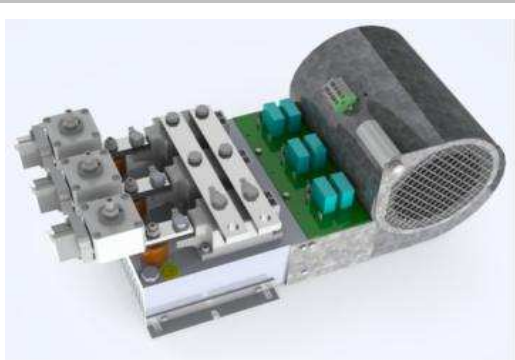


SKS 640F B6C 430 V16 SU



Thyristor Module stack

SEMISTACK® CLASSICS - B6C

Three phase controlled rectifier

Preliminary Data

Ordering No. 08785021  
Description SKS 640F B6C 430 V16 SU

Features

- Isolated power stacks
- SKKT 330/16
- Heatsink P16/200
- Forced air cooling
- RC circuit included
- Fuses with microswitches
- Thermal trip included

Typical Applications

- Regulated power supplies
- Alternator excitation
- Motor control

Remarks

This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee, expressed or implied, is made regarding delivery, performance or suitability.

| Electrical Characteristics |                                                |                                           |     |     |     |                 |
|----------------------------|------------------------------------------------|-------------------------------------------|-----|-----|-----|-----------------|
| Symbol                     | Conditions                                     |                                           | min | typ | max | Unit            |
| Electrical Data            |                                                |                                           |     |     |     |                 |
| I <sub>D</sub>             | Maximum DC current                             | T <sub>AMBIENT</sub> = 35°C ; No overload |     | 640 |     | A               |
| V <sub>AC</sub>            | Maximum AC voltage (+/-10%)                    |                                           |     | 500 |     | V <sub>AC</sub> |
| V <sub>BUS</sub>           | DC Bus voltage                                 |                                           |     | 670 |     | V <sub>DC</sub> |
| P <sub>TOTAL</sub>         | Maximum stack power                            |                                           |     | 430 |     | kW              |
| P <sub>LOSS</sub>          | Stack power loss (T <sub>AMBIENT</sub> = 35°C) |                                           |     |     |     | W               |

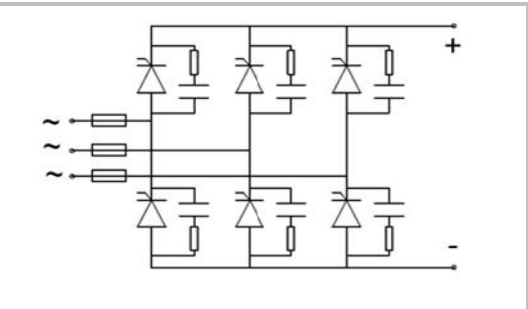
| Environmental Data |                                           |               |     |     |      |
|--------------------|-------------------------------------------|---------------|-----|-----|------|
| Symbol             | Conditions                                | min           | typ | max | Unit |
| Mechanical Data    |                                           |               |     |     |      |
| Drawing            | SEMIKRON document number.revision.version | 12100512.00.B |     |     | -    |
| Weight             | Approximate total weight                  | 15.52         |     |     | kg   |
| Altitude           | Installation altitude without derating    | 1 000         |     |     | m    |
| Protection         | IEC 60529                                 | IP00          |     |     | -    |
| Pollution Degree   | EN 50178                                  | 2             |     |     | -    |

|                  |                           |                |                 |
|------------------|---------------------------|----------------|-----------------|
| Fan Data         |                           |                |                 |
| Type             | SEMIKRON fan designation  | SKF 16A-230-11 | -               |
| V <sub>FAN</sub> | Fan voltage               | 230            | V <sub>AC</sub> |
| f <sub>FAN</sub> | Fan frequency             | 50/60          | Hz              |
| I <sub>FAN</sub> | Fan maximum input current | 0.60/0.68      | A               |
| P <sub>FAN</sub> | Fan power                 | 135/154        | W               |

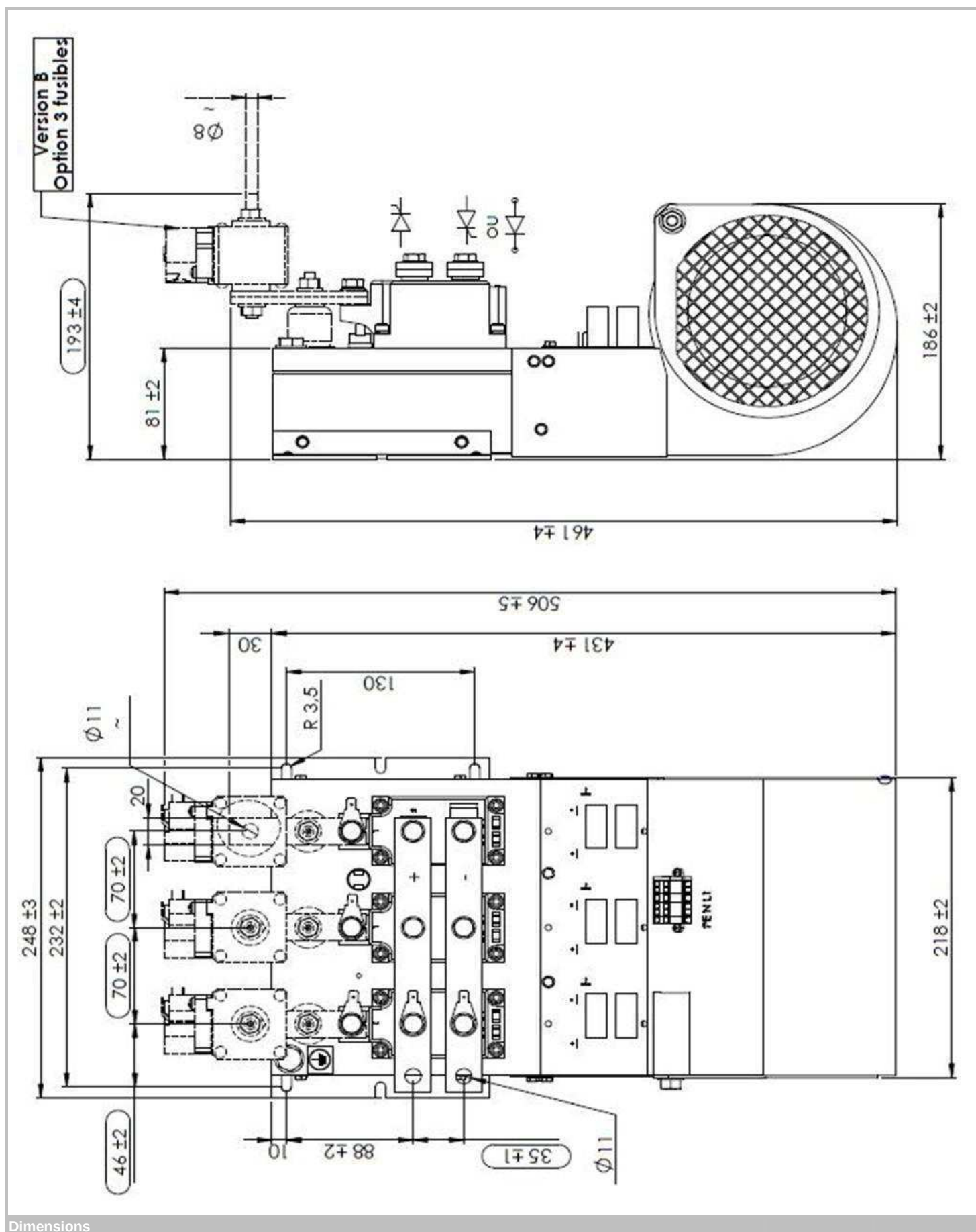
| Stack Protection |                                            |      |     |     |      |
|------------------|--------------------------------------------|------|-----|-----|------|
| Symbol           | Conditions                                 | min  | typ | max | Unit |
| RC Circuit       |                                            |      |     |     |      |
| Type             | RC in parallel with each electrical switch | RC47 |     |     | -    |
| R                | Resistance (11W)                           | 47   |     |     | Ohm  |
| C                |                                            | 0.22 |     |     | μF   |

|                    |                                                                 |     |      |
|--------------------|-----------------------------------------------------------------|-----|------|
| Fuses              |                                                                 |     |      |
| Size               | 1 fuse per phase, with microswitches                            | 31  | -    |
| I <sub>N RMS</sub> | Caliber                                                         | 700 | A    |
| U <sub>N</sub>     | Nominal voltage (IEC)                                           | 690 | V    |
| I <sup>2</sup> t   | Total at U <sub>n</sub> at room temperature (approx. 20...25°C) | 515 | kA²s |

|                      |                                                       |                       |     |
|----------------------|-------------------------------------------------------|-----------------------|-----|
| Bimetal Thermal Trip |                                                       |                       |     |
| T <sub>S</sub>       | Switching temperature over which thermal trip is open | 85                    | °C  |
| I <sub>TC MAX</sub>  | Maximum permissible current                           | at 240V <sub>AC</sub> | 1 A |
|                      |                                                       | at 30V <sub>DC</sub>  | 3 A |



B6C



## Dimensions

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