



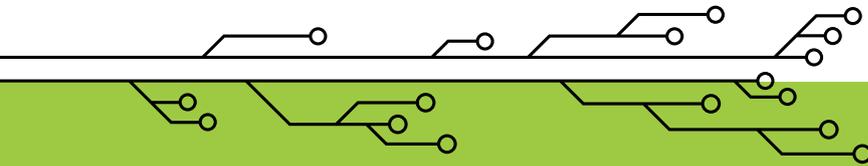
Driving Innovation,  
Powering a Sustainable Tomorrow

# SCS25SP400 10kW Single Phase Converter

(Available in both SiC/Si Power Switches)

**A perfect solution for motor drives, front end converters, industrial and renewable energy solutions.**

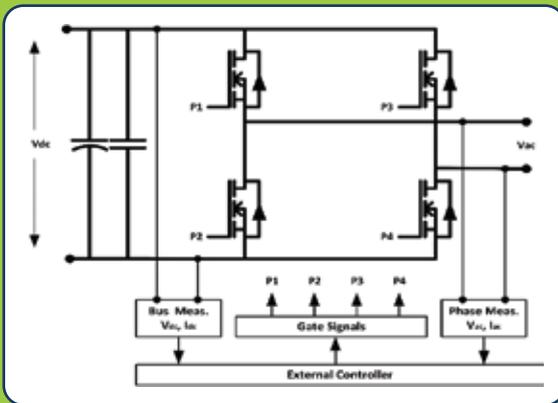
SCS's SCS25SP400 10kW Single Phase Converter is a complete, easy-to-use, flexible power converter by using the SiC/Si based power switches. As demonstrated in the block diagram below, the converter integrates everything required to quickly evaluate system performance out of the box, while also providing expansion flexibility to suit end-application needs. Built on a single, compact PCB, the design incorporates a low-inductance DC bus structure, SCS's high-speed 250 kHz gate drivers, reinforced-isolated voltage & current sensing, and robust thermal management. With an integrated heatsink and cooling fan, the converter offers stable performance during high-load operation. The system is ideal for evaluating or scaling up to higher power levels in industrial motor drives, power supplies, renewable energy applications, or as the bi-directional active front end (AFE) stage for off-board electric vehicle (EV) fast charging. A pre-flashed (1ph Square PWM algorithm) microcontroller is given with this to quickly evaluate the performance of the converter.



Customizing it to meet the specific requirements or standards is possible.

## SCS25SP400 Ratings

Symbol	Symbol	Min.	Typ.	Max.	Unit
$P_{OUT}$	Output Power	-	-	10	kW
$V_{DC}$	DC Bus Voltage	-	350	400	V
$V_{AUX}$	Auxiliary Voltage	23	24	25	V
$I_{AUX}$	Auxiliary Current	-	-	2	A
$I_{OUT}$	Output Current	-	-	25	A
$f_s$	Switching Frequency	-	-	250	kHz



**\*Note: For switching frequency above 100kHz, change in snubber components is required for smooth switching voltages**