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Ensure that these instructions are made available to the end user for future reference.

© Product installation and operation guide



METAL PV AC CONSUMER UNIT

METAL PV AC CONSUMER UNIT

Description

- Part No.: LSMC1032-R20,LSMC1032-R32
- Operating Voltage:230VAC.
- Protection Degree: IP40.
- Maximum Load(A): As indicated on incoming device.
- Material: Manufactured from robust steel.
- Fully enclosed metal construction body with drop down metal lid.
- Multiple circular cable entry knock-outs (25&32mm) on the top and bottom,32mm on the sides, and back plus larger rear slots.
- Raised din rail improves cable routing.
- Modern style finished in white polyester powder coating to RAL9010.
- Flexible connection allows for various configurations of protected ways. Consumer unit enclosures supplied with neutral cable, busbar, neutral & earth terminals, DIN rail , cable gland.
- Fitted with DP 100A main Switch.
- Fitted with 20A/32A Type A RCBO.
- Fitted with 32AAC isolation switch.
- Fitted with single phase energy meter(MLCD61).
- Fitted with 20/40kA T2 surge protective device (SP140 1P+N/1).

Technical Data

Main Switch Specification

Part No.	MS2100D
Rated Current	100A
Rated Voltage	230V
Terminal Capacity	50mm ²
Terminal Torque	2.5Nm

SPD Specification

Part Number	SP140 1P+N/1
In -Nominal Discharge Current For Class II	20 kA
I _{max} - Maximum Discharge Current	40 kA
I _{sc} cr- Short Circuit Current Rating	25 kA
U _c -Max Continuous Operating Voltage	275 VAC
Up- Voltage Protection Level (L-N),(N-PE)	1.5 kV
Type Test Class	Type 2
Degree Of Protection	IP20
Cable Terminal Max Capacity	L:16mm ² N:10mm ² PE:10mm ²
Earthing Installations Type	TT-TN
Terminal Torque	L&N (top) 1.2Nm / L (Bottom) : 2.5Nm
Standard	IEC EN61643-11
Fuse Type gG	125A Max

Type A RCBO Specification

Part No.	AMR120B-030,AMR132B-030
Rated Current (In)	20A, 32A,
Rated Voltage (Ue)	230V AC.
Breaking Capacity (Icn)	6kA.
Rated Residual Current	30mA
Tripping Characteristic	B
Incoming Method	Bidirectional
Number Of Poles	1P+N (switched neutral)
Electrical Endurance	4000 cycles.
Mechanical Endurance	10000 cycles.
Terminal Cable Capacity Maximum	IN:16mm², OUT:10mm²
Standard	BS EN 61009-1

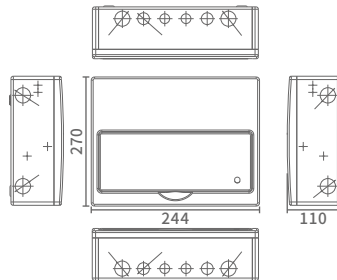
Single Phase Energy Meter Specification

Part No.	MLCD61
Voltage	230V AC
Frequency	50/60Hz
Base Current(Ib)	5A
Max Current(I _{max})	45A
Kwh Display	6+1 digits(999999.9kWh)
Impulse Constant	1000 imp/kWh
Protection Degree	IP20
Mounting	35mm DIN Rail
Standard	EN 62053-21

AC Isolation Switch Specification

Part No.		IS332DBR
Conventional Free Air Thermal Current (I _{th})		32A
Operational Current Ie		
AC-21A/B	400V	32A
	500V	
	690V	
AC-22A/B	400V	32A
	500V	25A
	690V	25A
AC-23A/B	400V	32A
	500V	25A
	690V	25A
Rated Operational Power		
AC-23A/B	415V	15kW
	500V	
	690V	
Short circuit withstand current of fuse protection(kA rms expected value).		
Fuse Class	415V	32A
Rated Conditional Short-Circuit Current	415V	50kA
Short cruit withstand current of circuit breaker for protection,any circuit breaker that can trip within 0.3s		
Rated Short-Time Withstand Current	0.3s	2.5kA
Short Circuit Performance(Unprotected)		
Rated Short-time Withstand Current	1s	1.26kA
Rated Short Circuit Making Capacity		1.8kA
Cross Area Of Terminals		1.5~10mm²
Rated Insulation Voltage Ui		800V
Rated Impulse Withstand Voltage Uimp		8kV
Mechanical Endurance		100000
Ambient Temperature		Operating -25~+55°C Storage -40~+70°C
Terminal Cable Capacity		10mm²
Terminal Torque		1.5Nm

Dimension (mm)



Installation

Enclosure Mounting

- Remove lid by turning lid fixing screws until they are free from the base.
- Remove appropriate cable entry holes. If using compression glands, fit them in the appropriate knockout prior to fixing unit to the wall.
- Mount the unit using appropriate screws and fixings.
- Bring all cables in through appropriate cutouts and route to their final location.

Connection Of Main Incoming Device

- Cut and dress the main incoming cables and connect them into the appropriate terminals.
- Tighten the main incoming terminals securely.

1.Installer Qualification

Must be installed by a qualified electrical professional.

2.Compliance With Regulations

Strictly follow the current IET wiring regulations (BS 7671) and local building codes.

3.Screw Tightening

Ensure all screws are fully tightened before installation, referring to the torque settings table.

4.Safe Power Disconnection

Always disconnect the power supply to the consumer unit before starting installation work.

Torque settings:

Before powering up the installation check all connections are TORQUED (see table). Loose connections cause fires!

Environment

Waste electrical products should not be disposed of in household waste contact your retailer or local authority for recycling information.

