Liquid Cooling/Heating Thermal Management System For Energy Storage

Model	BTMS030-ESA	BTMS050-ESA	BTMS080-ESA	BTMS080-ESD	BTMS050-ESC	BTMS030-ESB	BTMS050-ESB	BTMS060-ESA	BTMS060-ESB	BTMS090-ESA	BTMS100-ESA	BTMS100-ESB	BTMS150-ESA	BTMS200-ESA	BTMS250-ESB	BTMS250-ESA	BTMS300-ESB	BTMS300-ESA	KES0350-LVAA	KES0350-LHAA	BTMS400-ESA	BTMS450-ESA	BTMS600-ESA	BTMS600-ESD	BTMS600-ESB	BTMS600-ESC	BTMS800-ESA	BTMS800-ESB	BTMS950-ESA
Structure	Vertical	Vertical	Vertical	Vertical	Horizontal	Horizontal	Horizontal	Horizontal	Door installation	Vertical	Vertical	Door installation	Vertical	Vertical	Horizontal	Vertical	Vertical	Vertical	Vertical	Horizontal	Vertical	Vertical	Vertical	Vertical	Horizontal	Split	Vertical	Horizontal	Vertical
Cooling capacity	3kW	5kW	8kW	8kW	5kW	3kW	5kW	6kW	6kW	9kW	10kW	10kW	15kW	20kW	25kW	25kW	30kW	30kW	35kW	35kW	40kW	45kW	60kW	60kW	60kW	60kW+50kW	80kW	80kW	95kW
Heating Capacity	2.5kW/2kW												12kW		16kW	18kW	16kW	16kW (24kW Optional)	24kW	24kW	16kW (24kW Optional)					24kW	24kW	24kW	16kW/20kW
Ambient Temp	-30~+60°C								-15~+60°C	-30~+60°C																			
COP	≥2.0 (@45°C Ambient)																												
Refrigerant	R134a	R134a or R513A	R134a or R513A	R513A or R1234YF	R134a	R134a	R134a or R513A	R134a	R134a	R134a	R134a	R134a or R513A	R134a	R410A	R513A	R410A	R410A	R134a or R513A	R32	R32	R134a or R513A	R134a or R513A	R410A or R32	R410A	R513A	R410A	R410A	R410A	R513A/R410A
High Voltage	220-230VAC±20%/1Phase/50&60Hz				DC600~860V	220-230VAC±20%/1Phase/50&60Hz				380-480VAC±15%/3Phase/50&60Hz																		380VAC±15% /3Phase/50Hz 480VAC (-10% ~ +15%)/3Phase/60Hz
Low Voltage	24VDC																												
Coolant	50%50% Glycol / Water																												
Coolant Flow Rate	50L/min@90kPa					40L/min@90kPa	50L/min@90kPa	40L/min@90kPa	50L/min@90kPa			72L/min@90kPa	250L/min@90kPa or 360-400L/min@90kPa		250L/min@70kPa	400L/min@150kPa	350L/min~500L/min@150kPa	400L/min@140kPa	350L/min@100kPa	200L/min@60kPa	400L/min@140kPa	400L/min@140kPa	500L/min@150kPa	500L/min@150kPa	500L/min@150kPa	Battery：500L/min@150kPa PCS：210L/min@140kPa	700L/min@150kPa	700L/min@150kPa	720L/min@220kPa
Communication Protocol	CAN2.0/RS485				CAN2.0	CAN2.0/RS485																							
Control Target	Operating Mode+Target Coolant Temperature																												
Noise	<72dB(A)	<75dB(A)		<65dB(A)	<75dB(A)	<70dB(A)	<70dB(A)	<78dB(A)	<70dB(A)	<78dB(A)		<75dB(A)	<78dB(A)		<74dB(A)	<78dB(A)	<78dB(A)	<75dB(A)	<70dB(A)	≤73dB(A)	<80dB(A)		<83dB(A)	<80dB(A)	<74dB(A)	<85dB(A)	<85dB(A)	<80dB(A)	<80dB(A)
IP Rating	IP67																										IP55		
Dimension	L1150×W270×H1040mm	L1209mm×W272mm×H1039mm		L1295×W275×H1074mm	L1050×W808×H980mm	L1051×W800×H840mm	L900×W850×H220mm	L900×W866×H220mm	L744×W265×H1350mm	L1100×W350×H1050mm		L800×W400×H1750mm	L980×W630×H2400mm		L2100×W550×H1230mm	L1200×W440×H2400mm		L980×W630×H2400mm	L1200×W500×H2400mm	L2200×W550×H1900mm	L980×W630×H2400mm	L1000×W650×H2500mm	L1200×W440×H2400mm	L1070×W820×H2400mm	L2100×W550×H1230mm	Cabinet：L800×W440×H2400mm Roof Module：L5100×W1450×H380mm	L1200×W500×H2400mm	L2200×W550×H1450mm	L2050×W852×H2380mm
Weight	≤65kg	≤80kg	≤80kg	≤92kg	≤75kg	≤80kg	≤70kg	≤65kg	≤80kg	≤90kg		<135kg	<230kg	≤400kg	<300kg	<300kg	<300kg	<300kg	≤400kg	≤400kg	<300kg	<300kg	≤400kg	<450kg	<480kg	Cabinet：<450kg Roof Module：<300kg	<500kg	<500kg	<1100kg
Inlet/Outlet	CQC20			NW22	Ø25	CQC20		NW26		NW26 (Battery)+S10(PCS)		NW26	DN50														DN60		DN80



5kW BTMS050-ESA
3kW BTMS030-ESA



3kW BTMS030-ESB
5kW BTMS050-ESB
6kW BTMS060-ESA



15kW BTMS150-ESA



20kW BTMS200-ESA
25kW BTMS250-ESA
30kW BTMS300-ESB



30kW BTMS300-ESA
40kW BTMS400-ESA
45kW BTMS450-ESA

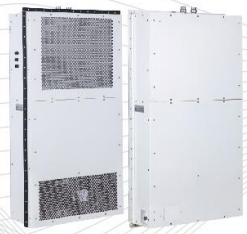


25kW BTMS250-ESB(Horizontal)
35kW KES0350-LHAA
60kW BTMS600-ESB(Horizontal)
80kW BTMS800-ESB(Horizontal)



8kW BTMS080-ESA

8kW BTMS080-ESD



6kW BTMS060-ESA
10kW BTMS100-ESB



10kW BTMS100-ESA
(Battery only or Battery + PCS with Independent Temperature Control)



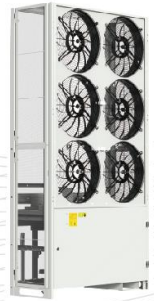
60kW BTMS600-ESD



60kW BTMS600-ESA



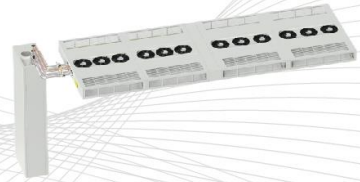
35kW KES0350-LVAA



80kW BTMS800-ESA



95kW BTMS950-ESA



60kW+60kW BTMS600-ESC (Rooftop)
(Battery + PCS with Independent Temperature Control)