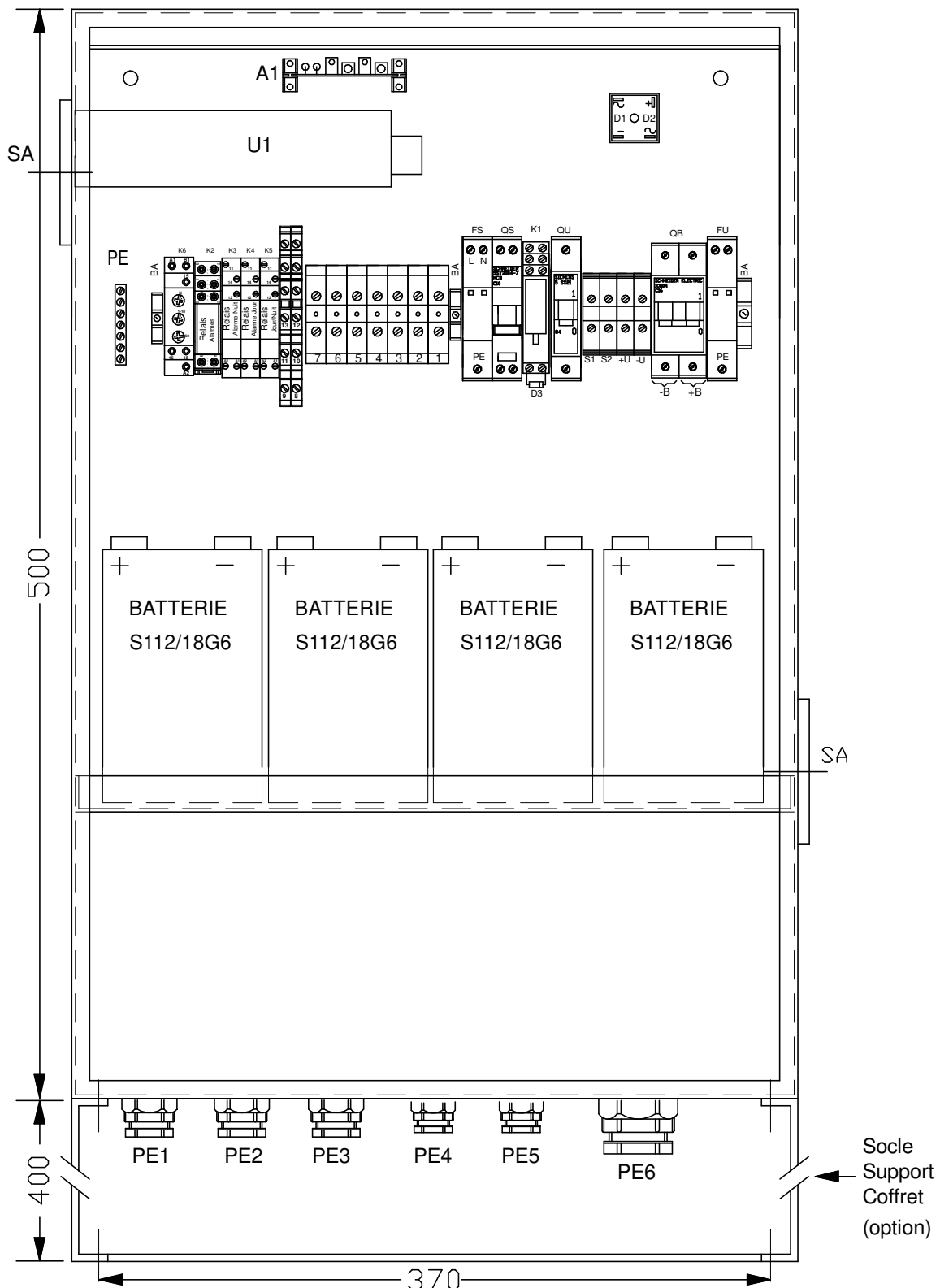




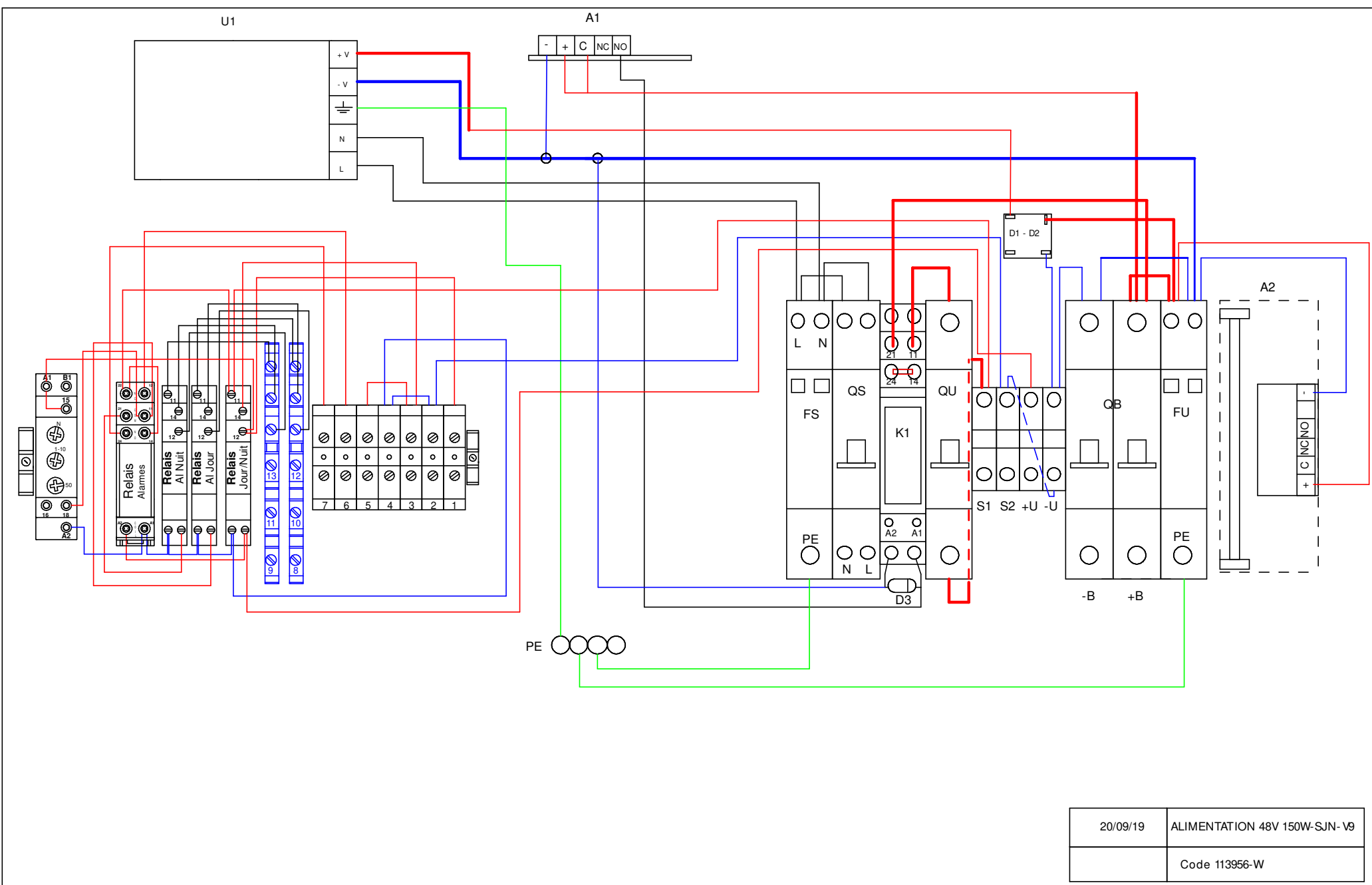
# **COFFRET "ALIMENTATION" 48Vdc 300W**

## **Borniers Alarmes Départs Utilisations**

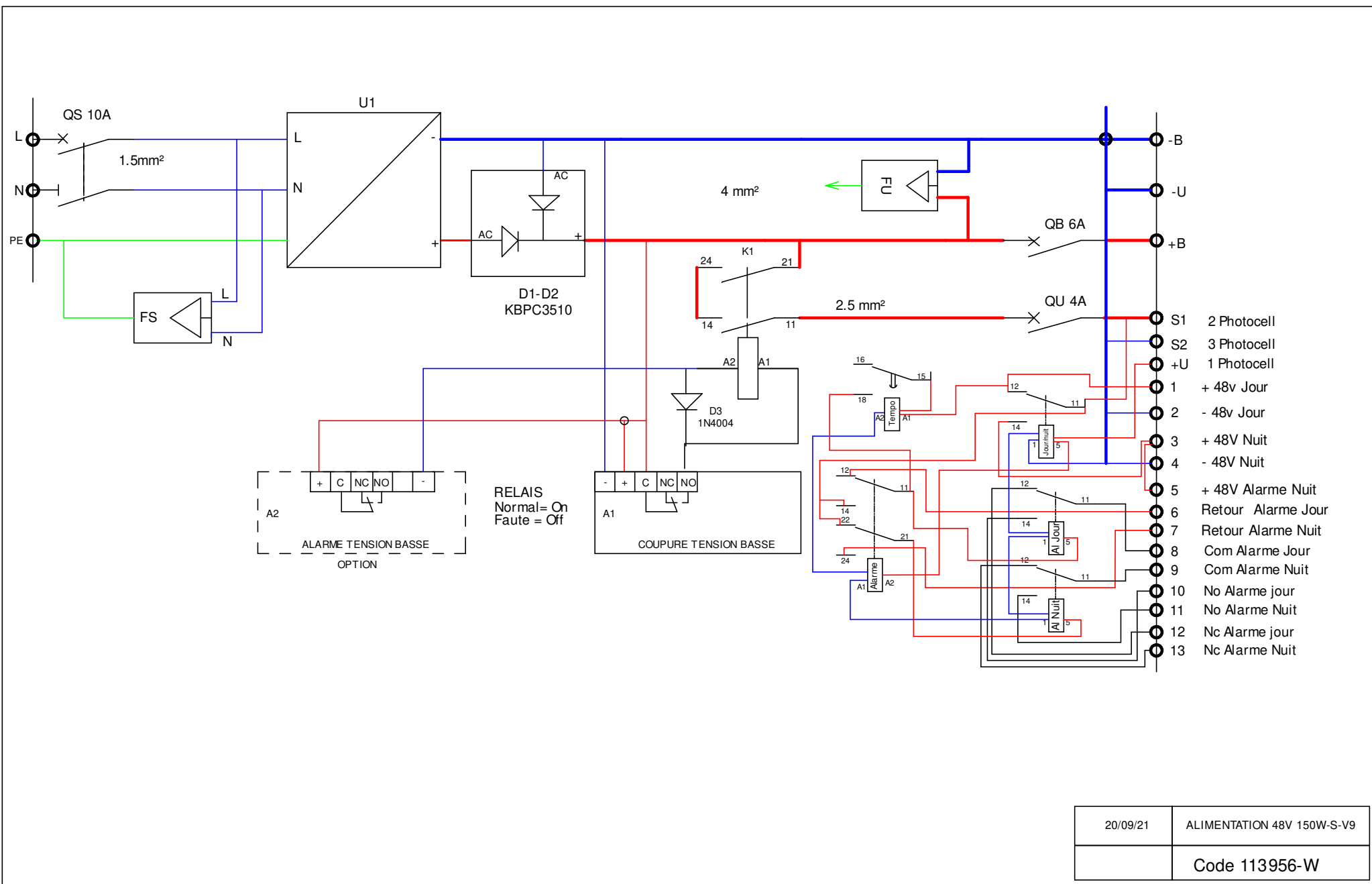
OBSTA  
2 rue Troyon  
92316 Sèvres  
[www.obsta.com](http://www.obsta.com)



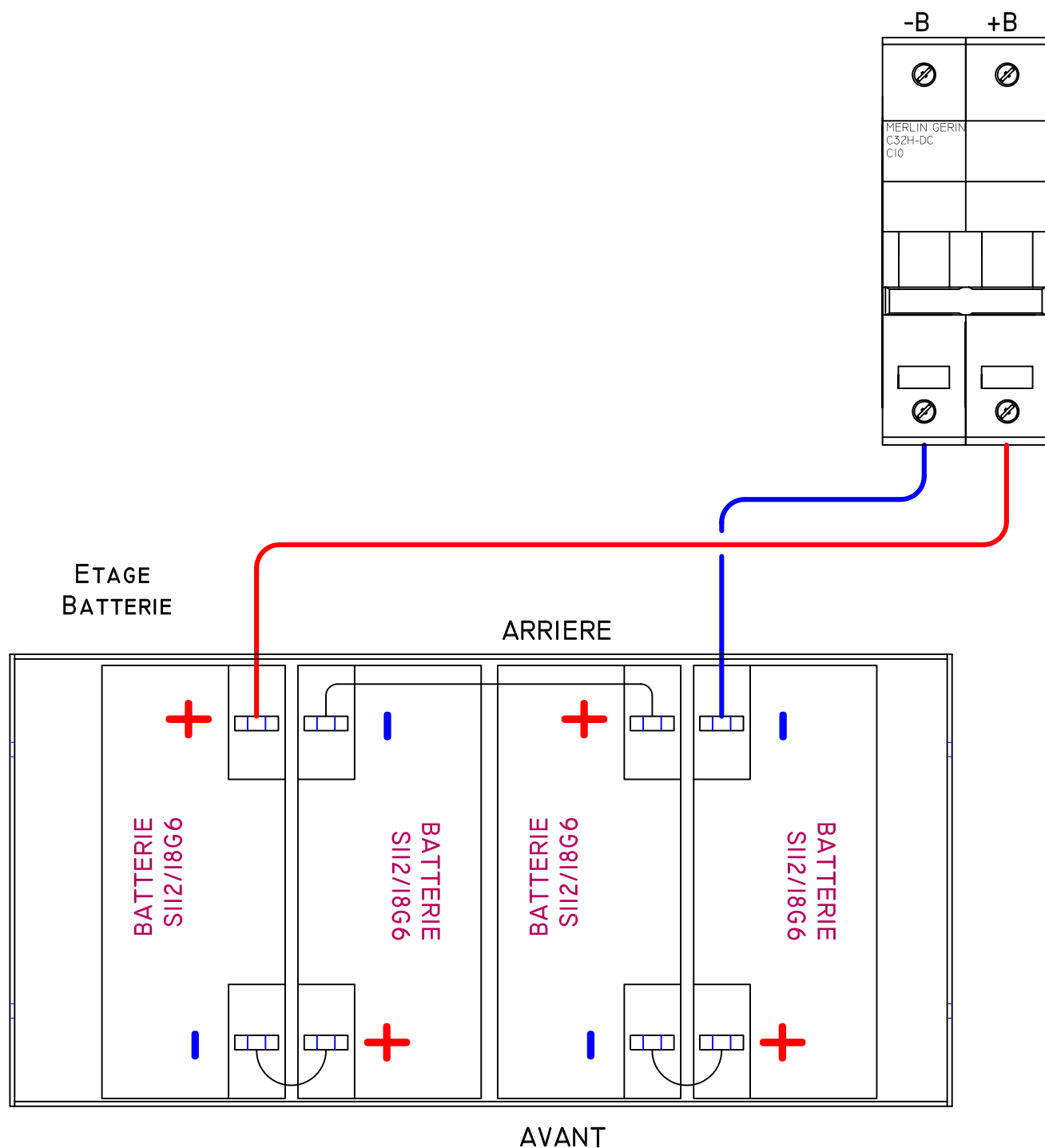
|                                   |           |           |             |              |        |                                                                                     |               |                         |                                                                                                                                                                             |
|-----------------------------------|-----------|-----------|-------------|--------------|--------|-------------------------------------------------------------------------------------|---------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   | Ed.1 :    | Ed.2 :    | Ed.3 :      | Ed.4 :       | Ed.5 : | E.S :                                                                               |               | Echelle / Scale :       |                                                                                                                                                                             |
| Mise à jour :<br>Update :         | 20/07/16  | 03/02/18  | 22/07/21    | 16/09/21     |        | Tolérance :<br>Tolerance : ISO 2768-M                                               |               | Format :<br>Size : A4-V |   |
| Dessiné par :<br>Drawing by :     | T.BARDOT  | T.BARDOT  | S.CANTARERO | R.PELLEGRINO |        | FOLIO                                                                               | 113956-W      |                         |                                                                                                                                                                             |
| Vérifié par :<br>Approved by :    | J.CARELLA | J.CARELLA |             | H.BURGAUD    | 1/1    |                                                                                     |               |                         |                                                                                                                                                                             |
| Coffret "ALIMENTATION" 48Vdc 300W |           |           |             |              |        |  | AS 0386.9 PE1 |                         |                                                                                                                                                                             |



|          |                              |
|----------|------------------------------|
| 20/09/19 | ALIMENTATION 48V 150W-SJN-V9 |
|          | Code 113956-W                |



|          |                            |
|----------|----------------------------|
| 20/09/21 | ALIMENTATION 48V 150W-S-V9 |
|          | Code 113956-W              |



|                                                        |           |           |        |        |                                                                                     |                            |                   |                                                                                                                                                                                  |
|--------------------------------------------------------|-----------|-----------|--------|--------|-------------------------------------------------------------------------------------|----------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                        | ED.1 :    | ED.2 :    | ED.3 : | ED.4 : | ED.5 :                                                                              | E.S :                      | Echelle / Scale : |                                                                                                                                                                                  |
| MISE À JOUR :<br>CORRECTION :                          | 24/08/18  | 13/02/19  |        |        |                                                                                     | TOLÉRANCE :<br>TOLERANCE : | FORMAT<br>SIZE :  | A4-V   |
| DESSINÉ PAR :<br>PREPARED BY :                         | T.BARDOT  | T.BARDOT  |        |        |                                                                                     | FOLIO                      |                   |                                                                                                                                                                                  |
| VÉRIFIÉ PAR :<br>APPROVED BY :                         | J.CARELLA | J.CARELLA |        |        |                                                                                     | 1/1                        |                   |                                                                                                                                                                                  |
| COFFRET "ALIMENTATION" 48Vdc 300W<br>CÂBLAGE BATTERIES |           |           |        |        |  | AS 0386.9 P2               |                   |                                                                                                                                                                                  |

[illegible]



## Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 89%
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in constant current limiting circuit
- 1U low profile 41mm
- Built-in cooling fan ON-OFF control
- Built-in DC OK signal
- Built-in remote sense function
- 5 years warranty



## SPECIFICATION

| MODEL                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | HRP-300-3.3                                                                                                                                  | HRP-300-5  | HRP-300-7.5 | HRP-300-12   | HRP-300-15   | HRP-300-24   | HRP-300-36   | HRP-300-48   |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|--------------|--------------|--------------|--------------|--------------|
| OUTPUT                   | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3.3V                                                                                                                                         | 5V         | 7.5V        | 12V          | 15V          | 24V          | 36V          | 48V          |
|                          | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 60A                                                                                                                                          | 60A        | 40A         | 27A          | 22A          | 14A          | 9A           | 7A           |
|                          | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0 ~ 60A                                                                                                                                      | 0 ~ 60A    | 0 ~ 40A     | 0 ~ 27A      | 0 ~ 22A      | 0 ~ 14A      | 0 ~ 9A       | 0 ~ 7A       |
|                          | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 198W                                                                                                                                         | 300W       | 300W        | 324W         | 330W         | 336W         | 324W         | 336W         |
|                          | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 80mVp-p                                                                                                                                      | 90mVp-p    | 100mVp-p    | 120mVp-p     | 150mVp-p     | 150mVp-p     | 250mVp-p     | 250mVp-p     |
|                          | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2.8 ~ 3.8V                                                                                                                                   | 4.3 ~ 5.8V | 6.8 ~ 9V    | 10.2 ~ 13.8V | 13.5 ~ 18V   | 21.6 ~ 28.8V | 28.8 ~ 39.6V | 40.8 ~ 55.2V |
|                          | VOLTAGE TOLERANCE Note.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ±2.5%                                                                                                                                        | ±2.0%      | ±2.0%       | ±1.0%        | ±1.0%        | ±1.0%        | ±1.0%        | ±1.0%        |
|                          | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ±0.5%                                                                                                                                        | ±0.5%      | ±0.5%       | ±0.3%        | ±0.3%        | ±0.2%        | ±0.2%        | ±0.2%        |
|                          | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ±1.0%                                                                                                                                        | ±1.0%      | ±1.0%       | ±0.5%        | ±0.5%        | ±0.5%        | ±0.5%        | ±0.5%        |
|                          | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1000ms, 50ms/230VAC      2500ms, 50ms/115VAC at full load                                                                                    |            |             |              |              |              |              |              |
| HOLD UP TIME (Typ.)      | 16ms/230VAC      16ms/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                              |            |             |              |              |              |              |              |
| INPUT                    | VOLTAGE RANGE Note.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 85 ~ 264VAC      120 ~ 370VDC                                                                                                                |            |             |              |              |              |              |              |
|                          | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 47 ~ 63Hz                                                                                                                                    |            |             |              |              |              |              |              |
|                          | POWER FACTOR (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | PF>0.95/230VAC      PF>0.99/115VAC at full load                                                                                              |            |             |              |              |              |              |              |
|                          | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 80%                                                                                                                                          | 82%        | 86%         | 88%          | 88%          | 87%          | 88%          | 89%          |
|                          | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.5A/115VAC      2.5A/230VAC                                                                                                                 |            |             |              |              |              |              |              |
|                          | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 35A/115VAC      70A/230VAC                                                                                                                   |            |             |              |              |              |              |              |
|                          | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <1.2mA / 240VAC                                                                                                                              |            |             |              |              |              |              |              |
| PROTECTION               | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 105 ~ 135% rated output power<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed        |            |             |              |              |              |              |              |
|                          | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3.96 ~ 4.62V                                                                                                                                 | 6 ~ 7V     | 9.4 ~ 10.9V | 14.4 ~ 16.8V | 18.8 ~ 21.8V | 30 ~ 34.8V   | 41.4 ~ 48.6V | 57.6 ~ 67.2V |
|                          | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Shut down o/p voltage, recovers automatically after temperature goes down<br>Protection type : Shut down o/p voltage, re-power on to recover |            |             |              |              |              |              |              |
|                          | DC OK SIGNAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | PSU turns on : 3.3 ~ 5.6V ; PSU turns off : 0 ~ 1V                                                                                           |            |             |              |              |              |              |              |
| FUNCTION                 | FAN CONTROL (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Load 35±15% or RTH2≥50℃ Fan on                                                                                                               |            |             |              |              |              |              |              |
| ENVIRONMENT              | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -40 ~ +70℃ (Refer to "Derating Curve")                                                                                                       |            |             |              |              |              |              |              |
|                          | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 20 ~ 90% RH non-condensing                                                                                                                   |            |             |              |              |              |              |              |
|                          | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -40 ~ +85℃, 10 ~ 95% RH                                                                                                                      |            |             |              |              |              |              |              |
|                          | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ±0.03%/℃ (0 ~ 50℃)                                                                                                                           |            |             |              |              |              |              |              |
|                          | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes                                                                                 |            |             |              |              |              |              |              |
| SAFETY & EMC<br>(Note 4) | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | UL60950-1, TUV EN60950-1 approved                                                                                                            |            |             |              |              |              |              |              |
|                          | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC                                                                                              |            |             |              |              |              |              |              |
|                          | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH                                                                                    |            |             |              |              |              |              |              |
|                          | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3                                                                                      |            |             |              |              |              |              |              |
|                          | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, heavy industry level, criteria A                                               |            |             |              |              |              |              |              |
| OTHERS                   | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 176K hrs min.    MIL-HDBK-217F (25℃)                                                                                                         |            |             |              |              |              |              |              |
|                          | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 199*105*41mm (L*W*H)                                                                                                                         |            |             |              |              |              |              |              |
|                          | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.95Kg;15pcs/15.3Kg/0.69CUFT                                                                                                                 |            |             |              |              |              |              |              |
| NOTE                     | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to EMI testing of component power supplies.<br>(as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )<br>5. Derating may be needed under low input voltages. Please check the derating curve for more details. |                                                                                                                                              |            |             |              |              |              |              |              |

### ■ Mechanical Specification

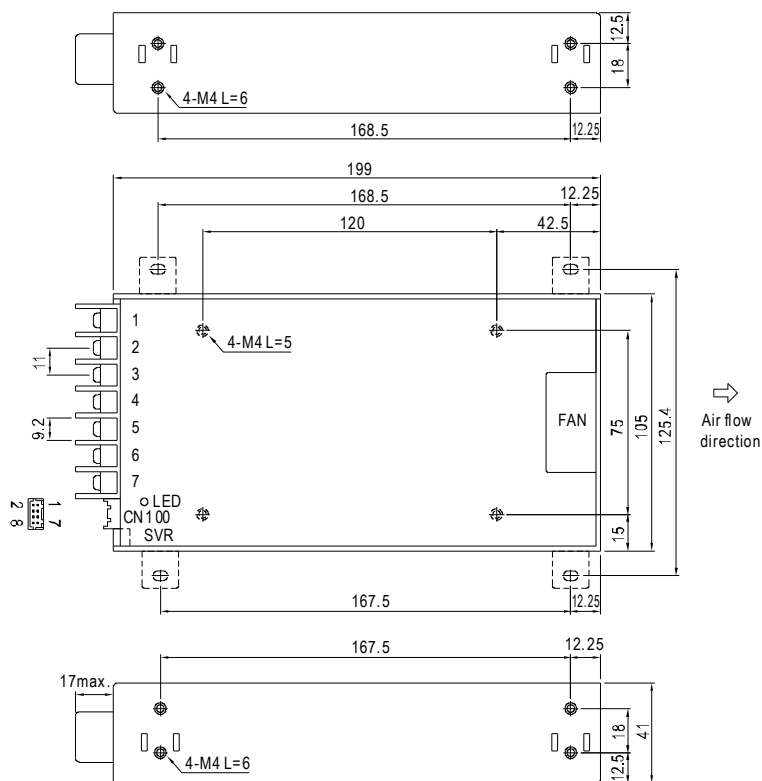
Case No.980A      Unit:mm

### Terminal Pin No. Assignment

| Pin No. | Assignment       | Pin No. | Assignment   |
|---------|------------------|---------|--------------|
| 1       | AC/L             | 4,5     | DC OUTPUT -V |
| 2       | AC/N             | 6,7     | DC OUTPUT +V |
| 3       | EG $\frac{+}{-}$ |         |              |

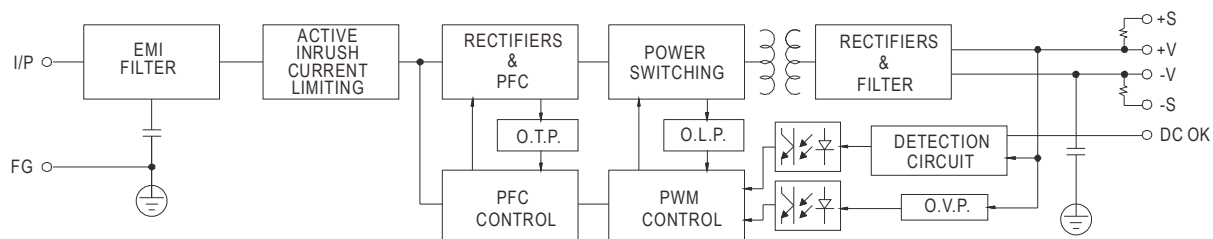
Connector Pin No. Assignment (CN100) :  
HRS DF11-08DP-2DS or equivalent

| Pin No. | Assignment | Mating Housing                | Terminal                       |
|---------|------------|-------------------------------|--------------------------------|
| 1,2,4,6 | NC         | HRS DF11-8DS<br>or equivalent | HRS DF11-**SC<br>or equivalent |
| 3       | DC-OK      |                               |                                |
| 5       | GND        |                               |                                |
| 7       | +S         |                               |                                |
| 8       | -S         |                               |                                |

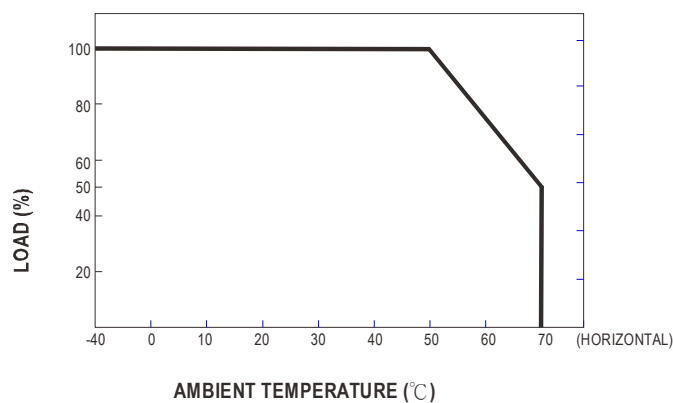


### ■ Block Diagram

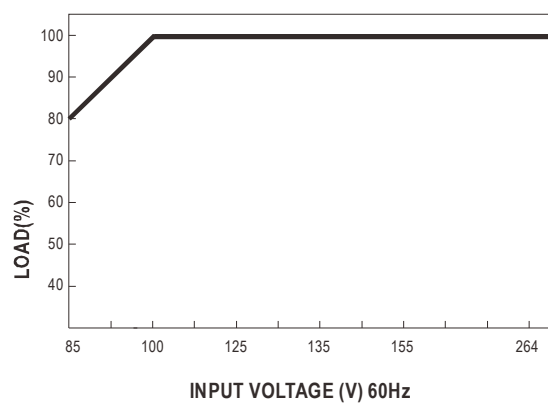
fosc : 70KHz



### Derating Curve



### ■ Output Derating VS Input Voltage

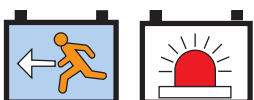


## Industrial Batteries / Network Power

### Powerfit S100



»The compact energy package  
for more security«



**Powerfit<sup>®</sup>**

## Powerfit S100

### The compact all-rounder

GNB's Powerfit S100 are general purpose batteries designed to deliver high performance in case of power interruptions. They are the ideal solution for applications such as security & alarm systems, emergency lighting, signaling, and any other UPS application where compact and reliable back-up power is key.

#### Specifications:

- > Rechargeable VRLA batteries in which the electrolyte is fixed in a glass mat (with very fine glass fibres)
- > Perfect combination of energy storage performance and reliability
- > Maintenance-free (no topping up) during the whole service life
- > Nominal capacity 1.2 – 38 Ah
- > 3-5 years design life at 20 °C ambient temperature (80% re-maining capacity)
- > Container in ABS Material
- > Designed in accordance with IEC 60896-21/22
- > Grid plate construction consisting of a lead calcium alloy
- > Low gas emission due to high gas recombination of 99%
- > Low self-discharge rate (about 3% / month at 20 °C)
- > Trouble-free transport of operational blocks, no restrictions for rail, road, sea and air transportation (IATA, DGR clause A67)
- > Completely recyclable

#### Technical characteristics and data

| Type        | Part number     | Nom-voltage<br>V | Nom. capacity C <sub>20</sub><br>1.80 Vpc<br>25 °C<br>Ah | C <sub>10</sub><br>1.75 Vpc<br>25 °C<br>Ah | C <sub>1</sub><br>1.6 Vpc<br>25 °C<br>Ah | Length*<br>(l)<br>mm | Width*<br>(b/w)<br>mm | Height*<br>(h)<br>mm | Weight<br>ca.<br>kg | Internal-resistance<br>acc. to IEC<br>60896-21<br>mΩ | Max. discharge<br>current<br>f. 5 sec.<br>A | Terminal |
|-------------|-----------------|------------------|----------------------------------------------------------|--------------------------------------------|------------------------------------------|----------------------|-----------------------|----------------------|---------------------|------------------------------------------------------|---------------------------------------------|----------|
| S106/1.2 S  | NAS10601D2VW0SA | 6                | 1.20                                                     | 1.14                                       | 0.73                                     | 97.0                 | 24.0                  | 57.5                 | 0.29                | 65.0                                                 | 18.0                                        | S-4.8    |
| S106/4.5 S  | NAS10604D5VW0SA | 6                | 4.50                                                     | 4.27                                       | 2.73                                     | 70.0                 | 47.0                  | 106                  | 0.81                | 25.0                                                 | 67.5                                        | S-4.8    |
| S106/12 SR  | NAS1060012VW0RA | 6                | 12.0                                                     | 11.5                                       | 7.54                                     | 151                  | 51.0                  | 100                  | 1.80                | 15.0                                                 | 180                                         | SR-6.3   |
| S112/1.2 S  | NAS11201D2VW0SA | 12               | 1.20                                                     | 1.14                                       | 0.73                                     | 97.0                 | 43.0                  | 58.0                 | 0.57                | 90.0                                                 | 18.0                                        | S-4.8    |
| S112/1.9 S  | NAS11201D9VW0SA | 12               | 1.90                                                     | 1.80                                       | 1.15                                     | 178                  | 35.0                  | 65.0                 | 0.87                | 80.0                                                 | 28.5                                        | S-4.8    |
| S112/4.5 S  | NAS11204D5VW0SA | 12               | 4.50                                                     | 4.27                                       | 2.73                                     | 90.0                 | 70.0                  | 107                  | 1.48                | 40.0                                                 | 67.5                                        | S-4.8    |
| S112/7.2 S  | NAS11207D2VW0SA | 12               | 7.20                                                     | 6.82                                       | 4.44                                     | 151                  | 65.0                  | 99.0                 | 2.35                | 22.0                                                 | 108                                         | S-4.8    |
| S112/7.2 SR | NAS11207D2VW0RA | 12               | 7.20                                                     | 6.82                                       | 4.44                                     | 151                  | 65.0                  | 99.0                 | 2.35                | 22.0                                                 | 108                                         | SR-6.3   |
| S112/9 SR   | NAS1120009VW0RA | 12               | 9.00                                                     | 8.06                                       | 5.31                                     | 151                  | 65.0                  | 99.0                 | 2.45                | 18.0                                                 | 127.5                                       | SR-6.3   |
| S112/12 S   | NAS1120012VW0SA | 12               | 12.0                                                     | 11.5                                       | 7.54                                     | 151                  | 98.0                  | 101                  | 3.50                | 14.0                                                 | 180                                         | S-4.8    |
| S112/12 SR  | NAS1120012VW0RA | 12               | 12.0                                                     | 11.5                                       | 7.54                                     | 151                  | 98.0                  | 101                  | 3.50                | 14.0                                                 | 180                                         | SR-6.3   |
| S112/18 G6  | NAS1120018VW0BA | 12               | 18.0                                                     | 17.2                                       | 11.3                                     | 181.5                | 77.0                  | 167.5                | 5.40                | 16.0                                                 | 270                                         | G-M6     |
| S112/26 G6  | NAS1120026VW0BA | 12               | 26.0                                                     | 24.8                                       | 16.3                                     | 166                  | 175                   | 125                  | 8.00                | 14.0                                                 | 390                                         | G-M6     |
| S112/38 F6  | NAS1120038VW0FA | 12               | 38.0                                                     | 38.0                                       | 23.2                                     | 197                  | 165                   | 170                  | 12.20               | 10.0                                                 | 456                                         | F-M6     |

\* ± 2 mm



Nominal capacity  
1.2 – 38 Ah  
C<sub>20</sub>



Block battery



Grid plate



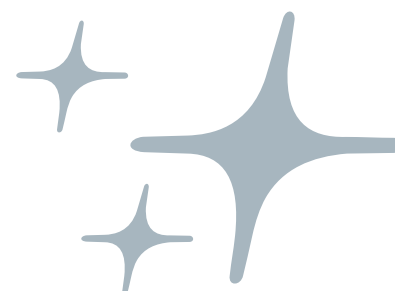
Recyclable



Valve regulated  
lead-acid  
batteries



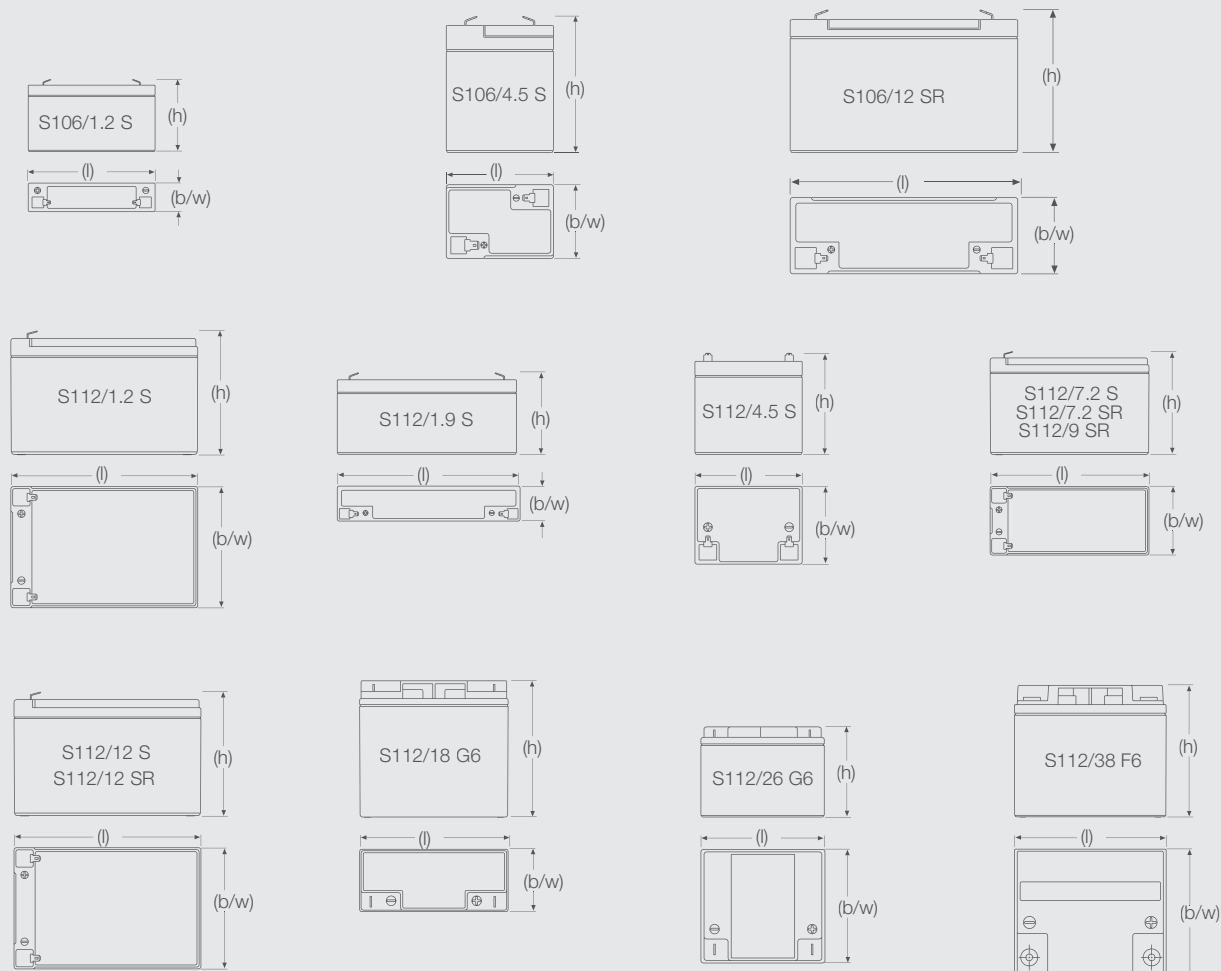
Maintenance-free (no  
topping up)



## Powerfit S100

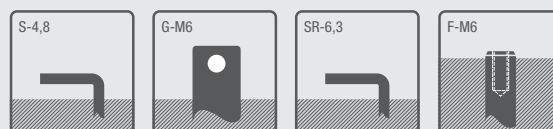
The compact energy source with high performance

### Dimensions



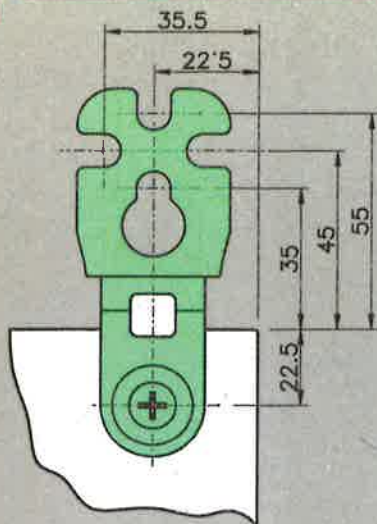
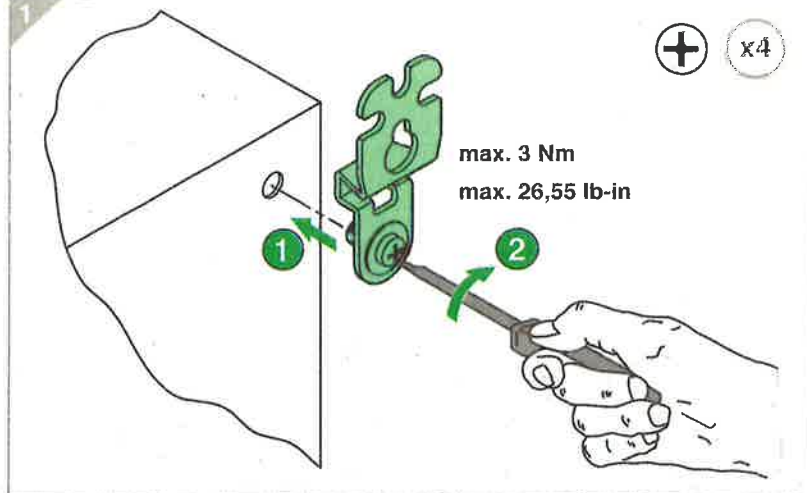
### Container and terminal

> **Container:** ABS

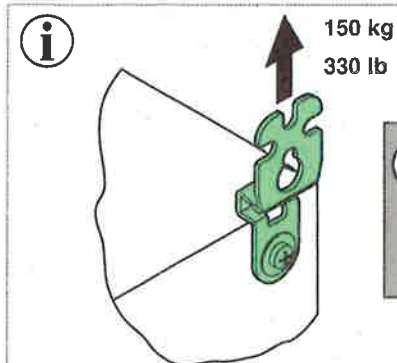


### Applications

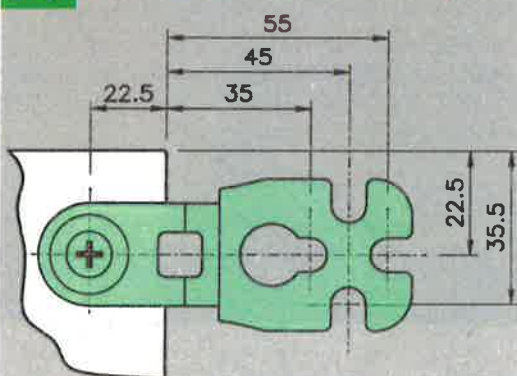
In addition to their suitability for general applications in security systems, the Powerfit S100 batteries are a reliable energy source for emergency lighting.

**A****NSYAEFPSC ... NSYAEFPFXSC****1****x4**

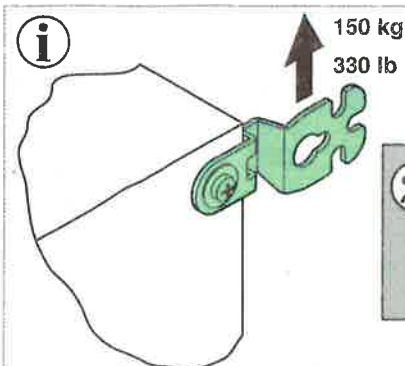
max. 3 Nm  
max. 26,55 lb-in

**i**

 **Ne pas utiliser pour des charges dynamiques !**  
**Do not use for dynamics loads !**

**A'****NSYAEFPSC ... NSYAEFPFXSC****1****x4**

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