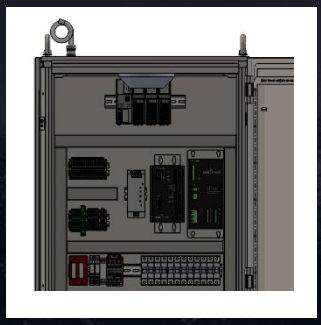
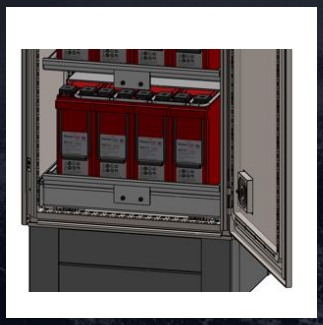
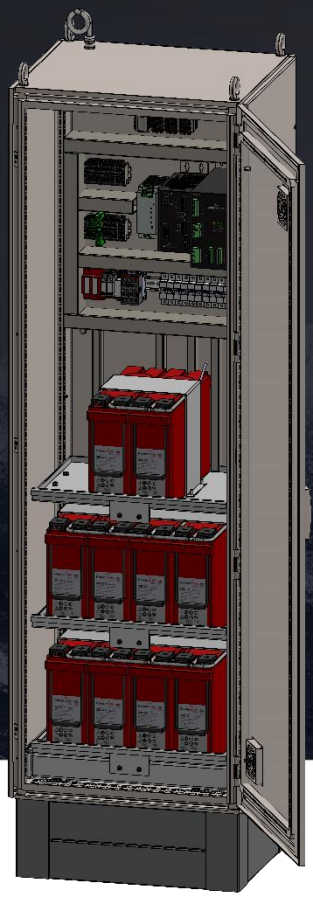
EVERSAFE

DATASHEET







Safety Light Control System

- 3 configurable back-up channels
- Configurable digital I/O channels
- Secure communication
- Variable UPS size
- Internal AC Socket

Engineered for offshore wind environments, the Safety Light Control System (SLCS) consolidates work lights and subsystems into a single cabinet, adapting to evolving project demands.

By integrating multiple control functions within the SLCS, design complexity is reduced and maintainability is enhanced.

Remote monitoring and control streamline operation, helping ensure a safer, well-lit working environment.

General Description

Designed for offshore wind applications, the SLCS (Safety Light Control System) supplies, controls, and monitors the EverSafe system, providing reliable UPS functionality during power interruptions.

The system can be tailored to manage additional lighting and equipment, with UPS coverage extended to these electrical loads. A central PLC supervises all devices, featuring programmable inputs and outputs for custom functions.

SLCS communicates seamlessly with the Sabik Offshore SCADA System or other SCADA platforms using OPC UA or MODBUS protocols.

It is suited for installations where AtoN systems are absent or must be kept separate, and can control a diverse array of equipment, from ID sign lights to platform and internal lighting.

Dimensions & Weight

The cabinet dimensions shown below are including a 200 mm high base, which is required when using connector-based or cable gland interface on the bottom side of the cabinet. If alternative connection types such as cable gland mounted on the top of the cabinet are used, the base height can be reduced to 100 mm.

UPS battery capacity @24 V DC	100 Ah	200 Ah	300 Ah	400 Ah	500 Ah	600 Ah
Cabinet height incl. base (mm)	1400	1600	1600	1600	2000	2000
Cabinet width (mm)	600	600	600	600	600	600
Cabinet depth (mm)	500	500	500	500	500/600	500/600
Total Weight approx. (kg.)	160	220	275	335	415	470

*The cabinet dimension and weight shown in the table is only indicative, the specific weight is depending on the specific SLCS configurations.

Material

	Enclosure frame	Door	Top, side & rear panels	Mounting plate	Base
Material	Sheet steel 1.5 mm	Sheet steel 2.0 mm	Sheet steel 1.5 mm	Sheet steel 3.0 mm	Sheet steel, 2.0 mm
Surface finish	Dipcoat-primed	Dipcoat-primed, powder-coated on the outside, textured paint	Dipcoat-primed, powder-coated on the outside, textured paint	Zinc-plated	Dipcoat-primed, powder-coated on the outside, textured paint
Colour	RAL 7035	RAL 7035	RAL 7035	RAL 7035	RAL 9005

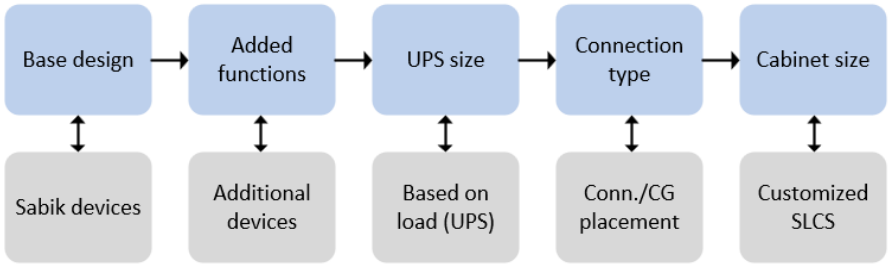
Electrical

Operating voltage V_{IN}	AC 230 V (-15% / +15%)
Frequency range (f_n)	47 ... 63 Hz
Power Consumption average (V_{IN} = AC 230 V)	Depending on SLCS configuration
System Power Consumption average (V_{IN} = AC 230 V)	Depending on SLCS configuration
Inrush Current	Depending on SLCS configuration
Recommended circuit-breaker for input protection	Depending on SLCS configuration
Output voltage V_{OUT}	DC 24 V (optional AC 230 V for project specific devices)
Communication bus (NAi devices)	Serial Sabik Communication (NAi bus)
Communication bus (Optional)	Serial RS232/485
Communication bus (Network)	TCP/IP

Connection Options

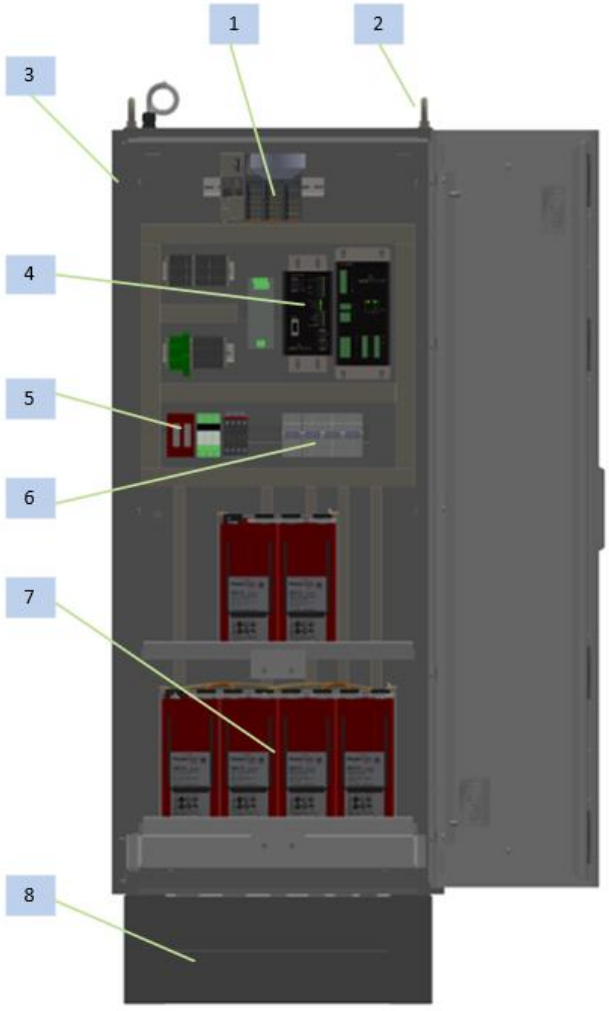
Electrical Connection (power in)	Connector / Cable gland
PE Connection	Cable gland / PE bolt
Monitoring & Control (DO & DI)	Connector / Cable gland
Device Connections (thru OVP box)	Connector / Cable gland
Optional Device Connections	Connector / Cable gland
Network Connection	Connector / Cable gland (RJ45)

Optional functions of the SLCS can be designed to meet project specific requirements, such as supply for internal / external lights controlled via switches or SCADA, UPS supply for 3rd party equipment with specific timing i.e.



Components

1. PLC - Controller
2. Lifting eyes
3. Cabinet
4. Battery Chargers
5. Surge Arrestor
6. MCB's
7. Batteries
8. Frame



*SLCS-300, as example

Environmental Conditions

Ambient temperature (operation)	-5 ... +40 °C (temperature outside range, UPS time reduced)
Ambient temperature (storage / transport)	-20 ... +50 °C
Humidity (operation / storage / transport)	95% r.h. up to 45°C 70% r.h. for T > 45°C
Atmospheric pressure (operation / storage / transport)	80 ... 108 kPa
Degree of protection (acc. to IEC 60529)	IP55
IK Code	IK10
Corrosion class (acc. to ISO 12944)	C4-H

Compliance

Electrical Standards	EN 61439-1:2011	Low-voltage switchgear and control gear assemblies - Part 1: General rules
	EN 61439-2:2011	Low-voltage switchgear and control gear assemblies - Part 2: Power switchgear and control gear assemblies
	IEC 61892	Mobile and fixed offshore - Electrical installations
	IEC 61892-1:2019	Part 1 - General requirements and conditions
	IEC 61892-2:2019	Part 2 - System design
	IEC 61892-3:2019	Part 3 - Equipment
	IEC 61892-4:2019	Part 4 - Cables
	IEC 61892-6:2019	Part 6 - Installation
Environmental	DIN EN ISO 12944	Corrosion Class C4H
	IEC 60721-3-3	Shock and vibration 3M12
	IEC 63000:2018	RoHS assessment
Product Safety	EN 60204-1:2018	Safety of machinery – Electrical equipment of machines – Part 1: General requirements
	IEC 62485-1:2018	Safety requirements for secondary batteries and battery installations
Electromagnetic Compatibility	EN 61000-6-2:2019	Electromagnetic compatibility (EMC) Part 6-2: Generic standards - Immunity for industrial environments
	EN 61000-6-4:2019	Electromagnetic compatibility (EMC) Part 6-4: Generic standards – Emission standard for industrial environments

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