

Commeo HV-C Smart Energy System | 844 V | 46.4 kWh

esr20U800B8C141E16P16

Technical data

technology description	Lithium ion battery system (NMC)		
communication interface	CAN-Bus Ethernet		
nom. energy	46.4 kWh		
nom. voltage	844.0 V $\approx$		
nom. capacity	55.0 Ah		
max. discharge power (at nom. voltage)	92.8 kW		
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	
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	2P16S		
standard scope of delivery	energy storage block esbC141P		16 qty
	energy storage block esbC141E		16 qty
	control unit ccuHV160U		1 qty
	Rittal industry cabinet		
	(600 x 2000 x 600 mm) excl. base accessories		1 qty
weight	approx. 512.8 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	27.5 A (0.5C)		
end-of-charge current	2.8 A (0.05C)		
max. discharge current	110.0 A (2C)		
rel. humidity	< 80 % (temperature-dependent) non-condensing		
operating temperature range	5 – 40 °C charge 5 – 50 °C discharge		
operating voltage range	698.0 – 932.0 V $\approx$		
temperature range	transport	< 1 month	-20 – 45 °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.