Step 2: ASSEMBLY planning and design verification

Temperature rise verification up to 630 A

You may use the table below for a simplified calculation up to 630 A

Position	Number	Manufacturer	Type	Description	Rated current of the equipment I_n	P_{vn}	Derating [1]	Rated current of a circuit I_{nc}	Assumed load factor [2]	Assumed operating current I_B	Power loss of a device at I_B	Sum of the power losses
					(A)	(W)		(A)		(A)	(W)	(W)
										$I_B = I_{nc} \cdot$ assumed load factor	$P_B = P_{vn} \cdot (I_B/ I_n)^2$	$P_{vB} = P_B \cdot$ number
										Sum of the installed power losses		
										Wiring power loss (%) [3]	30	
										Power loss dissipation of the enclosure		
										Difference = power loss dissipation – sum of the installed power loss= $P_{vzul} - \sum P_{vB}$		

1) According to IEC 61439-2 Table 101 – Values of assumed loading – depending on the number of equipment used in the same time
2) Manufacturer information for equipment under different conditions, but not less than 0.8 in line with section 10.10.4.2.1
3) The wiring power loss is assumed as percentage of the equipment power losses – proposal: 30 %