

Quad AC / DC POWER SUPPLY
with very high insulation voltage

GIS40 - 35AD



$V_{in} = 230 \text{ V}$
 $V_{out} = 35 \text{ V}$
 $V_{iso} = 40 \text{ kV}$
 $P_{max} = 300 \text{ W}$

Siebel
Elektronik GmbH

Datasheet Revision C

10.05.2017

APPLICATIONS

- Auxiliary power supply for high voltage power semiconductors (IGCT,GTO,IGBT)

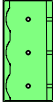
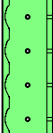
ELECTRICAL DATA

| PARAMETER | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|---|--|-------|----------|-----|--------------|
| Input Voltage V_{in} | AC voltage 50 / 60 Hz (or DC) | 150 | 230 | 255 | V |
| Output Voltage V_{out} | DC voltage (additional AC 70kHz) | 30 | 35 | 39 | V |
| Max.Output Power P_{max1} | Power of one output channel | 120 | 140 | | W |
| Continuous Power | Power of one output channel | 100 | | | W |
| Max. Output Power P_{max} | Power of all four channels together | 280 | 300 | 330 | W |
| Input current | with power factor correction | | 1.4 | 4 | A |
| Insulation Voltage output to ground V_{iso} | 50 Hz AC voltage, 60 sec (type test) without partial discharge (< 10pC) (part test) | 40 | 80 | 50 | kV kV |
| Insulation Voltage output to output | 50 Hz AC voltage, 60 sec (type test) without partial discharge (< 10pC) (type test) | | 21 15 | | kV kV |
| Insulation Capacitance | output to ground | | 30 | | pF |
| Max. dv/dt (Insulation) | ground connection at base plate | | | 25 | kV/ μ s |
| storage temperature | | -30 | | 70 | $^{\circ}$ C |
| ambient temperature | $V_{in} > 185\text{V}$ | -20 | | 50 | $^{\circ}$ C |
| Short Circuit Time | output shortened | 1 min | | | |

OPTICAL ERROR FEEDBACK

- The LED is on for error free condition.
- The LED is off for the following error conditions: output overload, high temperature, low input voltage.
- A suitable optical receiver is the HFBR-2528.

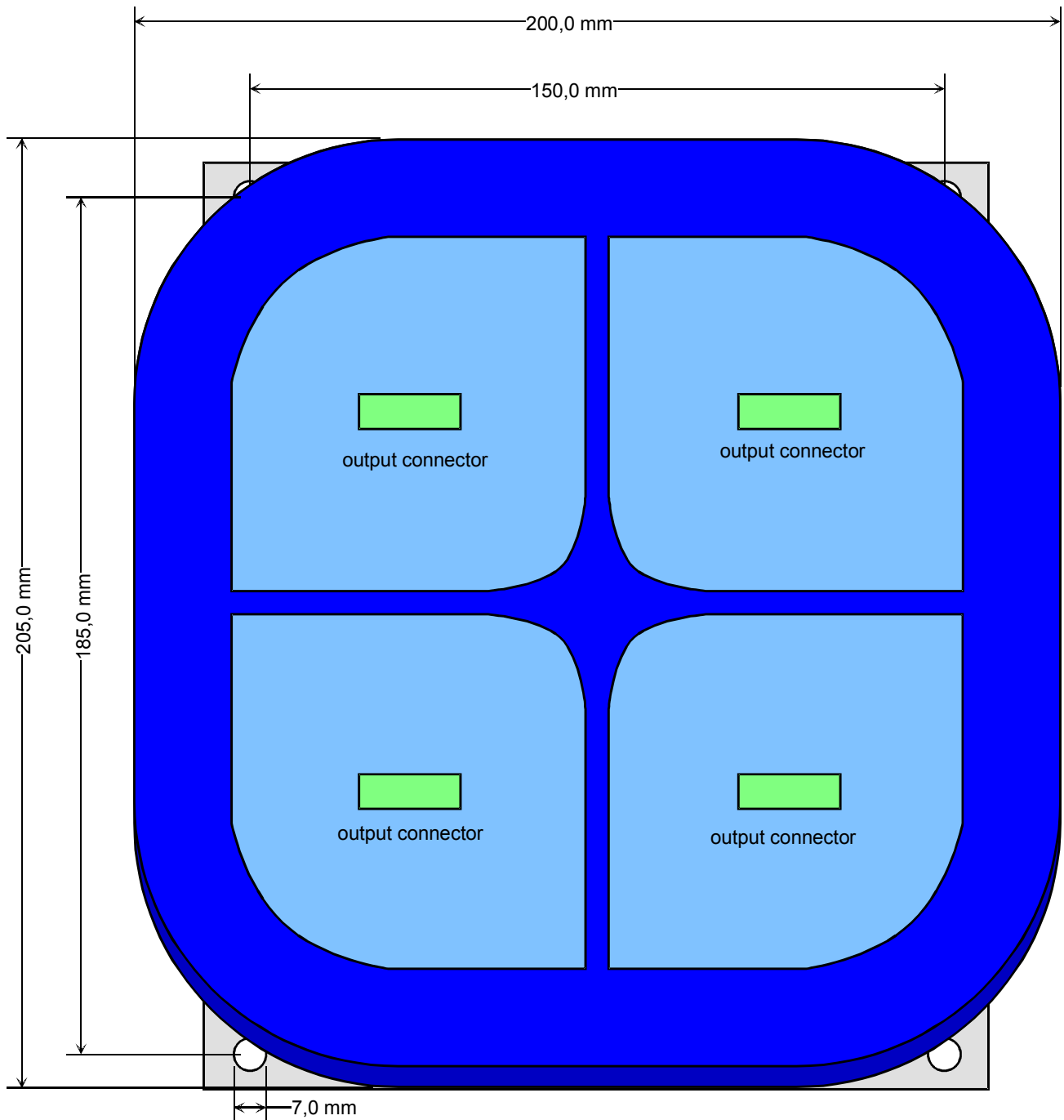
CONNECTION DATA

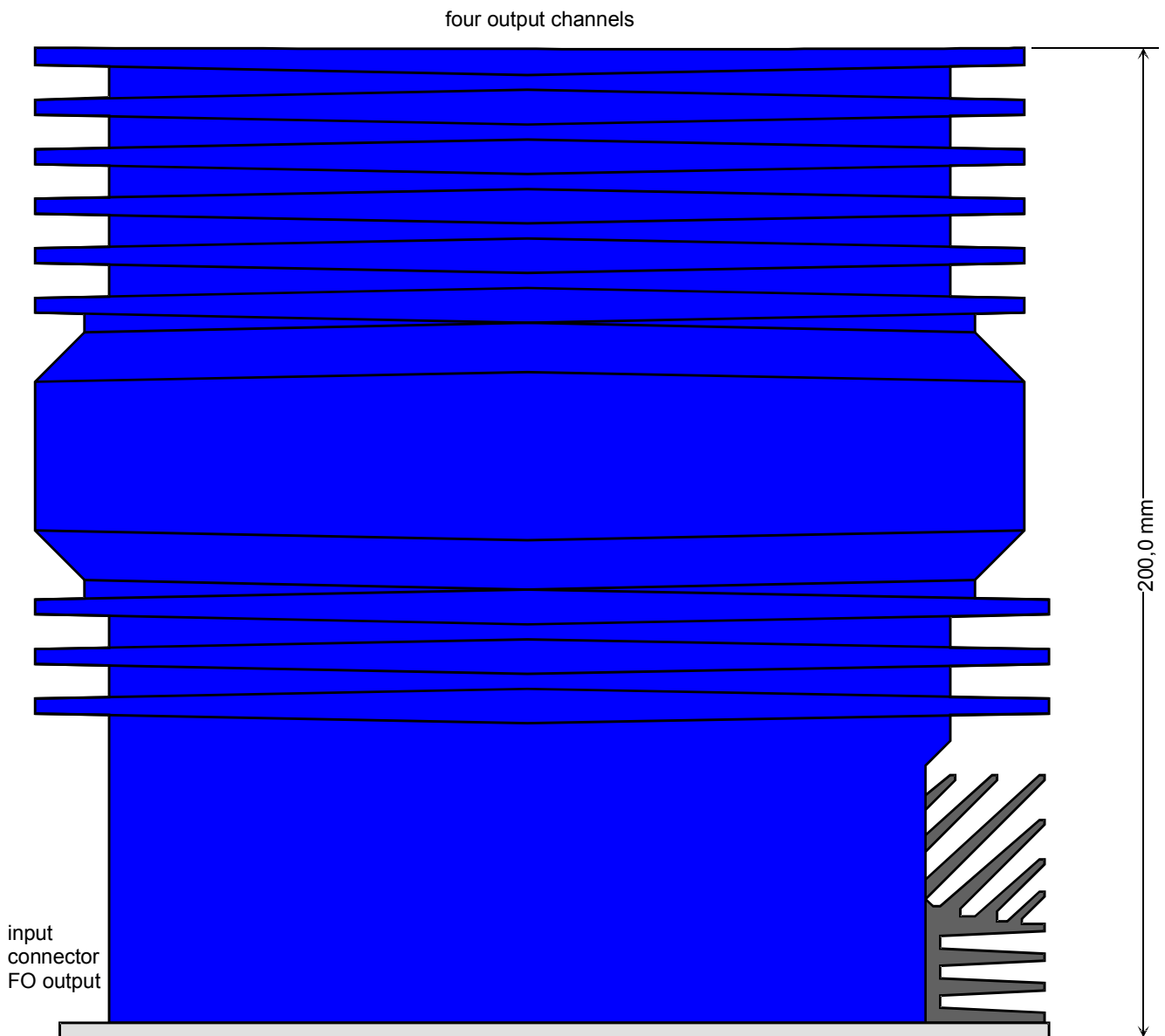
| | | |
|---|---|--|
| Input Connector Phoenix 1926028 |  | 1 = PE (ground, earth) 2 = N (neutral) 3 = L (line, phase) |
| Output Connector (4 x) Phoenix 1755752 |  | 1 = AC1 (AC voltage 70 kHz) 2 = DC- (DC voltage negative) 3 = DC+ (DC voltage positive) 4 = AC1 (AC voltage 70 kHz) |

INSTALLATION INSTRUCTIONS

- It is important to establish a low inductive ground connection.
- The environment must be clean and dry. Excessive temperature should be avoided.

DIMENSIONS





| PARAMETER | TYP | UNIT |
|---|------|------|
| Height | 200 | mm |
| Creepage distances output to input side (earth) | 500 | mm |
| Creepage distances output to output | 110 | mm |
| Clearance output to input side | 210 | mm |
| Weight | 6500 | g |

IMPORTANT NOTICE

Siebel Elektronik GmbH reserves the right to change specifications without notice. Siebel Elektronik GmbH does not provide a guarantee regarding the suitability of this product for any particular purpose. Mounting only by technical experts.