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Revision history		
Rev.	**Date.**	**Description**
001	15/02/2023	First Issue
002	08/03/2024	Updated according to comments

Document Title:	**BLPH Project - Load List**
Document Number:	K559-2254-CWIWP4202202-E14-001
Revision:	Rev002
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File Name:	K559-2254-CWIWP4202202-E14-001Rev002
Purchaser Job:	K559-2254
Purchase Order:	CWIWP4202202
Code:	E14
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Customer:	CrossWind C.V., Rotterdam, The Netherlands

1 MW Megablock Load List	
Date	08/03/2024
Responsible	TIN
Rev.	2

														Case 1 - Hot Standby (-10 °C)			Case 2 - Hot Standby (10 °C)			Case 3 - Hot Standby (25 °C)		
Full DT	Pretty Name	Description	Location DT	Location Pretty Name	Nameplate Voltage [Vac]	Nameplate Current [A]	Nameplate Power [kW]	Control Method	Control DT (if applicable)	Fusing	Fusing DT	Fuse Characteristics	Comments	Load [%]	Duty Cycle [%]	Average Power Consumption [kW]	Load [%]	Duty Cycle [%]	Average Power Consumption [kW]	Load [%]	Duty Cycle [%]	Average Power Consumption [kW]
=JA01+UC07-EB01-1	Container Heater, Element 1/3	40ft Container Heating Element 1	+UC07	40ft Container HVAC System	400	13.0	9.00	Solid-State Contactor	=BA20+UC20-QB13	MCCB	=LA01+UC20-FC13	16A, B-curve	480V Heater operated at 400V	100	100	9.00	100	0	0.00	100	0	0.00
=JA01+UC07-EB01-2	Container Heater, Element 2/3	40ft Container Heating Element 2	+UC07	40ft Container HVAC System	400	13.0	9.00	Solid-State Contactor	=BA20+UC20-QB14	MCCB	=LA01+UC20-FC14	16A, B-curve	480V Heater operated at 400V	100	0	0.00	100	0	0.00	100	0	0.00
=JA01+UC07-EB01-3	Container Heater, Element 3/3	40ft Container Heating Element 3	+UC07	40ft Container HVAC System	400	13.0	9.00	Solid-State Contactor	=BA20+UC20-QB15	MCCB	=LA01+UC20-FC15	16A, B-curve	480V Heater operated at 400V	100	0	0.00	100	0	0.00	100	0	0.00
=JA01+UC07-GQ08	DCDC Cooling Fan A	Heater/Cooling Fan 40ft Container 1/2	+UC07	40ft Container HVAC System	400	1.4	1.00	EC Motor	n/a	MCCB	=BA20+UC20-FC16	6A, B-curve	Fan with EC motor	70	100	0.70	70	0	0.00	40	100	0.40
=JA01+UC07-GQ09	DCDC Cooling Fan B	Heater/Cooling Fan 40ft Container 2/2	+UC07	40ft Container HVAC System	400	1.4	1.00	EC Motor	n/a	MCCB	=BA20+UC20-FC17	6A, B-curve	Fan with EC motor	70	100	0.70	70	0	0.00	40	100	0.40
=JA01+DA01-GQ06	Ventilation Intake Fan A	Upper Fan	+DA01	40ft Container, Inside	400	5.1	3.50	EC Motor	n/a	MCCB	=BA20+UC20-FC11	6A, B-curve	Fan with EC motor	0	0	0.00	0	0	0.00	0	0	0.00
=JA01+DA01-GQ07	Ventilation Intake Fan B	Lower Fan	+DA01	40ft Container, Inside	400	5.1	3.50	EC Motor	n/a	MCCB	=BA20+UC20-FC12	6A, B-curve	Fan with EC motor	0	0	0.00	0	0	0.00	0	0	0.00
=BA20+UC20-TB01	FCwave1+2 PSU	24V PSU for FCwave 1+2 with UPS	+UC20	40ft Control Cabinet	400	1.4	0.96	n/a	n/a	MCCB	=BA20+UC20-FC20	6A, B-curve		20	100	0.19	20	100	0.19	20	100	0.19
=BA20+UC20-TB01	FCwave3+4 PSU	24V PSU for FCwave 3+4 with UPS	+UC20	40ft Control Cabinet	400	1.4	0.96	n/a	n/a	MCCB	=BA20+UC20-FC21	6A, B-curve		20	100	0.19	20	100	0.19	20	100	0.19
=BA20+UC20-TB01	FCwave5+6 PSU	24V PSU for FCwave 5+6 with UPS	+UC20	40ft Control Cabinet	400	1.4	0.96	n/a	n/a	MCCB	=BA20+UC20-FC23	6A, B-curve		20	100	0.19	20	100	0.19	20	100	0.19
=BA20+UC20-TB30	Control System PSU	24V PSU for Control System with UPS	+UC20	40ft Control Cabinet	400	0.7	0.48	n/a	n/a	MCCB	=BA20+UC20-FC30	6A, B-curve		80	100	0.38	80	100	0.38	80	100	0.38
=BA20+UC30-EA01	Cabinet Lighting	Cabinet Lighting for Coolant Control Cabinet	+UC30	Coolant Skid Cabinet	230	0.1	0.05	Integrated Movement Sensor	n/a	MCCB	=BA20+UC30-FC02	1A, C-curve		100	5	0.00	100	5	0.00	100	5	0.00
=BA20+UC30-EB01	Cabinet Heater	Cabinet Heater for Coolant Control Cabinet	+UC30	Coolant Skid Cabinet	230	0.4	0.15	Thermostat	=BA20+UC30-BT01	MCCB	=BA20+UC30-FC03	4A, C-curve		100	100	0.15	100	0	0.00	100	0	0.00
=BA20+UC30-TB30	Control System PSU	24V PSU for Control System with UPS	+UC30	Coolant Skid Cabinet	400	0.7	0.48	n/a	n/a	MCCB	=BA20+UC30-FC100	6A, B-curve		100	100	0.48	100	100	0.48	100	100	0.48
=HE03+DA01-GP11	Coolant Pump, LT	Electronics Cooling	+DA01	40ft Container, Inside	400	5.8	4.00	VFD	=HE03-DA01-TA11	MCCB	=BA20+UC30-FC11	10A, B-curve		80	0	0.00	80	0	0.00	80	0	0.00
=HE01+DA02-GP19	Coolant Pump, HT1	Coolant Pump for FCwave 1-3	+DA02	Coolant Skid	400	21.7	15.00	VFD	=HE01+UC30-TA19	MCCB	=BA20+UC30-FC28	25A, B-curve		60	0	0.00	60	0	0.00	60	0	0.00
=HE02+DA02-GP29	Coolant Pump, HT2	Coolant Pump for FCwave 4-6	+DA02	Coolant Skid	400	21.7	15.00	VFD	=HE01+UC30-TA29	MCCB	=BA20+UC30-FC38	25A, B-curve		60	0	0.00	60	0	0.00	60	0	0.00
=HE01+DA02-GQ11	HT1 Ventilation Fan 1		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA11	MCCB	=BA20+UC30-FC20	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE01+DA02-GQ12	HT1 Ventilation Fan 2		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA12	MCCB	=BA20+UC30-FC21	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE01+DA02-GQ13	HT1 Ventilation Fan 3		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA13	MCCB	=BA20+UC30-FC22	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE01+DA02-GQ14	HT1 Ventilation Fan 4		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA14	MCCB	=BA20+UC30-FC23	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE01+DA02-GQ15	HT1 Ventilation Fan 5		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA15	MCCB	=BA20+UC30-FC24	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE01+DA02-GQ16	HT1 Ventilation Fan 6		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA16	MCCB	=BA20+UC30-FC25	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE02+DA02-GQ21	HT2 Ventilation Fan 1		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA21	MCCB	=BA20+UC30-FC30	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE02+DA02-GQ22	HT2 Ventilation Fan 2		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA22	MCCB	=BA20+UC30-FC31	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE02+DA02-GQ23	HT2 Ventilation Fan 3		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA23	MCCB	=BA20+UC30-FC32	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE02+DA02-GQ24	HT2 Ventilation Fan 4		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA24	MCCB	=BA20+UC30-FC33	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE02+DA02-GQ25	HT2 Ventilation Fan 5		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA25	MCCB	=BA20+UC30-FC34	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE02+DA02-GQ26	HT2 Ventilation Fan 6		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA26	MCCB	=BA20+UC30-FC35	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HE03+DA04-GQ31	LT Ventilation Fan 1		+DA02	Coolant Skid	400	5.8	4.00	VFD	=HE01+UC41-TA31	MCCB	=BA20+UC30-FC10	6A, B-curve		70	0	0.00	70	0	0.00	70	0	0.00
=HA01+DA01-EA01	Hydrogen Heater, Heater 1/2		+DA02	40ft Container, Outside	400	13.0	9.00	Solid-State Contactor	=BA30+UC30-QA10	MCCB	=BA20+UC30-FC41	16A, Z-curve		100	40	3.60	100	20	1.80	100	0	0.00
=HA01+DA01-EA02	Hydrogen Heater, Heater 2/2		+DA02	40ft Container, Outside	400	13.0	9.00	Solid-State Contactor	=BA30+UC30-QA11	MCCB	=BA20+UC30-FC42	16A, Z-curve		100	0	0.00	100	0	0.00	100	0	0.00
=JA01+DA03-EB02	Container Heater, 10ft	Heating Element, 10ft container	+DA03	10ft Container, Inside	400	13.0	9.00	Integrated Thermostat	n/a	MCCB	=LA01+UC31-FC04	10A, B-curve		100	25	2.25	100	0	0.00	100	0	0.00
=JA01+DA03-EB02	Container Heater Fan, 10ft		+DA03	10ft Container, Inside	400	1.0	0.70	Contactor	=LA01+UC31-QA01	MCCB	=LA01+UC31-FC07	6A, B-curve		100	100	0.70	100	0	0.00	100	0	0.00
=JA01+DA03-GQ03	Ventilation Fan, 10ft		+DA03	10ft Container, Inside	400	8.2	5.70	EC Motor	n/a	MCCB	=LA01+UC31-FC04	10A, B-curve	Fan with EC motor	30	0	0.00	30	0	0.00	30	100	1.71
=LA01+UC31-TB01	Control System PSU	Control System	+UC31	10ft Control Cabinet	400	0.7	0.48	n/a	n/a	MCCB	=LA01+UC31-FC01	4A, B-curve		80	100	0.38	80	100	0.38	80	100	0.38
=LA01+UC31-TB02	Control System PSU	Breaker Supply PSU	+UC31	10ft Control Cabinet	400	1.4	0.96	n/a	n/a	MCCB	=LA01+UC31-FC02	4A, B-curve		80	1	0.01	80	1	0.01	80	1	0.01
													Summation:			18.93 [kW]			3.63 [kW]			4.34 [kW]