phase (Internally)  |
| Burden       | : 0.2 VA max. per input for Voltage & Current Signals<br>3 VA max. on Aux. Supply |
| Aux. Supply  | : 40-270 VAC / DC   |
| Display      | : 4 Line x 3 Digit<br>{0.39 Inches 7 Segment LED Display}                         |
| Accuracy     | : Class 1.0 for Volt /Ammeter<br>For Hz : 0.1 %of full scale                      |
| Resolution   | : 0.01 for Frequency Meter<br>Amps : 0.1<100A<br>0.1<1000A<br>0.1KA>1000A         |
| Relay        | : Normally Energized  |
| Computation  | : True RMS  |
| Frequency    | : 45 Hz – 400 Hz.   |
| Ambient      | : 0 – 50°C  |
| Humidity     | : < 95 % Non –condensing  |
| Weight       | : 350gms  |
| Dimensions   | : 96 x 96 x 65 mm (L x W x D)   |
| Panel Cutout | : (90+1-0 )mm X ( 90+1_0)mm   |
| Mounting     | : Flush Mounting with side clamps.  |

## AE-301

### DIGITAL AUTOMATIC SUBMERSIBLE PUMP STARTER WITH WATER LEVEL CONTROLLER

- \* Most advanced submersible pump starter
- \* Digital display for convenient monitoring
- \* Dry run and overload protection
- \* Automatic water level control with float switch
- \* Single push start/stop buttons
- \* Built in electricity consumption meter
- \* Over and under voltage protection
- \* For single phase pumps up to 3 HP



## AE-302

### DIGITAL AUTOMATIC SUBMERSIBLE PUMP STARTER WITH WATER LEVEL CONTROLLER WIRELESS

- \* Hi-tech submersible pump starter with microprocessor
- \* Digital display for convenient monitoring
- \* Dry run and overload protection
- \* Wireless Automatic water level control with float switch
- \* Single push start/stop buttons
- \* Built in electricity consumption meter
- \* Over and under voltage protection
- \* For single phase pumps up to 3 HP





Our range of Asian Electrical & Electronics Buzzer is offered to meet the specific requirements of the control panel and control desk manufacturers, we have emerged with diverse range of Electronic Buzzer, which is primarily manufactured for normally all types of devices.

We offer Electronic Buzzer type 96x96 MTMV & 72x72 MTMV, which is specially designed for audio annunciation purpose. Further much care and attention is taken for selecting the output pitch in the maximum sensitive zone of human auditory system. Also, pitch is continuously adjusted over a vast range to give effects of pleasing sound, comfort and convenience to the clients. Moreover, our devices are completely reliable and enduring for a longer period as they are completely electronic. In addition, our devices are greatly preferred over other conventional Electro Magnetic Buzzer & Bell. Also, our devices can be availed in three different tones such as single tone, two tone and three tone.

#### **SALIENT BENEFITS**

- High Durability - Electronic Circuit - Exquisite appearance
- Low Power Consumption - Easy Flush mounting for panels
- Protected against polarity reversal - Generates no radio frequency voice
- Suitable for operation on AC or DC



| S.No.         | Cat No.             | DIMENSION (MM) |          |        |                          |
|---------------|---------------------|----------------|----------|--------|--------------------------|
| HT INSULATORS |                     | TOP DIA        | BOTT DIA | HEIGHT | INSERT SIZE              |
| 1             | HT 3.3 (DMC)        | 61             | 61       | 75     | M12x18,M10x18, M6x10     |
| 2             | HT 3.3 (Epoxy)      | 61             | 61       | 75     | M12x18,M10x18, M6x10(MS) |
| 3             | HT 6.6 (DMC)        | 61             | 61       | 90     | M12x18,M10x18, M6x10     |
| 4             | HT6.66190S(DMC)     | 61             | 61       | 90     | M12x18                   |
| 5             | HT6.64575D (DMC)    | 45             | 45       | 75     | M16X21                   |
| 6             | HT6.66190 (Epoxy)   | 61             | 61       | 90     | M12X18,M10X18,M6X10(MS)  |
| 7             | HT11/61130 (DMC)    | 61             | 61       | 130    | M16x36,M12x18, M6x12     |
| 8             | HT11/61130 (Epoxy)  | 61             | 61       | 130    | M16x36,M12x18, M6x12(MS) |
| 9             | HT11/75130 (Epoxy)  | 75             | 75       | 130    | M20x40,M16X36,M10X16(MS) |
| 10            | HT22/70210 (Epoxy)  | 70             | 70       | 210    | M16x45,M10x25,M6x15(MS)  |
| 11            | HT33/80300 (Epoxy)  | 80             | 80       | 300    | M16x75,M10x25,M6x15(MS)  |
| 12            | HT33/100300 (Epoxy) | 100            | 100      | 300    | M24x55,M16x50,M10x16(MS) |
| 13            | HT33/120320 (Epoxy) | 100            | 120      | 320    | M20x75,M16x50,M10x16(MS) |
| 14            | NEW HT 6.6 KV       | 85             | 88       | 60     | M16x18,M16x18,M10x18(MS) |

## NOTE ON SMC & DMC SUPPORTS & INSULATORS

All Switch gear & Electrical panels are combination of current carrying conductors & non current carrying structure. To separate & support the current carrying busbars from the structure, busbar supports & Insulators are used. These supports / insulators should be designed to bear electrical & mechanical stress during the normal & fault conditions. They should also comply others features like Nonhygroscopic, Fire Retardant, chemical & Corrosion Resistance.

**Asian** busbar supports & insulators are made of SMC (Sheet Moulded Compound) / DMC (Dough Moulded Compound) manufactured with a combination of resin and other additives under controlled temperature and pressure, to produce components with excellent alround properties and characteristics.

Although both SMC & DMC have the following properties, SMC is better in all respects

➤ High die electric & mechanical strength ➤ High temperature withstand capacity ➤ High strength to weight ratio

In insulators the inserts are made of EN1A which has better tensils strength as compared to MS & Brass (e.g. EN1A-600 Mpa, MS-300 Mpa, Brass-150 Mpa) & has least chances of thread failure as compared to others



**Hexagonal Insulators**

| Height (H) mm | Insert | Products code | Dimension |      |       | Normal Voltage AC/DC |
|---------------|--------|---------------|-----------|------|-------|----------------------|
|               |        |               | AF mm     | R mm | Hb mm |                      |
| 30            | M6     | MH 630        | 33        | 25   | 10    | 600/750              |
| 40            | M8     | MH 840        | 35        | 30   | 15    | 1000/1200            |
| 50            | M10    | MH 1050       | 46        | 37   | 20    | 1200/1500            |
| 50            | M12    | MH 1250       | 46        | 37   | 20    | 1200/1500            |
| 70            | M10    | MH 1070       | 55        | 41   | 20    | 2000/2400            |
| 70            | M12    | MH 1270       | 55        | 41   | 20    | 2000/2400            |

**Conical Insulators**

| Height (H) mm | Insert | Products code | Dimension |       |       | Normal Voltage AC/DC |
|---------------|--------|---------------|-----------|-------|-------|----------------------|
|               |        |               | Rt mm     | Rb mm | Hb mm |                      |
| 25            | M6     | MC 625        | 19        | 25    | 10    | 400/500              |
| 30            | M6     | MC 630        | 25        | 30    | 10    | 600/750              |
| 30            | M8     | MC 830        | 25        | 30    | 10    | 600/750              |
| 40            | M8     | MC 840        | 33        | 40    | 15    | 1000/1200            |
| 40            | M10    | MC 1040       | 33        | 40    | 15    | 1000/1200            |
| 50            | M10    | MC 1050       | 40        | 50    | 20    | 1200/1500            |
| 50            | M12    | MC 1250       | 40        | 50    | 20    | 1200/1500            |
| 60            | M10    | MC 1060       | 42        | 60    | 20    | 1500/1800            |
| 60            | M12    | MC 1260       | 42        | 60    | 20    | 1500/1800            |
| 70            | M10    | MC 1070       | 41        | 60    | 20    | 2000/2400            |
| 70            | M12    | MC 1270       | 41        | 60    | 20    | 2000/2400            |

**L- Type Support**

| Height (H) mm | Products code | LIST PRICE (Rs.) |       |
|---------------|---------------|------------------|-------|
|               |               | DMC              | SMC   |
| 60            | L 60          | 22.00            | 29.00 |
| 85            | L 85          | 27.00            | 34.00 |
| 100           | L 105         | 29.00            | 38.00 |
| 125           | L 125         | 34.00            | 41.00 |



**Finger-Supports**

| Busbar       | Product Code | Dimension |    |    |    |    |   |
|--------------|--------------|-----------|----|----|----|----|---|
|              |              | A         | B  | C  | D  | E  | F |
| 6mm x 1 run  | M106 S       | 7.2       | 50 | 22 | 14 | 10 | - |
| 10mm x 1 run | M110 S       | 11.5      | 50 | 22 | 14 | 10 | - |
| 12mm x 1 run | M112 S       | 13.7      | 50 | 22 | 14 | 10 | - |
| 6mm x 1 run  | M106 W       | 7.2       | 60 | 32 | 14 | 10 | - |
| 10mm x 1 run | M110 W       | 11.5      | 60 | 32 | 14 | 10 | - |
| 12mm x 1 run | M112 W       | 13.7      | 60 | 32 | 14 | 10 | - |
| 6mm x 1 run  | M106 K       | 7.2       | 70 | 42 | 20 | 16 | - |
| 10mm x 1 run | M110 K       | 11.5      | 70 | 42 | 20 | 16 | - |
| 12mm x 1 run | M112 K       | 13.7      | 70 | 42 | 20 | 16 | - |

| Busbar       | Product Code | Dimension |    |    |    |    |      |
|--------------|--------------|-----------|----|----|----|----|------|
|              |              | A         | B  | C  | D  | E  | F    |
| 6mm x 2 run  | M206 W       | 7.2       | 60 | 32 | 14 | 10 | 5.8  |
| 10mm x 2 run | M210 W       | 11.5      | 60 | 32 | 14 | 10 | 9    |
| 12mm x 2 run | M212 W       | 13.7      | 60 | 32 | 14 | 10 | 11.9 |
| 6mm x 2 run  | M206 K       | 7.2       | 70 | 42 | 20 | 16 | 5.8  |
| 10mm x 2 run | M210 K       | 11.5      | 70 | 42 | 20 | 16 | 9    |
| 12mm x 2 run | M212 K       | 13.7      | 70 | 42 | 20 | 16 | 11.9 |

| Busbar       | Product Code | Dimension |     |    |    |    |      |
|--------------|--------------|-----------|-----|----|----|----|------|
|              |              | A         | B   | C  | D  | E  | F    |
| 6mm x 3 run  | M306 W       | 7.2       | 60  | 40 | 14 | 10 | 5.8  |
| 10mm x 3 run | M310 W       | 11.5      | 80  | 50 | 14 | 10 | 9    |
| 12mm x 3 run | M312 W       | 13.7      | 90  | 60 | 15 | 11 | 11.9 |
| 6mm x 3 run  | M306 K       | 7.2       | 70  | 42 | 20 | 16 | 5.8  |
| 10mm x 3 run | M310 K       | 11.5      | 100 | 42 | 20 | 16 | 9    |
| 12mm x 3 run | M312 K       | 13.7      | 100 | 42 | 20 | 16 | 11.9 |

### Single Pole Supports System DMC/SMC (Colour : RYBB, Brown) SP-Series

| S. No. | Cat No. | Top Width (W) | Dimension Length (L) | Height (H) |
|--------|---------|---------------|----------------------|------------|
| 1      | SPN1    | 15            | 23                   | 14         |
| 2      | SPN2    | 15            | 28                   | 19         |
| 3      | NT 60   | 25            | 60                   | 25         |
| 4      | SP30    | 25            | 55                   | 30         |
| 5      | SP35    | 39            | 87                   | 35         |
| 6      | SPS42   | 42            | 82                   | 46         |
| 7      | SP55    | 50            | 110                  | 55         |
| 8      | SP65    | 52            | 110                  | 65         |
|        |         |               |                      |            |



### EARTH STRIP INSULATOR

Designed to hold Earthing Strips without drilling holes & Alignment Issues

| S. No. | Cat No. | Top Width (W) | Dimension Length (L) | Height (H)     |
|--------|---------|---------------|----------------------|----------------|
| 1      | BC 325  | 74            | 25                   | 37.5 (11+26.5) |
| 2      | BC 540  | 105           | 30                   | 48 (12.5+35.5) |



### NEUTRAL LINKS

(Mounted on DMC Insulating Pad with connecting strip)

|   |       |
|---|-------|
| 1 | NL32  |
| 2 | NL63  |
| 3 | NL100 |



### THREE PHASE CONNECTORS DMC

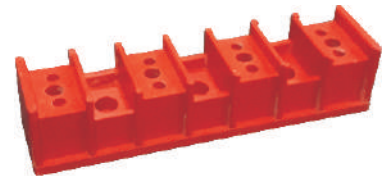
| S.No. | Cat No. | DESCRIPTION   |                                       |
|-------|---------|---------------|---------------------------------------|
| 1     | TP1     | TP Connector  | 1/4"x30mm Bolts(fitted) and RYB caps  |
| 2     | TPN1    | TPN Connector | 1/4"x30mm Bolts(fitted) and RYBB caps |
| 3     | TPN18   | TP Connector  | M8x35mm Bolts(fitted) and RYBB caps   |
| 4     | TSB26   | DP Connector  | M6x25 Bolts(Moulded) & Cover          |
| 5     | TSB36   | TP Connector  | M6x25 Bolts(Moulded) & Cover          |
| 6     | TSB46   | TPN Connector | M6x25 Bolts(Moulded) & Cover          |
| 7     | TSB28   | DP Connector  | M8x30 Bolts(Moulded) & Cover          |
| 8     | TSB38   | TP Connector  | M8x30 Bolts(Moulded) & Cover          |
| 9     | TSB48   | TPN Connector | M8x30 Bolts(Moulded) & Cover          |



### TP-20



### TP-50



### DMC 110

### SMC-130



### TRIPLE POLE NEUTRAL SUPPORT FOR SINGLE BUSBAR

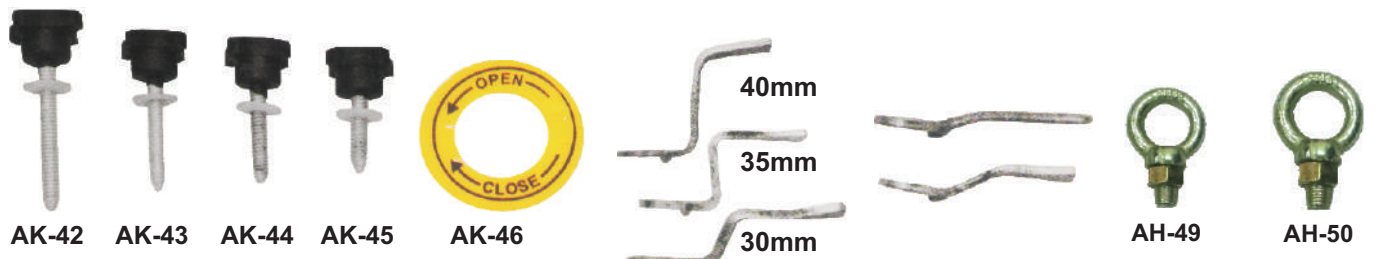
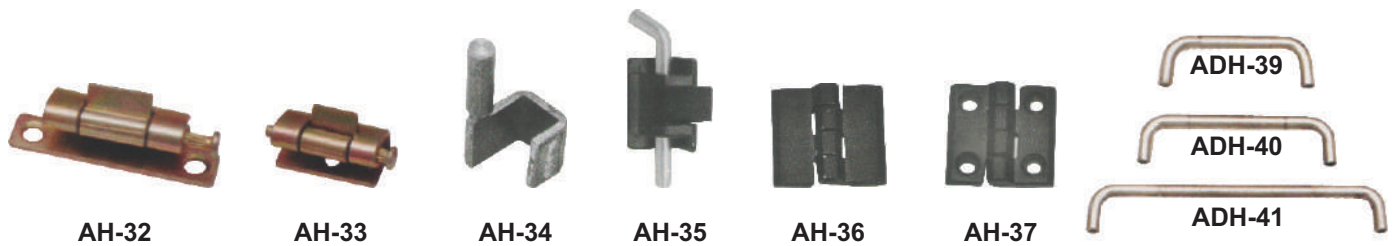
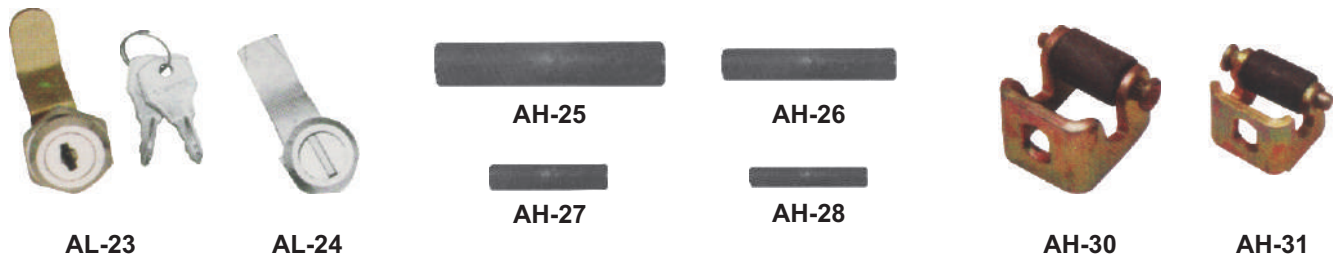


### TRIPLE POLE NEUTRAL SUPPORT FOR DOUBLE BUSBAR

### COMBI CONICAL SERIES



| Code No.      | DIMENSIONS (mm) |     |    |    |    |    |
|---------------|-----------------|-----|----|----|----|----|
|               | A               | B   | C  | D  | E  | F  |
| S 4C-525 (M5) | 25              | 120 | 20 | 35 | 34 | 35 |
| S 4C-630 (M6) | 30              | 185 | 25 | 52 | 52 | 52 |
| S 4C-845 (M8) | 45              | 260 | 35 | 70 | 70 | 70 |



## OUR KEY STRENGTH

- \* Own Compounding of SMC /DMC
- \* Automatic Hydraulic Press
- \* Computer aided Designing with integrated tool room facilities to produce critical dimension
- \* All Products are type tested in our end
- \* We can make as per customer specifications
- \* Meeting the deadlines.All efforts are made to ensure that shipment of goods within time

| TOLERANCE CHART |              | <p>ALL DATA GIVEN IN THIS CATALOGUE HAS BEEN DETERMINED CAREFULLY AT THE COMPANY'S TEST LAB WITH VARIETY OF PURPOSE FOR WHICH THE PRODUCTS ARE USED AND THE METHODS AND APPLICATION TECHNIQUES EMPLOYED HOWEVER THE DATA AND INFORMATIONS.</p> <p>ARE GIVEN ONLY AS A GUIDE AND ARE NOT BINDING NO GUARANTEE OF THERE AUTHENTICITY CAN THEREFORE BE ASSUMED IN ALL SITUATIONS</p> <p>ARE THE COMPANY RESERVES THE RIGHT TO MODIFY FEATURES WITHOUT PRIOR NOTICE IN VIEW OF CONTINUED IMPROVEMENTS.</p> |
|-----------------|--------------|--|
| DIMENSION (MM)  | TOLERANCE(+) |  |
| 1-15            | 0.20 MM      |  |
| 16-50           | 0.40 MM      |  |
| 51-100          | 0.75 MM      |  |
| 101-150         | 1.0 MM       |  |

## TECHNICAL SPECIFICATIONS

| PROPERTIES               | UNITS  | TEST METHODS (ASTM) | VALUES             |      |
|--------------------------|--------|---------------------|--------------------|------|
|                          |        |                     | SMC                | DMC  |
| PHYSICAL                 |        |                     |                    |      |
| SPECIFIC GRAVITY         |        | IS-1998             | 1.7                | 1.9  |
| GLASS CONTENTS           | %      | N.A.                | 25                 | 15   |
| WATER ABSORPTION (24yrs) | %      | D-570               | 0.2                | 0.15 |
| MECHANICAL               |        |                     |                    |      |
| TENSILE STRENGTH         | Kgf/cm | D-638               | 700                | 400  |
| FLEXURAL STRENGTH        | Kgf/cm | D-790               | 1550               | 900  |
| COMPRESSIVE STRENGTH     | kgf/cm | D-695               | 1800               | 1500 |
| IMPACT STRENGTHZOD       | J/m    | D-265               | 600                | 250  |
| ELECTRICAL               |        |                     |                    |      |
| DIELECTRIC STRENGTH      | KV/mm  | D-149               | 12                 | 10   |
| TRACKING STRENGTH        | Volts  | BS-5901             | +600               | +600 |
| ARC RESISTANCE           | Secs   | D-495               | +180               | +180 |
| FLAMMABILITY             |        | UL-94               | Self Extinguishing |      |

## DEALER NAME & ADDRESS

ASIAN®