Planning sheet for calculating the DC link power $P_{DC\ link}$

Axis des.	Order No. of the motor	n_{rated} [rpm]	M_0 [Nm]	I_{rated} [A]	I_0 (PS) [A]	$P_{calcFDD}$ [kW] 1)	$\tilde{n}/n_{rated}$	$P_{calcFDD}$ ($\tilde{n}/n_{rated}$) [kW]
Range I for $P_{calc\ FDD}$ from 0 ... 1.8 kW								
1								
2								
3								
4								
5								
6								
						Sum Range I		
Range II for $P_{calc\ FDD}$ from 1.8 ... 8.8 kW								
1								
2								
3								
4								
5								
6								
						Sum Range II		
Range III for $P_{calc\ FDD}$ from 8.8 ... 27 kW								
1								
2								
3								
4								
5								
6								
						Sum Range III		

		K_I					
Sum Range I		x		=			
		K_{II}			+		
Sum Range II		x		=			
		K_{III}			+		
Sum Range III		x		=			

	x 1.1 =	**DC link power $P_{DC\ link\ FDD}$**	kW
+		**DC link power $P_{DC\ link\ MSD}$**	kW
=		**DC link power $P_{DC\ link}$**	kW

Application	Speed ratio $\tilde{n}/n_{rated}$
Feed drives Robot drives	0.4 ... 0.7 0.9 ... 1
Main spindle drives with 1FT	1

Feed axes for each range	Simultaneity factor K for each
1	1
2	0.63
3	0.5
4	0.38
5	0.33
6	0.28

1) See technical specifications for the motors.