

Commeo HV-C Smart Power System | 521 V | 22.0 kWh

esr12U500B4C112E8S12

Technical data

technology description	Lithium ion battery system (NMC)		
communication interface	CAN-Bus Ethernet		
nom. energy	22.0 kWh		
nom. voltage	521.0 V $\pm$		
nom. capacity	42.2 Ah		
max. discharge power (at nom. voltage)	88.0 kW		
expected cycles	(0.8C charge 4C discharge 25 °C 80 % SOH) 1,200 @ 100 % DoD		
expected operating life (calendric)	12 years		
installation site	indoors non-condensing		
IP Code	IP 20 (increasing IP Code by using optional accessories)		
protection class	2		
interconnection	2P10S		
standard scope of delivery	energy storage block esbC112S		12 qty
	energy storage block esbC112E		8 qty
	control unit ccuHV200U		1 qty
	Rittal industry cabinet (600 x 1200 x 600 mm) excl. base		1 qty
	accessories		
weight	approx. 343.0 kg		
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			33.8 A (0.8C)
end-of-charge current			2.1 A (0.05C)
max. discharge current			168.8 A (4C)
rel. humidity			< 80 % (temperature-dependent) non-condensing
operating temperature range			5 – 45°C charge 5 – 55 °C discharge
operating voltage range			476.0 – 583.0 V $\pm$
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.