Commeo HV-C Smart Energy System | 791 V | 43.5 kWh

esr20U750B5C141E10S20

Technical data

technology description	Lithium ion battery system (NMC)	
communication interface	CAN-Bus | Ethernet	
nom. energy	43.5 kWh	
nom. voltage	791.0 V ⎓	
nom. capacity	55.0 Ah	
max. discharge power (at nom. voltage)	87.0 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	2P15S	
standard scope of delivery	energy storage block esbC141S energy storage block esbC141E control unit ccuHV160U Rittal industry cabinet (600 x 2000 x 600 mm) excl. base accessories	20 qty 10 qty 1 qty 1 qty
weight	approx. 462.0 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			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			655.0 – 874.0 V ⎓
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.

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Errors and omissions excepted - valid until revoked