

# **E&E** Certification Record

Listing#: E113907 Report #: 108420B

Original Certification Date: July 1, 2021

Revised Certification Date: N/A

This Certification is issued to: Sicon S.r.l. (Trademark SOCOMEC) Via Sila, 1/3 36033 – Isola Vicentina (VI)



#### Stating that the product(s):

Energy Storage System SUNSYS-HES-L composed of,

SUN-HES-L-380U (converter cabinet) or SUN-HES-L-480 (converter cabinet) + SUN-HES-MOD50 (power module) + CATL O452280-E or CATL O452280-P (battery cabinet)

### Product Rating(s):

Energy storage system is a modular system in term of power rating and stored energy capacity:

- Inverter cabinet is modular inverter which can be equipped with 50 kVA power rated modules up to 300 kVA maximum power rating;
- Single inverter cabinet can be connected to 1 to 6 battery cabinets, in order to have a minimum capacity of 280 Ah and maximum of 1680 Ah;
- Energy Storage system can be composed of 1 or 2 inverter cabinets which can be connected to max 6 battery cabinets;

## Converter cabinet(s) (C-Cab):

Number of power modules	1	2	3	4	5	6
Power rating	50kVA	100kVA	150kVA	200kVA	250kVA	300kVA
DC voltage	570÷860 V <sub>DC</sub>					
Frequency	55÷65 Hz					
	480 V <sub>AC</sub> / 60 Hz (SUN-HES-L-480)					
Maximum DC current	87 Adc	174 A <sub>DC</sub>	261 A <sub>DC</sub>	348 A <sub>DC</sub>	435 ADC	522 A <sub>DC</sub>
AC voltage	480 V <sub>AC</sub> ± 20% (3ph+N)					
Rated AC current	60 Arms	120 Arms	180 Arms	241 ARMS	301 ARMS	361 A <sub>RMS</sub>
	380 V <sub>AC</sub> / 60 Hz (SUN-HES-L-380U)					
Maximum DC current	86 A <sub>DC</sub>	173 A <sub>DC</sub>	259 A <sub>DC</sub>	346 A <sub>DC</sub>	432 A <sub>DC</sub>	519 A <sub>DC</sub>
AC voltage	380 V <sub>AC</sub> ± 20% (3ph)					
Rated AC current	76 A <sub>RMS</sub>	152 A <sub>RMS</sub>	228 A <sub>RMS</sub>	304 A <sub>RMS</sub>	380 A <sub>RMS</sub>	456 A <sub>RMS</sub>

#### Battery cabinet(s) (B-Cab)

Batteries electrical ratings depend on configuration: up to six battery cabinet CATL O452280-E or CATL O452280-P (B-cab) can be connected to one or two converters (C-Cab) in parallel to compose the Energy Storage System up to 1680 Ah maximum capacity.

Electrical ratings of single battery cabinet are:

Maximum DC continuous current	140 Apc		
Maximum DC continuous power	93,1 kW		
Maximum short circuit current / duration	12,2 kA / 300 μs		
Nominal AC voltage / frequency	88÷132 V <sub>AC</sub> / 50/60 Hz		
Maximum AC continuous current	30 A		
Rated capacity	280 Ah		
Nominal DC voltage	665,6 V <sub>DC</sub>		

Achieved Certification to the following standard(s): ANSI/CAN/UL 9540:2020 Energy Storage Systems and Equipment

Michael Collins

Eurofins Electrical and Electronic Testing North America, Inc.

All changes proposed in the previously identified product that affects the above information must be submitted to Eurofins for evaluation prior to implementation to assure continued NRTL Certification status. The covered product(s) shall be subject to follow-up inspections to ensure that the Certified product(s) are identical to the product sample evaluated by Eurofins E&E NA and that all responsibilities are being fulfilled as specified in the Applicants' Responsibility section of the Certification Report. The Applicant named above has been authorized Eurofins E&E NA to represent the product(s) listed in this record as "MET Certified" and to mark this/these product(s) according to the terms and conditions of the Eurofins E&E NA Applicant Contract, Listing Reports, and the applicable agreements. Only the product(s) bearing the MET Mark and under a follow-up service are considered to be included in this Certification program. This certification has been granted under a System 3 program as defined in ISO/IEC 17067.



Eurofins E&E North America, Inc. is accredited by OSHA and the Standards Council of Canada.







