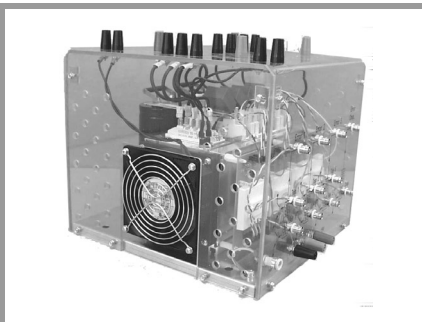


SEMISTACK - IGBT



SEMITRANS Stack¹⁾

Three-phase rectifier + inverter with brake chopper

**SEMITEACH - IGBT
SKM 50 GB 123D
SKD 51
P3/250F**

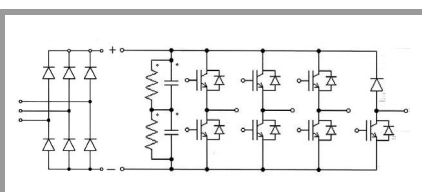
Features

- Multi-function IGBT converter
- Transparent enclosure to allow visualization of every part
- IP2x protection to minimize safety hazards
- External banana/BNC type connectors for all devices
- Integrated drive unit offering short-circuit detection/cut-off, power supply failure detection, interlock of IGBTs + galvanic isolation of the user
- Forced-air cooled heatsink

Typical Applications

- Education: One stack can simulate almost all existing industrial applications:
 - 3-phase inverter+brake chopper
 - Buck or boost converter
 - Single phase inverter
 - Single or 3-phase rectifier

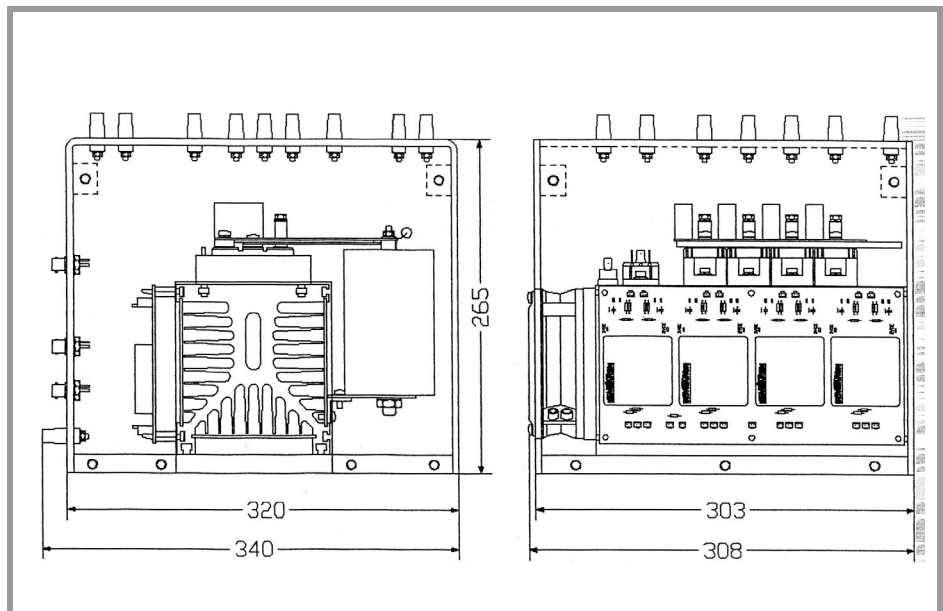
¹⁾ Photo non-contractual



B6U + B6CI + E1CIKF

Circuit	I_{rms} (A)	V_{ac} / V_{dcmax}	Types
B6CI	30	440 / 750	SEMITEACH - IGBT

Symbol	Conditions	Values	Units
I_{rms}	no overload	30	A
V_{CES}	IGBT - 4x SKM 50 GB 123D	1200	V
$V_{CE(SAT)}$	$I_c = 50A, V_{GE} = 15V, \text{chip level}; T_j = 25(125)^\circ C$	2,7 (3,5)	V
V_{GES}		± 20	V
I_c	$T_{case} = 25 (80)^\circ C$	50 (40)	A
I_{CM}	$T_{case} = 25 (80)^\circ C; t_p = 1ms$	100 (80)	A
$V_{in(max)}$	Rectifier - 1x SKD 51/14	3 x 480 3 x 380	V V
	without filter with filter		
C_{eqvl} V_{DCmax}	DC Capacitor bank - Electrolytic 2x 2200 μF /400V	1100 / 800 750	$\mu F / V$ V
	total equivalent capacitance max. DC voltage applied to the capacitor bank		
Power supply Current consumption	Driver - 4x SKHI 22	0 / 15	V
Thermal trip	max; per driver	16	mA
	Normally Open type (NO)	71	$^\circ C$



General dimensions

This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.