

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

## APPLICATIONS

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

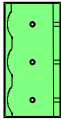
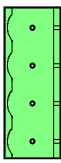
## ELECTRICAL DATA

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)		80		kV
	without partial discharge ( $\leftarrow 10\text{pC}$ ) (part test)	40		50	kV
Insulation Voltage output to output	50 Hz AC voltage, 60 sec (type test)		21		kV
	without partial discharge ( $\leftarrow 10\text{pC}$ ) (type test)		15		kV
Insulation Capacitance	output to ground		30		pF
Max. dv/dt (Insulation)	ground connection at base plate			25	kV/ $\mu\text{s}$
storage temperature		-30		70	$^{\circ}\text{C}$
ambient temperature	$V_{in} \rightarrow 185\text{V}$	-20		50	$^{\circ}\text{C}$
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.

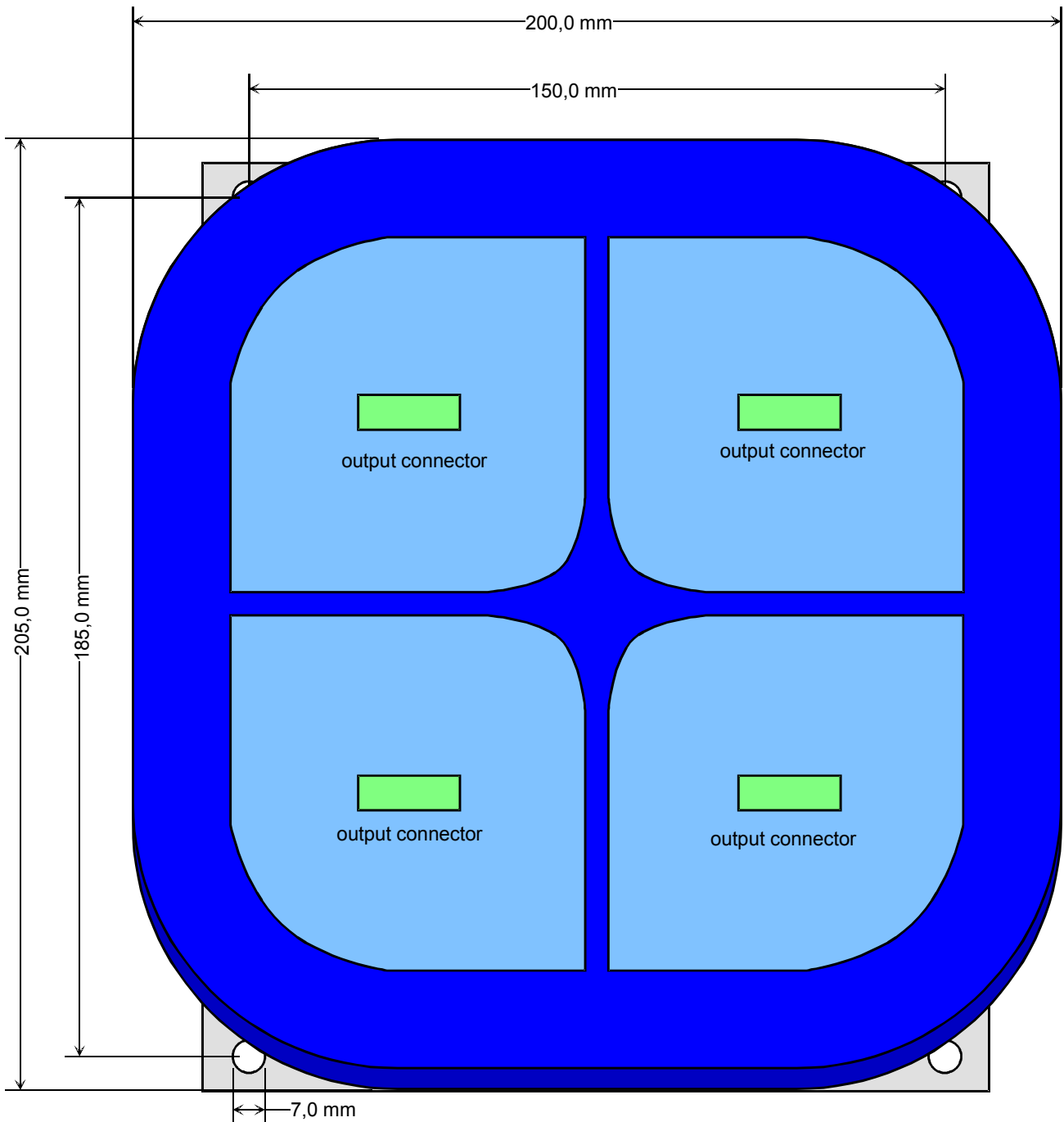
## CONNECTION DATA

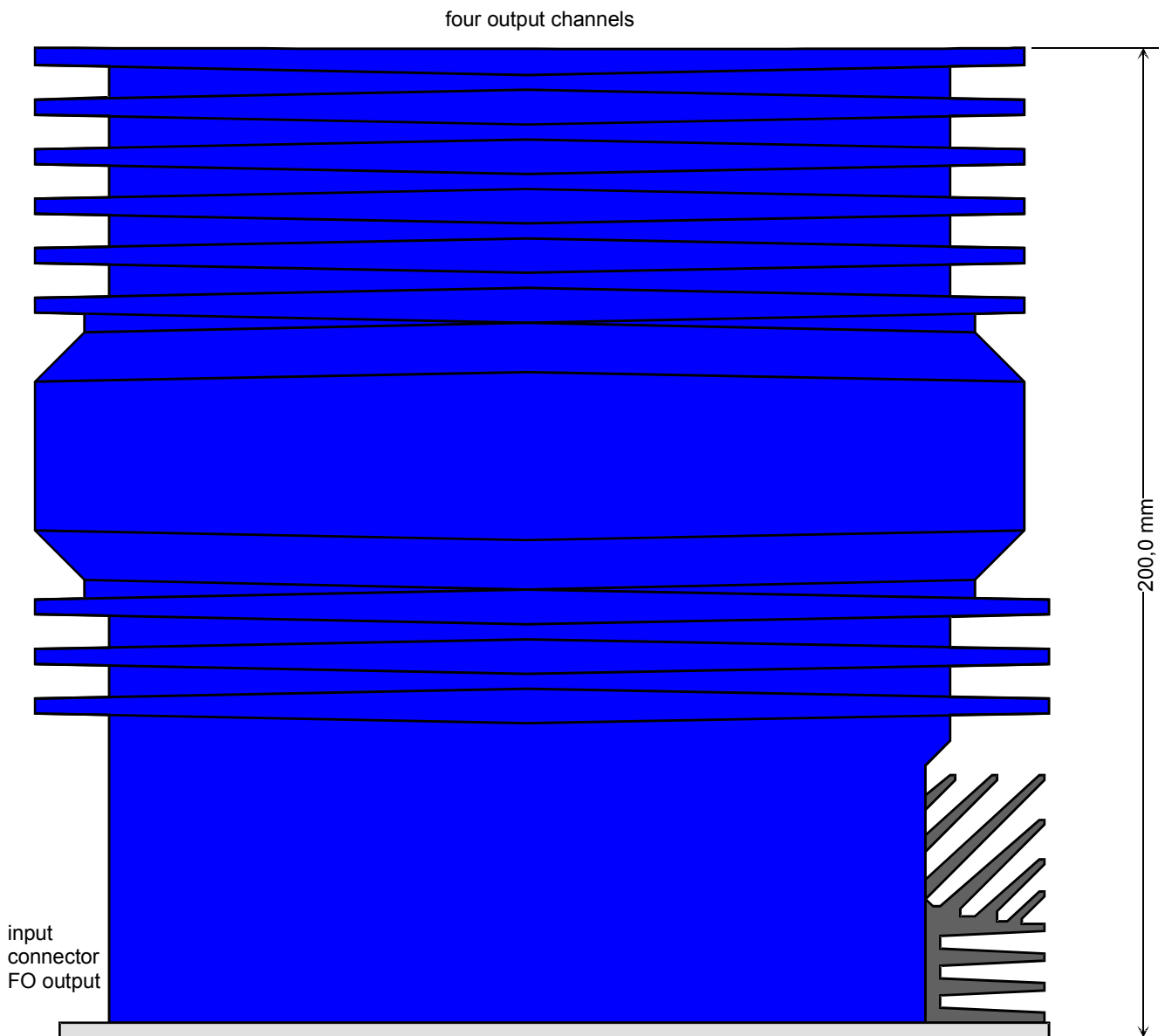
Input Connector Phoenix 1926028		1 = PE (ground, earth) 2 = N (neutral) 3 = L (line, phase)
Output Connector (4 x) Phoenix 1755752		1 = AC1 (AC voltage 70 kHz) 2 = DC- (DC voltage negative) 3 = DC+ (DC voltage positive) 4 = AC1 (AC voltage 70 kHz)

## INSTALLATION INSTRUCTIONS

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

## DIMMENSIONS





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 makes no warranty regarding the suitability of this product for any particular purpose. Mounting only by technical experts.

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