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Project:	BOSCH

Battery Operation Requirements			
Quiescent mode	24	hour	When the system is powered by a power supply conforming to EN 54-4 and no other functional condition is indicated.
Evacuation time	30	min.	Maximum time interval the voice alarm system must be used for evacuation.
Safety factor (tolerance, temperature)	30	%	Additional battery capacity to compensate for aging and low temperature operation, appr. 10%, as well as reduced capacity, appr. 20%, due to fast discharge of the battery (Peukert's law).

Cluster >		1	2	3	4	5	6
Required battery capacity incl. safety factor (min. 100Ah - max. 230Ah)	Ah	165	130	0	0	0	0
Maximum battery current (check battery specification)	A	61,9	59,3	0,0	0,0	0,0	0,0
Mains current draw at 230VAC (during alarm and max. battery charging)	A	3,59	3,44	0,00	0,00	0,00	0,00
Mains current draw at 115VAC (during alarm and max. battery charging)	A	7,17	6,87	0,00	0,00	0,00	0,00

		Active (idle)	Active
Total power loss of amplifiers	W	243	604
Total heat loss (heat dissipation within the rack)	BTU/h	829	2062

i For more information about battery and heat loss calculation please read the applicable sections in chapter "System composition" of the PRAESENSA Installation manual.

This tool calculates the power requirements for a PRAESENSA system. It calculates up to 6 clusters. A cluster consists of one PRA-MPS3 and the connected devices to be supplied with power. Use the safety factor in the calculation of the battery capacity to compensate the tolerances of battery brands and types. Please also check the rack space requirements for the calculated battery types. For each additional rack a new calculation has to be made.

Special Note: Maximum battery current must be observed while it highly varies among different battery types.

The Power calculator serves as a support tool only. It cannot substitute professional advice from technical experts. For further details, our sales and support team will be happy to assist. Bosch does not warrant that the tool will fulfill any specific or general user requirement and disclaims any warranty for fitness for a specific purpose. To the extent permitted by law, Bosch will not accept any liability for any loss, damage or other consequences resulting from the use of the tool.