



## New HVIL Evaluation Block

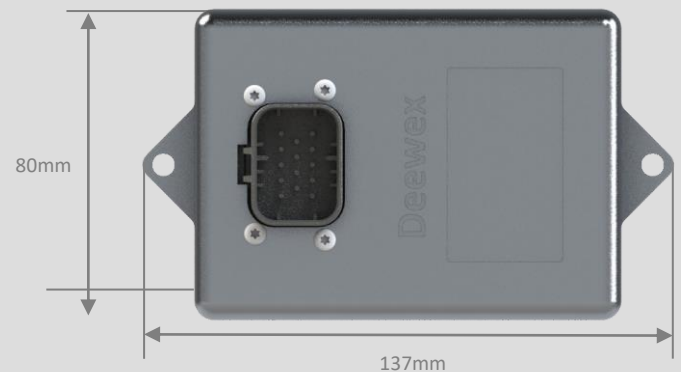
100% Safe, Ruggedized, Sophisticated for High-Voltage Interlock Loop

### FEATURES

- Designed following intrinsic safety rules
- For High Voltage application up to 650V
- Local or Remote activation, Re-arm button
- Unidirectional Interlock System
- Protection against HV Faults
- Protection against Short-circuit to Ground
- Communication CAN bus 2.0B
- Dimensions 137x80x55mm, Weight 400g

### APPLICATIONS

- Electrical vehicles (car, truck, bus)
- Inverter, Converter, Battery, HV networks



### ELECTRICAL CHARACTERISTICS @ 25°C to 70°C

	MIN	TYP.	MAX	UNITS
Control Power Supply – (12V option)	10.8	12	13.2	V
Control Power Supply – (24V option)	21.6	24	26.4	V
Power Supply power		4		W
Imposed interlock circuit current		52		mA
HVIL line authorized impedance			100	Ω
Insulation resistance between Contactor coil and LV	10 G			Ω
Operating and Storage temperature	-25		70	°C

### INTERFACE & CONTROLS

Protection against Surge or HV voltage (on HVIL+)	1 000 VDC
Protection against Surge or HV voltage (on HVIL-)	650 VDC
Short-circuit to Ground Protection	Between HVIL+ and HVIL-

### MECHANICAL INTERFACE

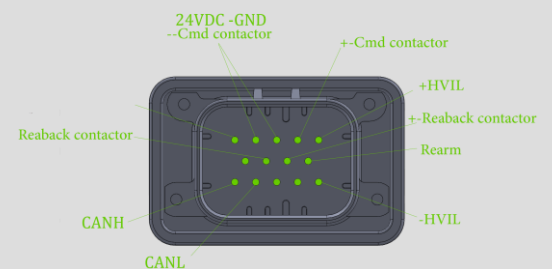
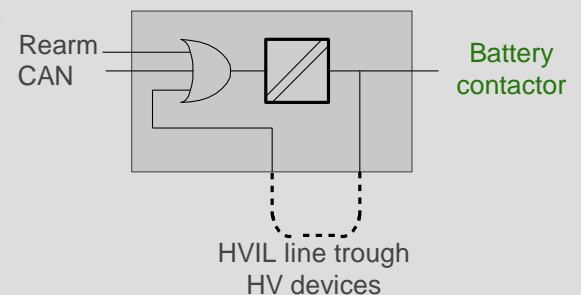
Box connector: 776267-5	To use with plug 776273-x
Box fixation	Screw 3M or Rail DIN Ω

### COMMUNICATION AND MONITORING

CAN 2.0B bus speed	1,000 Kbit/s
CAN periodicity	100 ms

### STANDARDS USED FOR DESIGN ONLY

Designed with respect to	Safety	IEC 61508-2, EN NF 50129
	Insulation/Isolation	IEC60664-1
	Ingress Protection	IP67
	EMC/EMI	EN55022 – Criteria B
Mean Time Between Failure (MTBF)		> 250,000 hours



### SIMPLIFIED ORDERING INFORMATION

#### ESIL - XX

XX = 12 for 12V power supply and 24 for 24V power supply

Data presented in this document is subject to change without notice as it is part of continuous development.

