Technical Information

PrimeSTACK

4PS0300R12KS4-3GV

Vorläufige Daten
preliminary data

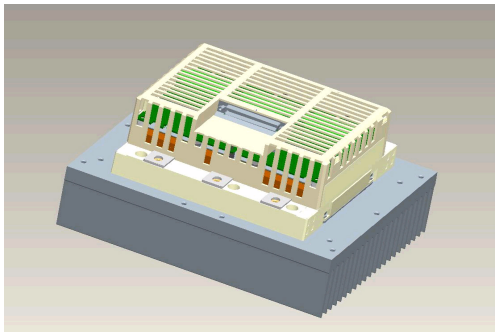
Key data

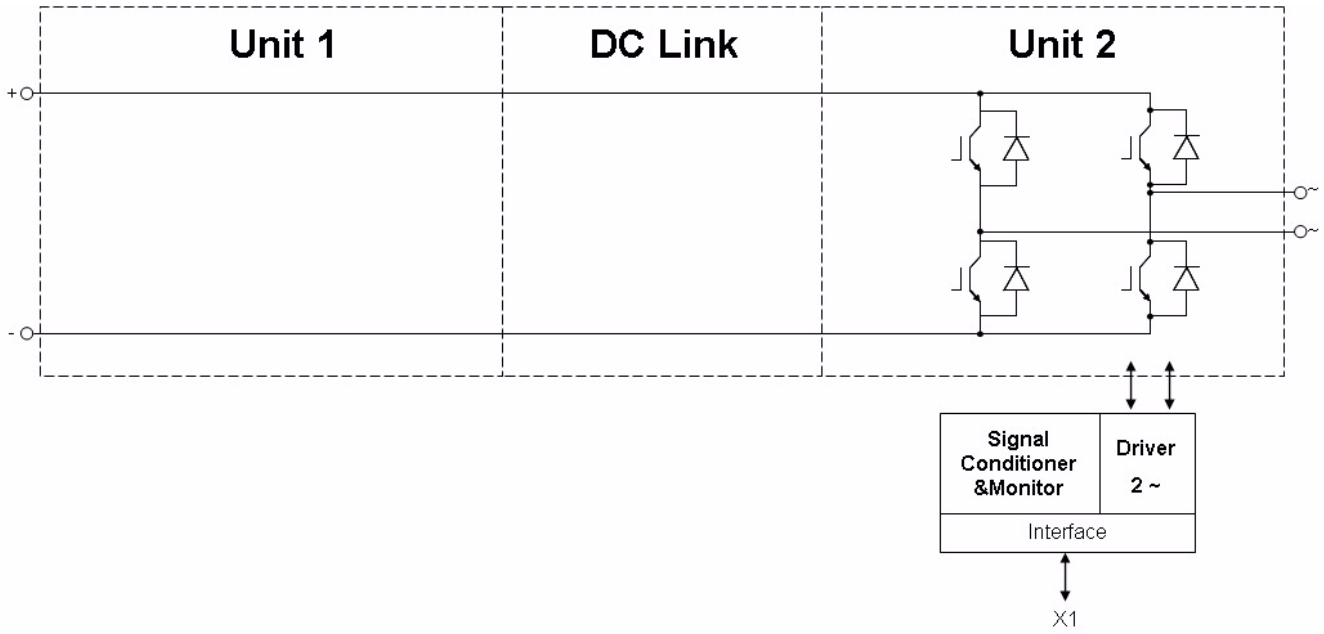
2x 183A AC at 400V AC, forced air (fan not implemented)

General information for:

Stacks for various inverter application. Semiconductors, heat sinks, drivers and sensors included.
These are only technical data!
Please read carefully the complete documentation and maintain the proper design environment!
Especially note the EMC environment and the controller's functionality.

Topology	B2I
Application / Modulation	Inverter / Sine
Load type	resistive, inductive
Cooling	forced air (fan not implemented)
Market	common industrial, drives, power supply
Monitors	current, voltage, temperature
Semicond. (Unit 1)	none
DC Link	none
Semicond. (Unit 2)	2x FF300R12KS4
Interface IGBT	electrical CMOS
Standards	EN50178, UL94, prepared for UL508C
Product ID (eupec)	30699
Mechanical drawing number	38000030
Electrical drawing number	4PS-C3-V





prepared by: Hoelbe Oliver	date of publication: 2007-11-10
approved by: Jürgen Schiele	revision: 2.0

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Notes

Overvoltage shutdown:
It must be realized by the customer.
Overvoltage and Overcurrent shutdown reaction time:
This parameter refers to the customers controller.

Electrical data

DC Link				min	typ	max	units
Voltage			V_{DC}		650	850	V

Unit 2 AC				min	typ	max	units
Voltage	#ignore#		V_{Unit2}		400		V_{RMS}
Continuous current	V_{Unit2} = 400V_{RMS}, V_{DC} = 650V, T_{inlet} = 40°C, T_J ≤ 125°C, f_{Unit2} = 50Hz, f_{sw2} = 5000Hz, cos(phi) = 0,85		I_{Unit2}			183	A_{RMS}
Continuous current overload cap.	T_{inlet} = 40°C, for overload capability 150% for 60s				130		A_{RMS}
Short time current	T_{inlet} = 40°C, 10s, every 180s, initial load = 160A_{RMS}		I_{Unit2}			200	A_{RMS}
Overcurrent shutdown	within 15µs				460		A_{peak}
Switching frequency			f_{sw2}			20000	Hz
Power losses	V_{Unit2} = 400V, V_{DC} = 650V, T_{inlet} = 40°C, T_J ≤ 125°C, f_{Unit2} = 50Hz, f_{sw2} = 5000Hz, cos(phi) = 0,85, I_{Unit2} = 183A_{RMS}		P_{loss2}		1325		W
Power factor			$cos(phi)_{Unit2}$	-1,00		1,00	

General data				min	typ	max	units
Power losses (PCB)			$P_{loss\ aux}$			t.b.d.	W
EMC test	according to IEC61800-3 at named interfaces	power	V_{Burst}		2		kV
		control	V_{Burst}		1		kV
		aux (24V)	V_{Surge}		1		kV
Insulation management is designed for			V_{Line}		500		V_{RMS}
Insulation test voltage	according to EN50178, f = 50Hz, t = 60s		V_{isol}		1,8		kV_{RMS}