

Branch Offices:

|                                                                                                                                                                                      |                                                                                                                                                                        |                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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AV ATS 04/25



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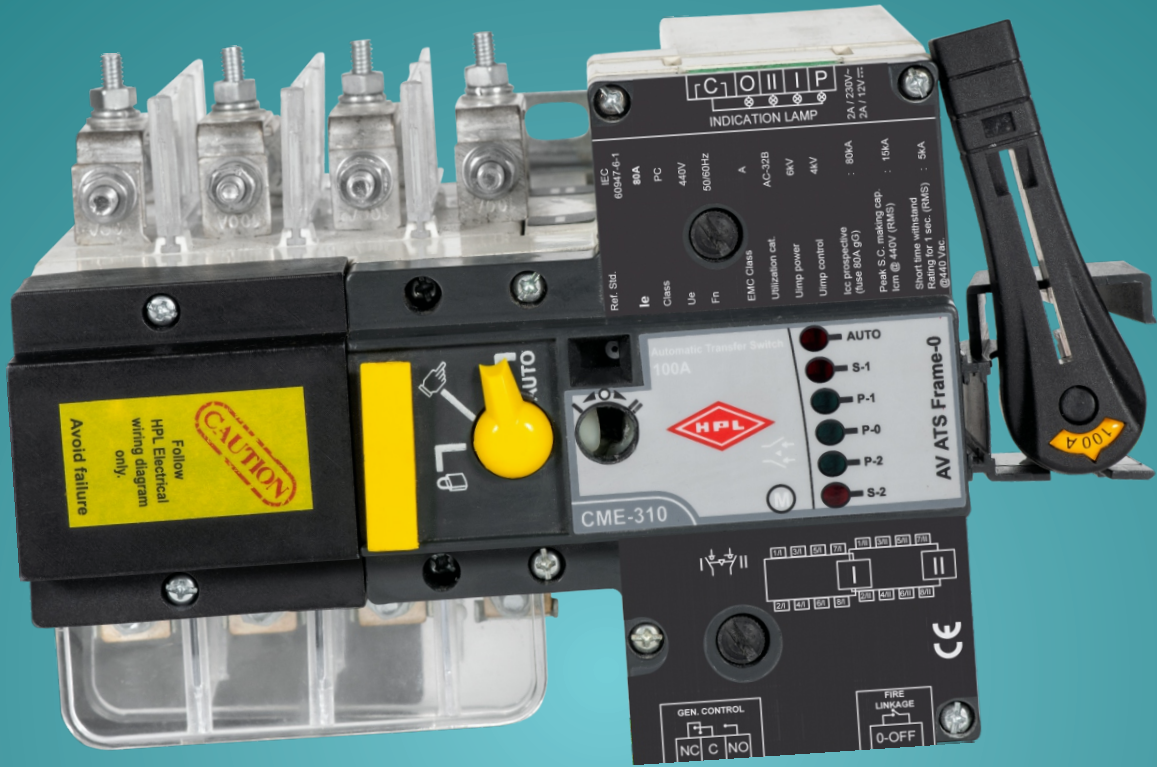
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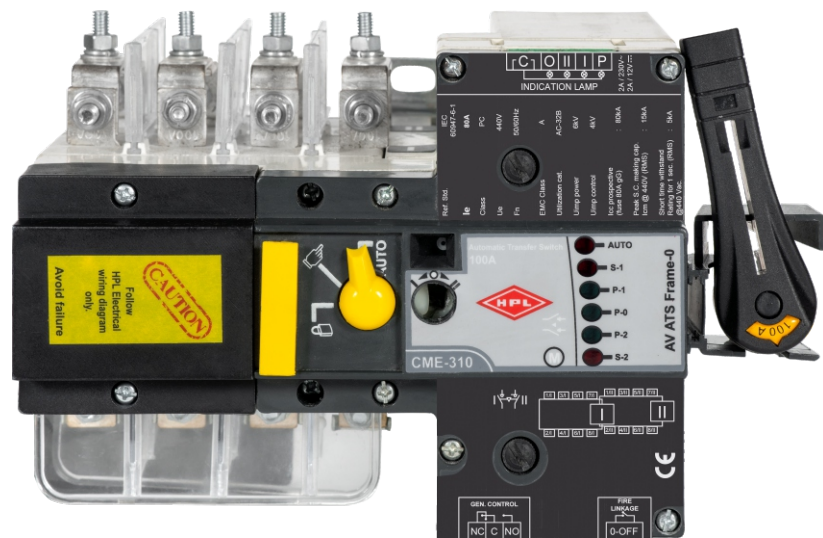
AV ATS

Advance Version Automatic Transfer Switch  
Changeover applications 40A-1600A



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**AV ATS**  
Advance Version Automatic  
Transfer Switch  
From 40A-1600A

Founded in 1956, the HPL Group is a major player in Indian Electrical Industry with commitment to the state of art technology, manufacturing world class products. HPL Group has been serving Indian Industry since last 55 years with time tested, reliable and well-proven products in the field of Switchgears, Protection Devices, Electronic Energy Meters, Energy Management Systems, Luminaries, Wire & Cable, LED Lighting, Modular Switches & Solar.

HPL Group has created niche for it self in Electrical Industry. Upgradation of existing technology and introduction of new products with innovative ideas and new technology are the main driving force here.

HPL brings to you, **AV ATS** range of True 4 pole motor operated changeover switches with positive break indication. They enable the on load transfer of two three-phase supplies via remote volt-free contacts, from either external automatic controllers, using pulse logic or push button station.

They are intended for use in low voltage power systems where interruption of the load supply is acceptable during transfer.

#### Approvals & Test

- Time tested
- Widely Acceptable Customer Accepted
- ISO 9001 Certified



Globally Accepted  
exporting to over  
**25 countries**



**AV ATS**  
1600A

#### The solution for

- > Generator manufacturers.
- > Heating.
- > Air conditioning.
- > Ventilation.
- > Telecommunications.



#### Strong points

- > Extensive power supply range.
- > Safety and reliability.
- > Easy integration.
- > Simplified maintenance.
- > ATS Dual power supply.

#### Conformity to standards

- > IEC 60947-6-1
- > IEC 60947-3
- > CE Marked
- > RoHS Compliant



#### Salient Features:

- A strong, reliable double break mechanism to provide a safe changeover of sources remotely.
- The only Switch with RoHS Compliance studded with protections like Phase Barriers, Source Separators, Terminal Cover.
- The only ATS with Protection against Arc.
- The FR molding material of the switch is having high thermal withstand capacity.
- AV ATS is True 4 Pole switch available in 4 frame sizes with AC 23A & AC-31B Load switching duty.
- AV ATS is available with 3 positions I-O-II Manual & Electrical Operations with non defeatable mechanical interlock.
- The AV ATS can be put in 'O' position both by manual operation through emergency handle & Electrical Operation through emergency switch.
- In the AV ATS the contacts opening / closing is within self extinguishing reinforced fiberglass body with arc chutes for quick & better arc extinguishing.
- For all versions, the quick make and quick break feature independent of the operating speed enables the switches to close and open circuits under the most severe conditions (e.g. highly inductive loads-AC 23A duty).
- The manual and electrical operation are interlocked and the manual operation is done with the handle provided with.
- The motor module is detachable & wide range of spares allow on site repair solutions.
- The Basic Controller & Higher Version Controller are available for advance auto switching with Communication facility.

#### Applications

- Healthcare
- Internet Data Centers
- Commercial Buildings
- Industrial Buildings
- Residential Buildings
- Telecom Central Office
- Process Manufacturing
- Distribution Power / Load Management
- HVAC
- Telecommunications BMS

#### Installation

- Changeover switches are ideal choice for installation in A.M.F. panel or for remote operation.
- Connection on terminal is very easy, as they are large & accessible.

#### Conformity

IS/IEC: 60947-3 & IEC: 60947-6-1.

CE Marked.

RoHS Compliant.

#### Range

AC 23A 415VAC 4 Pole 40A to 1600A in 4 frame sizes.

#### General Characteristics

The ideal conception in HPL AV ATS changeover switch incorporate 3 stable positions (I-O-II) changeover ensuring isolation of 2 asynchronous power supply.

#### Positions:

- O - Circuit I and II Open (Neutral Position).
- I - Circuit -I close and circuit II open (transformer supply "ON" and generator supply "OFF").
- II - Circuit I open and Circuit II close (generator supply "ON" and transformer supply "OFF").

All positions are interlocked.

#### Functions

AV ATS CHANGEOVER SWITCHES 'operate as a Changeover giving three stable positions I-O-II and help in supply changeover from one source to another' remotely.

#### Design

AV ATS Changeover Switches are manufactured from AV Changeover moulded case on load switches. In case of control supply failure, Emergency Handle arrangement is provided for manual operation of switch in "OFF" position or selecting the supply. The switch frames are back to back. The whole range is motor operated.

#### Contact System

- Clearly apparent operation.
- High thermal and dynamic strength to withstand rated fused short circuit current level 80KA rms.
- Are rated for AC-23A utilisation category.

#### Factory Fitted Auxiliary Contacts

- Auxiliary contacts are of "CO" type, they provide position signal or prebreak control.
- Auxiliary contacts are pre-wired for more convenience during installations.
- Auxiliary contacts 1NO 1NC and 2NO 2NC are available.

Characteristics according to IEC 60947-3 and IEC 60947-6-1

40 to 1600A

| Specification                            | Current Rating |      |      |      |      |         |      |      |         |      |      |         |  |         |
|------------------------------------------|----------------|------|------|------|------|---------|------|------|---------|------|------|---------|--|---------|
|                                          | Frame Sizes    |      |      |      |      | Frame-0 |      |      | Frame-1 |      |      | Frame-2 |  | Frame-3 |
| Thermal Current (Ith) 40°C               | 40A            | 63A  | 80A  | 100A | 125A | 125A    | 160A | 200A | 250A    | 320A | 400A | 630A    |  |         |
| Rated Insulation voltage Ui (Vac)        | 750            | 750  | 750  | 750  | 750  | 1000    | 1000 | 1000 | 1000    | 1000 | 1000 | 1000    |  |         |
| Dielectric strength (Vac) 50 Hz 1 minute | 4000           | 4000 | 4000 | 4000 | 4000 | 5000    | 5000 | 5000 | 5000    | 5000 | 8000 | 8000    |  |         |
| Impulse voltage ( KV)                    | 6              | 6    | 6    | 6    | 6    | 6       | 6    | 8    | 8       | 8    | 12   | 12      |  |         |
| Number of Poles                          | 4              | 4    | 4    | 4    | 4    | 4       | 4    | 4    | 4       | 4    | 4    | 4       |  |         |

Rated Operational Current Ie (A) According to IS/IEC: 60947-3

|                 |    |    |    |     |     |     |     |     |     |     |     |     |
|-----------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 415 Vac: AC 23A | 40 | 63 | 80 | 100 | 125 | 125 | 160 | 200 | 250 | 320 | 400 | 630 |
| 500 Vac: AC 23A | 40 | 55 | 55 | 55  | 55  | 100 | 130 | 160 | 200 | 250 | 315 | 315 |
| 260V dc: DC 21A | 40 | 63 | 80 | 100 | 125 | 125 | 160 | 200 | 250 | 320 | 400 | 630 |
| 260V dc: DC 22A | 40 | 63 | 80 | 100 | 125 | 125 | 160 | 200 | 250 | 320 | 400 | 500 |
| 260V dc: DC 23A | 40 | 63 | 63 | 63  | 63  | 125 | 160 | 160 | 200 | 250 | 400 | 500 |
| 440V dc: DC 21A | 40 | 63 | 80 | 100 | 125 | 125 | 160 | 200 | 250 | 320 | 400 | 500 |
| 440V dc: DC 22A | 40 | 63 | 80 | 100 | 125 | 125 | 130 | 160 | 200 | 250 | 400 | 500 |
| 440V dc: DC 23A | 40 | 63 | 63 | 63  | 63  | 125 | 130 | 160 | 200 | 250 | 400 | 500 |

Rated Current & Voltage of motor

|                   |                            |  |  |  |                            |  |  |  |  |  |  |  |
|-------------------|----------------------------|--|--|--|----------------------------|--|--|--|--|--|--|--|
| Current / Voltage | 0.25A/230VAC & 0.25A/12VDC |  |  |  | 0.25A/230VAC & 0.25A/48VDC |  |  |  |  |  |  |  |
|-------------------|----------------------------|--|--|--|----------------------------|--|--|--|--|--|--|--|

Overload Capacity

|                                              |    |    |    |     |     |     |     |     |     |     |     |     |
|----------------------------------------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Short circuit current with fuses (kA RMS)    | 80 | 80 | 80 | 80  | 80  | 80  | 80  | 80  | 80  | 80  | 80  | 80  |
| Associated Fuse Rating                       | 40 | 63 | 80 | 100 | 125 | 125 | 160 | 200 | 250 | 315 | 400 | 630 |
| Peak short circuit making capacity (kA RMS)  | 15 | 15 | 15 | 15  | 15  | 20  | 20  | 20  | 30  | 45  | 45  | 45  |
| Admissible short time current 1 sec (kA RMS) | 5  | 5  | 5  | 5   | 5   | 7   | 7   | 7   | 13  | 13  | 13  | 13  |

Making & Breaking Characteristics

|                                           |     |     |     |      |      |      |      |      |      |      |      |      |
|-------------------------------------------|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| Breaking capacity (A RMS) 415 Vac pf=0.35 | 320 | 504 | 640 | 800  | 1000 | 1000 | 1280 | 1600 | 2000 | 2520 | 3200 | 5040 |
| Making capacity (A RMS) 415 Vac pf=0.35   | 400 | 630 | 800 | 1000 | 1250 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | 6300 |

Endurance

|                                     |       |       |       |       |       |      |      |      |      |      |      |      |
|-------------------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| Mechanical Life (No. of Operations) | 10000 | 10000 | 10000 | 10000 | 10000 | 8000 | 8000 | 8000 | 8000 | 5000 | 5000 | 5000 |
| Electrical Life (No. of Operations) | 2500  | 2500  | 1500  | 1500  | 1500  | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Operating Torque ( N-m)             | 3.5   | 3.5   | 3.5   | 3.5   | 3.5   | 9.5  | 9.5  | 9.5  | 11   | 11   | 17   | 17   |

Switching Time

|                                              |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| I - II or II - I (s)                         | 0.5  | 0.5  | 0.5  | 0.5  | 0.5  | 0.75 | 0.75 | 0.75 | 1.3  | 1.3  | 1.3  | 1.3  |
| I - 0 or II - 0 (s)                          | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.45 | 0.45 | 0.45 | 0.85 | 0.85 | 0.85 | 0.85 |
| Duration of "electrical blackout" I - II (s) | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.3  | 0.3  | 0.3  | 0.6  | 0.6  | 0.6  | 0.6  |

Power Connection

|                                  |     |     |     |     |     |     |    |     |      |      |     |       |
|----------------------------------|-----|-----|-----|-----|-----|-----|----|-----|------|------|-----|-------|
| (Details of Copper Conductors)   |     |     |     |     |     |     |    |     |      |      |     |       |
| Min.Cu. Cable/Bus bar size (mm²) | 10  | 16  | 25  | 35  | 50  | 50  | 70 | 95  | 120  | 185  | 240 | 2x185 |
| (Details of Aluminum Conductors) |     |     |     |     |     |     |    |     |      |      |     |       |
| Min.Al. Cable/Bus bar size (mm²) | 16  | 25  | 35  | 50  | 70  | 70  | 95 | 150 | 185  | 240  | 300 | 640   |
| Weight (Kgs) 4P                  | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 7.5 | 8  | 8   | 10.5 | 10.5 | 19  | 22    |

Characteristics according to IEC 60947-3 and IEC 60947-6-1

40 to 1600A

| Specification                            | Current Rating |       |         |       |
|------------------------------------------|----------------|-------|---------|-------|
|                                          | Frame Sizes    |       | Frame-4 |       |
| Thermal Current (Ith) 40°C               | 800A           | 1000A | 1250A   | 1600A |
| Insulation voltage Ui (Vac)              | 1000           | 1000  | 1000    | 1000  |
| Dielectric strength (Vac) 50 Hz 1 minute | 8000           | 8000  | 10000   | 10000 |
| Impulse voltage ( KV)                    | 12             | 12    | 12      | 12    |
| Number of Poles                          | 4              | 4     | 4       | 4     |

Rated Operational Current Ie (A) According to IS/IEC: 60947-3

|              |     |      |      |      |
|--------------|-----|------|------|------|
| 415 V AC 23A | 800 | 1000 | 1250 | 1600 |
| 500 V AC 23A | 400 | 630  | 800  | 1000 |
| 260V DC 21A  | 800 | 1000 | 1250 | 1250 |
| 260V DC 22A  | 800 | 1000 | 1250 | 1250 |
| 260V DC 23A  | 800 | 1000 | 1250 | 1250 |
| 440V DC 21A  | 800 | 1000 | 1250 | 1250 |
| 440V DC 22A  | 800 | 1000 | 1250 | 1250 |
| 440V DC 23A  | 800 | 1000 | 1250 | 1250 |

Rated Current & Voltage of motor

|                   |                            |  |  |  |
|-------------------|----------------------------|--|--|--|
| Current / Voltage | 0.25A/230VAC & 0.25A/48VDC |  |  |  |
|-------------------|----------------------------|--|--|--|

Overload Capacity

|                                              |     |      |      |         |
|----------------------------------------------|-----|------|------|---------|
| Short circuit current with fuses (kA RMS)    | 80  | 80   | 80   | 80      |
| Fuse Rating                                  | 800 | 1000 | 1250 | 2 x 800 |
| Peak short circuit making capacity (kA RMS)  | 105 | 105  | 105  | 110     |
| Admissible short time current 1 sec (kA RMS) | 50  | 50   | 50   | 50      |

Making & Breaking Characteristics

|                                           |      |       |       |       |
|-------------------------------------------|------|-------|-------|-------|
| Breaking capacity (A RMS) 415 Vac pf=0.35 | 6400 | 8000  | 8000  | 8000  |
| Making capacity (A RMS) 415 Vac pf=0.35   | 8000 | 10000 | 10000 | 10000 |

Endurance

|                                     |      |      |      |      |
|-------------------------------------|------|------|------|------|
| Mechanical Life (No. of Operations) | 4000 | 4000 | 4000 | 4000 |
| Electrical Life (No. of Operations) | 500  | 500  | 500  | 500  |
| Operating Torque ( N-m)             | 40   | 40   | 40   | 40   |

Switching Time

|                                              |      |      |      |      |
|----------------------------------------------|------|------|------|------|
| I - II or II - I (s)                         | 1.5  | 1.5  | 1.5  | 1.5  |
| I - 0 or II - 0 (s)                          | 0.86 | 0.86 | 0.86 | 0.86 |
| Duration of "electrical blackout" I - II (s) | 0.7  | 0.7  | 0.7  | 0.7  |

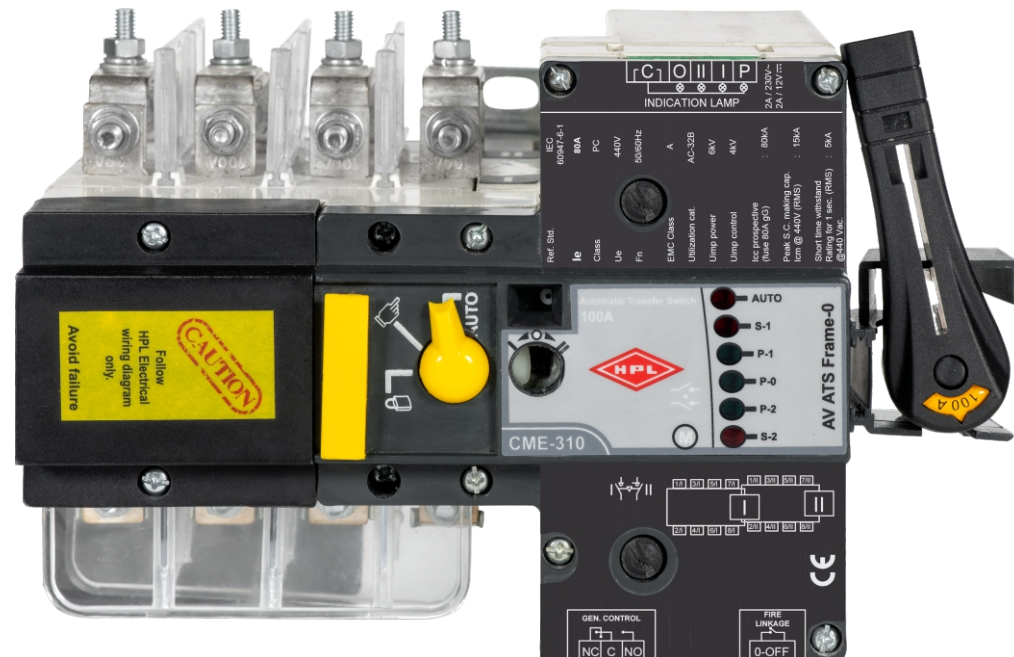
Power Connection

|                                     |        |         |         |         |
|-------------------------------------|--------|---------|---------|---------|
| Min. Cu. Cable / Bus bar size (mm²) | 50x5x2 | 60x5x2  | 80x5x2  | 100x5x2 |
| Min. Al. Cable / Bus bar size (mm²) | 50x8x2 | 50x10x2 | 63x12x2 | 100x8x2 |
| Weight (Kgs) 4P                     | 35.2   | 43.3    | 45.0    | 69.0    |



## AV ATS

Advance Version Automatic  
Load Transfer Switch  
From 40A - 1600A



### Versions of ATS

#### ATS without Controller (Motorised Chageover)

#### ATS with inbuilt Input Control Supply & Logic Control with LED Indication ATS CME 310

- ATS is available without external control wiring, only Power Terminal need to be connected
- ATS does not require any external component for providing power input for Motor and ATS is ready for operation
- ATS does not require any external logic control
- ATS would sense the source failure on both sources
- ATS would give command to start the DG set
- ATS would select the Preferred source
- ATS would give command to stop the DG set
- ATS has factory configured ON delay time on both sources
- LED would indicate
  - availability of Sources
  - Switch position I-0-II
  - Auto/ Manual (to be set by the operator)
- The CME 310 arrangement is available throughout the range from 40A to 1600A



#### ATS with Inbuilt Smart Controller CME 360

##### Key Features:

- ATS with Controller CME 360
- CME 360 would sense & measure both source
  - Over Voltage & Under Voltage
  - Over Frequency & Under Frequency
  - Over Current & Under Current
- CME 360 could be programmed to act on the measured unhealthy values by disconnecting the circuit to protect the equipments at Load
- CME 360 could override the specific programs
- CME 360 could Measure Energy - Active & reactive
- CME 360 measures over 45 parameters including Voltage, Current, Frequency, kW, kVA, kVAR, PF, Active Energy for Mains Generator & MD in kW and kVA for Mains & Generator separately with Data & Time, Run Hour, Power ON Hour
- CME 360 evade further devastations by short circuits by Fire Protection System Linkage
- CME 360 can prevent more damage by earthquake protection system linkage
- CME 360 has data capacity for
  - Total ON hours of ATS
  - Individual ON hours of EB & DG
  - Power Factor - Priority & alternate source
  - Maximum Demand
- Current & Peak current - Measure & Display the value & the value can be Communicated on remote PC or Mobile App
- Event Recording of last 10 Faults
- Communication via RS485 MODBUS
- Optional Ethernet Communication
- CME 360 can provide last 6 months History of Parameters for kWh and MD through communication
- Remote operation through PLC/ SCADA/ EMS
- Password Protection
- Potential free contacts - DG Start/ Stop
- Cloud/ IoT connected with Software - via Gateway
- No external component required for common output for energising ATS Motor
- LCD Display with Backlit with full screen display in Ethernet version
- Load output and Neutral position arrangements as required by the customer
- Ease of maintenance with Modular Motor Module which can be detached without dismantling Power Terminals and reduces ATS Downtime during maintenance
- CME 360 is low maintenance product - PAN India network of qualified Customer Support Engineers
- CME 360 is available for Operating voltage 60V DC or 230V ac (other voltages on request)
- The CME 360 Inbuilt Controller for all ratings from 40A to 1600A



## Controllers - Door Mounted

Advance Version Automatic  
Transfer Switch



### CME 360



### Key Features of CM 331

- Configurable inputs(4)
- Configurable volt-free outputs (4)
- Configurable DC outputs (4)
- Icon or English text display
- LED indicator
- Front Panel / PC configuration
- Source 1 / Source 2 control
- Configurable Timers
- Start inhibit
- Load inhibit
- Manual restore to S1
- Automatic switch-over between supplies
- Single event scheduler
- 3-phase display



### Key Benefits of CM 335

- Configurable inputs(12).
- Configurable volt-free outputs (6).
- Configurable DC outputs (6).
- 4 Line back-lite LCD text display.
- Five key menu navigation.
- Front panel editing with PIN protection.
- LED & LCD alarm indication.
- Source 1 / Source 2 control.
- Start & Load Inhibit.
- Manual restore to S1.
- Configurable timers and alarms.
- Multiple date and time scheduler.
- Power monitoring (kW h, kV Ar, kV A h, kV Ar h).
- USB Connectivity.
- Backed up real time clock.

- Fully configurable via Controller.
- Configuration Suite PC software.
- Configurable display languages.
- User selectable Rs232 and Rs485 communications.
- Expansion compatible.
- SMS messaging (additional external modem required)
- Integral PLC editor.
- Modules can be integrated into buildings management systems (BMS).



### Dimensions of CME360, CM 331 & CM 335

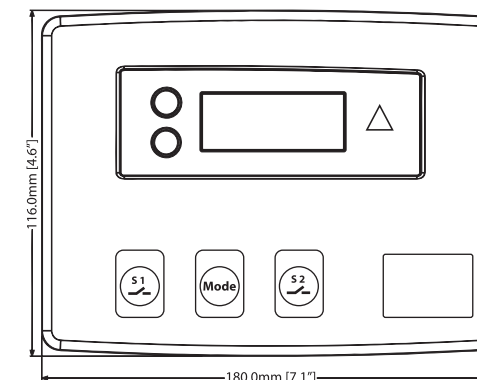


#### Dimensions

96mm x 96mm x 55mm  
(3.78" x 3.78" x 2.17")

#### Panel Cutout

92mm x 92mm  
(3.62" x 3.62")

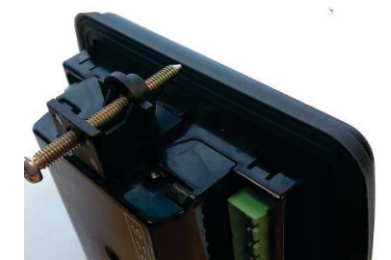
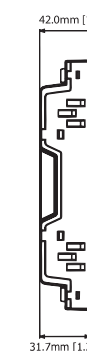


#### Dimensions

180mm x 116mm x 42mm  
(7.1" x 4.6" x 1.7")

#### Panel Cutout

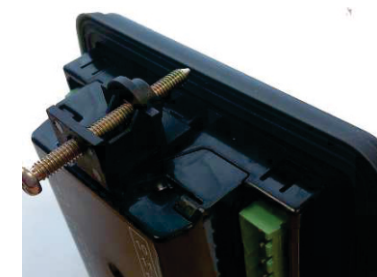
154mm x 98mm  
(6" x 3.9")



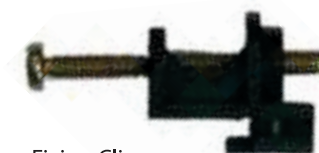
Fixing Clip fitted to Module



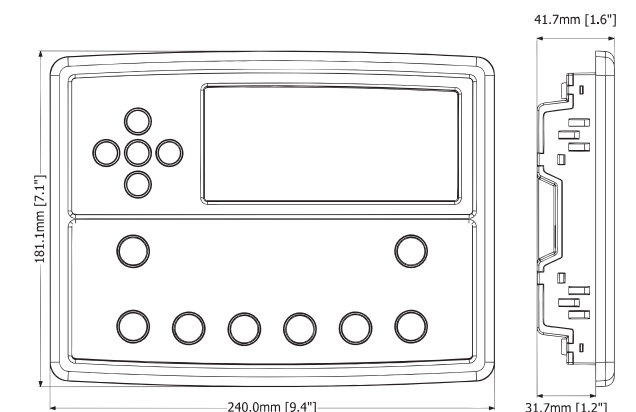
Fixing Clip



Fixing Clip fitted to Module



Fixing Clip

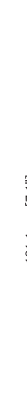


#### Dimensions

240mm x 181.1mm x 41.7mm  
(9.4" x 7.1" x 1.6")

#### Panel Cutout

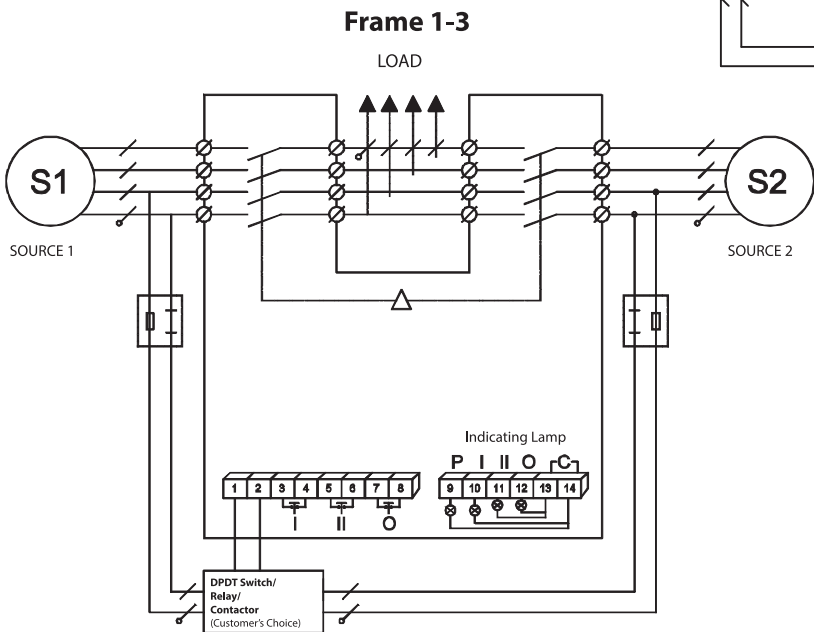
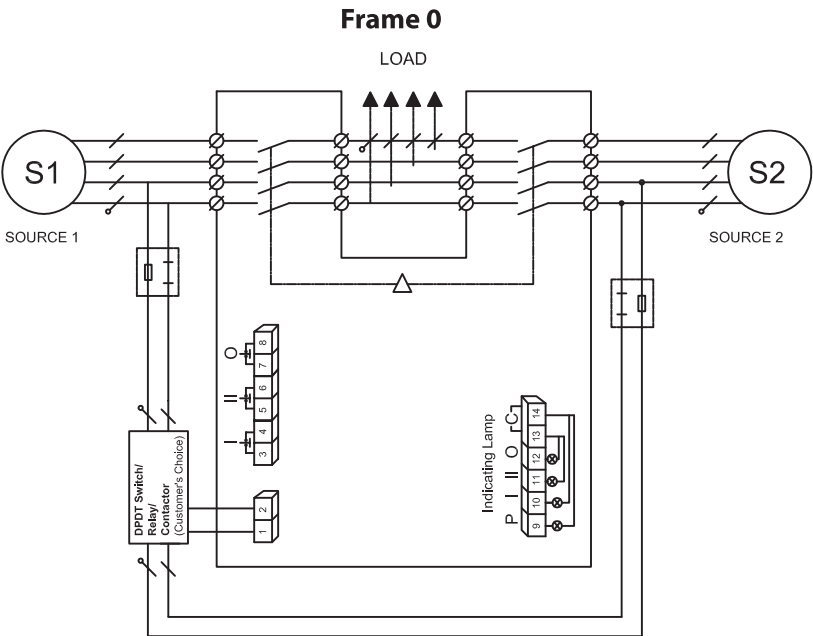
220mm x 160mm  
(8.7" x 6.3")





ATS Switch Connections

- P = Power Indication
- I = Source - 1
- II = Source - 2
- O = Neutral
- C = Common



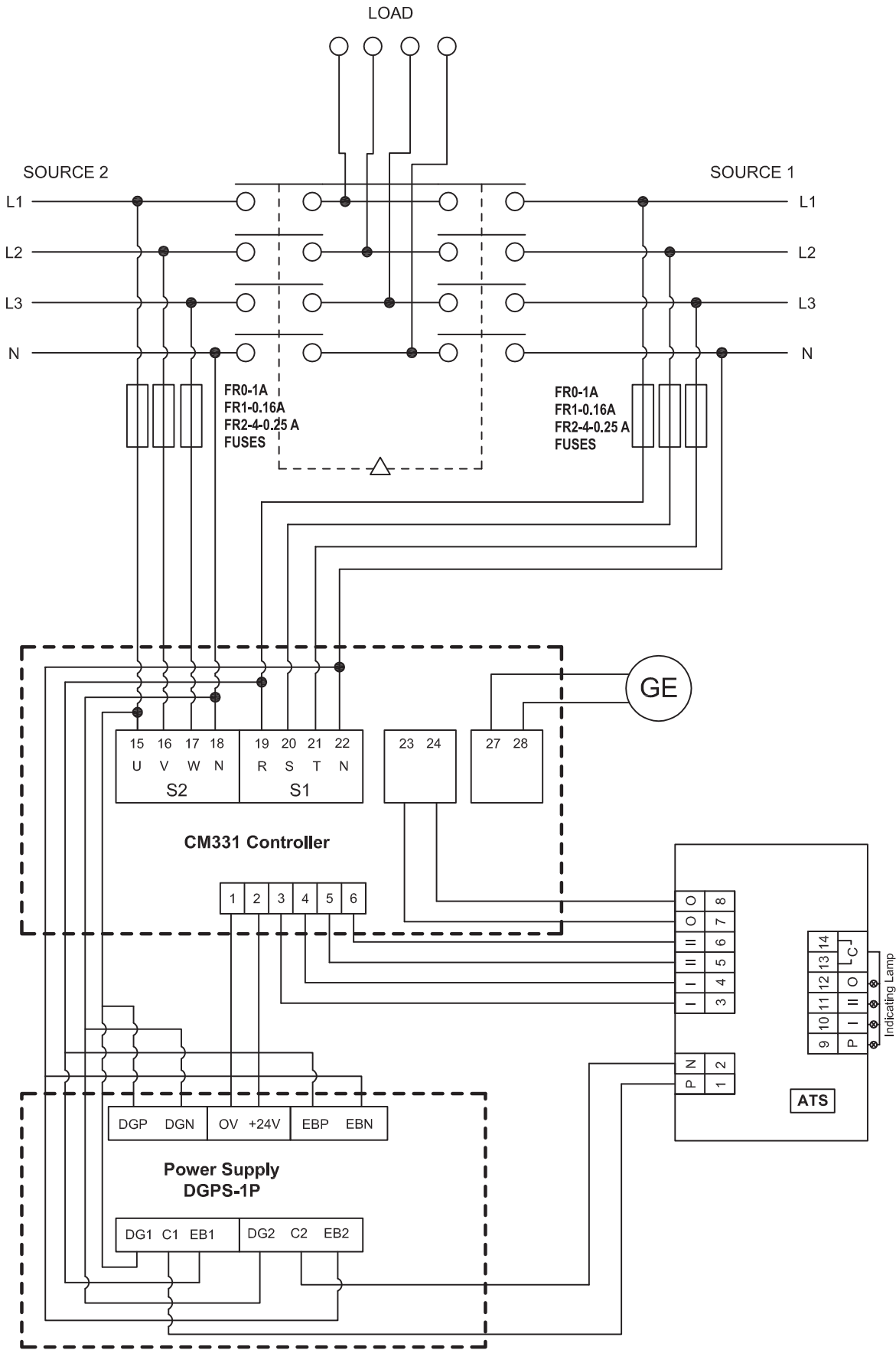
- P = Power Indication
- I = Source - 1
- II = Source - 2
- O = Neutral
- C = Common

| DETAILS      | TERMINAL No. | DESCRIPTION           | PARAMETERS                                                                                                                                           | CABLE SIZE REQD. |
|--------------|--------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Power Supply | ①            | Power Supply          | 230 Vac ±20%                                                                                                                                         | 1.5 Sq.mm        |
|              | ②            |                       |                                                                                                                                                      |                  |
| Control      | ③            | Position-I Command    | <div></div> <div><b>DO NOT CONNECT<br/>TO POWER SUPPLY</b></div> |                  |
|              | ④            |                       |                                                                                                                                                      |                  |
|              | ⑤            | Position-II Command   |                                                                                                                                                      |                  |
|              | ⑥            |                       |                                                                                                                                                      |                  |
|              | ⑦            | Position-O Command    |                                                                                                                                                      |                  |
|              | ⑧            |                       |                                                                                                                                                      |                  |
| Signaling    | ⑨ ~ ⑭        | Power Indicator       | FR0-1A<br>FR1-0.16A<br>FR2-4-0.25A<br>230 Vac OUTPUT                                                                                                 |                  |
|              | ⑩ ~ ⑭        | Position-I Indicator  |                                                                                                                                                      |                  |
|              | ⑪ ~ ⑬        | Position-II Indicator |                                                                                                                                                      |                  |
|              | ⑫ ~ ⑬        | Position-O Indicator  |                                                                                                                                                      |                  |

\*FUSE-FST-160mA (Part No.0034.3109.2.G)  
FUSE-FST-250mA (Part No.0034.3111.2.G)  
Shurter German/ Indian recommended.



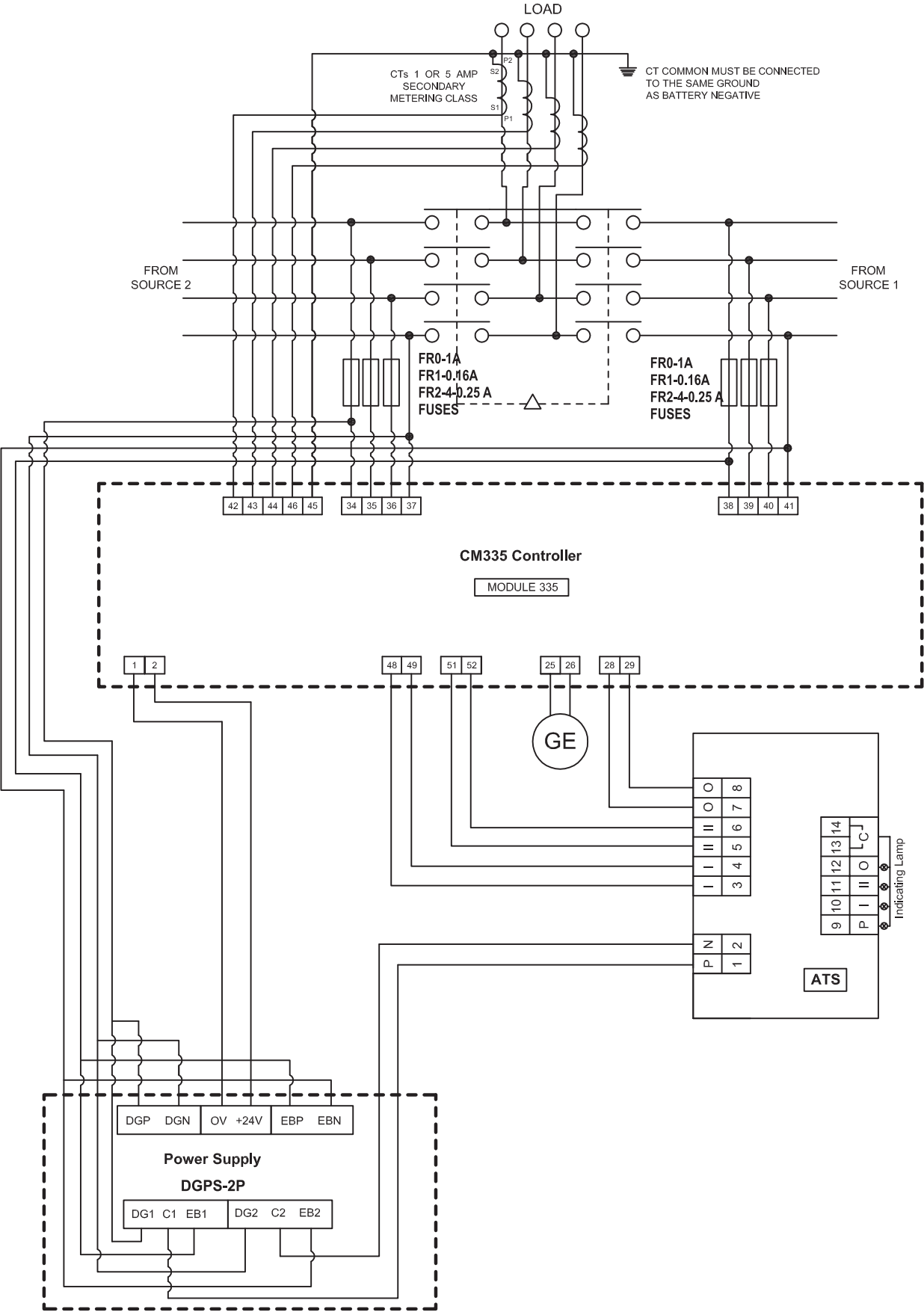
ATS with CM 331 Controller Connection



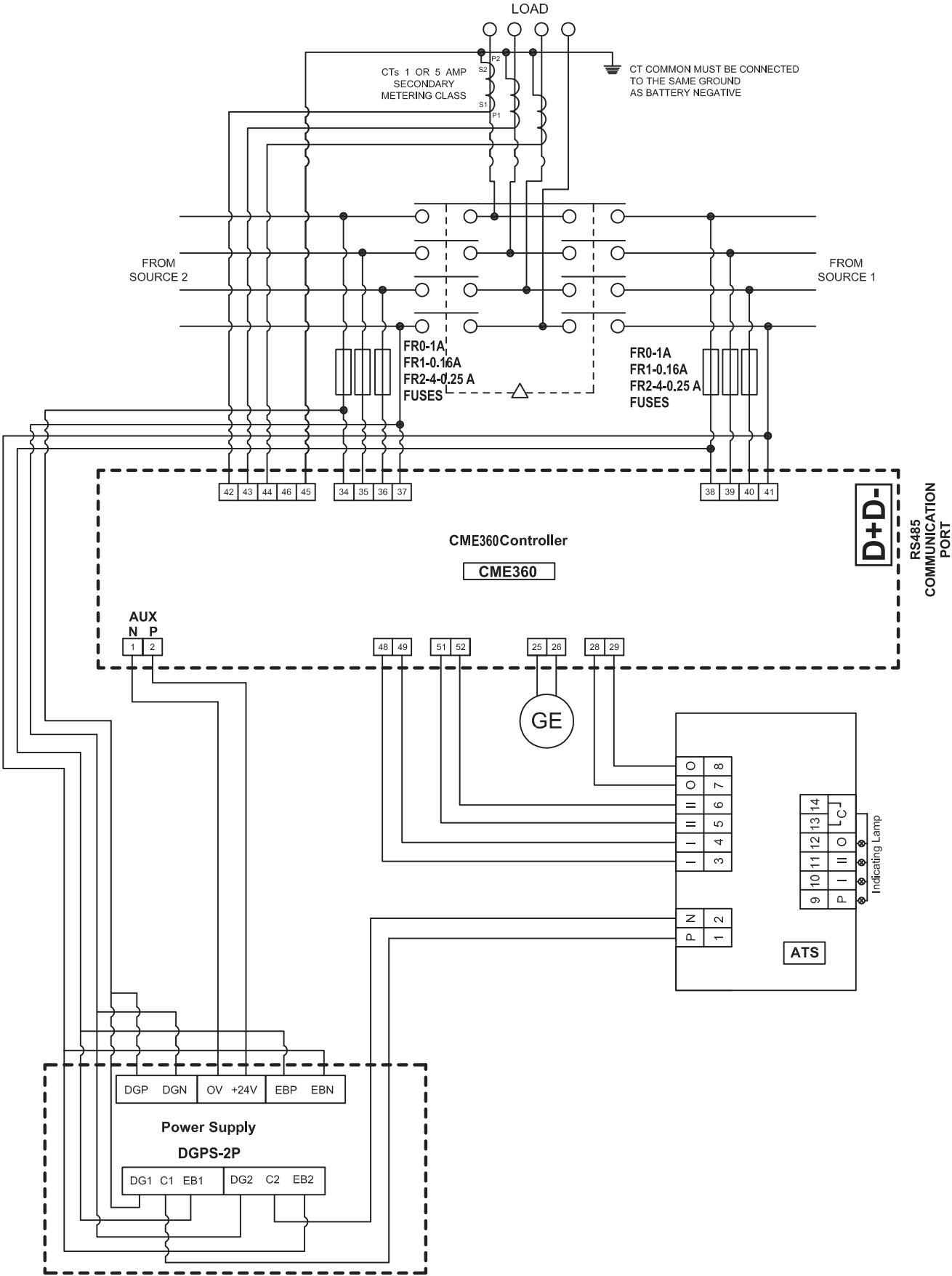




ATS with CM 335 Controller Connection

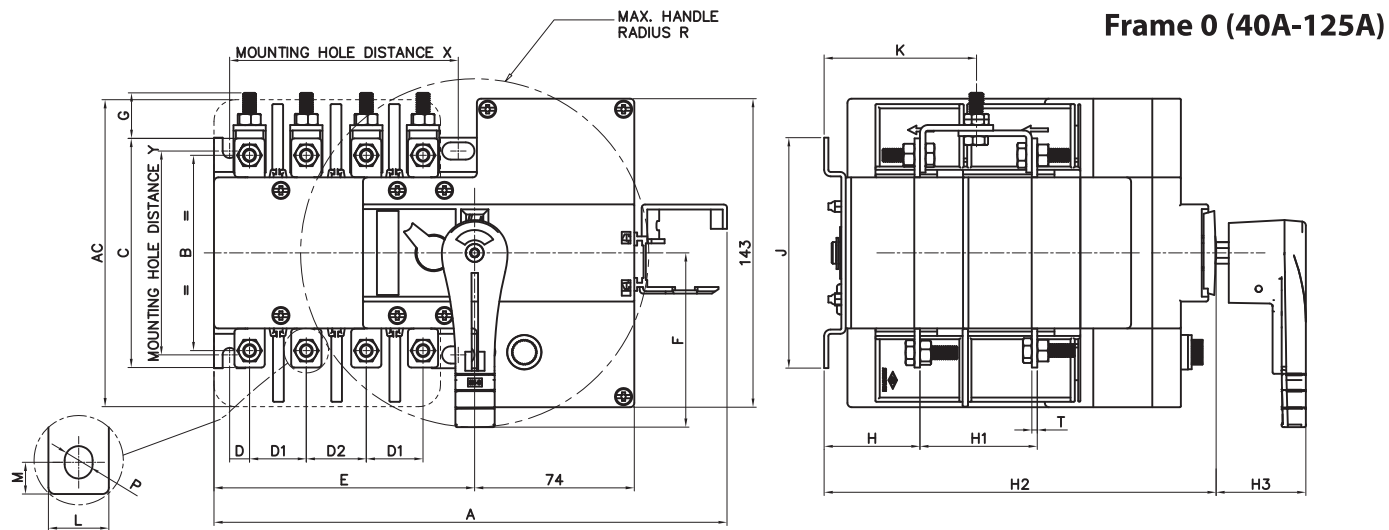


ATS with CME 360 Controller Connection



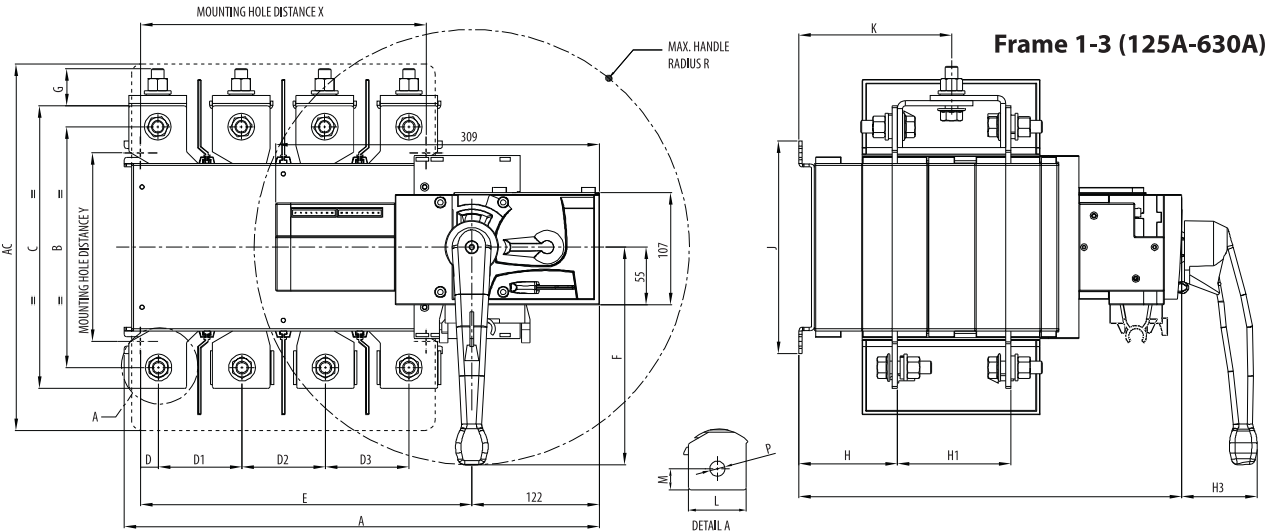


Dimension



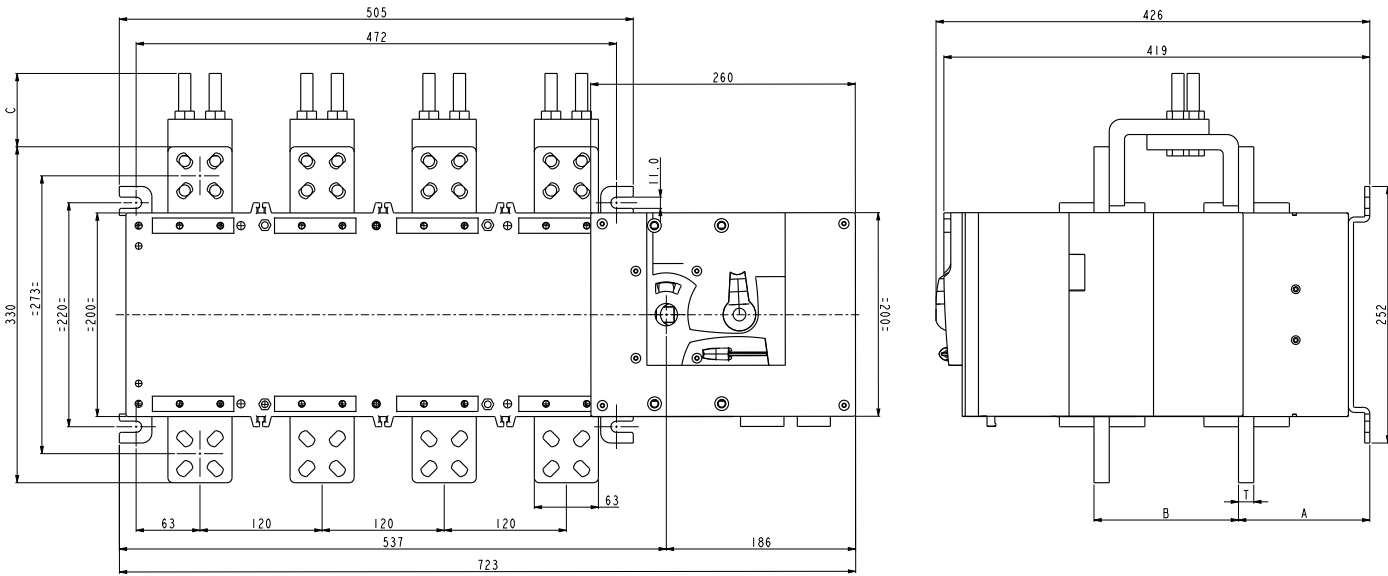
| Rating | Mounting Hole Dist. |    | A   | B  | C   | D | D1 | D2 | E   | F  | G  | H  | H1 | H2  | H3 | J   | K  | L  | M | P   | R  | T   | AC  |
|--------|---------------------|----|-----|----|-----|---|----|----|-----|----|----|----|----|-----|----|-----|----|----|---|-----|----|-----|-----|
|        | X                   | Y  |     |    |     |   |    |    |     |    |    |    |    |     |    |     |    |    |   |     |    |     |     |
| 40A    | 106                 | 95 | 238 | 91 | 106 | 9 | 26 | 28 | 121 | 81 | 22 | 44 | 54 | 182 | 42 | 107 | 71 | 14 | 8 | 6.5 | 81 | 2.5 | 142 |
| 63A    | 106                 | 95 | 238 | 91 | 106 | 9 | 26 | 28 | 121 | 81 | 22 | 44 | 54 | 182 | 42 | 107 | 71 | 14 | 8 | 6.5 | 81 | 2.5 | 142 |
| 80A    | 106                 | 95 | 238 | 91 | 106 | 9 | 26 | 28 | 121 | 81 | 22 | 44 | 54 | 182 | 42 | 107 | 71 | 14 | 8 | 6.5 | 81 | 2.5 | 142 |
| 100A   | 106                 | 95 | 238 | 91 | 106 | 9 | 28 | 29 | 121 | 81 | 22 | 44 | 54 | 182 | 42 | 107 | 71 | 15 | 8 | 6.5 | 81 | 2.5 | 142 |
| 125A   | 106                 | 95 | 238 | 91 | 106 | 9 | 28 | 29 | 121 | 81 | 22 | 44 | 54 | 182 | 42 | 107 | 71 | 15 | 8 | 6.5 | 81 | 2.5 | 142 |

Note: All dimensions in mm (Tolerance ±5%)



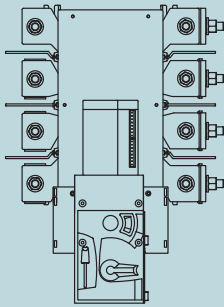
| Rating   | Mounting Hole Dist. |     | A     | B   | C   | D  | D1   | D2   | E   | F   | G  | H    | H1    | H2  | H3 | J   | K     | L  | M  | P    | R   | T   | AC  |
|----------|---------------------|-----|-------|-----|-----|----|------|------|-----|-----|----|------|-------|-----|----|-----|-------|----|----|------|-----|-----|-----|
|          | X                   | Y   |       |     |     |    |      |      |     |     |    |      |       |     |    |     |       |    |    |      |     |     |     |
| 125A     | 158                 | 95  | 316.5 | 117 | 141 | 12 | 45   | 45   | 183 | 151 | 35 | 64   | 66    | 278 | 54 | 115 | 95    | 22 | 16 | 10.5 | 151 | 3   | 195 |
| 160&200A | 158                 | 95  | 316.5 | 123 | 155 | 8  | 48   | 45   | 183 | 151 | 35 | 64   | 66    | 278 | 54 | 115 | 95    | 25 | 16 | 10.5 | 151 | 4   | 195 |
| 250&320A | 215                 | 111 | 375.5 | 152 | 192 | 7  | 64.5 | 64.5 | 240 | 208 | 35 | 72.5 | 75.5  | 298 | 72 | 130 | 107.5 | 32 | 20 | 11   | 208 | 4.5 | 240 |
| 400A     | 273                 | 180 | 454   | 206 | 240 | 27 | 73   | 73   | 317 | 208 | 40 | 94.5 | 108.5 | 366 | 72 | 203 | 146   | 40 | 20 | 14.5 | 208 | 5   | 350 |
| 630A     | 273                 | 180 | 454   | 230 | 270 | 17 | 80   | 80   | 317 | 208 | 40 | 94.5 | 108.5 | 366 | 72 | 203 | 146   | 55 | 20 | 14.5 | 208 | 5   | 350 |

Note: All dimensions in mm (Tolerance ±5%)

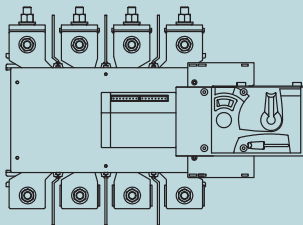


| S. NO. | RATING | A   | B   | C  | T  |
|--------|--------|-----|-----|----|----|
| 1      | 800A   | 124 | 137 | 63 | 6  |
| 2      | 1000A  | 124 | 137 | 63 | 6  |
| 3      | 1250A  | 125 | 138 | 64 | 7  |
| 4      | 1600A  | 129 | 142 | 72 | 15 |

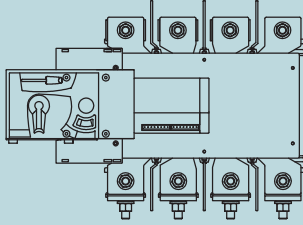
Mounting Orientation



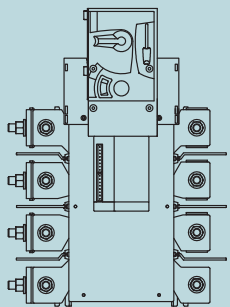
Possible



Recommended



Forbidden



Forbidden

Dimension Enclosure

| Rating      | L   | W   | Y   | X   | H   |
|-------------|-----|-----|-----|-----|-----|
| 40A - 125A  | 350 | 400 | 398 | 350 | 300 |
| 125A - 200A | 450 | 500 | 497 | 450 | 359 |
| 250A - 320A | 550 | 600 | 598 | 550 | 399 |
| 400A - 630A | 650 | 700 | 690 | 600 | 469 |

Note: All dimensions in mm (Tolerance ±5%)

800-1600Amps Data Available on Request

