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COV\_01

# UKRAINE

|                                                                                                                                |                         |                          |                                |                                |  |                       |  |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------|--------------------------------|--------------------------------|--|-----------------------|--|
| 01                                                                                                                             | M.Auclair<br>26/07/2017 | C.Catalano<br>26/07/2017 | D.Stremoukhova<br>26/07/2017   | Первая проблема<br>First issue |  |                       |  |
| Редакция №                                                                                                                     | Выполнено:<br>дата      | Проверено:<br>дата       | Одобрено:<br>дата              | Изменение<br>Modification      |  |                       |  |
| Заказчик<br>Customer                                                                                                           |                         |                          |                                | Заказ № 235906                 |  |                       |  |
| Обозначение проекта у заказчика<br>Customer project reference                                                                  |                         |                          |                                | UKRENERGO-CBR 220kV AND 330kV  |  |                       |  |
|                                                                                                                                |                         |                          |                                |                                |  |                       |  |
| <br>Grid Solutions<br>Villeurbanne France |                         | АНТ                      | Тип документа<br>Document type |                                |  | Редакция №<br><br>01  |  |
| Масштаб                                                                                                                        |                         | Формат<br>A3             | № чертежа<br>Drawing number    |                                |  | № страницы<br>001/007 |  |
|                                                                                                                                |                         |                          | VS235906GAD01D                 |                                |  |                       |  |

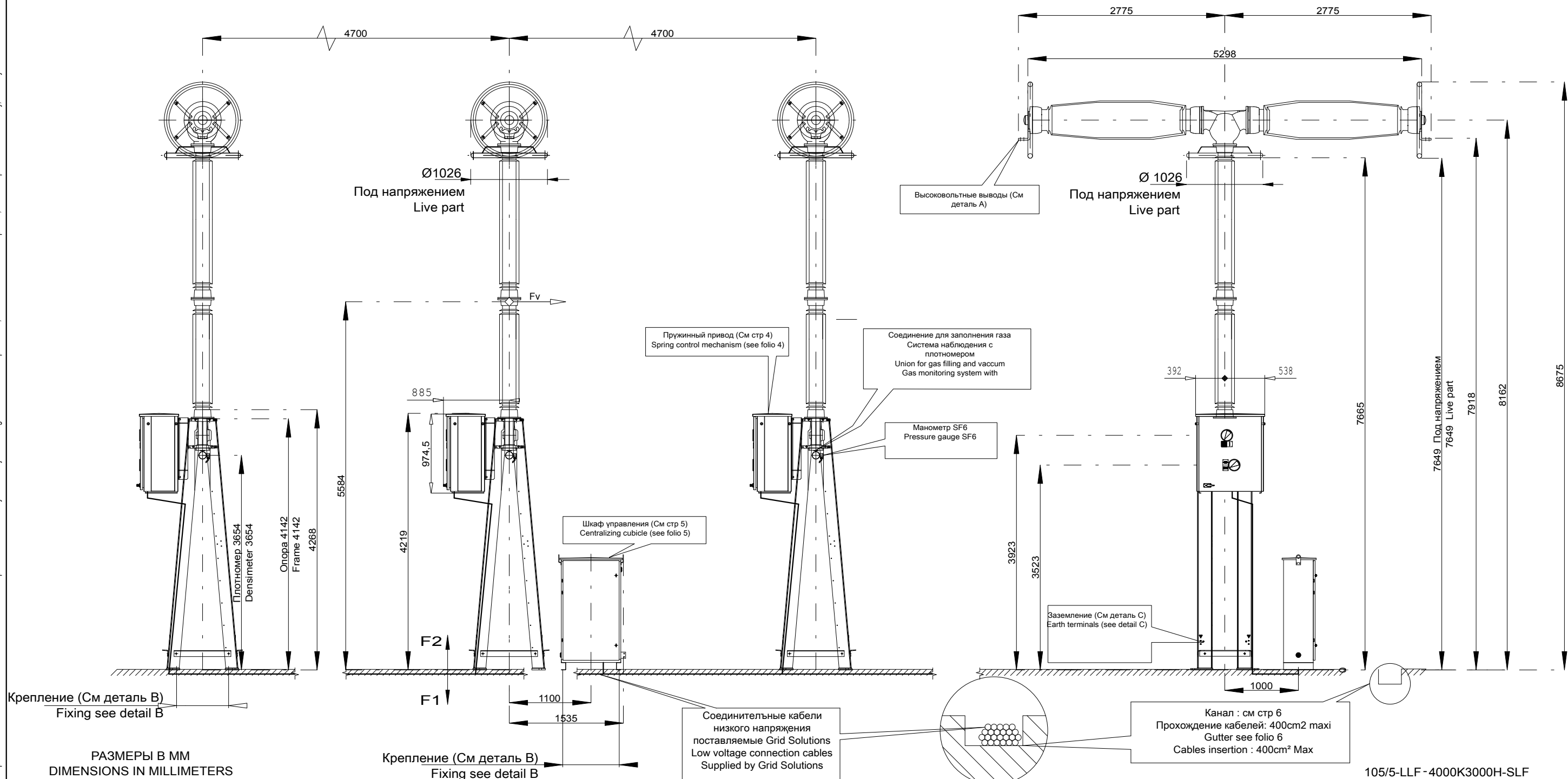
|        |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
|--------|------------------------------|-----|-----|----|---------------------------|------------------|----------------------------------------------------|--|-------------------------|--|---|--|---|--|---|--|
| A      | 1                            |     | 2   |    | 3                         |                  | 4                                                  |  | 5                       |  | 6 |  | 7 |  | 8 |  |
|        | Название листа<br>Sheet name |     |     |    | № страницы<br>Page number |                  | Редакция №<br>Revision N°                          |  | Описание<br>Description |  |   |  |   |  |   |  |
|        | COV_01                       |     | 001 |    | 01                        |                  |                                                    |  |                         |  |   |  |   |  |   |  |
|        | CON_01                       |     | 002 |    | 01                        |                  | СОДЕРЖАНИЕ   CONTENTS                              |  |                         |  |   |  |   |  |   |  |
|        | AC1_01                       |     | 003 |    | 01                        |                  | РАЗМЕРЫ   DIMENSIONS                               |  |                         |  |   |  |   |  |   |  |
|        | AC1_02                       |     | 004 |    | 01                        |                  | ПРУЖИННЫЙ МЕХАНИЗМ ТИПА   SPRING MECHANISM         |  |                         |  |   |  |   |  |   |  |
|        | AC1_03                       |     | 005 |    | 01                        |                  | ЦЕНТРАЛЬНЫЙ ШКАФ УПРАВЛЕНИЯ   CENTRALIZING CUBICLE |  |                         |  |   |  |   |  |   |  |
|        | AC1_04                       |     | 006 |    | 01                        |                  | КРЕПЛЕНИЕ   FIXING TO GROUND                       |  |                         |  |   |  |   |  |   |  |
| AC1_05 |                              | 007 |     | 01 |                           | деталь   DETAILS |                                                    |  |                         |  |   |  |   |  |   |  |
| B      |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
|        |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
|        |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
| C      |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
|        |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
|        |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
| D      |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
|        |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
|        |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
| E      |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
|        |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
|        |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
| F      |                              |     |     |    |                           |                  |                                                    |  |                         |  |   |  |   |  |   |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|------------------|--|------------------------|--|--------------------------|--|--------------------------|--|------------------------|--|-----------------------------------------------------------------------------------------------------------------------------|--|-----------------------------|--|------------------------------|--|-------------------------------|--|-----------------------|--|---------------------------|--|----|--|
| Формат<br>Format |  | Выполнено:<br>Drawn by |  | Проверено:<br>Checked by |  | Одобрено:<br>Approved by |  | Заказ №<br>Order N°    |  | 235906                                                                                                                      |  | GL315                       |  |                              |  | UKRENERGO-CBR 220kV AND 330kV |  | UKRAINE<br>Grid804194 |  | Редакция №<br>Revision N° |  | 01 |  |
| A3               |  | M.Auclair              |  | C.Catalano               |  | D.Stremoukhova           |  | СОДЕРЖАНИЕ<br>CONTENTS |  |  Grid Solutions<br>Villeurbanne France |  | № чертежа<br>Drawing number |  | VS235906GAD01D               |  |                               |  |                       |  | № страницы<br>Page number |  |    |  |
|                  |  | 26/07/2017             |  | 26/07/2017               |  | 26/07/2017               |  |                        |  |                                                                                                                             |  | Расположение<br>Location    |  | Название листа<br>Sheet name |  | CON_01                        |  |                       |  |                           |  |    |  |

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|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|
| 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  | 8 |  |
|---|--|---|--|---|--|---|--|---|--|---|--|---|--|---|--|

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РАЗМЕРЫ В ММ  
DIMENSIONS IN MILLIMETERS

| Нагрузки<br>STRENGTHS                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $F_v$<br>Нагрузка ветровая в центре гравитационного поля :<br>STRENGTH DUE TO THE WIND EXERTED ON THE POLE THRUST CENTER : <b>497</b> daN<br><br>Максимальные нагрузки статические + динамические на точку опоры :<br>MAXIMUM STRENGTHS (STATIC+DYNAMIC)<br>ON EVERY FIXING POINT :<br>книзу F1 : <b>-5772</b> daN<br>Downward F1 : <b>-5772</b> daN<br>кверху F2 : <b>5138</b> daN<br>Upward F2 : <b>5138</b> daN | Нагрузки на фундамент книзу (F1) : <b>-4673</b> daN<br>STRENGTH ON FOUNDATION DOWNWARD (F1) : <b>-4673</b> daN<br><br>Нагрузки на фундамент кверху (F2) : <b>1570</b> daN<br>STRENGTH ON FOUNDATION UPWARD (F2) : <b>1570</b> daN<br><br>Реакция вращающего момента на фундамент : <b>7109</b> daN.m<br>OVERTURNING TORQUE ON FOUNDATION : <b>7109</b> daN.m |

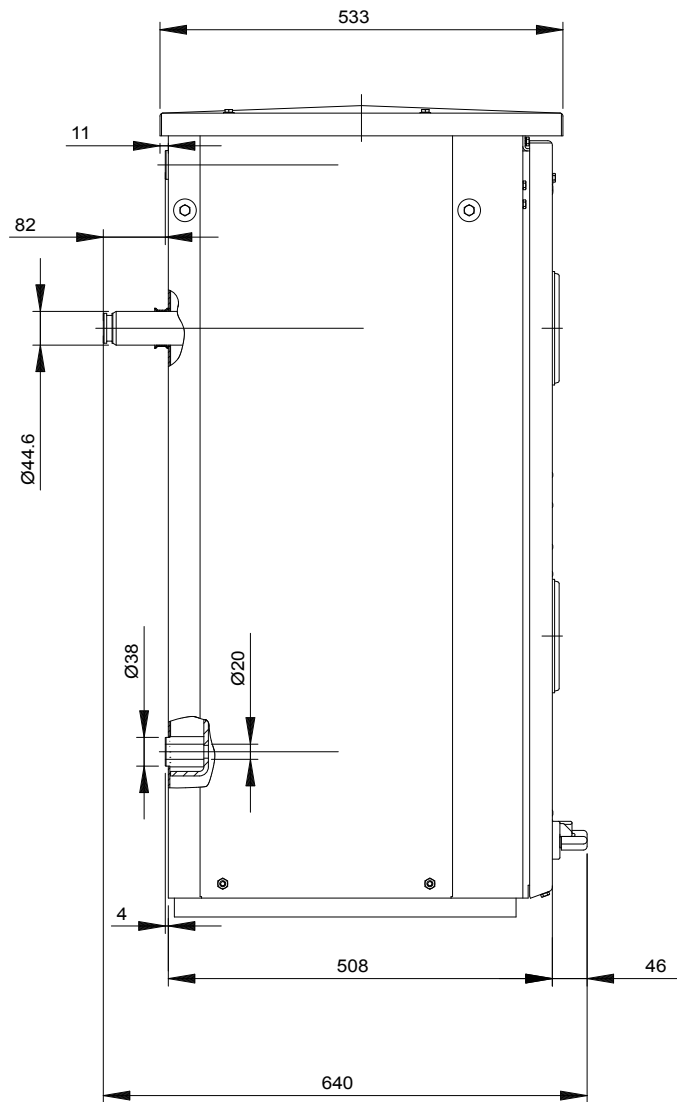
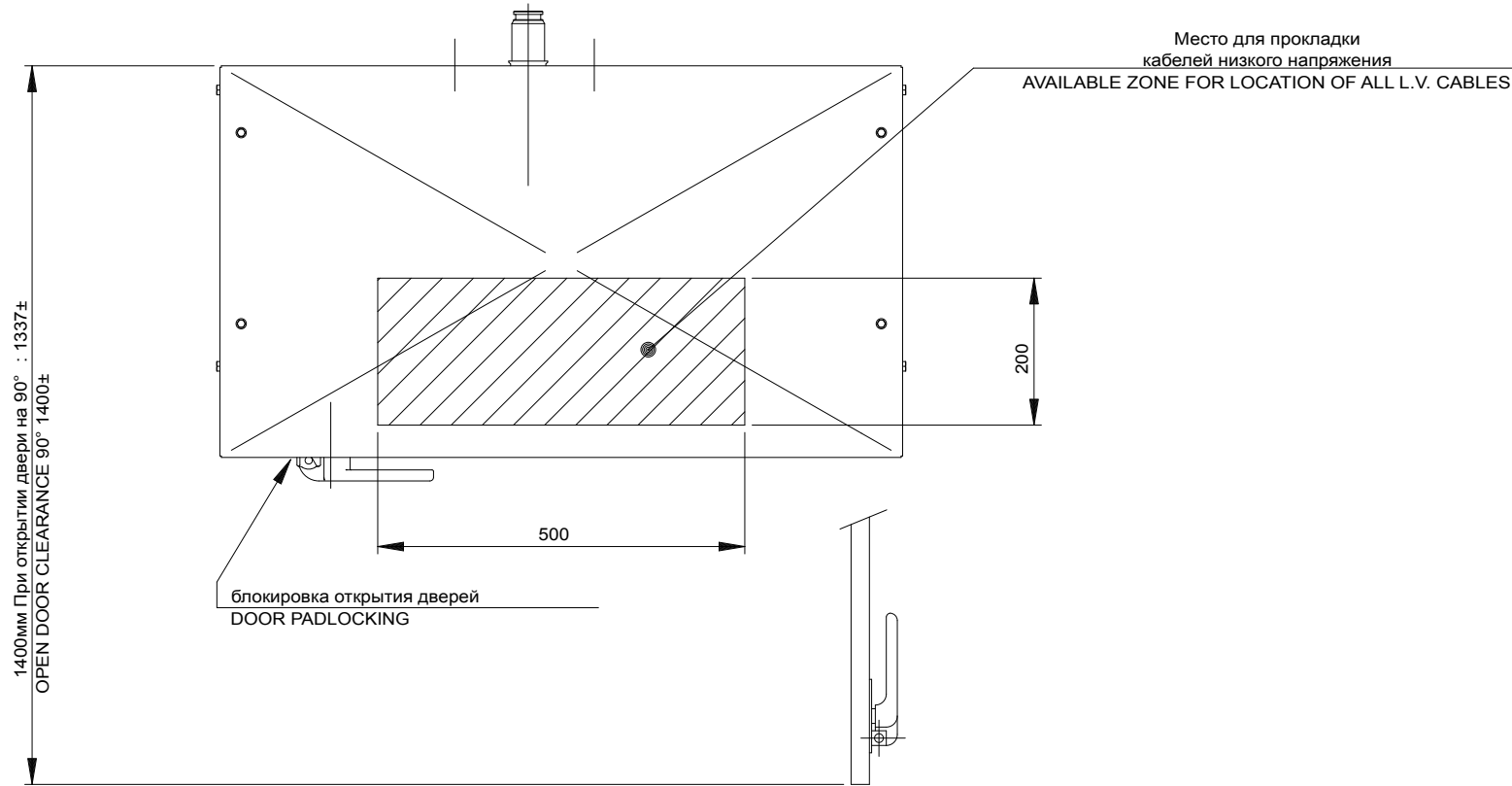
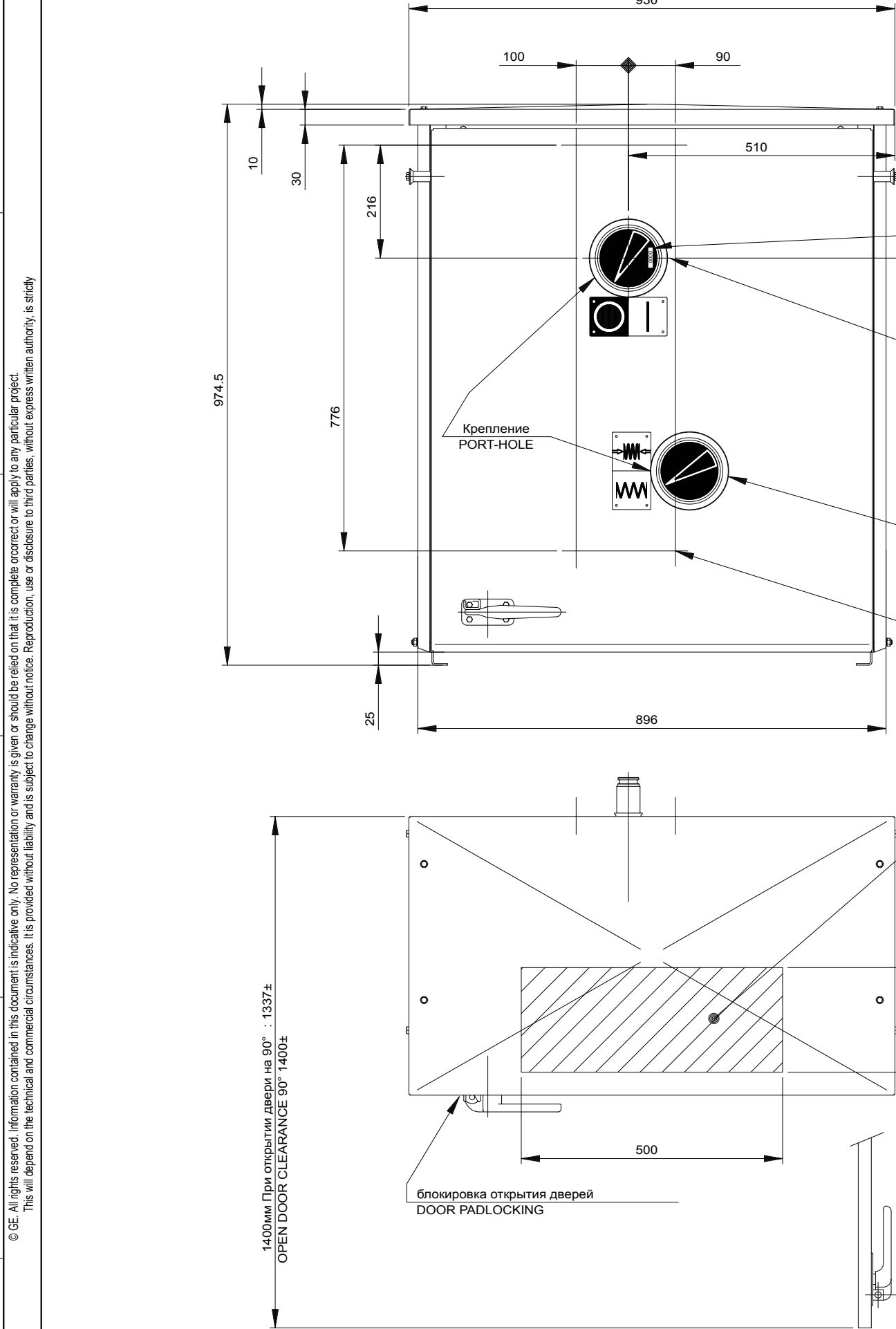
| Допустимые нагрузки на высоковольтные выводы<br>PERMISSIBLE STRENGTH ON THE TERMINALS |         |
|---------------------------------------------------------------------------------------|---------|
| Горизонтальные нагрузки :<br>Horizontal tensile strength :                            | 150 daN |
| Горизонтальные поперечные нагрузки :<br>Transversal horizontal strength :             | 100 daN |
| Вертикальные нагрузки :<br>Vertical strength :                                        | 125 daN |

| Масса<br>MASS OF PART                                                  |                |
|------------------------------------------------------------------------|----------------|
| Масса гасительной камеры :<br>MASS OF ONE COMPLETE INTERRUPTING PART : | <b>1870</b> kg |
| Масса опоры :<br>MASS OF THE FRAME :                                   | <b>446</b> kg  |
| Масса пружинного привода :<br>MASS OF SPRINGS CONTROL MECHANISM :      | <b>205</b> kg  |
| Масса шкафа управления :<br>MASS OF CENTRALIZING CUBICLE :             | <b>80</b> kg   |
| Общая масса выключателя :<br>MASS OF THE CIRCUIT BREAKER WITH FRAME :  | <b>5690</b> kg |

105/5-LLF-4000K3000H-SLF

|                  |                        |                          |                          |                       |        |                                                                                                                             |                             |                              |                           |    |
|------------------|------------------------|--------------------------|--------------------------|-----------------------|--------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------|---------------------------|----|
| Формат<br>Format | Выполнено:<br>Drawn by | Проверено:<br>Checked by | Одобрено:<br>Approved by | Заказ №<br>Order N°   | 235906 | GL315                                                                                                                       | UKRAINE                     |                              | Редакция №<br>Revision N° | 01 |
| A3               | M.Auclair              | C.Catalano               | D.Stremoukhova           | РАЗМЕРЫ<br>DIMENSIONS |        |  Grid Solutions<br>Villeurbanne France | № чертежа<br>Drawing number | VS235906GAD01D               | № страницы<br>Page number |    |
|                  | 26/07/2017             | 26/07/2017               | 26/07/2017               |                       |        |                                                                                                                             | Расположение<br>Location    | Название листа<br>Sheet name |                           |    |
|                  |                        |                          |                          |                       |        |                                                                                                                             |                             | AC1_01                       | 003 / 007                 |    |

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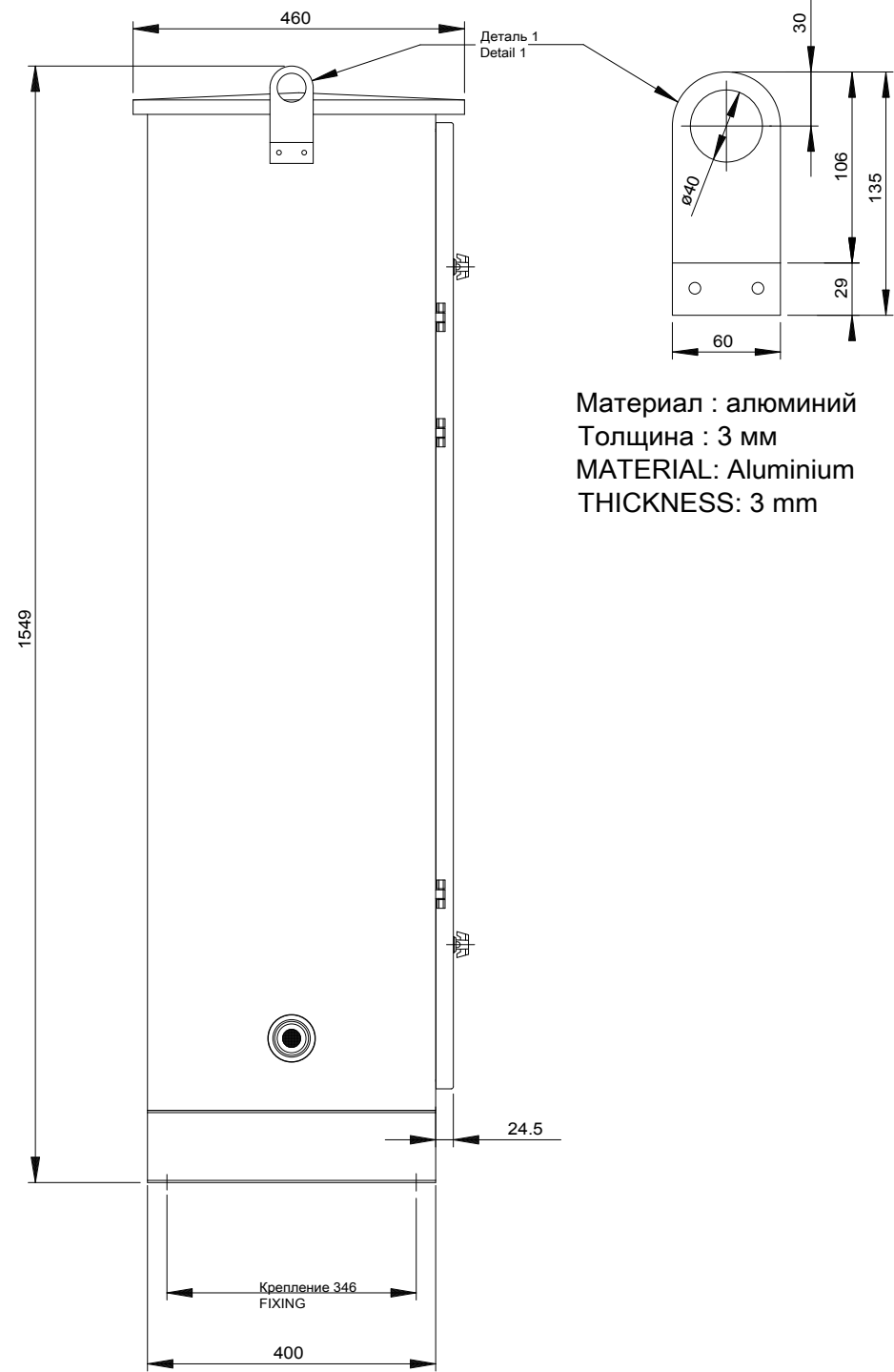
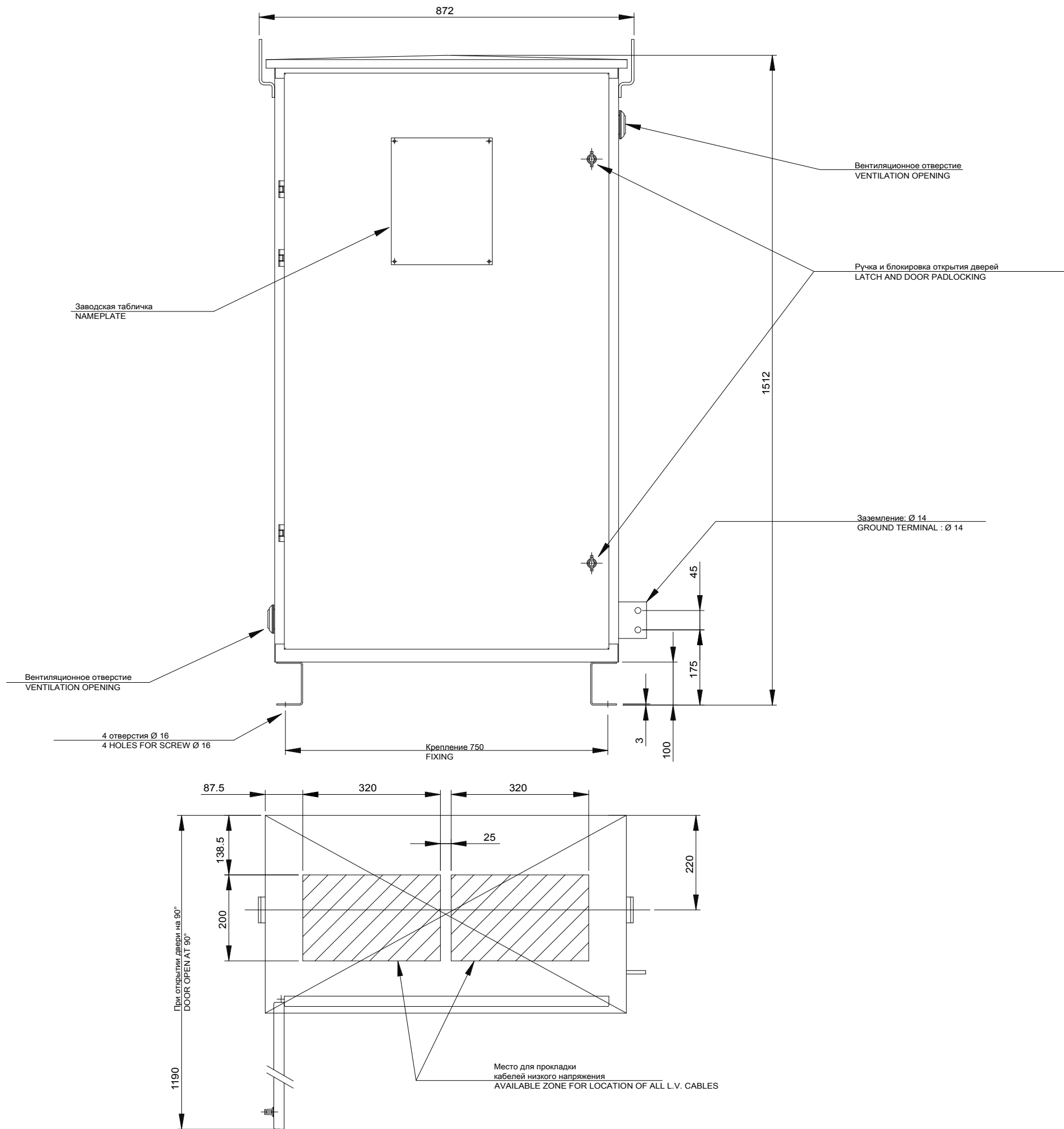


МАССА : 205 кг  
MASS : 205 kg

FK3-2  
РАЗМЕРЫ В ММ  
DIMENSIONS IN MILLIMETERS

|                  |                        |                          |                          |                                             |        |                                                                                                                             |                             |                           |                              |           |
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| Формат<br>Format | Выполнено:<br>Drawn by | Проверено:<br>Checked by | Одобрено:<br>Approved by | Заказ №<br>Order N°                         | 235906 | GL315                                                                                                                       | UKRAINE                     |                           | Редакция №<br>Revision N°    | 01        |
| A3               | M.Auclair              | C.Catalano               | D.Stremoukhova           | ПРУЖИННЫЙ МЕХАНИЗМ ТИПА<br>SPRING MECHANISM |        |  Grid Solutions<br>Villeurbanne France | № чертежа<br>Drawing number |                           | VS235906GAD01D               |           |
|                  | 26/07/2017             | 26/07/2017               | 26/07/2017               |                                             |        |                                                                                                                             | Расположение<br>Location    |                           | Название листа<br>Sheet name | AC1_02    |
|                  |                        |                          |                          |                                             |        |                                                                                                                             |                             | № страницы<br>Page number |                              | 004 / 007 |

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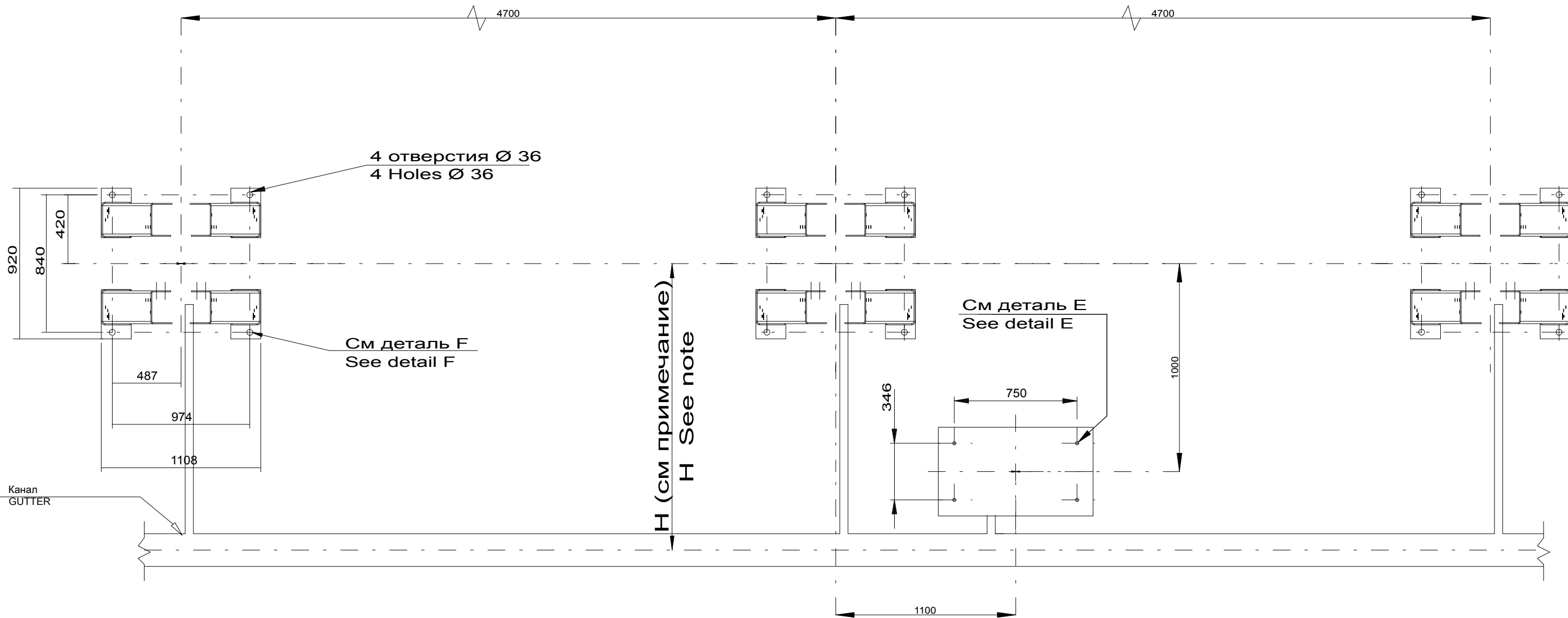
Материал : алюминий  
Толщина : 3 мм  
MATERIAL: Aluminium  
THICKNESS: 3 mm

МАССА : 80 кг  
MASS : 80 kg

РАЗМЕРЫ В ММ  
DIMENSIONS IN MILLIMETERS

|                  |                        |                          |                          |                                                     |        |                                                                                                                             |                             |                              |                           |                           |
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| A3               | M.Auclair              | C.Catalano               | D.Stremoukhova           | ЦЕНТРАЛЬНЫЙ ШКАФ УПРАВЛЕНИЯ<br>CENTRALIZING CUBICLE |        |  Grid Solutions<br>Villeurbanne France | № чертежа<br>Drawing number |                              | VS235906GAD01D            |                           |
|                  | 26/07/2017             | 26/07/2017               | 26/07/2017               |                                                     |        |                                                                                                                             | Расположение<br>Location    | Название листа<br>Sheet name |                           | № страницы<br>Page number |
|                  |                        |                          |                          |                                                     |        |                                                                                                                             |                             | AC1_03                       |                           | 005 / 007                 |

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**H = ..... mm**

Размер указывается заказчиком для расчета  
длины кабелей низкого напряжения  
DIMENSION TO BE STATED BY USERS,  
TO CALCULATE THE LENGTH OF L.V. CABLES

ПРИМЕЧАНИЕ :  
NOTE :

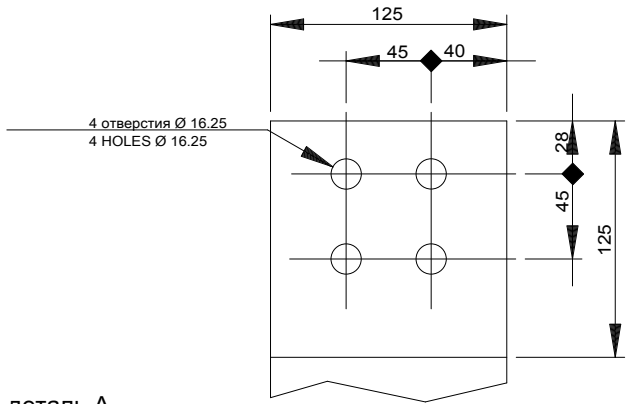
деталь B  
DETAIL B

РАЗМЕРЫ В ММ  
DIMENSIONS IN MILLIMETERS

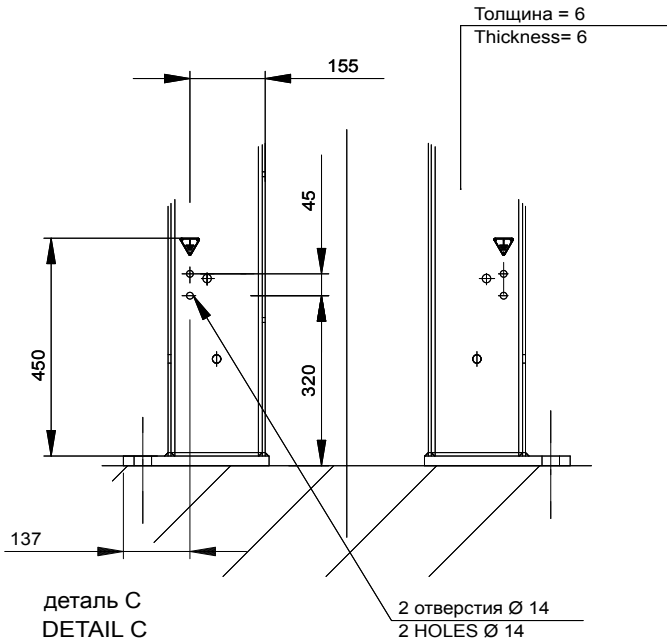
|                  |                                        |                          |                          |                               |        |       |                                                                                                                             |                             |  |                                     |    |                                            |
|------------------|----------------------------------------|--------------------------|--------------------------|-------------------------------|--------|-------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------|--|-------------------------------------|----|--------------------------------------------|
| Формат<br>Format | Выполнено:<br>4 Holes Ø 36<br>Drawn by | Проверено:<br>Checked by | Одобрено:<br>Approved by | Заказ №<br>Order N°           | 235906 | GL315 | UKRAINE                                                                                                                     |                             |  | Редакция №<br>Revision N°           | 01 |                                            |
| A3               | M.Auclair                              | C.Catalano               | D.Stremoukhova           | КРЕПЛЕНИЕ<br>FIXING TO GROUND |        |       |  Grid Solutions<br>Villeurbanne France | № чертежа<br>Drawing number |  | VS235906GAD01D                      |    | № страницы<br>Page number<br><br>006 / 007 |
|                  | 26/07/2017                             | 26/07/2017               | 26/07/2017               |                               |        |       |                                                                                                                             | Расположение<br>Location    |  | Название листа<br>Sheet name AC1_04 |    |                                            |

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Деталь высоковольтных выводов  
Алюминий, толщиной 25 мм  
Для соединителя : NEMA Standart  
DETAIL OF THE H.V. TERMINALS  
ALUMINIUM THICKNESS = 25mm  
Connector NORME NEMA

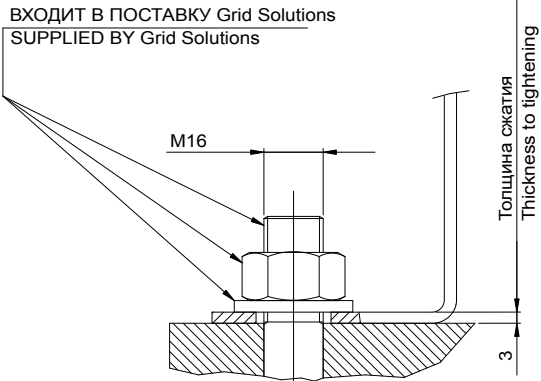


деталь A  
DETAIL A

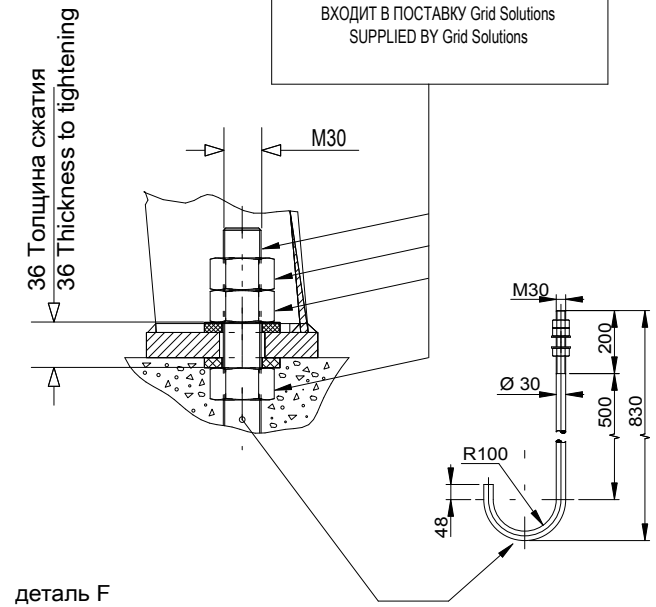


деталь C  
DETAIL C

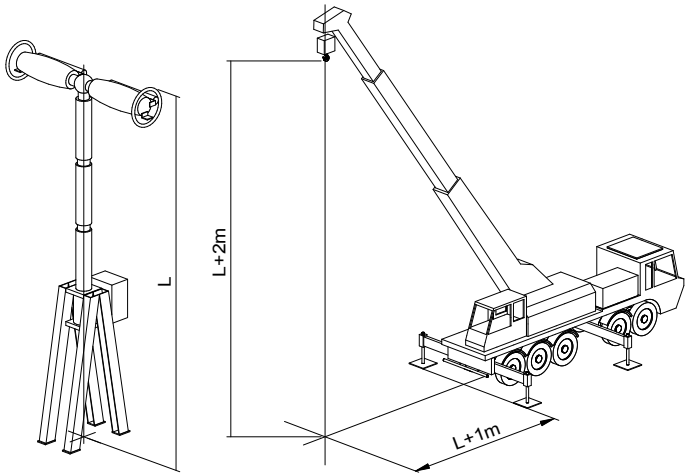
ШКАФ УПРАВЛЕНИЯ  
(См стр 5)  
CENTRALIZING CUBICLE  
See folio 5



деталь E  
DETAIL E



деталь F  
DETAIL F



Устройство для подъема  
используемое для установки выключателя  
Lifting appliance required for circuit breaker erection

РАЗМЕРЫ В ММ  
DIMENSIONS IN MILLIMETERS

|  |                  |                        |                          |                          |                     |        |       |                                                                                                                                |                             |  |                                     |    |                                            |
|--|------------------|------------------------|--------------------------|--------------------------|---------------------|--------|-------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--|-------------------------------------|----|--------------------------------------------|
|  | Формат<br>Format | Выполнено:<br>Drawn by | Проверено:<br>Checked by | Одобрено:<br>Approved by | Заказ №<br>Order N° | 235906 | GL315 |                                                                                                                                | UKRAINE                     |  | Редакция №<br>Revision N°           | 01 |                                            |
|  | A3               | M.Auclair              | C.Catalano               | D.Stremoukhova           | деталь<br>DETAILS   |        |       | <br>Grid Solutions<br>Villeurbanne France | № чертежа<br>Drawing number |  | VS235906GAD01D                      |    | № страницы<br>Page number<br><br>007 / 007 |
|  |                  | 26/07/2017             | 26/07/2017               | 26/07/2017               |                     |        |       |                                                                                                                                | Расположение<br>Location    |  | Название листа<br>Sheet name AC1_05 |    |                                            |