



## New standard of 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 110x80x55mm, Weight 250g

### APPLICATIONS

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

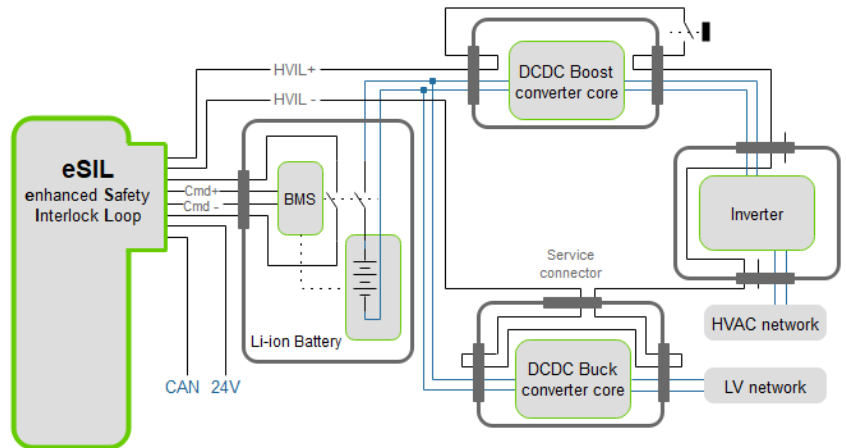


Figure 1 : Example of application

### ELECTRICAL CHARACTERISTICS @25°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

### PROTECTIONS OF OUTPUT LINES

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: 776262-1	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

Safety embedded system design	IEC 61508-2, EN NF 50129
Insulation coordination	IEC60664-1
Ingress Protection	IP67
EMC Conducted Emissions	EN55022 – Criteria B
MTBF	> 250,000 hours

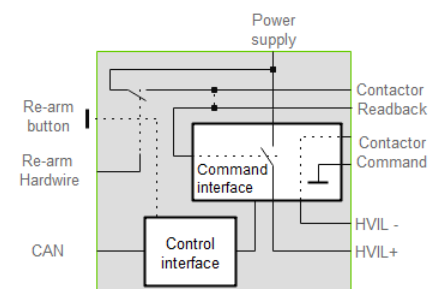


Figure 2 : Internal block diagram

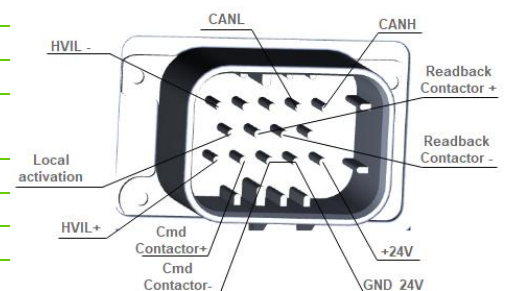


Figure 3 : Connector pinout

