# Astrol Electronic AG

Electronic Engineering • Technical Assemblies

### **Gate-Units**

## **GU-IGBT-HPHV**

## **Universal Gate-Unit for High Voltage IGBT**



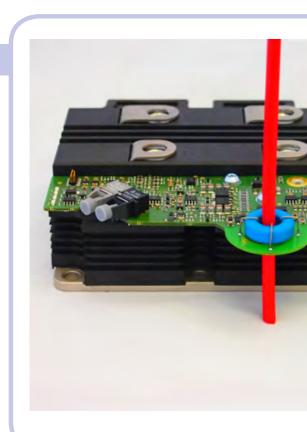
- **Industrial drives**
- Parallel and/or serial connected applications
- Medium-voltage converters
- Research
- Medical applications
- Flexible AC transmission systems

#### Features:

- Power concept allows up to 12 gate units with only one power supply (CSINT-100W)
- Integrated current loop power supply for high voltage insulation up to 40kV
- Fits directly on standard High voltage HiPak/IH11(12) Modules
- Adaptive design for a variety of IGBT modules
- High current gate drive up to 50A peak
- Up to 15kHz operating frequency
- Saturation detection and automatic turn-off or feedback depends on version
- Overcurrent/Overvoltage detection
- Gate voltage supervision
- Power supply supervision
- Status feedback via fibre optic link to overall controller
- Active clamping

### **Options:**

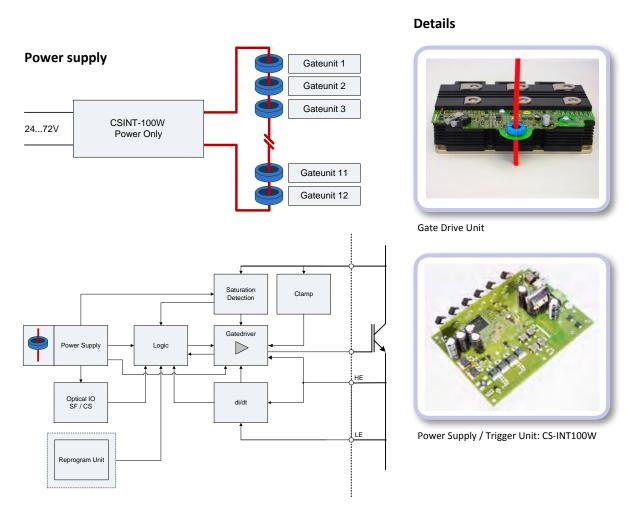
- Reprogammable via fibre optic link
- Independent dV/dt and dI/dt control for turn-on and turn-off
- Gate drive options: Passive resistor, gate voltage ramp, gate current ramp, dV/dt & dI/dt control





### **Technical specification of GU-IGBT-HPHV**

Parameter	Symbol	Remarks	Min.	Тур.	Max.	Unit
Operating voltage IGBT	U		-	-	6.5	kVDC
Voltage above earth potential	U		-	-	40	kV
Frequency (depends on IGBT)	f		0	-	15	kHz
Duty cycle	f		0	-	100	%
Gate current	I		-	-	±50	А
Gate voltage ON	U		-	-	18	V
Gate voltage OFF	U		-	-	-12	V
Turn ON delay	t		-	-	400	ns
Turn OFF delay	t		-	-	400	ns
Inter gate unit jitter	t		-	-	30	ns
Operating temperature	Т		-40	-	85	°C
Power consumption idle	Р		-	-	1	W



Order code	Description	Version		
AC-10627-1xx	GU-IGBT-HPHV (IGBT Type)	Gate unit for (IGBT Type)		