



# Carel Industries SPA

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info: carel@carel.com



power**solution**

Project code HB200CXX00SE0 Rev 0

Project description Q.E. SECONDARY

|                   |                         |                       |      |
|-------------------|-------------------------|-----------------------|------|
| Supply voltage    | 1P+N+E - 230V - 50/60Hz | Operating temperature | 40°C |
| Rated current     | 42A                     | Icc                   | 6kA  |
| Auxiliary voltage | 230Vac                  |                       |      |

|             |                   |    |            |
|-------------|-------------------|----|------------|
| Designed by | Luca Cazzagon     | on | 07/04/2022 |
| Checked by  | Franco Meneghetti | on | 20/04/2022 |
| Approved by | Franco Meneghetti | on | 20/04/2022 |

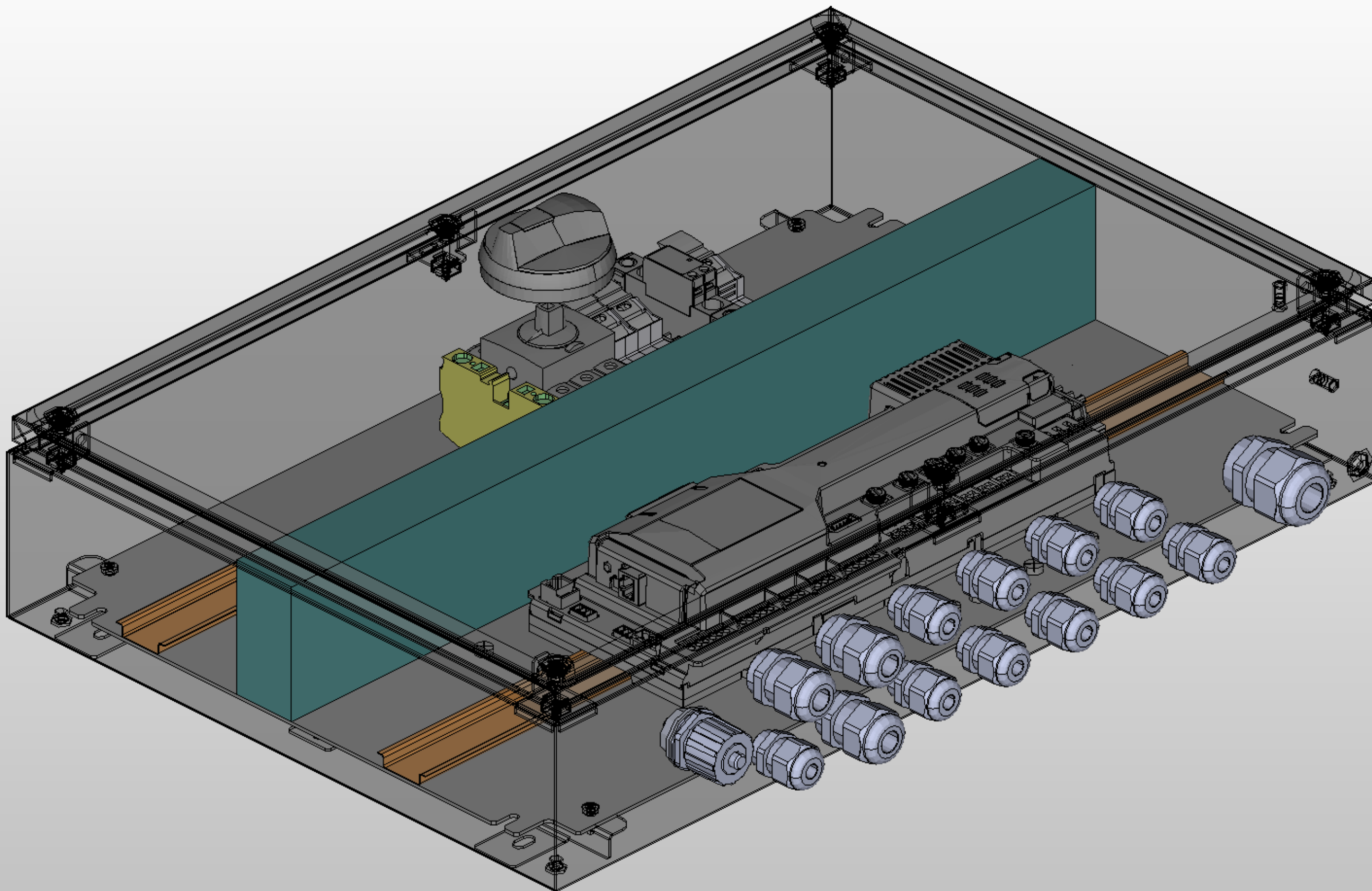
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|              |      |      |      |               |                |                                                                                       |            |                      |             |        |
|--------------|------|------|------|---------------|----------------|---------------------------------------------------------------------------------------|------------|----------------------|-------------|--------|
|              |      |      | Date | 07/04/2022    | HB200CXX00SE0  |  | Title page | Mounting locations + | Page        | &EAA/1 |
|              |      |      | Elab | Luca Cazzagon |                |                                                                                       |            |                      | Next        | 2      |
|              |      |      |      |               | Q.E. SECONDARY |                                                                                       |            | Function =           | Total pages | 23     |
| Modification | Date | Name | Rev. | 0             |                |                                                                                       |            |                      |             |        |



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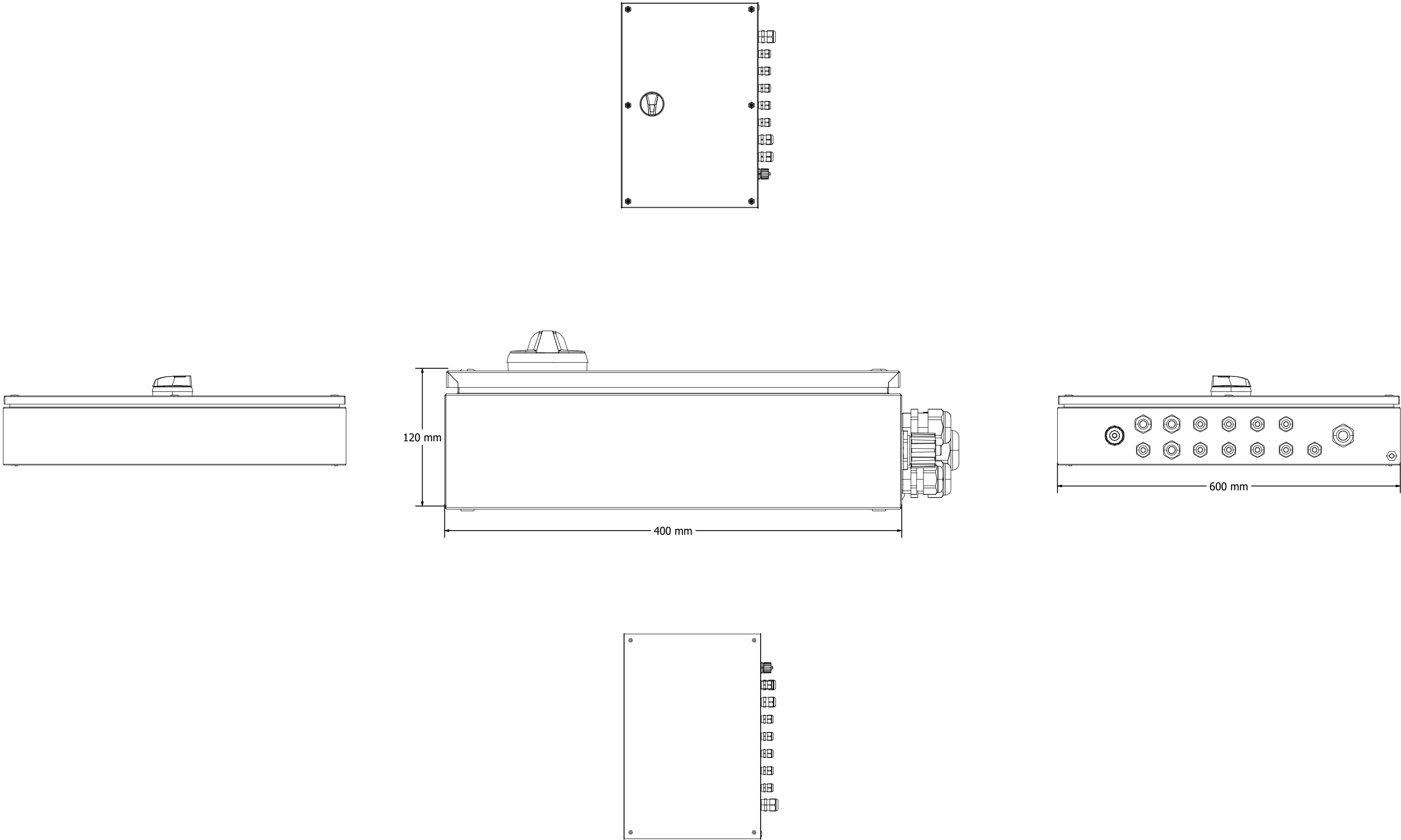


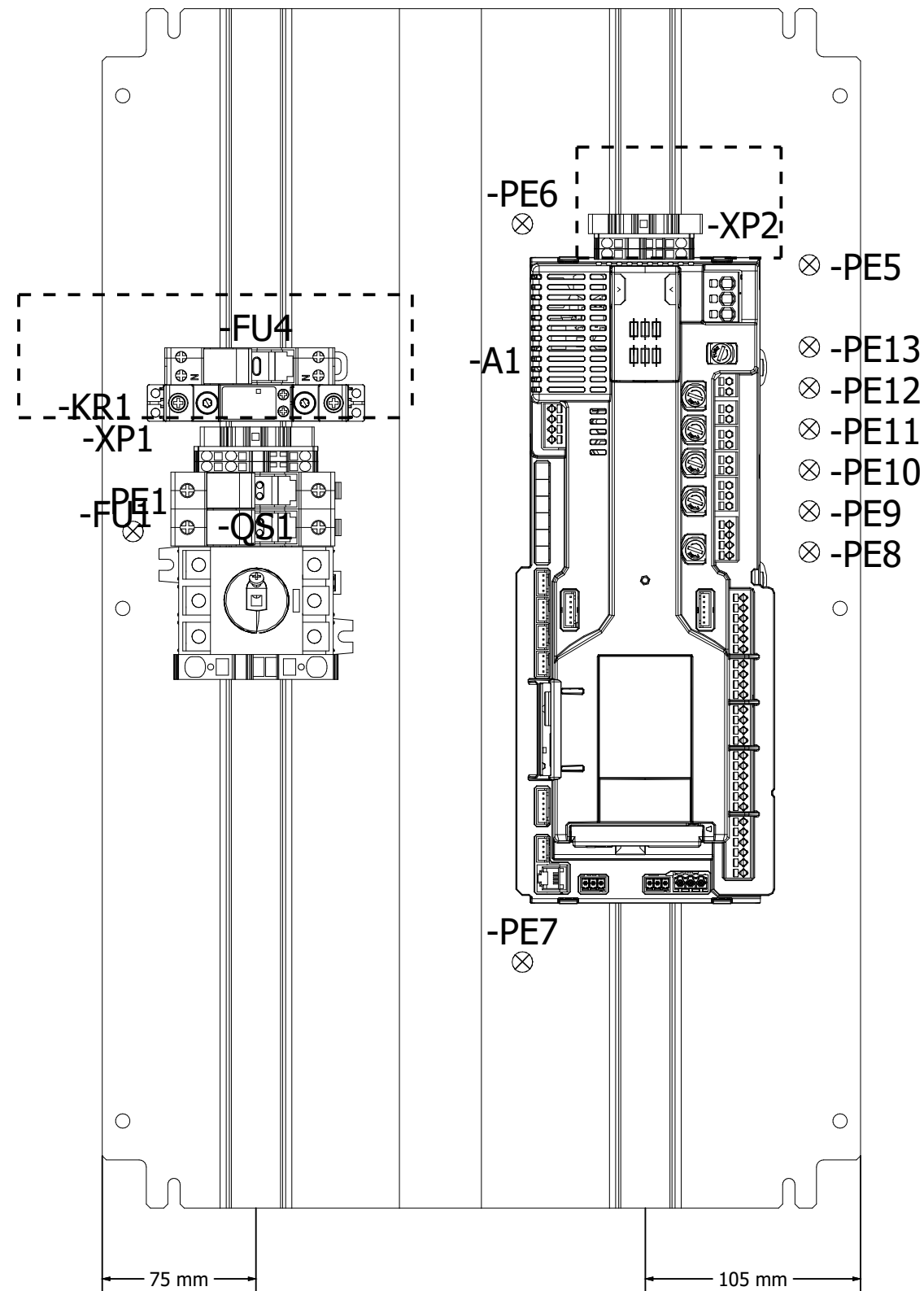
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|              |      |      | Date | 07/04/2022    | HB200CXX00SE0  |
|              |      |      | Elab | Luca Cazzagon |                |
|              |      |      |      |               | Q.E. SECONDARY |
| Modification | Date | Name | Rev. | 0             |                |

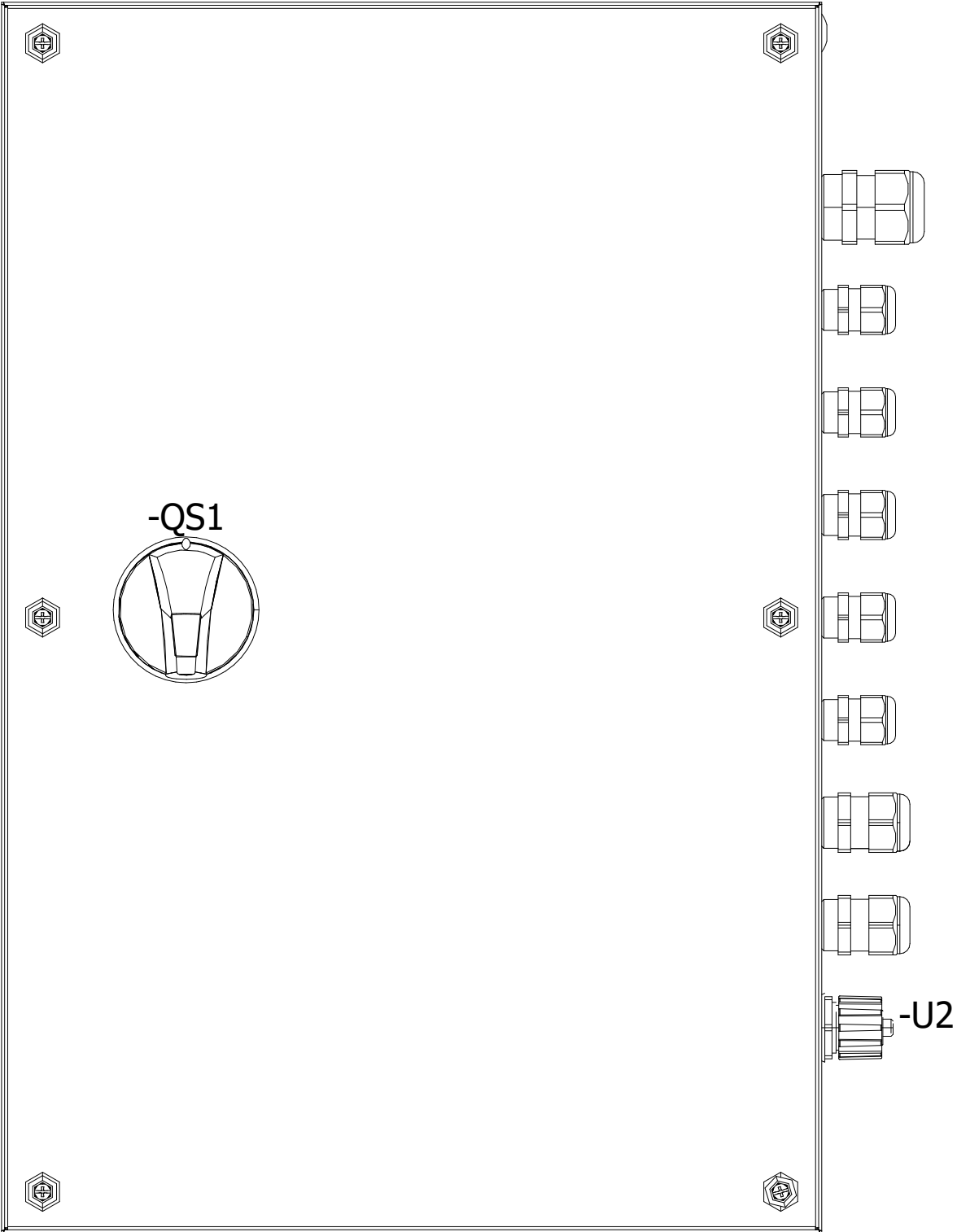
**CAREL**

General view

|                    |   |    |             |           |
|--------------------|---|----|-------------|-----------|
| Mounting locations | + | QE | Page        | +QE&ETL/1 |
|                    |   |    | Next        | 2         |
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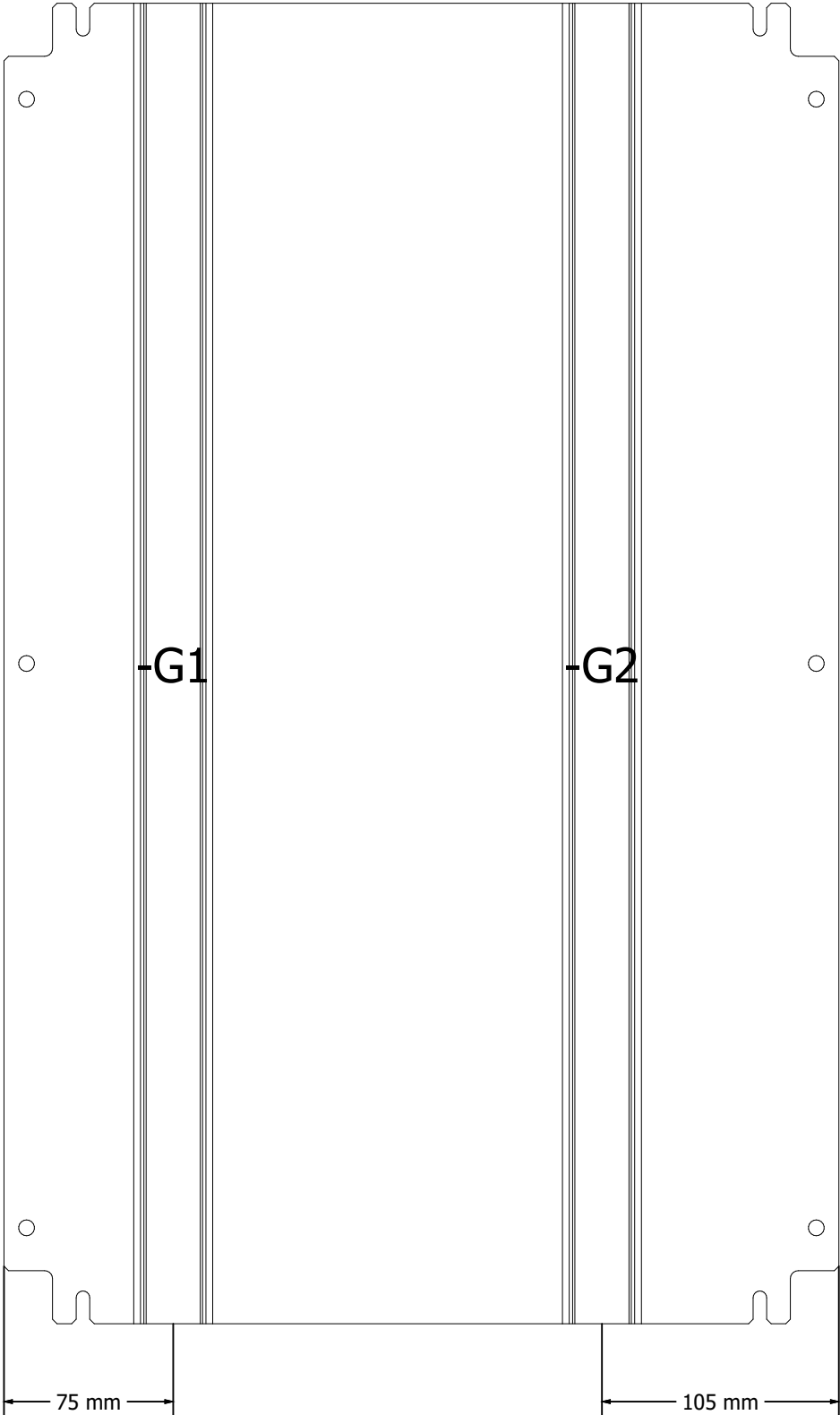






Layout guides and channels

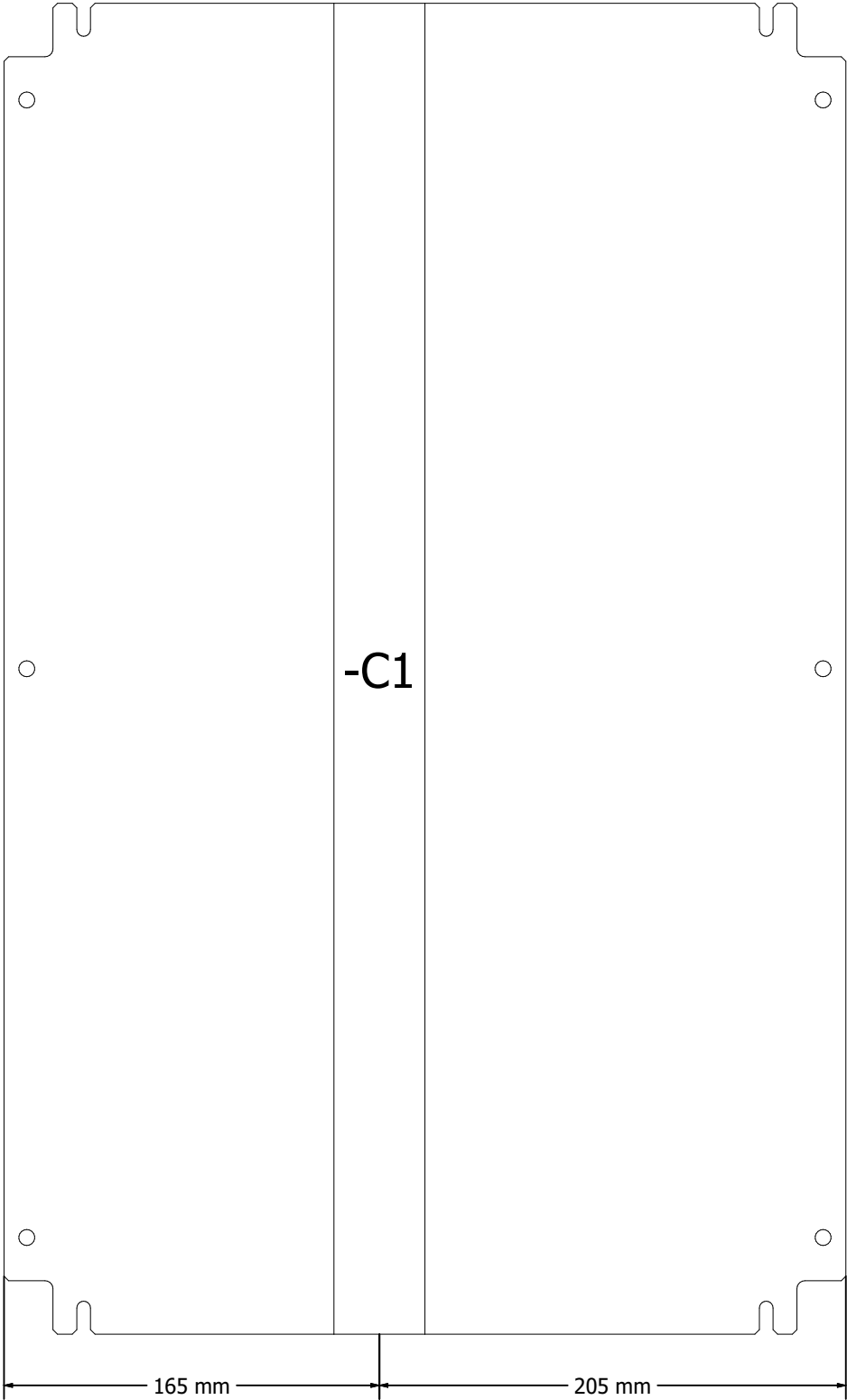
| Sign | Type   | Length<br>(Tollerance -5mm) |
|------|--------|-----------------------------|
| G1   | 35x7.5 | 530 mm                      |
| G2   | 35x7.5 | 530 mm                      |



Empty

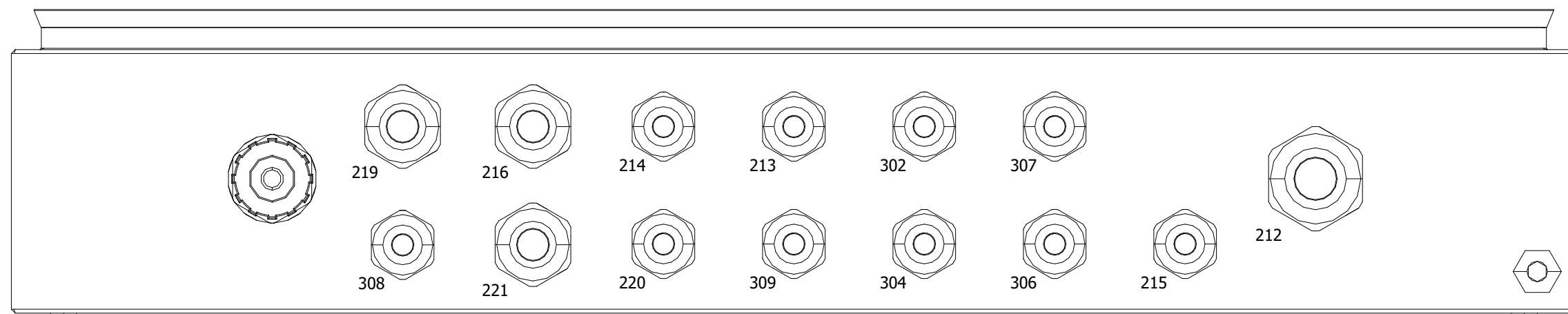
Layout guides and channels

| Sign | Type  | Length<br>(Tolerance -5mm) |
|------|-------|----------------------------|
| C1   | 40X80 | 585 mm                     |

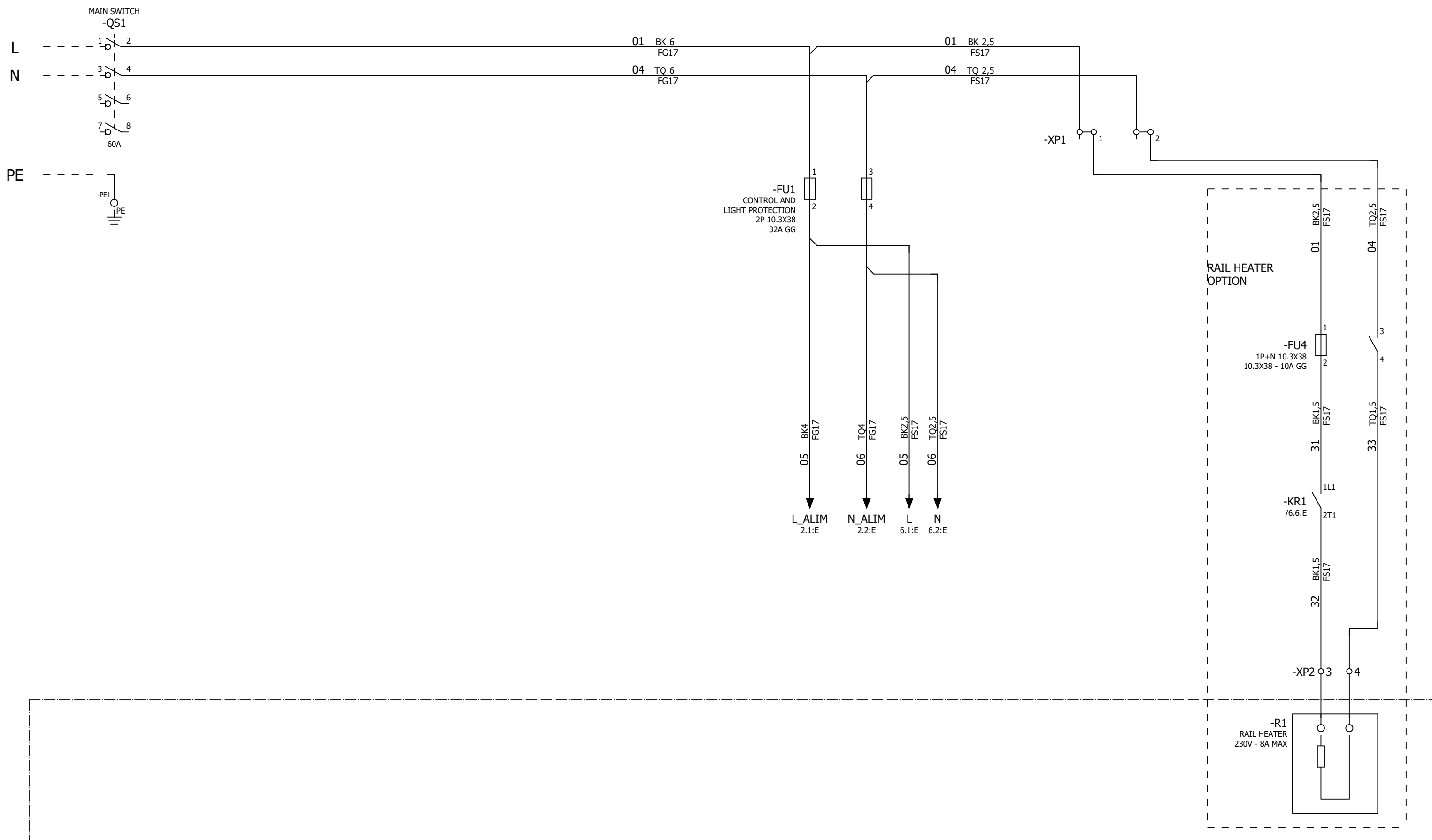


## Cable entry/exit components

| Item number | Component tipe | Drilling<br>(Tolerance +0.5mm) |
|-------------|----------------|--------------------------------|
| 212         | M32 Gland      | Ø 32.5mm                       |
| 213         | M20 Gland      | Ø 20.5mm                       |
| 214         | M20 Gland      | Ø 20.5mm                       |
| 215         | M20 Gland      | Ø 20.5mm                       |
| 216         | M25 Gland      | Ø 25.5mm                       |
| 219         | M25 Gland      | Ø 25.5mm                       |
| 220         | M20 Gland      | Ø 20.5mm                       |
| 221         | M25 Gland      | Ø 25.5mm                       |
| 302         | M20 Gland      | Ø 20.5mm                       |
| 304         | M20 Gland      | Ø 20.5mm                       |
| 306         | M20 Gland      | Ø 20.5mm                       |
| 307         | M20 Gland      | Ø 20.5mm                       |
| 308         | M20 Gland      | Ø 20.5mm                       |
| 309         | M20 Gland      | Ø 20.5mm                       |

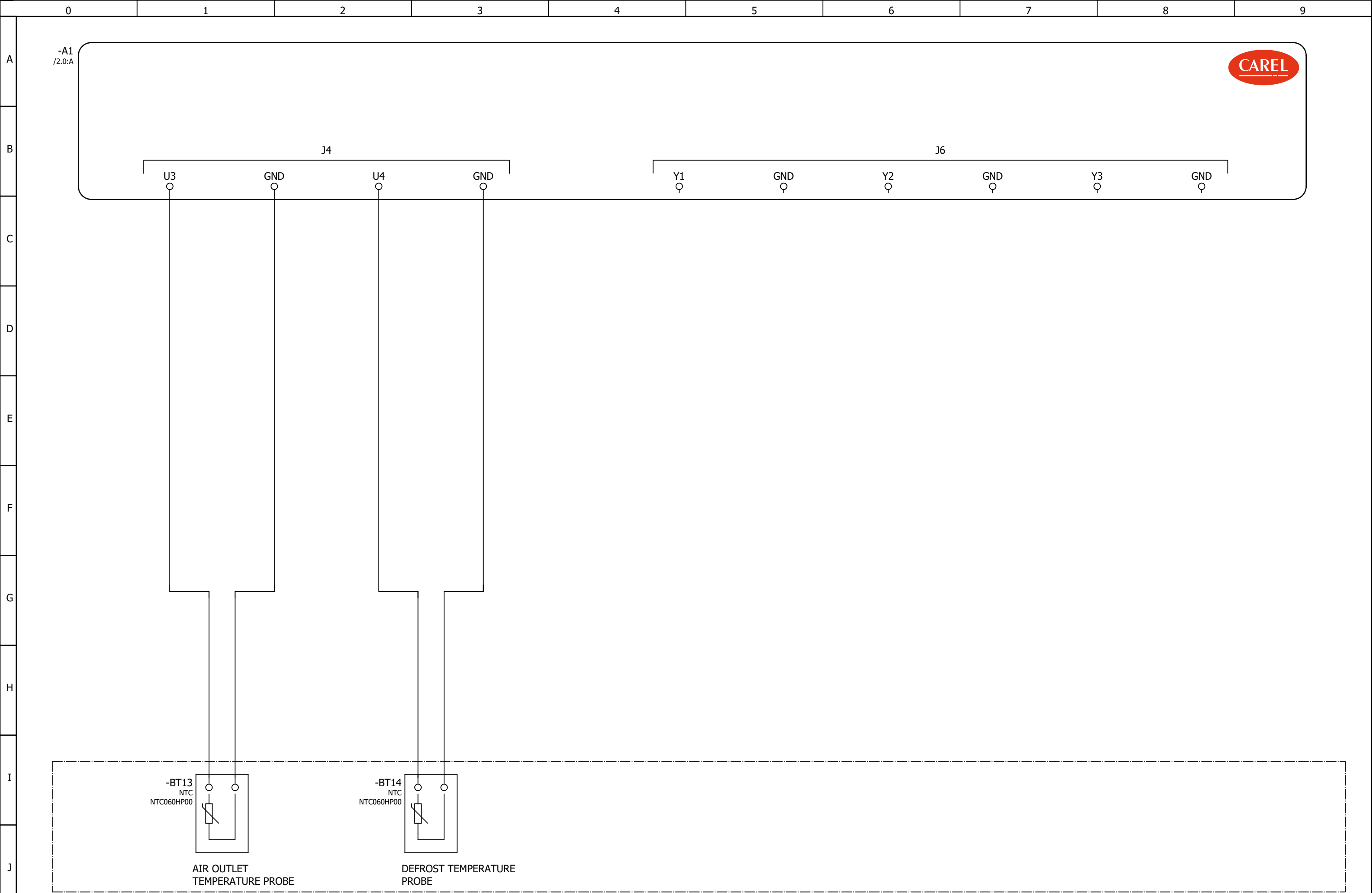


|              |      |      |      |               |               |                                                                                       |             |                    |      |          |           |
|--------------|------|------|------|---------------|---------------|---------------------------------------------------------------------------------------|-------------|--------------------|------|----------|-----------|
|              |      |      | Date | 07/04/2022    | HB200CXX00SE0 |  | Bottom view | Mounting locations | + QE | Page     | +QE&ETL/7 |
|              |      |      | Elab | Luca Cazzagon |               |                                                                                       |             | Q.E. SECONDARY     |      |          | Next      |
|              |      |      |      |               |               |                                                                                       |             |                    |      |          |           |
| Modification | Date | Name | Rev. | 0             |               |                                                                                       |             |                    |      | Function | =         |

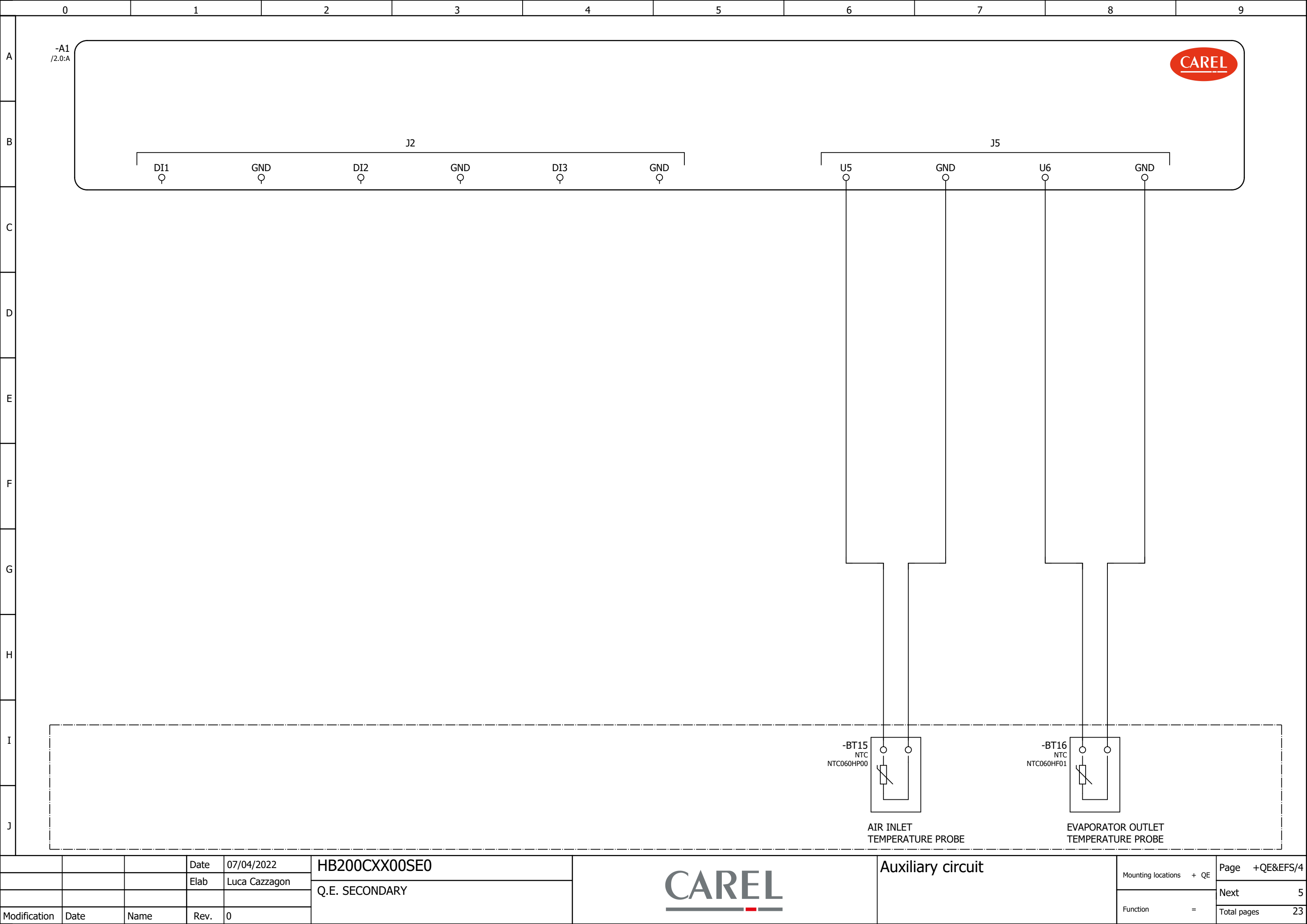


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|--------------|------|------|------|---------------|---------------|---------------------------------------------------------------------------------------|---------------|-------------------------|------|-----------|
|              |      |      | Date | 07/04/2022    | HB200CXX00SE0 |  | Power circuit | Mounting locations + QE | Page | +QE&EFS/1 |
|              |      |      | Elab | Luca Cazzagon |               |                                                                                       |               |                         | Next | 2         |
|              |      |      |      |               | Function =    |                                                                                       |               | Total pages             | 23   |           |
| Modification | Date | Name | Rev. | 0             |               |                                                                                       |               |                         |      |           |

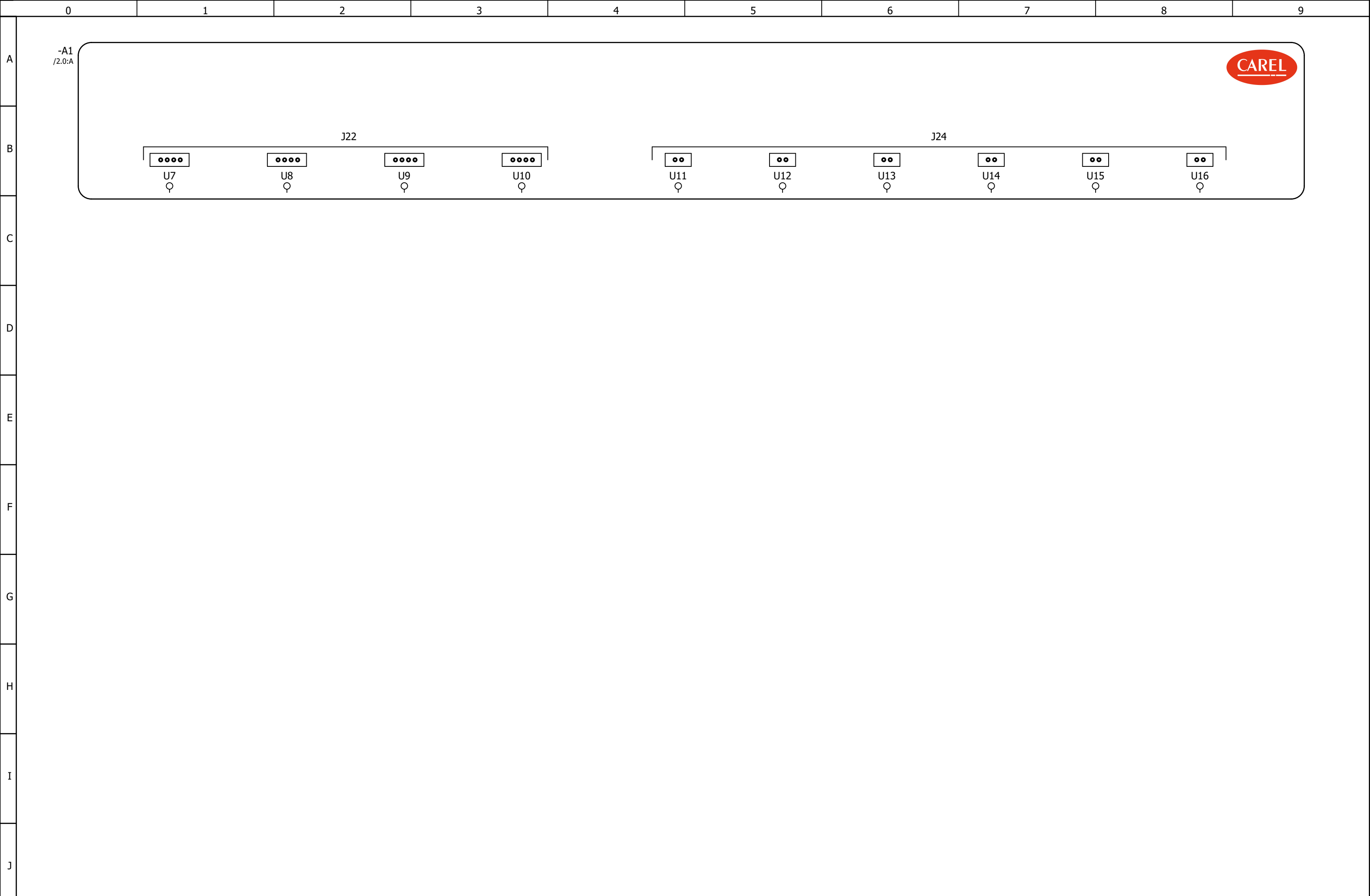
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|--------------|------|------|------|---------------|----------------|---------------------------------------------------------------------------------------|-------------------|-------------------------|----------|-----------|-------------|----|
|              |      |      | Date | 07/04/2022    | HB200CXX00SE0  |  | Auxiliary circuit | Mounting locations + QE | Page     | +QE&EFS/2 |             |    |
|              |      |      | Elab | Luca Cazzagon | Q.E. SECONDARY |                                                                                       |                   |                         | Next     | 3         |             |    |
|              |      |      |      |               |                |                                                                                       |                   |                         | Function | =         | Total pages | 23 |
| Modification | Date | Name | Rev. | 0             |                |                                                                                       |                   |                         |          |           |             |    |

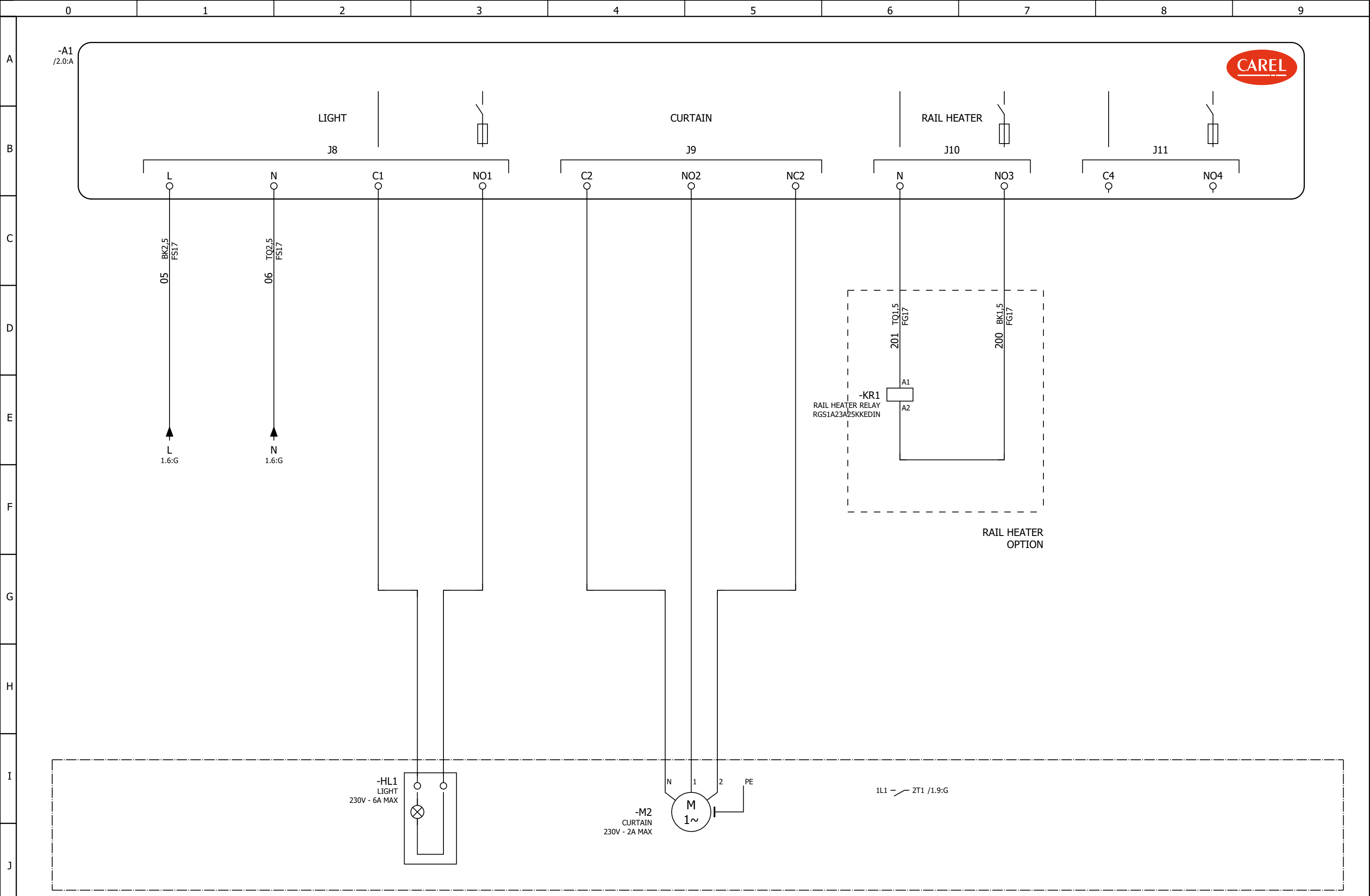


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|--------------|------|------|------|---------------|----------------|---------------------------------------------------------------------------------------|-------------------|-------------------------|-------------|-----------|
|              |      |      | Date | 07/04/2022    | HB200CXX00SE0  |  | Auxiliary circuit | Mounting locations + QE | Page        | +QE&EFS/3 |
|              |      |      | Elab | Luca Cazzagon |                |                                                                                       |                   |                         | Next        | 4         |
|              |      |      |      |               | Q.E. SECONDARY |                                                                                       |                   | Function =              | Total pages | 23        |
| Modification | Date | Name | Rev. | 0             |                |                                                                                       |                   |                         |             |           |

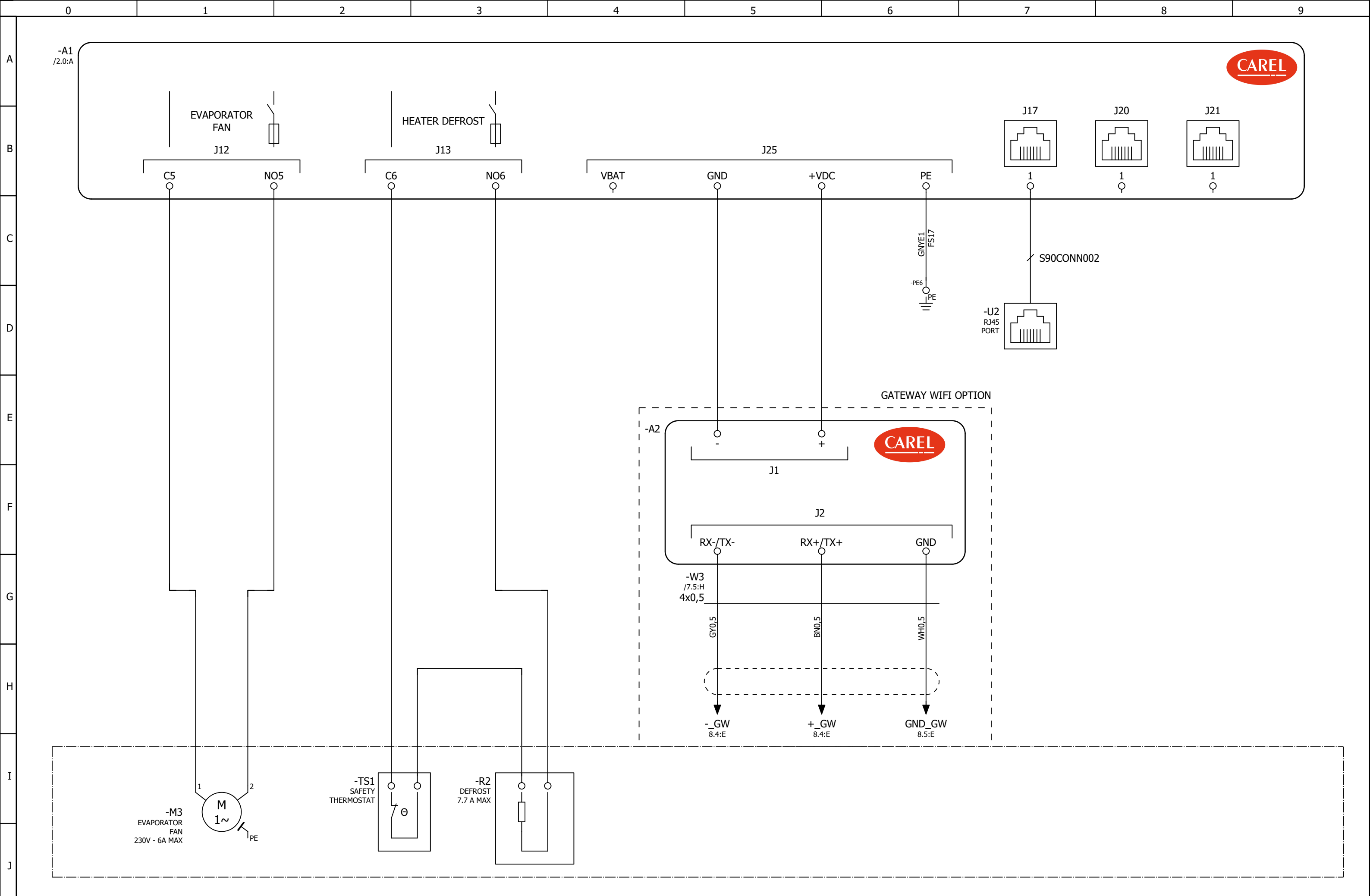


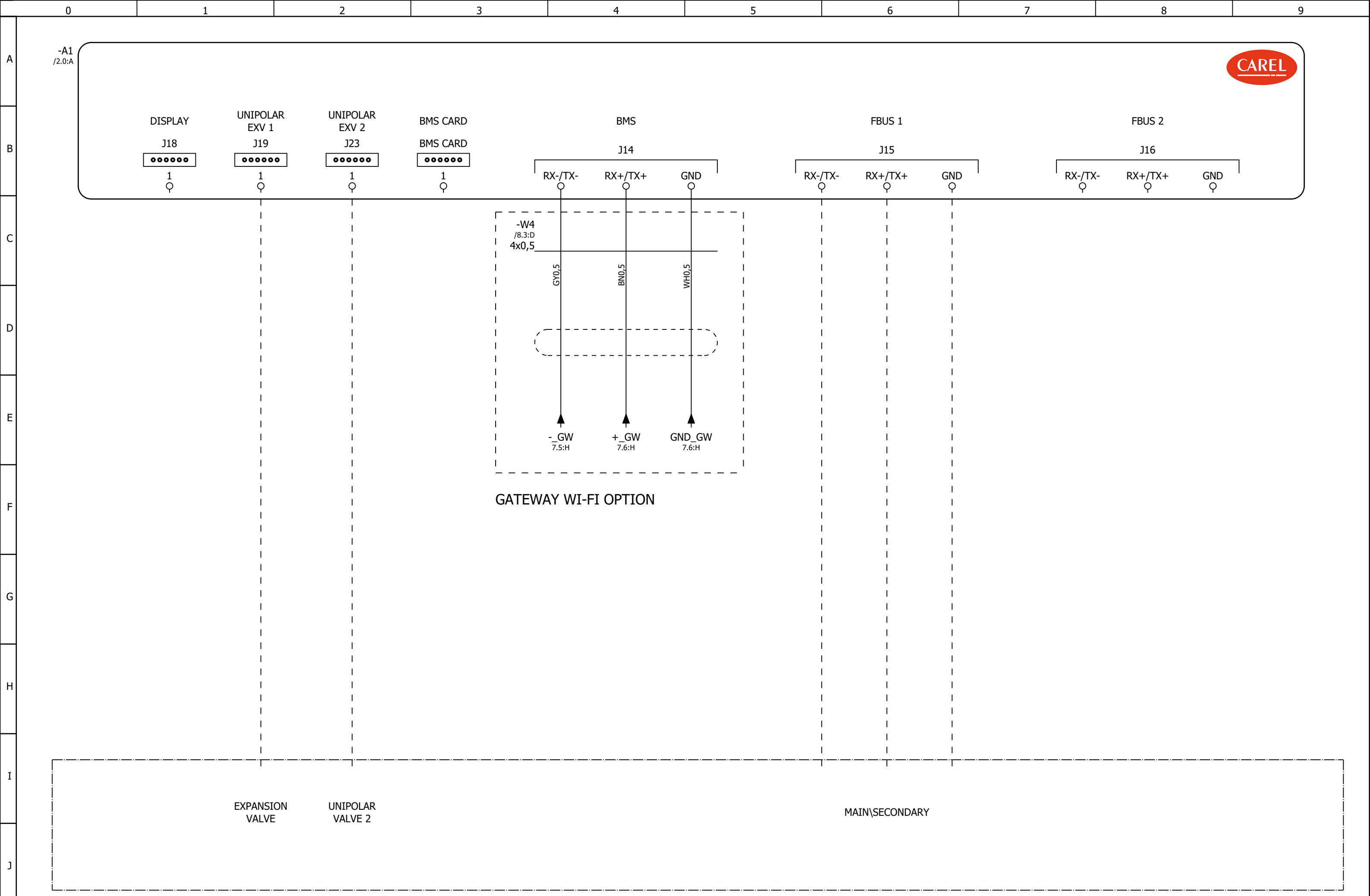
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|--------------|------|------|------|---------------|---------------------------------|---------------------------------------------------------------------------------------|-------------------|-------------------------|----------------|
|              |      |      | Date | 07/04/2022    | HB200CXX00SE0<br>Q.E. SECONDARY |  | Auxiliary circuit | Mounting locations + QE | Page +QE&EFS/4 |
|              |      |      | Elab | Luca Cazzagon |                                 |                                                                                       |                   |                         | Next 5         |
| Modification | Date | Name | Rev. | 0             |                                 |                                                                                       |                   | Function =              | Total pages 23 |





|              |      |      |      |               |                                 |  |                   |                         |                |
|--------------|------|------|------|---------------|---------------------------------|--|-------------------|-------------------------|----------------|
|              |      |      | Date | 07/04/2022    | HB200CXX00SE0<br>Q.E. SECONDARY |  | Auxiliary circuit | Mounting locations + QE | Page +QE&EFS/6 |
|              |      |      | Elab | Luca Cazzagon |                                 |  |                   |                         | Next 7         |
| Modification | Date | Name | Rev. | 0             |                                 |  |                   | Function =              | Total pages 23 |

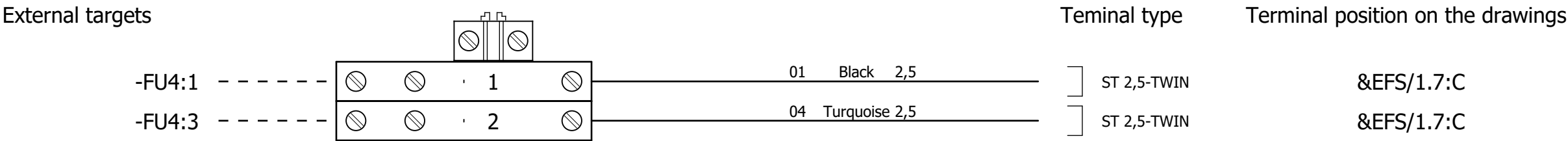




## Terminal diagram

## Terminal strip

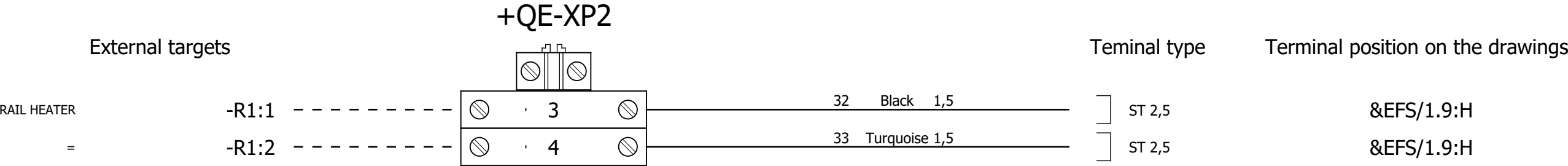
+QE-XP1



|              |      |      |      |               |               |                                                                                       |                |                         |                                                                                       |                |
|--------------|------|------|------|---------------|---------------|---------------------------------------------------------------------------------------|----------------|-------------------------|---------------------------------------------------------------------------------------|----------------|
|              |      |      | Date | 07/04/2022    | HB200CXX00SE0 |  | Terminal strip | Mounting locations + QE | Page +QE&EMA/1                                                                        |                |
|              |      |      | Elab | Luca Cazzagon |               |                                                                                       |                |                         | Next                                                                                  | 2              |
|              |      |      |      |               |               |                                                                                       |                | Q.E. SECONDARY          |  | Terminal strip |
| Modification | Date | Name | Rev. | 0             |               |                                                                                       |                |                         |                                                                                       |                |

Terminal diagram

Terminal strip



Cable name

+QE-W3

Cable type

4x0,5 mm<sup>2</sup>

Free conductors

3

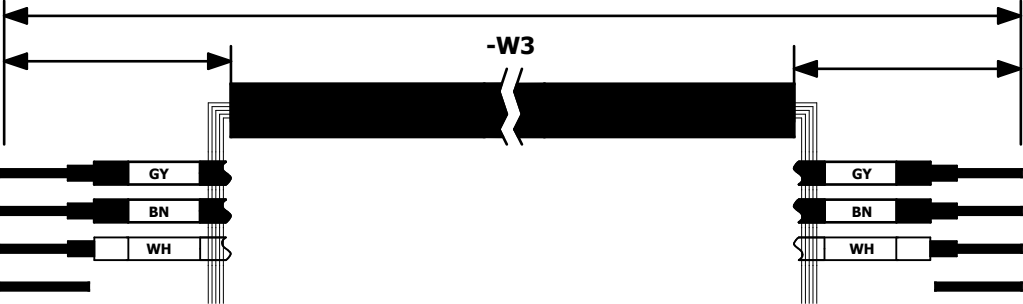
Cable parts

Shielded 3x0.5

Order number

1008019AXX

| Mounting location: | Origin | Function text source | Display |
|--------------------|--------|----------------------|---------|
|                    |        |                      |         |
|                    |        |                      |         |
|                    |        |                      |         |
|                    |        |                      |         |



| Display | Function text target | Target | Mounting location: |
|---------|----------------------|--------|--------------------|
|         |                      |        |                    |
|         |                      |        |                    |
|         |                      |        |                    |
|         |                      |        |                    |

Cable name

+QE-W4

Cable type

4x0,5 mm<sup>2</sup>

Free conductors

3

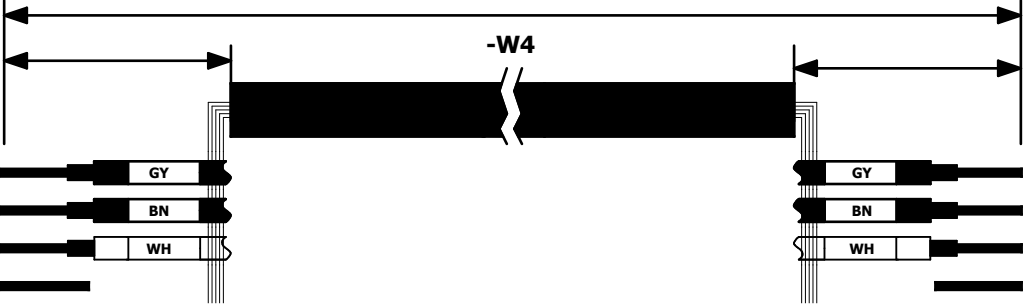
Cable parts

Shielded 3x0.5

Order number

1008019AXX

| Mounting location: | Origin | Function text source | Display |
|--------------------|--------|----------------------|---------|
|                    |        |                      |         |
|                    |        |                      |         |
|                    |        |                      |         |
|                    |        |                      |         |



| Display | Function text target | Target | Mounting location: |
|---------|----------------------|--------|--------------------|
|         |                      |        |                    |
|         |                      |        |                    |
|         |                      |        |                    |
|         |                      |        |                    |

BOM internal panel

InternoQE\_F01\_003

| Short name | Designation             | Function text                | Position   | Manufacturer  | Component tipe   | Oracle code   |
|------------|-------------------------|------------------------------|------------|---------------|------------------|---------------|
| A1         | HEOS ELECTRONIC CONTROL |                              | &EFS/2.0:A | CAREL         | HEC00001113E2    | HEC00001113E2 |
| A2         | GATEWAY WI-FI           |                              | &EFS/7.4:E | Carel         | GTW0000WT0       | GTW0000WT0    |
| BT13       | TEMPERATURE PROBE       | NTC060HP00                   | &EFS/3.1:I | CAREL         | NTC060HP00       | NTC060HP00    |
| BT14       | TEMPERATURE PROBE       | =                            | &EFS/3.3:I | CAREL         | NTC060HP00       | NTC060HP00    |
| BT15       | TEMPERATURE PROBE       | =                            | &EFS/4.6:I | CAREL         | NTC060HP00       | NTC060HP00    |
| BT16       | TEMPERATURE PROBE       | NTC060HF01                   | &EFS/4.8:I | CAREL         | NTC060HF01       | NTC060HF01    |
| FU1        | Fuse holder             | CONTROL AND LIGHT PROTECTION | &EFS/1.5:D |               | 2P 10.3X38       | 0606198AXX    |
| FU1        | Safety fuse             | =                            | &EFS/1.5:D |               | 10.3X38 - 32A GG | 0605368CEL    |
| FU4        | Fuse holder             |                              | &EFS/1.9:E |               | 1P+N 10.3X38     | 0606194AXX    |
| FU4        | Safety fuse             |                              | &EFS/1.9:E |               | 10.3X38 - 10A GG | 0605362AUN    |
| HL1        |                         | LIGHT                        | &EFS/6.3:I |               |                  |               |
| KR1        | SSR Relay               | RAIL HEATER RELAY            | &EFS/6.6:E | CARLO GAVAZZI | RGS1A23A25KKEDIN | 0110133AXX    |
| M2         |                         | CURTAIN                      | &EFS/6.4:I |               |                  |               |
| M3         |                         | EVAPORATOR FAN               | &EFS/7.1:I |               |                  |               |
| PE1        | GROUND                  |                              | &EFS/1.0:D |               | PE               | PE            |
| PE5        | GROUND                  |                              | &EFS/2.2:D |               | PE               | PE            |
| PE6        | GROUND                  |                              | &EFS/7.6:C |               | PE               | PE            |
| QS1        | Disconnect switch       | MAIN SWITCH                  | &EFS/1.0:B | SOCOMEK       | Sirco M63        | 0403341AXX    |
| QS1        | Operation               | =                            | &EFS/1.0:B | SOCOMEK       | BK 16-80A        | 0402334AXX    |
| R1         |                         | RAIL HEATER                  | &EFS/1.8:I |               |                  |               |
| R2         |                         | DEFROST                      | &EFS/7.3:I |               |                  |               |
| TS1        |                         | SAFETY THERMOSTAT            | &EFS/7.2:I |               |                  |               |
| U2         | Passaparete RJ45        | RJ45 PORT                    | &EFS/7.7:D | CONEC         | PASSAPARETE RJ45 | 0510180AXX    |

# BOM internal panel

InternoQE F01 003

[illegible]

|              |      |      |      |               |                |                                                                                       |            |                         |                  |    |
|--------------|------|------|------|---------------|----------------|---------------------------------------------------------------------------------------|------------|-------------------------|------------------|----|
|              |      |      | Date | 07/04/2022    | HB200CXX00SE0  |  | Parts list | Mounting locations + QE | Page +QE&EPA/1.a |    |
|              |      |      | Elab | Luca Cazzagon |                |                                                                                       |            |                         | Next             |    |
|              |      |      |      |               | Q.E. SECONDARY |                                                                                       |            | Function =              | Total pages      | 23 |
| Modification | Date | Name | Rev. | 0             |                |                                                                                       |            |                         |                  |    |