

ALM/S

|| 24, 48, 110 Vdc

DC rectifier-battery chargers single-branch

Introduction

ALM/S is a series of single branch DC rectifiers-battery chargers (current range from 25 A to 60 A) with IGBT chopper technology, with single-phase and three-phase input, and Output at 24, 48 and 110 Vdc.

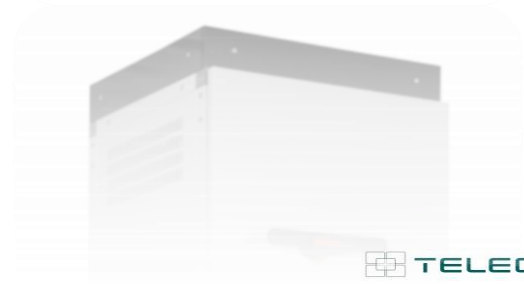
The "Single Branch" technology involves the use of a single AC / DC converter, which will provide the supply of loads and the recharging of batteries; equipped with Display (voltmeter and ammeter) on front panel and three-pole switch disconnecter with lock / door operation.

Applications

- Auxiliary circuits on MV/LV substations
- Emergency lighting
- Industrial applications
- Telecommunication systems

Key features

- IGBT chopper technology
- Input isolation Transformer*
- Display on front panel
- Compact cabinet



Input

Rated voltage
Rated Frequency

230 Vac 1-phase ($\pm 20\%$) / 400 Vac 3-phase ± 10 (others on request)
50 – 60 Hz

Output

Rated Voltage
Voltage stability with grid supply
Voltage stability without grid supply
Rated current
Voltage ripple

24 Vdc, 48 Vdc, 110 Vdc
 $\pm 1\%$
0,9 Vn (total discharge of batteries) / 1,13 Vn (total charge of batteries)
from 25 to 60 A
< 1%

Technical features

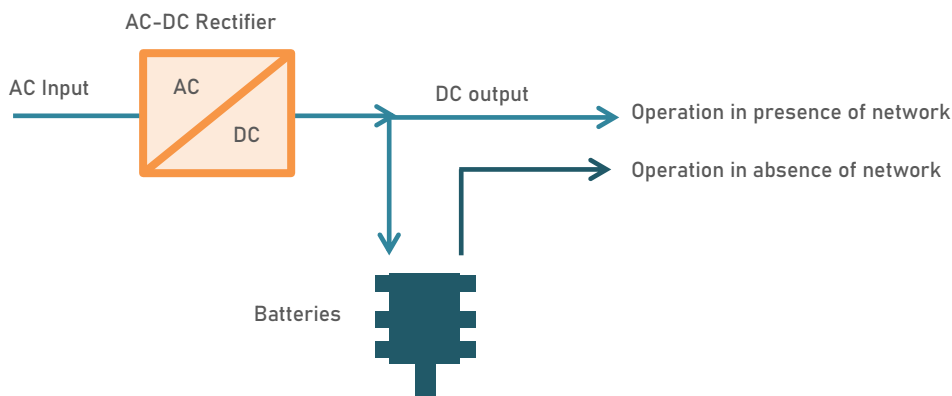
Rectifier
Display on front panel

IGBT chopper technology
Voltage for loads and batteries
Current for loads and batteries
Voltage of batteries
Status of loads and batteries

Batteries
Cabinet
Colour
Protection degree
Input o cables
Cooling
Installation
Max altitude
Relative humidity
Operating temperature
Storage temperatur
Reference standards

VRLA, GEL (installed internally)
Steel enclosure, painted with epoxy dust paint
RAL7035
IP31 internal (IP42 and IP54 on request)
Standard from the top (from the bottom on request)
Natural
Indoor
1000 m a.s.l.
< 90 % without condensing
0°C / +40°C
-25°C / +70°C (excluding batteries)
IEC62040-1, IEC62040-2, IEC62040-5-3, IEC478-1

Operating diagram



Optionals

KITALL Kit Alarms; terminal board with voltage-free contacts for remote alarm of general fault, power failure and low voltage of batteries

KITSGB Kit for disconnection of batteries at minimum voltage; in the absence of network beyond the required autonomy, the kit will disconnect the batteries, to prevent their complete discharge, which would irreversibly compromise their use.

KITISL Insulation control kit (earth pole) in case of short circuit or other malfunction.

KITPAR Parallel kit; provision for connection of a system with equal characteristics for parallel operation..

KITEPO** EPO kit (Emergency Power Off), with release button

KITMCB MCBs on front panel (on request)

Configurations

Code	Voltage		Current		Power	Backup time	Dim.	Weight
	Input	Output (Vdc)	A	W	W	Minutes	(WxHxD) mm	Kg
ALMS2425040	230 Vac Single-phase	24	25	600	600	60	455x705x315	60
ALMS2425065		24	25	600	600	120	600x860x400	80
ALMS2440065		24	40	960	960	60	600x860x400	80
ALMS2440100		24	40	960	960	120	600x860x400	105
ALMS2460100		24	60	1440	1440	60	600x1060x400	110
ALMS2460160		24	60	1440	1440	120	600x1060x400	153
ALMS2480130		24	80	1920	1920	60	600x1060x400	125
ALMS2480200		24	80	1920	1920	120	600x1060x400	177
ALMS4810018		48	10	480	480	60	455x705x315	57
ALMS4810026		48	10	480	480	120	455x705x315	68
ALMS4820040		48	20	960	960	60	600x860x400	100
ALMS4820055		48	20	960	960	120	600x1060x400	125
ALMS4830055		48	30	1440	1440	60	600x1060x400	125
ALMS4830080		48	30	1440	1440	120	600x1060x400	157
ALMS4860100		48	60	2880	2880	60	600x1730x600	247
ALMS4860160		48	60	2880	2880	120	600x1730x600	331
ALMS1110018		110	10	1100	1100	60	600x860x400	94
ALMS1110026		110	10	1100	1100	120	600x860x400	121
ALMS1130055		110	30	3300	3300	60	600x1730x600	285
ALMS1130080		110	30	3300	3300	120	600x1730x600	358
ALMS1160100		110	60	6600	6600	60	600x1730x600	403
ALMS1160160		110	60	6600	6600	120	600x2200x600	611

Code	Voltage		Current		Power	Backup time	Dim.	Weight
	Input	Output (Vdc)	A	W	W	Minutes	(WxHxD) mm	Kg
ALMS34860100	400 Vac 50 Hz Three-phase	48	60	2880	2880	60	600x1730x600	262
ALMS34860160		48	60	2880	2880	120	600x2200x600	356
ALMS31130055		110	30	3300	3300	60	600x2200x600	310
ALMS31130080		110	30	3300	3300	120	600x2200x600	383
ALMS31160100		110	60	6600	6600	60	600x2200x600	428
ALMS31160160		110	60	6600	6600	120	1200x2200x600	731

*for systems with 3-phase input
** bound to purchase also KITSGB