



Flatpack2 Wallbox

Power Supply System
24V/40-168 A, 48V/15-83 A, 110V/10-34 A

Compact wall mounted power supply system

The Flatpack2 Wallbox is built around our Flatpack2 rectifier and designed for applications as switchgear, telecom, emergency lightning, alarm systems etc.

With its compact design and simple installation, makes it a powerful wall mounted DC power supply package

Applications

The rectifier's wide DC output range makes it suitable for parallel operation with all types of stationary batteries, as lead acid, or nickel cadmium types.

Flatpack2 rectifier is using the latest design of high frequency switch mode technology, and can also be used without batteries. Because of its extremely high efficiency at low load it can be used for all type of applications as.

- Switchgear
- Telecommunications
- Alarm Systems
- Emergency lightning
- Dieselstart

Product Description

The basic power core has 2 rectifier positions, a Smartpack2 controller and a bulk DC output feed, with possibility for optional DC distribution.

The Smartpack2 controller comes with a high resolution TFT screen and controls all typical parameters as high, low battery voltage, rectifier fault, earth fault, tripped fuse etc.

The power core is prepared for any Flatpack2 HE rectifier module and depending on the rectifier choice the system output can be either of the following:

- 24V/40-168 A
- 48V/15-83 A
- 110V/10-34 A

Key Features

Compact design

The small system dimensions are ideal locations with limited space

Bulk-feed or integrated distribution

The system comes as default with bulk output DC feed, but can be configured with integrated load and battery distribution to meet your power solution requirements.

Digital controllers

Smartpack2 controller with a 3,2" TFT color display for excellent monitoring and regulation characteristics, included Ethernet and Web interface for remote monitoring.



Frontpanel Smartpack2

Unique install ability

Simple removable front cover gives good access for installation and connections, and cost effective time-to-install.

Global approvals

Flatpack2 Wallbox is CE marked for worldwide installation.

See last page for specifications

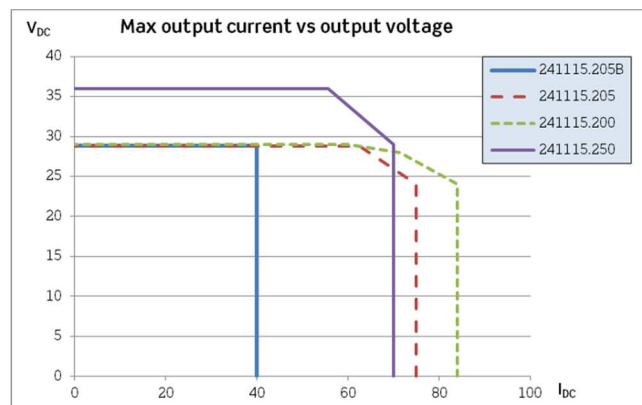
24V Wallbox

Applications

The 24 V rectifiers it suitable for parallel operation with all types of stationary batteries, as lead acid, or nickel cadmium types, and can also operate without batteries

Because of its extremely high efficiency at low load it can be used for typical applications as.

- Alarm systems
- Dieselstart float application
- PABX systems
- Emergency lightning
- Industrial control systems



Available 24V rectifiers for the Flatpack2 Wallbox

| Part number | Description | Voltage range | Efficiency | Maximum current | | Output protection |
|-------------|-------------------------|---------------|----------------------|-----------------|-----------|-------------------|
| | | | | 1 Module | 2 Modules | |
| 241115.205B | Flatpack2 24V/40A HE | 21.7 – 28.8 V | > 95% (30-65% load) | 40 A | 80 A | Fuse |
| 241115.205 | Flatpack2 24V/1800W HE | 21.7 – 28.8 V | > 95% (30-65% load) | 75 A | 150A | Fuse |
| 241115.200 | Flatpack2 24V/2000W | 21 – 29 V | > 89% (25-100% load) | 84 A | 168 A | Blocking diode |
| 241115.250 | Flatpack2 24V/2000W WOR | 21.5 – 36 V | > 91% (25-85% load) | 70 A | 140 A | Fuse |

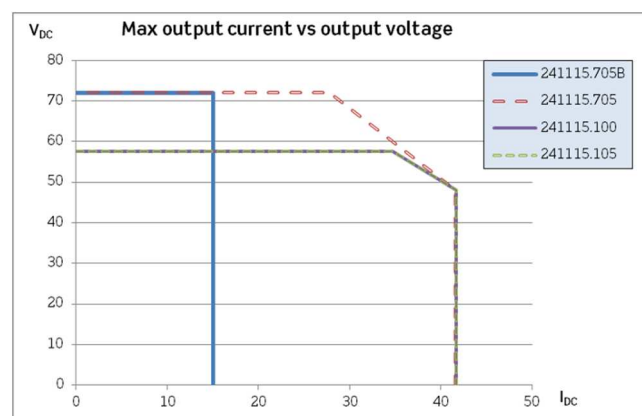
48V Wallbox

Applications

The 48 V rectifiers it suitable for parallel operation with all types of stationary batteries, as lead acid, or nickel cadmium types, and can also operate without batteries

Because of its extremely high efficiency at low load it can be used for typical applications as.

- Telecommunication systems
- PABX systems
- Emergency lightning
- Industrial control systems



Available 48V rectifiers for the Flatpack2 Wallbox

| Part number | Description | Voltage range | Efficiency | Maximum current | | Output protection |
|-------------|---------------------------|---------------|------------------------|-----------------|-----------|-------------------|
| | | | | 1 Module | 2 Modules | |
| 241115.705B | Flatpack2 48-60V/15A HE | 39.9 – 72 V | > 95.5% (50-100% load) | 15 A | 30 A | Fuse |
| 241115.705 | Flatpack2 48-60V/2000W HE | 39.9 – 72 V | > 95.5% (25-75% load) | 41.6 A | 83.2A | Fuse |
| 241115.100 | Flatpack2 48V/2000W | 43.2 – 57.6 V | > 91.5% (45-95% load) | 41.6 A | 83.2A | Blocking diode |
| 241115.105 | Flatpack2 48V/2000W HE | 43.5 – 57.6 V | > 96% (30-70% load) | 41.6 A | 83.2A | Fuse |

* 3kW 48V rectifiers are also supported, but this will require rebuild of the AC input to separate to individual feed for each rectifier.

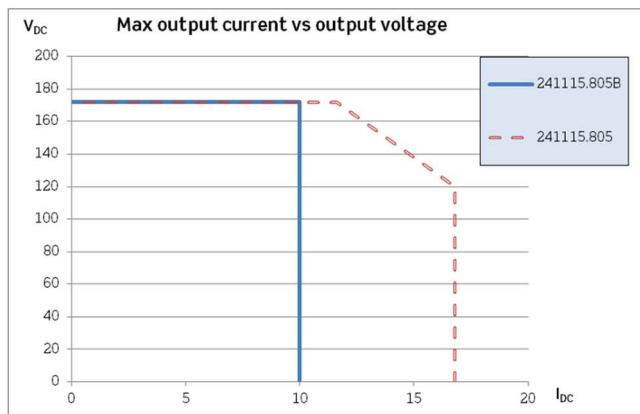
110V Wallbox

Applications

The 110 V rectifiers are suitable for parallel operation with all types of stationary batteries, as lead acid, or nickel cadmium types, and can also operate without batteries

Because of its extremely high efficiency at low load it can be used for typical applications as.

- Low & High Voltage switchgear
- Transformer & SUB Stations
- Power Generation & Distribution



Available 110V rectifiers for the Flatpack2 Wallbox

| Part number | Description | Voltage range | Efficiency | Maximum current | | Output protection |
|-------------|---------------------------|---------------|----------------------|-----------------|-----------|-------------------|
| | | | | 1 Module | 2 Modules | |
| 241115.805B | Flatpack2 110-125V/10A HE | 89.2-171.6 V | > 94% (45-100% load) | 10 A | 20 A | Oring diode |
| 241115.805 | Flatpack2 110V/2000W HE | 89.2-171.6 V | > 94% (30-70% load) | 16.8 A | 33.6A | Oring diode |

| Ordering information - order 1 Wallbox and 1 or 2 rectifiers | | | | | | | | | | | |
|--|------------------------|---------------------------------|--------------|-------------|------------|------------|------------|-------------|------------|------------|------------|
| System Voltage | Maximum Output Current | Adjustable Output Voltage Range | Part numbers | | | | | | | | |
| | | | CT030210.000 | 241115.205B | 241115.205 | 241115.200 | 241115.250 | 241115.705B | 241115.705 | 241115.100 | 241115.105 |
| 24 Vdc | 40 A | 21.7 – 28.8 V | 1 | 1 | | | | | | | |
| | 70 A | 21.7 – 28.8 V | 1 | | 1 | | | | | | |
| | 75 A | 21.5 – 36 V | 1 | | | 1 | | | | | |
| | 80 A | 21.7 – 28.8 V | 1 | 2 | | | | | | | |
| | 84 A | 21 – 29 V | 1 | | 1 | | | | | | |
| | 140 A | 21.7 – 28.8 V | 1 | | 2 | | | | | | |
| | 150 A | 21.5 – 36 V | 1 | | | 2 | | | | | |
| | 168 A | 21 – 29 V | 1 | | 2 | | | | | | |
| 48 Vdc | 15 A | 39.9 – 72 V | 1 | | | | 1 | | | | |
| | 30 A | 39.9 – 72 V | 1 | | | | 2 | | | | |
| | 41.6 A | 39.9 – 72 V | 1 | | | | | 1 | | | |
| | 41.6 A | 43.2 – 57.6 V | 1 | | | | | | 1 | | |
| | 41.6 A | 43.5 – 57.6 V | 1 | | | | | | | 1 | |
| | 83.2 A | 39.9 – 72 V | 1 | | | | 2 | | | | |
| | 83.2 A | 43.2 – 57.6 V | 1 | | | | | 2 | | | |
| | 83.2 A | 43.5 – 57.6 V | 1 | | | | | | 2 | | |
| 110 Vdc | 41.6 A | 89.2-171.6 V | 1 | | | | | | | 1 | |
| | 16.8 A | 89.2-171.6 V | 1 | | | | | | | | 1 |
| | 20 A | 89.2-171.6 V | 1 | | | | | | | 2 | |
| | 33.6 A | 89.2-171.6 V | 1 | | | | | | | | 2 |

Flatpack2 Wallbox

Additional Technical Specifications

| Input | |
|---------------------------|--|
| Voltage | 1 x single phase feed (85V _{AC} – 300V _{AC}) * |
| Recommended input breaker | 32A |
| Input Protection | Internal fuses in rectifier module On/off MCB |

| DC Output | |
|----------------|--|
| Voltage | 24V _{DC} , 48V _{DC} , 60V _{DC} & 110V _{DC} |
| Output current | See previous page or Flatpack2 rectifiers datasheets |

| Connections | |
|-------------------|---|
| Load connection | Screw terminal blocks, up to 35 mm ² (M8 Cable lug) |
| Alarm connections | Cage clamp terminal blocks, up to 1.5 mm ² |
| Input AC | Directly on input MCB, up to 25mm ² |

| Other Specifications | |
|----------------------|--|
| Isolation | <ul style="list-style-type: none"> 3.0 kV_{AC} – input and output 1.5 kV_{AC} – input earth 0.5 kV_{DC} – output earth * |
| Operating temp. | -40 to +60°C (-40 to +140°F) The maximum output power is reduced for ambient temperatures above +35 to +50°C depending on rectifier model. See rectifier datasheet for details. |
| Storage temp. | -40 to +80°C (-40 to +176°F) |
| Dimensions | 452 x 200x450mm (W x D x H) |
| Weight | Approx. 5kg (excluding rectifiers) |

* 1.5kV_{DC} for Wallbox with 110V Flatpack2 rectifiers

| Monitoring | |
|----------------------|--|
| Monitoring Unit | Smartpack2 |
| Local Operation | Display and keys, WEB interface via standard browser using WebPower |
| Remote Operation | WebPower (WEB Interface, SNMP protocol and email) |
| Alarm Relays | 6 x Potential free change over contacts (NO, NC, C) [Max 75V/2A/60W] |
| Visual Indications | <ul style="list-style-type: none"> Green LED – System ON Yellow LED – Minor alarm(s) Red LED – Major alarm(s) Graphical TFT high contrast, high resolution colour display |
| Inputs | <ul style="list-style-type: none"> 6 x digital or analogue inputs 3 x Temperature measurement |
| Current Measurements | <ul style="list-style-type: none"> Battery current (optional external battery shunt required) Rectifier current Calculated load current (optional external battery shunt required) |
| Alarms | <ul style="list-style-type: none"> Low output voltage alarms (2 individual alarm levels) High output voltage alarms (2 individual alarm levels) Earth fault alarm Temperature alarm Mains outage alarm Battery remaining capacity alarm Battery low quality alarm Load/battery fuse tripped alarm and much more |

See Smartpack2 datasheet for further details (242100.50X.DS3)

| Applicable Standards | |
|----------------------|---|
| Electrical safety | <ul style="list-style-type: none"> IEC 60950-1 UL 60950-1 |
| EMC | <ul style="list-style-type: none"> ETSI EN 300 386 V.1.3.2 (telecommunication network) EN 61000-6-1 (immunity, light industry) EN 61000-6-2 (immunity, industry) EN 61000-6-3 (emission, light industry) EN 61000-6-4 (emission, industry) |
| Environment | <ul style="list-style-type: none"> ETSI EN 300 019 ETSI EN 300 132-2 |

| Part no. | Description |
|--------------|----------------|
| CT030210.000 | FP2 24-110V WB |

Specifications are subject to change without notice

CT030210.DS3 – v0B