

AUTOMATIC CHANGEOVER WITH CURRENT LIMITER

Current | Voltage | Frequency | Energy

FOR A SEAMLESS, CHANGEOVER BETWEEN POWER SOURCES!



Features (Three Phase) :

- Micro controller based automatic source changeover with neutral isolation.
- Intelligent re-connection once trip occurs, either due to over voltage or over load.
- Energy, Current, Voltage measurement for DG & Current measurement for EB. Optional EB Energy and Voltage measurement for 3 phase.
- Intelligent tripping: Inverse curve (Higher the overload faster the trip).
- Conformity standard as per IEC 60947-6-1
- Manual reset provision when in sleep mode for restoring power supply Or through the mobile app when network is available.
- Intelligent changeover with R phase or any one phase failure (Manufacturing option).
- Under/Over voltage protection for EB to DG
- Programmable threshold setting for both sources independently.
- DG delay programmable for each ACCL to avoid loading the generator at a time.
- Potential free contact for connecting power load only in EB (single phase / relay version) optional(M 100R).
- Automatic trip if sum of power circuit and lighting circuit is >32A (single phase / relay version) optional.
- Individual phase overload monitoring (Any Phase > set current, it trips).
- DG Phase selection - Programmable

Unique Features :

- Intelligent Overload tripping with AC1 to AC3 behavior.
- Wide range of operational voltage: (180 - 260) VAC
- Display of overload information for both EB and DG, along with phase indication.
- Wiring simplicity for lighting and power with common neutral in iACCL M100R Single Phase.
- Installation is done as DIN rail for single phase and surface mountable for 3 phase (Optional DIN rail for 3 phase up to 40A).
- Eco friendly thermoplastic and fire retardant enclosure.
- More than 20000 operations.
- Reason for trip is displayed.
- Optional Prepaid feature only for DG
- RS 485 communication.(Optional)
- Protection against neutral current flow beyond threshold.
- EB measurement VHF for M300

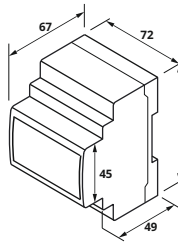
Features (Single Phase) :

- Under and Over Voltage protection when load is running on DG
- Protect DG with Staggered Delay and Inverse curve Protection
- Reduced wiring complexity and installation time- Terminal 16mm capacity
- Programmable DG current limiting features on site through configuration tool
- EB/DG Input source Interchangeability
- Field configuration through CFG 400 for iACCL 400/400C

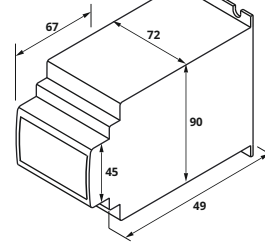
Mechanical Specification :

Single Phase

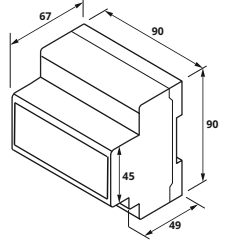
iACCL M400/400



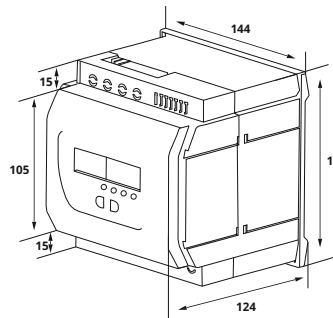
iACCL 400C



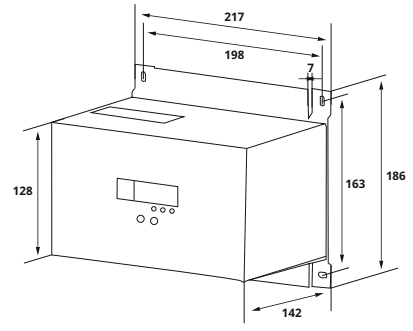
iACCL M100R



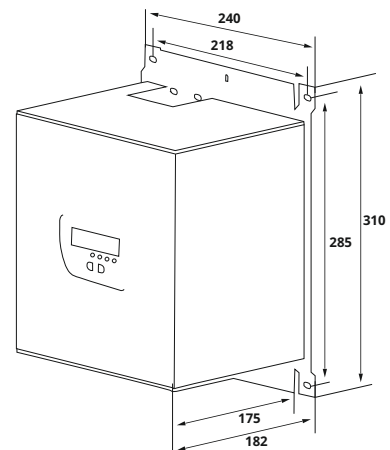
iACCL M300 (32A-63A) | M330 (40A)



iACCL M300 (80A)



iACCL M300 (100A)



Technical Specification:



| | 400 | 400C | M400 | M100R | M300 | M300 | M300 | M330 |
|--|--|----------------|-----------|----------------------|---------------------|--------------------|--------------------|--------------------|
| ELECTRICAL CHARACTERISTICS | | | | | | | | |
| Rated Current | 25/32A | | | | 40 63A | 80A | 100 125A | 40A |
| No. of Poles | 1P+N | | | 1P+N+1 Power Load | 3P+N | 3P+N | 3P+N | EB:3P+N DG:1P+N |
| Rated Operating Voltage | 240VAC | | | | 415/240VAC | 415/240VAC | 415/240VAC | 415/240VAC |
| Rated Frequency | 50Hz | | | | 50Hz | 50Hz | 50Hz | 50Hz |
| Utilization Category AC1 | 25/32A | | | | 40 63A | 80A | 100 125A | 40A |
| Utilization Category AC3 | 25/32A | | | | 32 40A | 63A | 80A | 32 40A |
| Ingress Protection: | IP 20 & Double Insulation (As per IEC 61010-1) | | | | | | | |
| Accuracy | Class 1 | | | | | | | |
| PROGRAMMING FEATURES | | | | | | | | |
| Energy Selection | Wh /VAh | | | | | | | |
| DG under voltage | 170-210VAC | | | | 165-210VAC | | | |
| DG over voltage | 240-270VAC | | | | | | | |
| DG Maximum Current Limit | 25/32A | | | | 40 63A | 80A | 100 125A | 40A |
| EB Maximum Current Limit | | | | | 40 63A | 80A | 100 125A | 40A |
| DG Start time | 1sec-30sec | | | | | | | |
| Cycle time | 6sec-150sec | | | | | | | |
| No. of Cycles | 5 to 10 | | | | | | | |
| DG Selection | NA | | | | DG Output selection | | | |
| METERING PARAMETERS | | | | | | | | |
| EB Source | NA | | | | Current | | | |
| DG Source | Current, Voltage, PF, W, VA, Wh/VAh | | | | | | | |
| Trip Reset | Reset Key | | | | Reset Key | Reset Key | Reset Key | Reset Key |
| INDICATION | EB Source, DG Source, Trip, Minus, Communication and Reason for Trip | | | | | | | |
| COMMUNICATION | | | | | | | | |
| Device ID & Parity | 1 to 247 & Odd, Even, None (Preferred Even) | | | | | | | |
| Protocol & Interface | Modbus. RTU & RS 485 | | | | | | | |
| Baud rate | 4800 bps to 19200 bps (Preferred 9600 bps) | | | | | | | |
| Isolation | 2000 volts AC isolation for 1 minute between communication & other circuits | | | | | | | |
| DISPLAY | | | | | | | | |
| Display type | LED 1 Row | | | | | | | |
| Instantaneous Digits | 4 | | | | | | | |
| Integrated Digits | 4 | | | | | | | |
| FAULT TRIPPING | | | | | | | | |
| EB Source | Over Current, Phase Missing | | | | | | | |
| DG Source | Over Current, Under / Over Voltage, Phase Missing | | | | | | | |
| MECHANICAL CHARACTERISTICS | | | | | | | | |
| Mounting (Vertical) | Din Rail | | | Surface Mounting | | | Surface Mounting | |
| Outline Dimension in HxWxD mm | 90x72x67 | 110x72 x135 mm | 90x72x67 | 90x90x67 | 193x144 x137 mm | 186x217 x142 mm | 240x310 x182 mm | 193x144 x137 mm |
| Weight in kg | 280 grams | 700 grams | 300 grams | 350 grams | 2.1 kg | 4.5 kg | 7 kg | 2.1 kg |
| Torque | 1 N-m | | | | 2 N-m | 2 N-m | 2.5 N-m | 2 N-m |
| Wire gauge | 11 AWG | | | | 6 AWG | 4 AWG | 1 AWG | 6 AWG |
| STANDARDS | | | | | | | | |
| Compliance | IEC 60947-6-1 | | | | | | | |
| USE ENVIRONMENT CHARACTERISTICS | | | | | | | | |
| Temperature | Ambient: -5 to +55° C, Storage: -25 to +75° C, Operating: -10 to +55° C, Operating Humidity: 5 to 85% RH | | | | | | | |
| Environmental | Class B | | | | | | | |
| Pollution degree | 2 | | | | | | | |