

# Board 3S SKYPER 32 R Gold



**SKYPER®**

## Adaptor board

Order Nr. L5062901

## Board 3S SKYPER 32 R Gold

### Features

- Two output channels
- Gold nickel finish
- Failure management

### Typical Applications\*

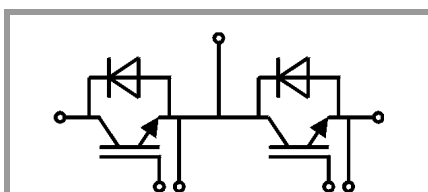
- Adaptor board for SKYPER 32 IGBT drivers in bridge circuits for industrial applications
- PCB with gold plating
- DC bus up to 1000V

### Remarks

- With external high voltage diode
- Please Note: the insulation test is not performed as a series test at SEMIKRON and must be performed by the user
- According to VDE 0110-20
- Output charge can be expanded to 6,3μQ with boost capacitors
- Insulation coordination in compliance with EN50178 PD2
- Operating temperature is real ambient temperature around the driver core
- Degree of protection: IP00

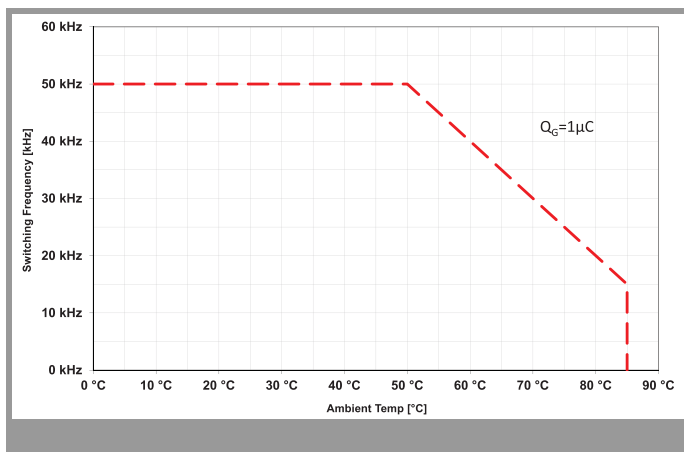
Absolute Maximum Ratings			
Symbol	Conditions	Values	Unit
$V_s$	Supply voltage primary	16	V
$I_{outPEAK}$	Output peak current	15	A
$I_{outAVmax}$	Output average current	50	mA
$f_{max}$	Max. switching frequency	50	kHz
$V_{CE}$	Collector emitter voltage sense across the IGBT	1700	V
$V_{isolIO}$	Insulation test voltage input - output (AC, rms, 2s)	4000	V
$V_{isolPD}$	Partial discharge extinction voltage, rms, $Q_{PD} \leq 10pC$	1200	V
$V_{isol12}$	Insulation test voltage output 1 - output 2 (AC, rms, 2s)	1500	V
$R_{Gon\ min}$	Minimum rating for external $R_{Gon}$	1.5	$\Omega$
$R_{Goff\ min}$	Minimum rating for external $R_{Goff}$	1.5	$\Omega$
$T_{op}$	Operating temperature	-40 ... 85	$^{\circ}C$
$T_{stg}$	Storage temperature	-40 ... 85	$^{\circ}C$

Characteristics					
Symbol	Conditions	min.	typ.	max.	Unit
$V_s$	Supply voltage primary side	14.4	15	15.6	V
$V_i$	Input signal voltage on / off		15 / 0		V
$V_{IT+}$	Input threshold voltage (HIGH)			12.3	V
$V_{IT-}$	Input threshold voltage (LOW)	4.6			V
$V_{G(on)}$	Turn on output voltage		15		V
$V_{G(off)}$	Turn off output voltage		-7		V
$t_{d(on)IO}$	Input-output turn-on propagation time		1.1		$\mu s$
$t_{d(off)IO}$	Input-output turn-off propagation time		1.1		$\mu s$



Adaptor board

# Board 3S SKYPER 32 R Gold



This is an electrostatic discharge sensitive device (ESDS), international standard IEC 60747-1, chapter IX.

## \*IMPORTANT INFORMATION AND WARNINGS

The specifications of SEMIKRON products may not be considered as guarantee or assurance of product characteristics ("Beschaffenheitsgarantie"). The specifications of SEMIKRON products describe only the usual characteristics of products to be expected in typical applications, which may still vary depending on the specific application. Therefore, products must be tested for the respective application in advance. Application adjustments may be necessary. The user of SEMIKRON products is responsible for the safety of their applications embedding SEMIKRON products and must take adequate safety measures to prevent the applications from causing a physical injury, fire or other problem if any of SEMIKRON products become faulty. The user is responsible to make sure that the application design is compliant with all applicable laws, regulations, norms and standards. Except as otherwise explicitly approved by SEMIKRON in a written document signed by authorized representatives of SEMIKRON, SEMIKRON products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury. No representation or warranty is given and no liability is assumed with respect to the accuracy, completeness and/or use of any information herein, including without limitation, warranties of non-infringement of intellectual property rights of any third party. SEMIKRON does not assume any liability arising out of the applications or use of any product; neither does it convey any license under its patent rights, copyrights, trade secrets or other intellectual property rights, nor the rights of others. SEMIKRON makes no representation or warranty of non-infringement or alleged non-infringement of intellectual property rights of any third party which may arise from applications. Due to technical requirements our products may contain dangerous substances. For information on the types in question please contact the nearest SEMIKRON sales office. This document supersedes and replaces all information previously supplied and may be superseded by updates. SEMIKRON reserves the right to make changes.