

CONTINUOUS DUTY

4 poles
50 Hz - 1500 rpm / 60 Hz - 1800 rpm

AMBIENT TEMPERATURE		40°C	WINDING DATA										Winding code	M0
TEMPERATURE RISE		H											Number of leads	12
INSULATION CLASS		H											Winding pitch	2/3
POWER FACTOR		0,8												
FREQUENCY		Hz	50 Hz				60 Hz							
VOLTAGE	Connections	Star series Star parallel	V	380	400	415	440	380	416	440	460	480		
				190	200	208	220	190	208	220	230	240		
RATING POWER			kVA	680	680	680	680	700	740	775	805	825		
			kW	544	544	544	544	560	592	620	644	660		
EFFICIENCY [%] @ 0,8 p.f.			4/4	94,4	94,7	94,8	94,8	94,3	94,6	94,9	95,0	95,1		
			3/4	95,2	95,3	95,3	95,2	94,8	95,1	95,3	95,4	95,4		
			2/4	95,5	95,4	95,4	95,4	95,0	95,2	95,4	95,5	95,5		
EFFICIENCY [%] @ 1 p.f.			4/4	95,6	95,8	95,9	95,9	95,5	95,7	96,0	96,1	96,1		
			3/4	96,2	96,3	96,3	96,2	95,9	96,1	96,3	96,3	96,4		
			2/4	96,4	96,4	96,4	96,3	96,1	96,2	96,4	96,4	96,4		
SHORT CIRCUIT RATIO			SCR	0,27	0,3	0,32	0,36	0,22	0,25	0,27	0,28	0,30		
REACTANCES [%]														
Direct axis synchronous		X _d	387	349	324	288	353	421	394	375	353			
Quadrature axis synchronous		X _q	204	184	171	152	252	222	208	198	186			
Direct axis transient		X' _d	33,6	30,3	28,1	25,0	41,5	36,6	34,2	32,5	30,6			
Direct axis subtransient		X'' _d	13,6	12,3	11,4	10,2	16,8	14,9	13,9	13,2	12,4			
Quadrature axis subtransient		X'' _q	17,4	15,7	14,6	13,0	21,5	19,0	17,7	16,9	15,9			
Negative sequence		X ₂	15,5	14,0	13,0	11,6	19,2	16,9	15,8	15,0	14,2			
Zero sequence		X ₀	3,5	3,2	2,9	2,6	4,3	3,8	3,6	3,4	3,2			
TIME CONSTANTS [s]														
Open circuit		T' _{do}					2,72							
Transient		T' _d					0,23							
Subtransient		T'' _d					0,016							
Armature		T _a					0,022							

MECHANICAL CHARACTERISTICS

D-end bearing/Lubrication	6322 C3 / With grease nipple	
N-end bearing/Lubrication	6317 2Z C3 / Prelubricated	
Overspeed [r.p.m.]	2250	
Inertia (J) [kgm ²]	Refer to B34 construction	11,69
Weight [kg]	Refer to B34 construction	1800
Method of cooling	IC01	
Cooling air required [m ³ /s] @ 50/60 Hz	0,93 / 1,12	
Degree of protection	IP23	
Types of construction available	B2 (SAE) - IM B34	
Direction of rotation (Standard)	CW	

OTHER DATA

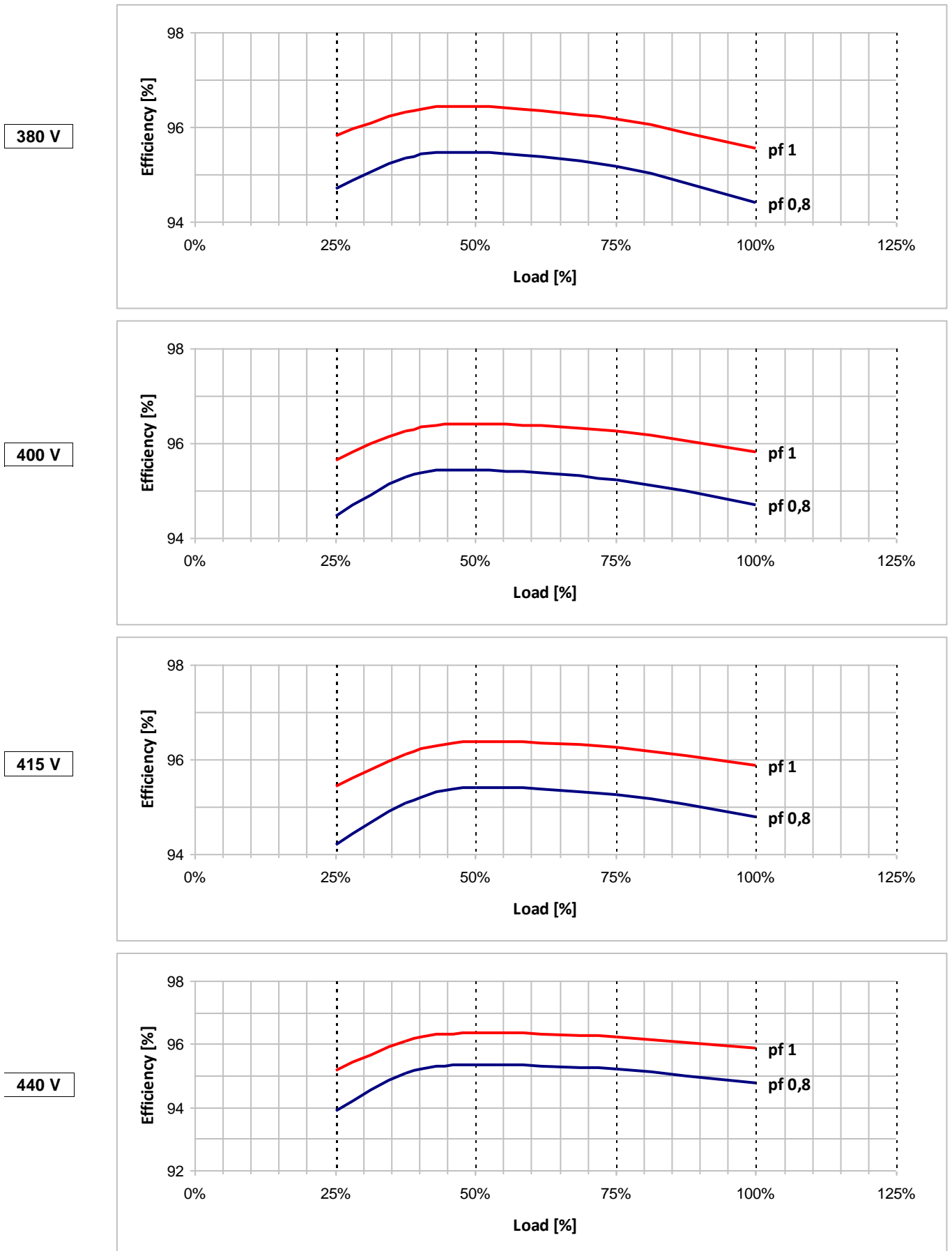
Phase resistance [Ω] @ 20 °C - Star series	0,004
Overloads	10% for 1 hour every 12 hours
3-phase short circuit sustained current	≥ 300 % (3 I _n) with auxiliary winding
Voltage regulation accuracy	± 0,5 % I _n steady state condition
Radio interference	EN 55011 - Class B Group 1
Wave form THF	< 2%
Total harmonic content	< 2% - At no load

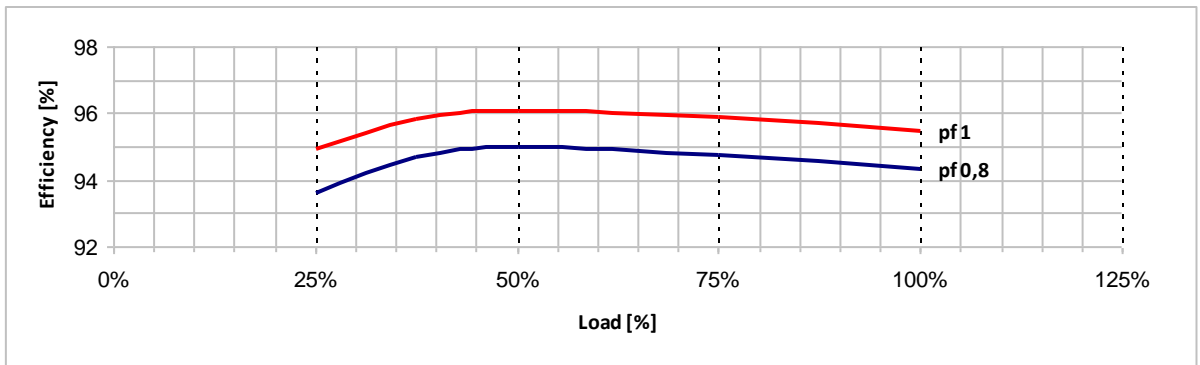
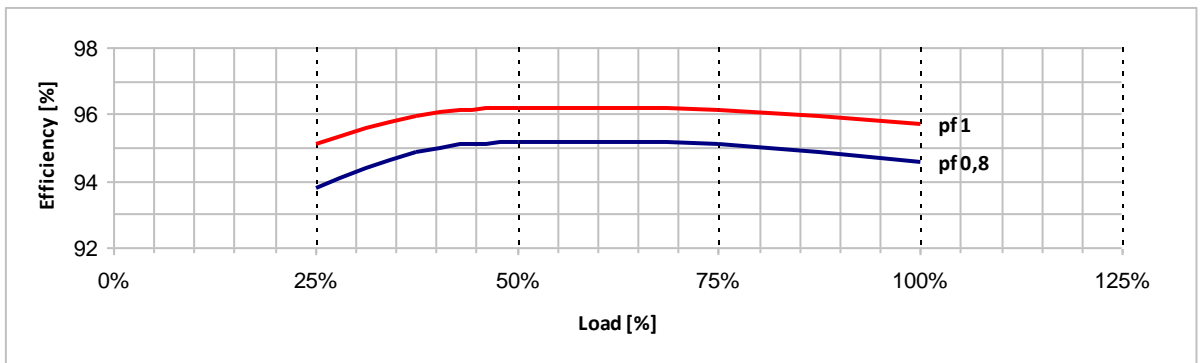
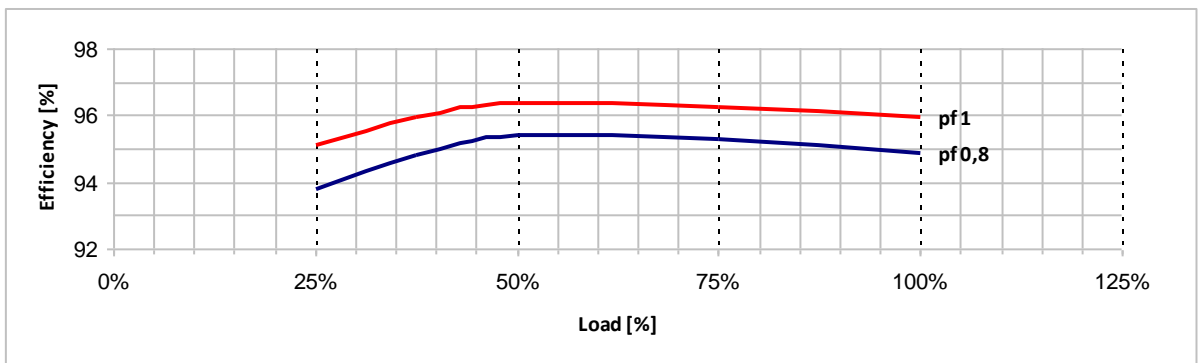
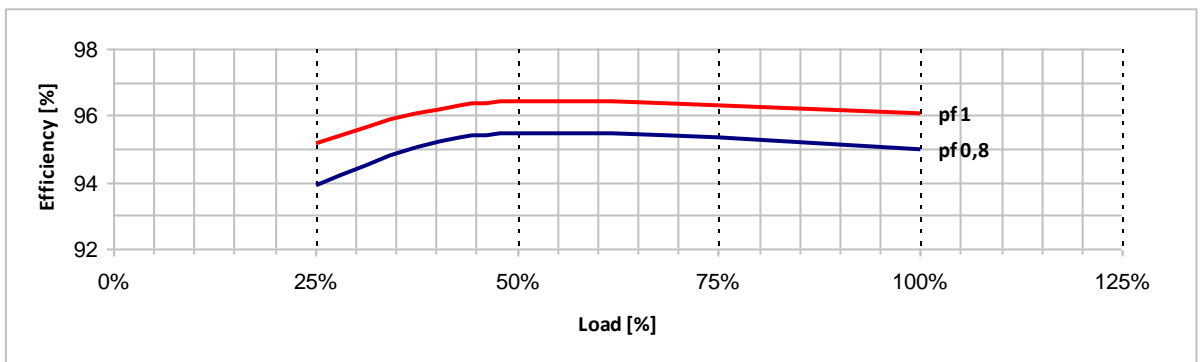
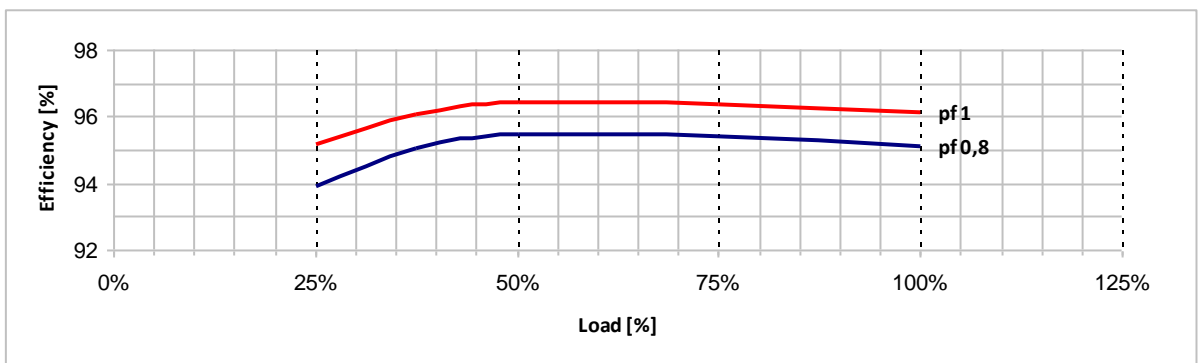
STANDARDS

IEC 60034-1; CEI 2-3; BS 4999-5000; VDE 0530; NF 51-100,111; OVE M-10, NEMA MG 1.22.

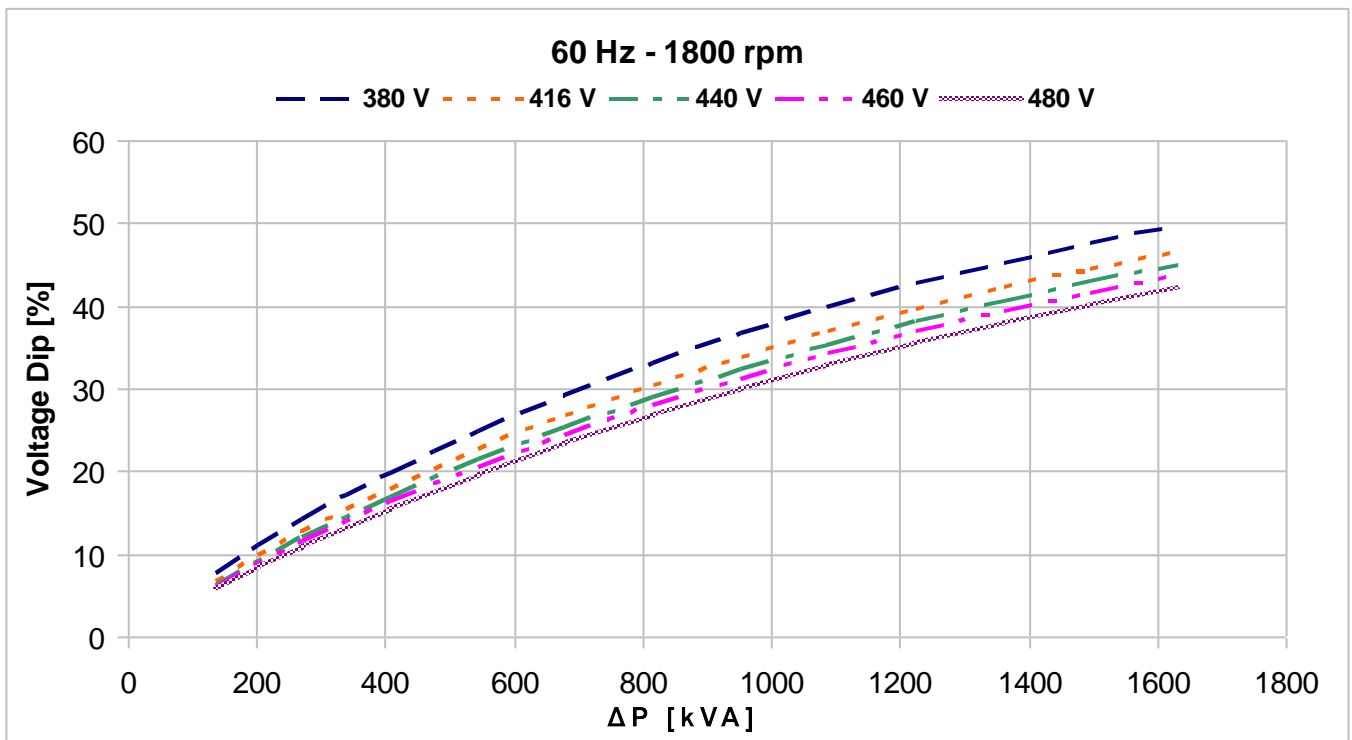
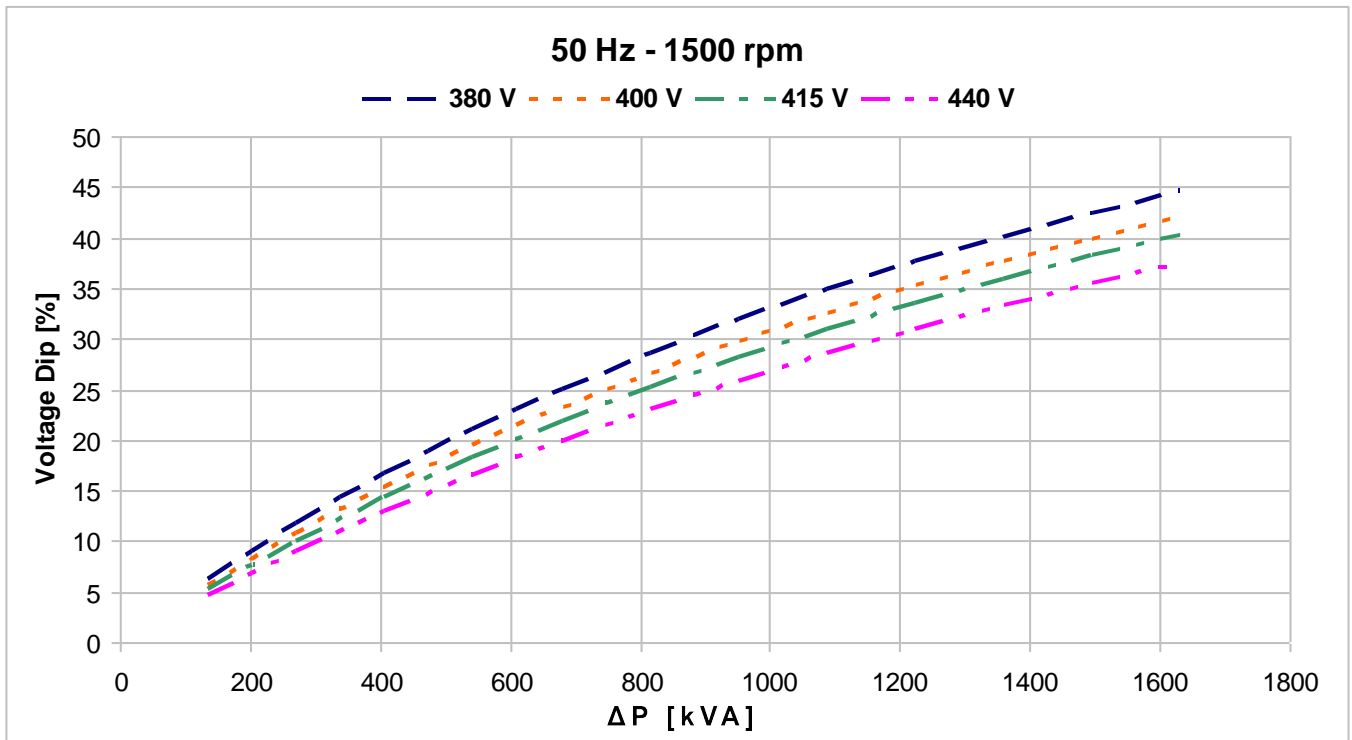
Typical efficiency curves

50 Hz - 1500 rpm



Typical efficiency curves
60 Hz - 1800 rpm
380 V

416 V

440 V

460 V

480 V


Locked rotor motor starting curves (*)



$$\Delta P = P_n \times \frac{I_s / I_n}{\cos \varphi_n \times \eta_n}$$

(*): A coefficient of 0,85 must be applied to the voltage dip if the load has a power factor equal or greater than 0,8.