

ELECTRICAL INSULATION AND POWER SUPPLY WITH ISO5125I

The ISO5125I is a single-channel insulated DC/DC converter suitable as a power supply for IGBT drivers up to 6.5 kV. It complements the 1SP0335 and 1SP0340 high-voltage s. Its output power of 5 W enables switching frequencies up to 5 kHz for 6.5 kV/750 A IGBTs.

On the basis of this concept, the drivers for IGBTs in the voltage range from 3.3 kV to 6.5 kV can be implemented in 2-level, 3-level and multi-level inverter topologies.

The driver unit is mounted directly onto the IGBT module by means of three screws. The power supply unit ISO5125I is designed as a separate module attached close to the IGBT. For parallel connected drivers, only one power supply is needed per switch.



ORDERING INFORMATION 1SP0335 DRIVER SERIES

	V-Type (Master)	S-Type (Master)	D-Type (Slave) ²⁾
Type designation plus	1SP0335V2M1-xx	1SP0335S2M1-xx	1SP0335D2S1-xx
xx: Voltage basic type) ¹⁾ or xx: Specific module type)	3300 V=33 / 4500 V=45 / 6500 V=65 e.g. 5SNA1200G330100		
Modul package	IHV 130/140; 190/140		
DC/DC-Converter	ISO5125I-xx (xx: 4500 V=45 / 6500 V=65 / 10000 V=100 / 12000 V=120)		
Input signal interface	Versatile FOL Input/Output	ST FOL Input/Output	n.a.
On-board connector	HFBR-2522Z/1522Z	HFBR-2412Z/1412Z	n.a.
Bus interface	X2/X3		
On-board connector	MBCON-6-1-0 (on 1SP0335)		
Connecting cable	MBC61-xxx-0 (xxx=030,050,070,110) ³⁾		
Power Supply	X0/X1		
User-board connector	Right angle MBCON-3-1-0; vertical MBCON-3-2-0		
Connecting cable driver/ISO	MBC41-xxx-0 (xxx=035,045,070,110) ³⁾		
Connecting cable ISO/User-board	MBC31-100-0		

¹⁾ Gate resistors have to be soldered by customer

²⁾ Only for parallel operation, needs master for control

³⁾ Cable length in cm