

Commeo energy storage block High Energy

esbC141S / esbC141P / esbC141E

FOR HIGH VOLTAGE SYSTEMS

commeo
energy storage solutions®

system component
for battery systems

Technical data

technology description	pluggable Lithium ion battery (NMC)	
nom. energy	1.45 kWh	
nom. voltage	52.7 V \approx	
nom. capacity	27.5 Ah	
max. discharge power (at nom. voltage)	2.9 kW	
energy density	213.2 Wh/l	
specific energy	139.4 Wh/kg	
expected cycles	(0.5C charge 1C discharge 25 °C 80 % SOH) > 1,400 @ 95 % DoD > 1,000 @ 98 % DoD	(0.5C charge 1.5C discharge 25 °C 80 % SOH) > 1,500 @ 95 % DoD > 1,400 @ 98 % DoD
installation site	indoors non-condensing	
IP Code	IP 20	
protection class	2	
expected operating life (calendric)	> 12 years	
dimensions (W x H x D)	200 x 200 x 170 mm	
weight	approx. 10.4 kg	
communication interface	CAN-Bus	
EU directives	2006/66/EG (BattG), 2014/30/EU (EMC), 2014/35/EU (LVD), 2011/65/EU, 2015/863/EU (RoHS)	
norms and standards	DIN EN 62619, UN 38.3, DIN EN 61010-1, DIN EN 61000-6-2/4, DIN EN ISO 13849-1	

Operating window

operation mode	guided by the State-of-Power (SoP) according to the specifications of the battery management system (BMS)	
max. charge current	13.8 A (0.5C)	
end-of-charge current	1.4 A (0.05C)	
max. discharge current	55.0 A (2C)	
rel. humidity	< 80 % (temperature-dependent) non-condensing	
operating temperature range	5 – 40 °C charge 5 – 50 °C discharge	
operating voltage range	43.6 – 58.3 V \approx	
temperature range	transport	< 1 month
	storage	< 6 month
		-20 – 45 °C
		-20 – 25 °C
max. operating altitude	2,000 m above sea level	



⚠ The user manual has to be strictly followed. The operating window of the battery has to be complied with.

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Errors and omissions excepted - valid until revoked

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