

Commeo energy storage block High Power

esbC112PR / esbC112ER

FOR 48V SYSTEMS

commeo
energy storage solutions®

system component
for battery systems

Technical data

technology description		pluggable Lithium ion battery (NMC)
nom. energy		1.10 kWh
nom. voltage		52.1 V $\approx$
nom. capacity		21.1 Ah
max. discharge power (at nom. voltage)		4.4 kW
energy density		161.8 Wh/l
specific energy		105.1 Wh/kg
expected cycles		(0.8C charge 4C discharge 25 °C 80 % SOH) > 1,200 @ 100 % DoD
installation site		indoors non-condensing
IP Code		IP 20
protection class		2
Breaking capacity (resistive, bidirectional)	60 V $\approx$ 2 A	45,000 cycles
	60 V $\approx$ 100 A	15 cycles
expected operating life (calendric)		> 12 years
dimensions (W x H x D)		200 x 200 x 170 mm
weight		approx. 10.5 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		16.9 A (08C)	
end-of-charge current		1.1 A (005C)	
max. discharge current		844 A (4C)	
rel. humidity		< 80 % (temperature-dependent) non-condensing	
operating temperature range		5 – 45 °C charge 5 – 55 °C discharge	
operating voltage range		47.6 – 58.3 V $\approx$	
temperature range	transport	< 1 month	-20 – 40 °C
	storage	< 6 month	-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.

Commeo GmbH

Otto-Lilienthal-Straße 8
49134 Wallenhorst, Germany

www.commeo.com

page 1/1
revision 6

Errors and omissions excepted - valid until revoked

21-044EN

09/2022