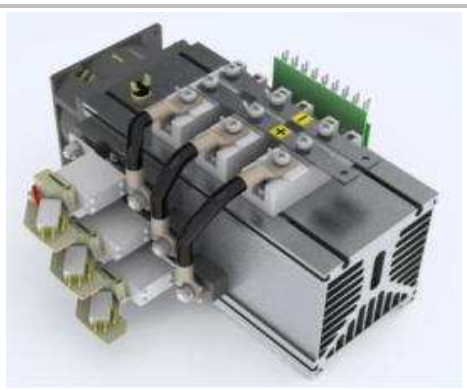
# SKS 250F B6C 170 V16 SU



Thyristor Module stack

**SEMISTACK® CLASSICS - B6C**
Three phase controlled rectifier

**Preliminary Data**

Ordering No. 08785027
Description SKS 250F B6C 170 V16 SU

**Features**

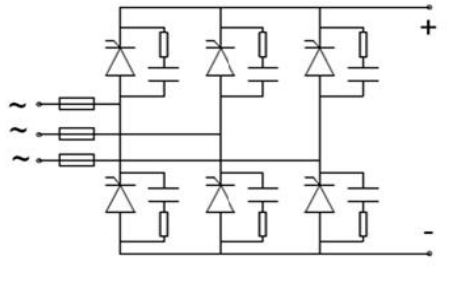
- Isolated power stacks
- SKKT 162/16
- Heatsink P3/265
- Forced air cooling
- RC circuit included
- Fuses with microswitches
- Thermal trip included

**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.




B6C

| Electrical Characteristics | | | | | | |
|---|---|---|---|---|---|---|
| **Symbol** | **Conditions** | | **min** | **typ** | **max** | **Unit** |
| Electrical Data | | | | | | |
| $I_D$ | Maximum DC current | $T_{AMBIENT}$ = 35°C ; No overload | | 250 | | A |
| $V_{AC}$ | Maximum AC voltage (+/-10%) | | | 500 | | $V_{AC}$ |
| $V_{BUS}$ | DC Bus voltage | | | 670 | | $V_{DC}$ |
| $P_{TOTAL}$ | Maximum stack power | | | 170 | | kW |
| $P_{LOSS}$ | Stack power loss ($T_{AMBIENT}$ = 35°C) | | | | | W |

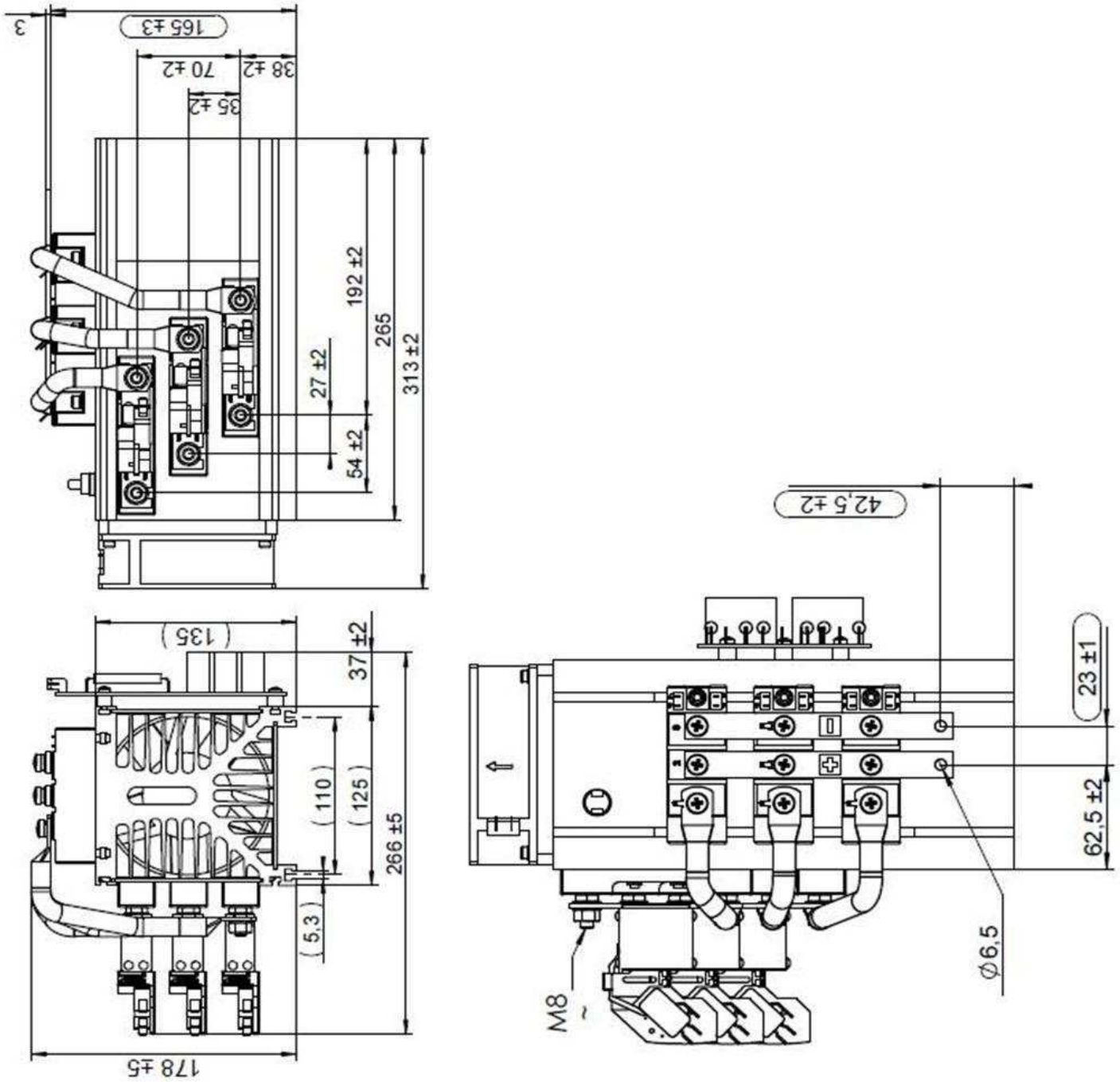
| Environnmental Data | | | | | |
|---|---|---|---|---|---|
| **Symbol** | **Conditions** | **min** | **typ** | **max** | **Unit** |
| Mechanical Data | | | | | |
| Drawing | SEMIKRON document number.revision.version | | **11102006.01.A** | | - |
| Weight | Approximate total weight | | 7.94 | | kg |
| Altitude | Installation altitude without derating | | | 1 000 | m |
| Protection | IEC 60529 | | IP00 | | - |
| Pollution Degree | EN 50178 | | 2 | | - |

| Fan Data | | | | |
|---|---|---|---|---|
| Type | SEMIKRON fan designation | | **SKF 3-230-01** | - |
| $V_{FAN}$ | Fan voltage | | 230 | $V_{AC}$ |
| $f_{FAN}$ | Fan frequency | | 50/60 | Hz |
| $I_{FAN}$ | Fan maximum input current | | 0.12/0.10 | A |
| $P_{FAN}$ | Fan power | | 15/14 | W |

| Stack Protection | | | | | |
|---|---|---|---|---|---|
| **Symbol** | **Conditions** | **min** | **typ** | **max** | **Unit** |
| RC Circuit | | | | | |
| Type | RC in parallel with each electrical switch | | **RC32** | | - |
| R | Resistance (11W) | | 100 | | Ohm |
| C | | | 0.1 | | µF |

| Fuses | | | | | |
|---|---|---|---|---|---|
| Size | 1 fuse per phase, with microswitches | | **000** | | - |
| $I_{N\ RMS}$ | Caliber | | 250 | | A |
| $U_N$ | Nominal voltage (IEC) | 690 | | | V |
| $I^2t$ | Total at Un at room temperature (approx. 20…25°C) | | | 56.68 | $kA^2s$ |

| Bimetal Thermal Trip | | | | |
|---|---|---|---|---|
| $T_S$ | Switching temperature over which thermal trip is open | | 85 | °C |
| $I_{TC\ MAX}$ | Maximum permissible current | at 240VAC | 1 | A |
| | | at 30VDC | 3 | A |




**Dimensions**

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