

ALM/d

|| 24, 48, 110 Vdc

DC rectifier-battery chargers double-branch

Introduction

ALMR/D is a series of double 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.

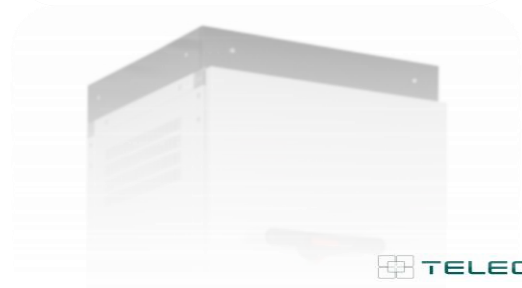
The "double branch" technology involves the use of one AC / DC converter, which will only provide the supply of loads and a second rectifier, dedicated only to the recharging of batteries; equipped with Display (voltmeter and ammeter) on front panel and three-pole switch disconnecter with lock / door 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

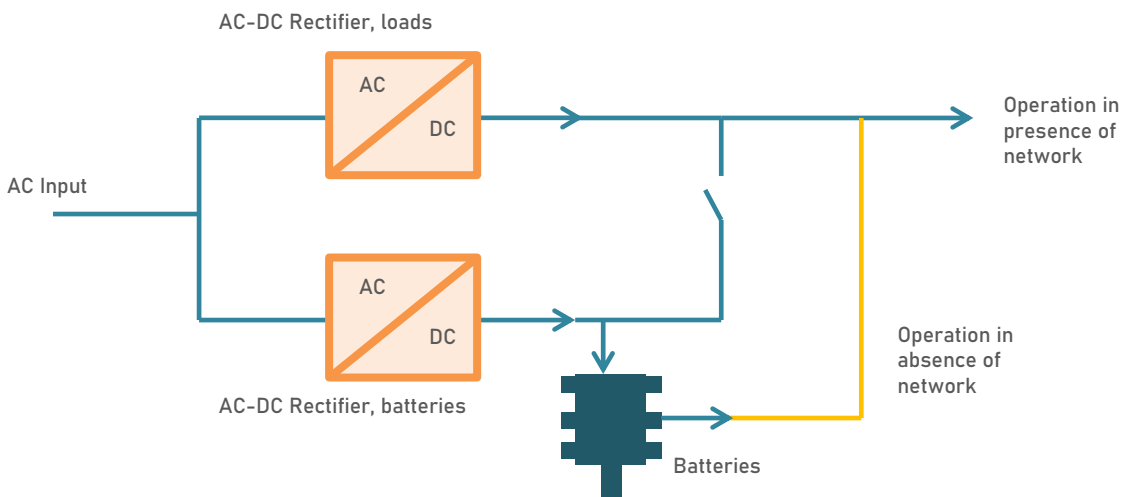
Rectifier
Display on front panel

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

Schema di funzionamento



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	Current	Power	Backup time	Dim. (WxHxD) mm	Weight
	Input	Output (Vdc)	load branch A	batteries branch A				
ALMD2425040	230 Vac 1-phase	24	25	5	600	60	600x860x400	74
ALMD2425065		24	25	5	600	120	600x860x400	86
ALMD2440065		24	40	5	960	60	600x860x400	86
ALMD2440100		24	40	10	960	120	600x860x400	111
ALMD2460100		24	60	10	1440	60	600x860x400	111
ALMD2460160		24	60	5	1440	120	600x1730x600	229
ALMD2480130		24	80	15	1920	60	600x1730x600	201
ALMD2480200		24	80	20	1920	120	600x1730x600	253
ALMD4810018		48	10	20	480	60	600x860x400	71
ALMD4810026		48	10	5	480	120	600x860x400	82
ALMD4820040		48	20	5	960	60	600x1060x400	116
ALMD4820055		48	20	5	960	120	600x1060x400	136
ALMD4830055		48	30	5	1440	60	600x1060x400	136
ALMD4830080		48	30	10	1440	120	600x1060x400	168
ALMD4860100		48	60	10	2880	60	600x1730x600	253
ALMD4860160		48	60	15	2880	120	600x2200x600	347
ALMD1110018		110	10	5	1100	60	600x860x400	100
ALMD1110026		110	10	5	1100	120	600x860x400	127
ALMD1130055		110	30	5	3300	60	600x2200x600	301
ALMD1130080		110	30	10	3300	120	600x2200x600	374
ALMD1160100	110	60	10	6600	60	600x2200x600	419	
ALMD1160160	110	60	15	6600	120	600x2200x600	617	

Code	Voltage		Current	Current	Power	Backup time	Dim. (WxHxD) mm	Weight
	Input	Output (Vdc)	load branch A	batteries branch A				
ALMD34860100	400 Vac 3-phase	48	60	10	2880	60	600x1730x600	262
ALMD34860160		48	10	15	2880	120	600x2200x600	356
ALMD31130055		110	30	5	3300	60	600x2200x600	310
ALMD31130080		110	30	10	3300	120	600x2200x600	383
ALMD31160100		110	60	10	6600	60	600x2200x600	428
ALMD31160160		110	60	15	6600	120	1200x2200x600	726

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