

CONTINUOUS DUTY
**4 poles
50 Hz - 1500 rpm / 60 Hz - 1800 rpm**

	40°C											
AMBIENT TEMPERATURE TEMPERATURE RISE INSULATION CLASS POWER FACTOR	H H 0,8	WINDING DATA										
							Winding code Number of leads Winding pitch					M0 12 2/3
FREQUENCY	Hz	50 Hz				60 Hz						
VOLTAGE	V	380	400	415	440	380	416	440	460	480		
Connections	Star series Star parallel	190	200	208	220	190	208	220	230	240		
RATING POWER	kVA kW	350	350	350	340	360	370	400	420	425		
		280	280	280	272	288	296	320	336	340		
EFFICIENCY [%] @ 0,8 p.f.	4/4 3/4 2/4	93,2	93,4	93,4	93,4	92,8	93,3	93,5	93,7	94,0		
		93,8	93,9	93,9	93,9	93,4	93,7	93,9	94,0	94,2		
		94,1	94,1	94,1	94,1	93,5	93,8	94,0	94,1	94,1		
EFFICIENCY [%] @ 1 p.f.	4/4 3/4 2/4	94,6	94,8	94,8	94,8	94,3	94,7	94,8	95,0	95,3		
		95,1	95,2	95,2	95,2	94,8	95,0	95,2	95,3	95,4		
		95,3	95,3	95,3	95,3	94,8	95,1	95,2	95,3	95,4		
SHORT CIRCUIT RATIO	SCR	0,32	0,35	0,38	0,44	0,26	0,30	0,31	0,32	0,35		
REACTANCES [%]												
Direct axis synchronous	Xd	429	387	360	311	392	454	439	421	392		
Quadrature axis synchronous	Xq	240	217	202	174	297	255	246	236	220		
Direct axis transient	X'd	41,1	37,1	34,5	29,8	50,7	43,5	42,0	40,4	37,5		
Direct axis subtransient	X''d	19,1	17,2	16,0	13,8	23,5	20,2	19,5	18,7	17,4		
Quadrature axis subtransient	X''q	21,4	19,3	17,9	15,5	26,4	22,6	21,9	21,0	19,5		
Negative sequence	X ₂	20,2	18,2	16,9	14,6	24,9	21,3	20,6	19,8	18,4		
Zero sequence	X ₀	4,5	4,1	3,8	3,3	5,6	4,8	4,6	4,4	4,1		
TIME CONSTANTS [s]												
Open circuit	T'do						1,38					
Transient	T'd						0,13					
Subtransient	T''d						0,011					
Armature	T _a						0,015					

MECHANICAL CHARACTERISTICS

D-end bearing/Lubrication	6319 C3 / With grease nipple
N-end bearing/Lubrication	6315 2Z C3 / Prelubricated
Overspeed [r.p.m.]	2250
Inertia (J) [kgm ²]	Refer to B34 construction 4,25
Weight [kg]	Refer to B34 construction 920
Method of cooling	IC01
Cooling air required [m ³ /s] @ 50/60 Hz	0,83 / 1,00
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	0,013
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

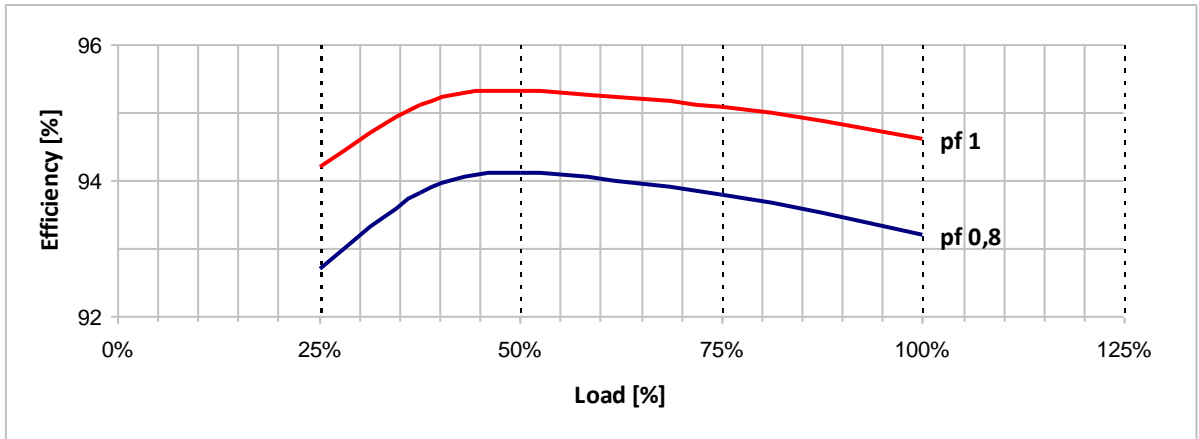
STANDARDS

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

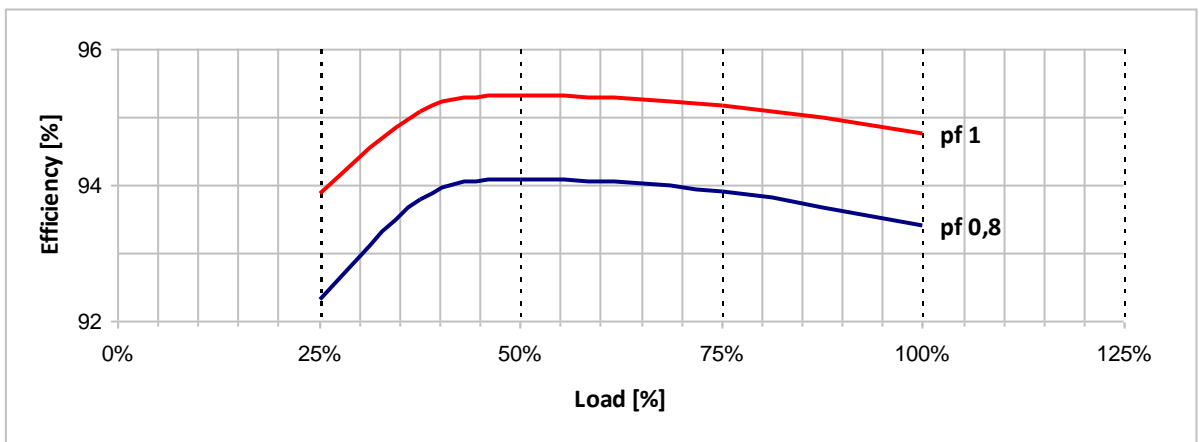
Typical efficiency curves

50 Hz - 1500 rpm

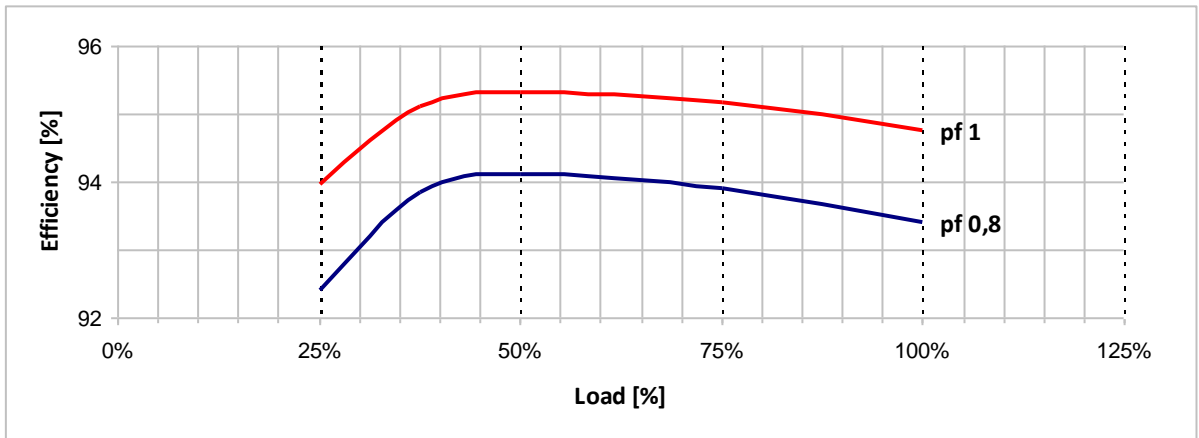
380 V



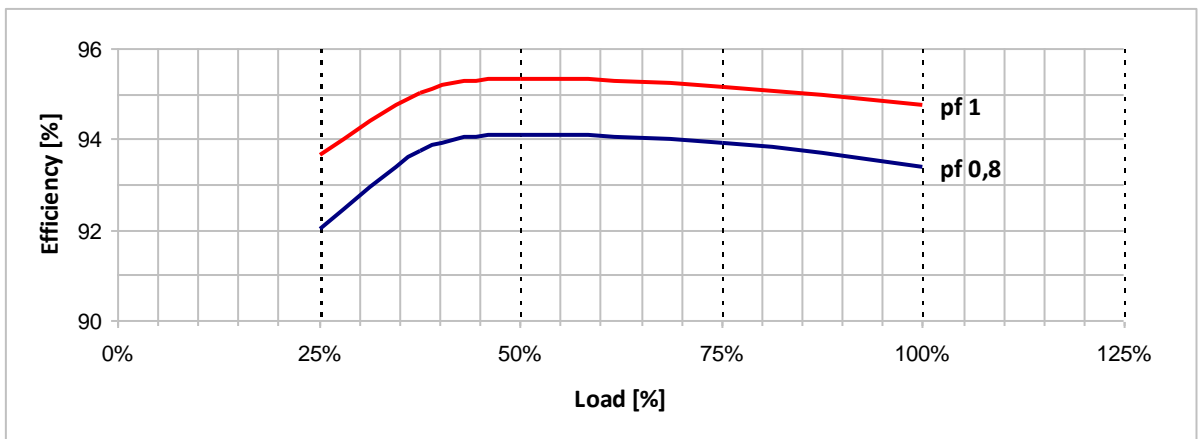
400 V



415 V



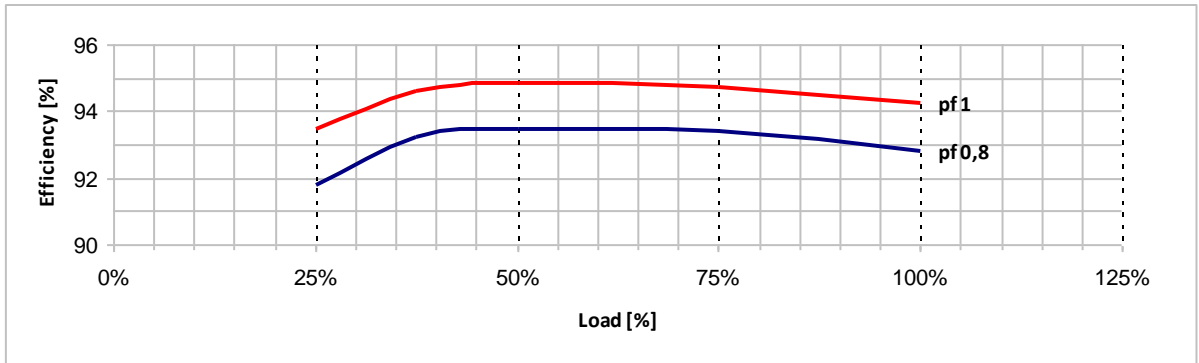
440 V



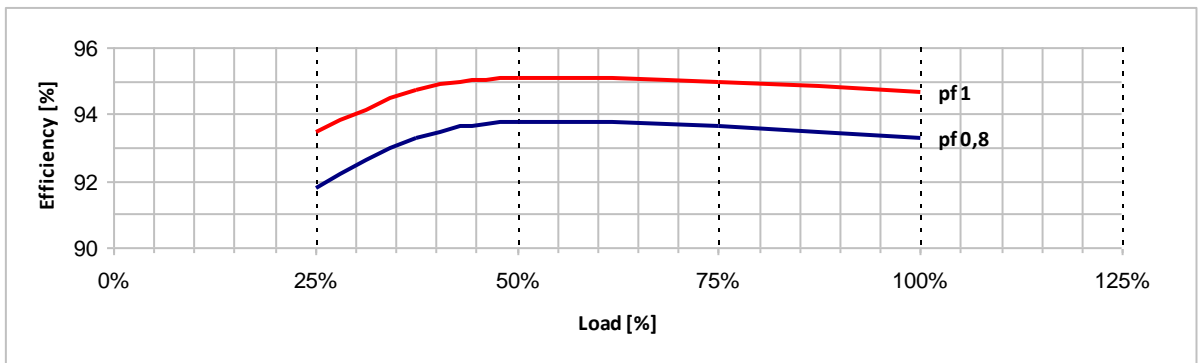
Typical efficiency curves

60 Hz - 1800 rpm

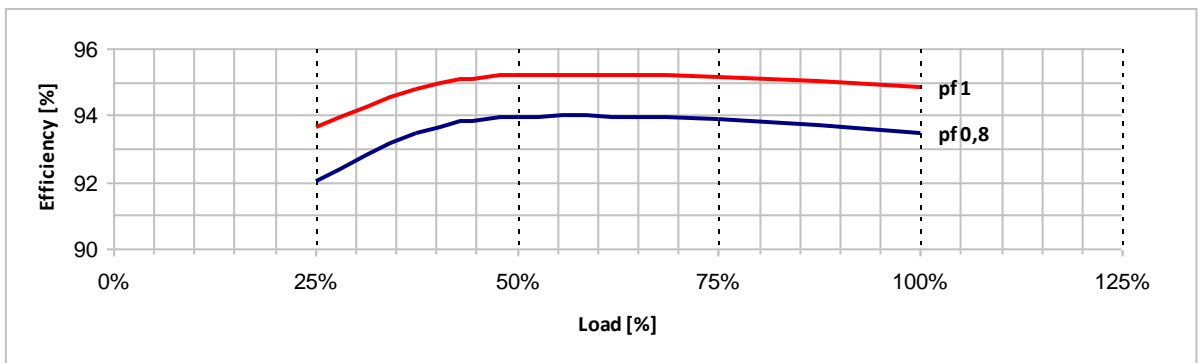
380 V



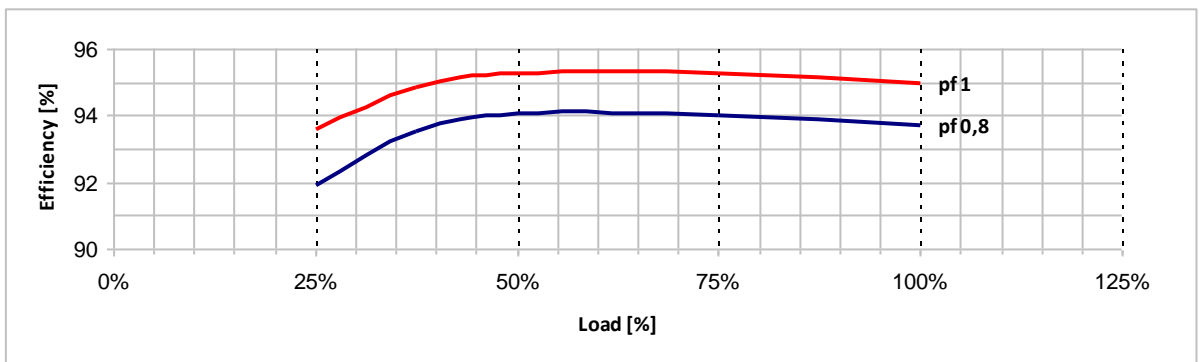
416 V



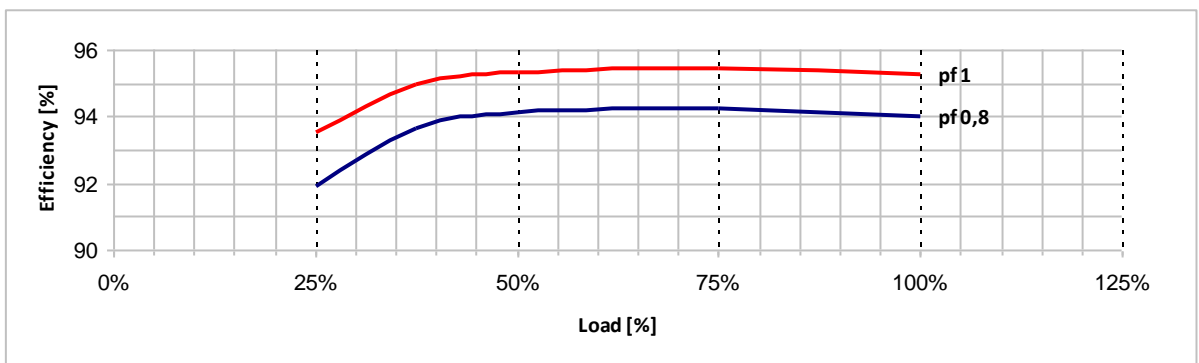
440 V

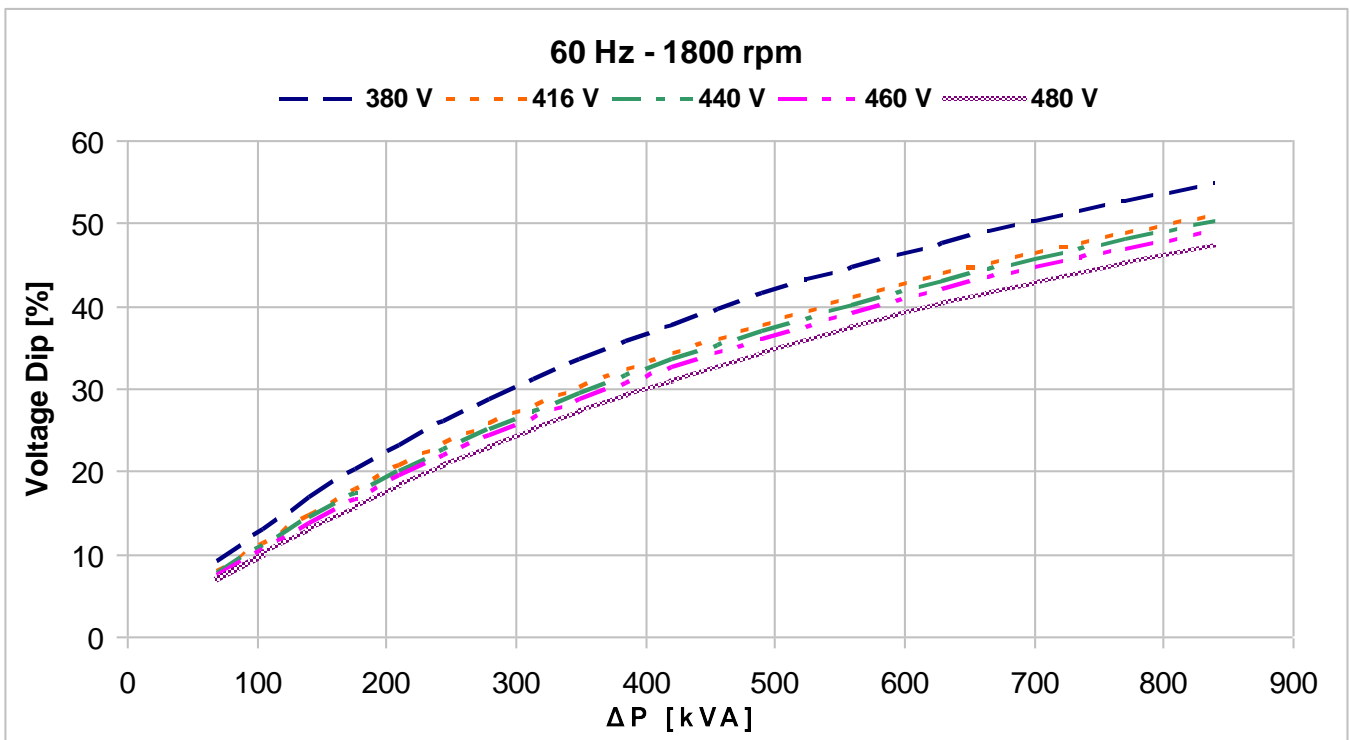
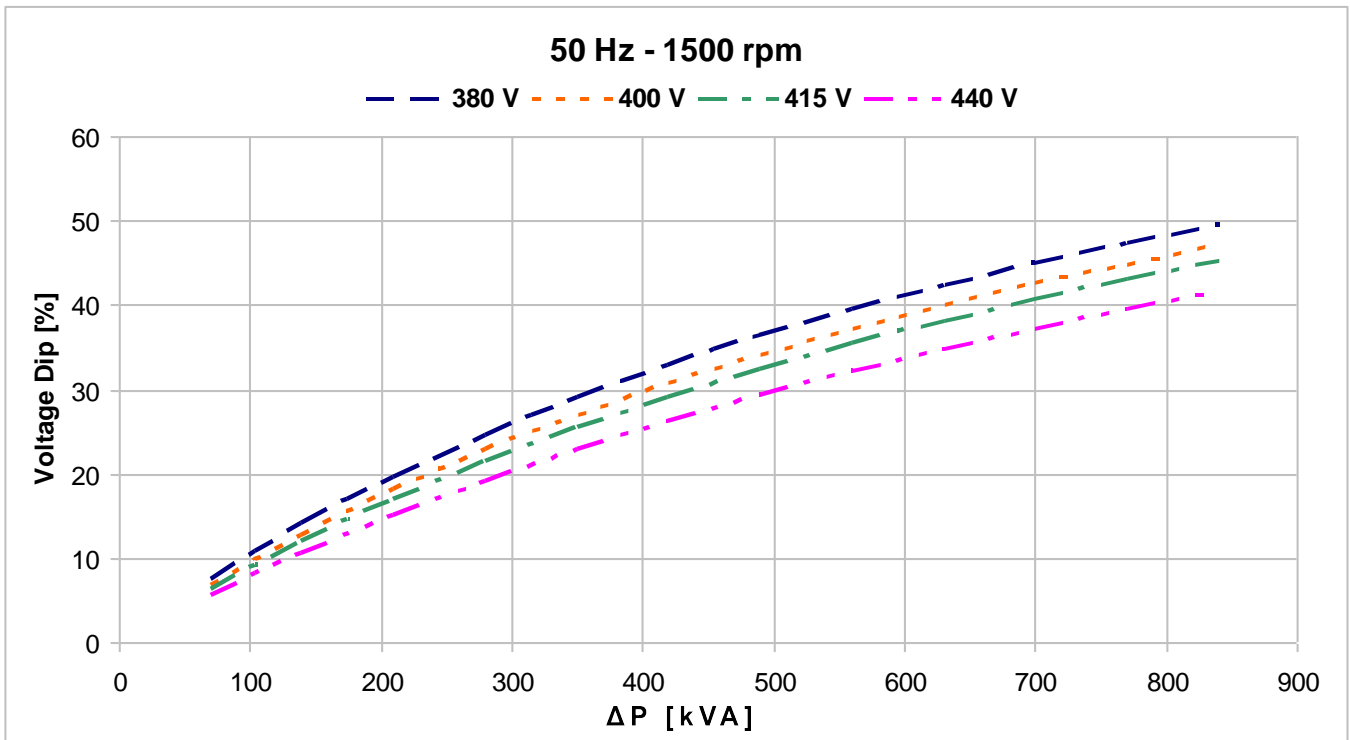


460 V



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.