

CONTINUOUS DUTY

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

AMBIENT TEMPERATURE		40°C	WINDING DATA						
TEMPERATURE RISE		H	Winding code						
INSULATION CLASS		H	Number of leads						
POWER FACTOR		0,8	Winding pitch						
			17						
			6						
			2/3						
FREQUENCY		Hz	50 Hz			60 Hz			
VOLTAGE	Star	V	380	400	415	416	440	460	480
	Delta		220	230	240	240	254	265	277
RATING		kVA	800	800	800	880	920	950	960
		kW	640	640	640	704	736	760	768
EFFICIENCY [%] @ 0,8 p.f.		4/4	94,9	95,0	95,1	95,2	95,2	95,2	95,3
		3/4	95,4	95,5	95,6	95,5	95,6	95,6	95,7
		2/4	95,7	95,6	95,6	95,6	95,7	95,8	95,8
EFFICIENCY [%] @ 1 p.f.		4/4	96,0	96,1	96,1	96,2	96,2	96,2	96,3
		3/4	96,4	96,4	96,5	96,4	96,5	96,6	96,6
		2/4	96,6	96,6	96,6	96,5	96,6	96,7	96,7
SHORT CIRCUIT RATIO		SCR	0,31	0,34	0,37	0,28	0,30	0,32	0,34
REACTANCES [%]									
Direct axis synchronous		X _d	353	319	296	389	364	344	319
Quadrature axis synchronous		X _q	196	177	164	216	202	191	177
Direct axis transient		X' _d	31,5	28,4	26,4	34,7	32,4	30,6	28,4
Direct axis subtransient		X'' _d	13,1	11,8	11,0	14,4	13,5	12,7	11,8
Quadrature axis subtransient		X'' _q	16,8	15,2	14,1	18,6	17,3	16,4	15,2
Negative sequence		X ₂	15,0	13,5	12,5	16,5	15,4	14,5	13,5
Zero sequence		X ₀	3,2	2,9	2,7	3,5	3,3	3,1	2,9
TIME CONSTANTS [s]									
Open circuit		T' _{do}	2,6						
Transient		T' _d	0,23						
Subtransient		T'' _d	0,016						
Armature		T _a	0,023						

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 13,12
Weight [kg]	Refer to B34 construction 2050
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	3
Overloads	10% for 1 hour every 12 hours
3-phase short circuit sustained current	$\geq 300\%$ (3 I _n) with auxiliary winding
Voltage regulation accuracy	$\pm 0,5\%$ 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

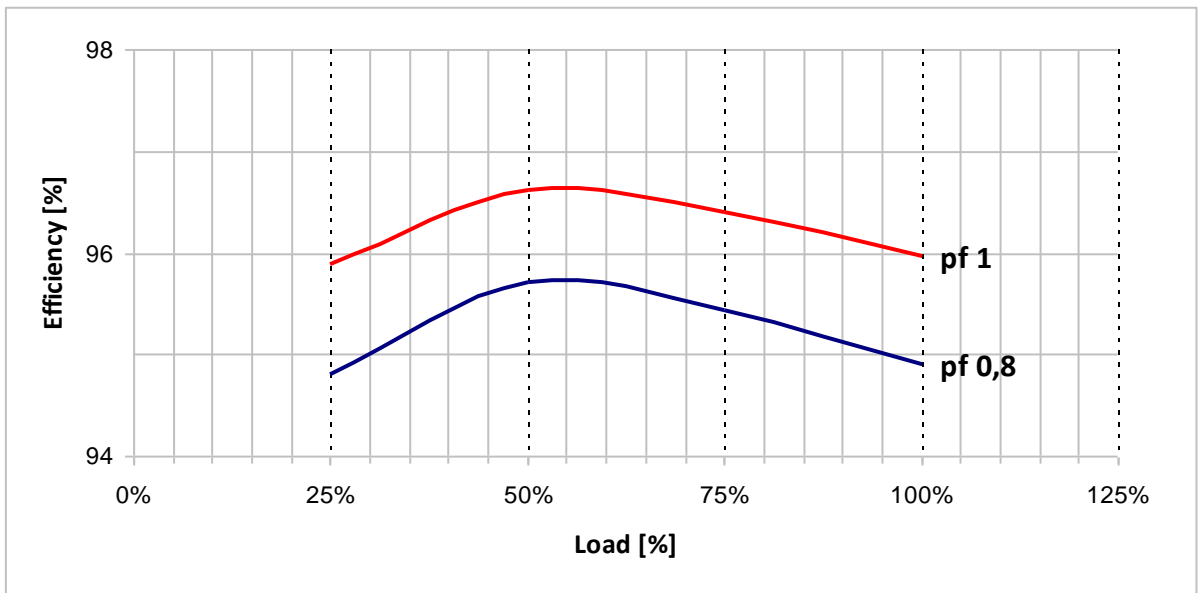
IEC 60034-1; CEI 2-3; BS 4999-5000; VDE 0530; NF 51-100,111; OVE M-10, NEMA MG 1.22.

Typical efficiency curves
50 Hz - 1500 rpm

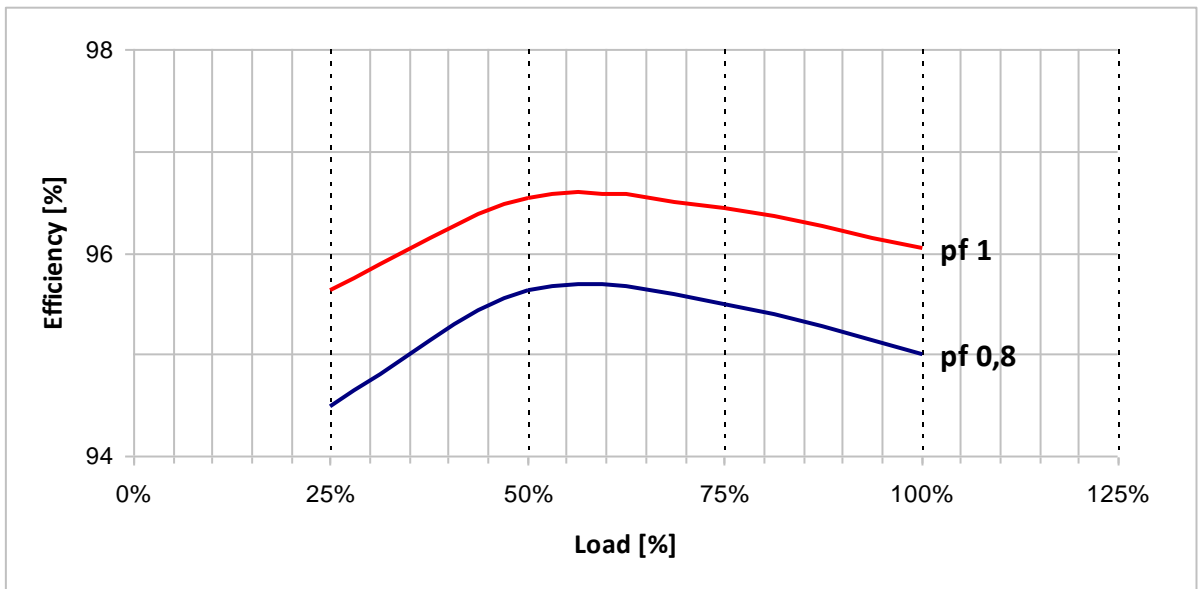
Typical efficiency curves

50 Hz - 1500 rpm

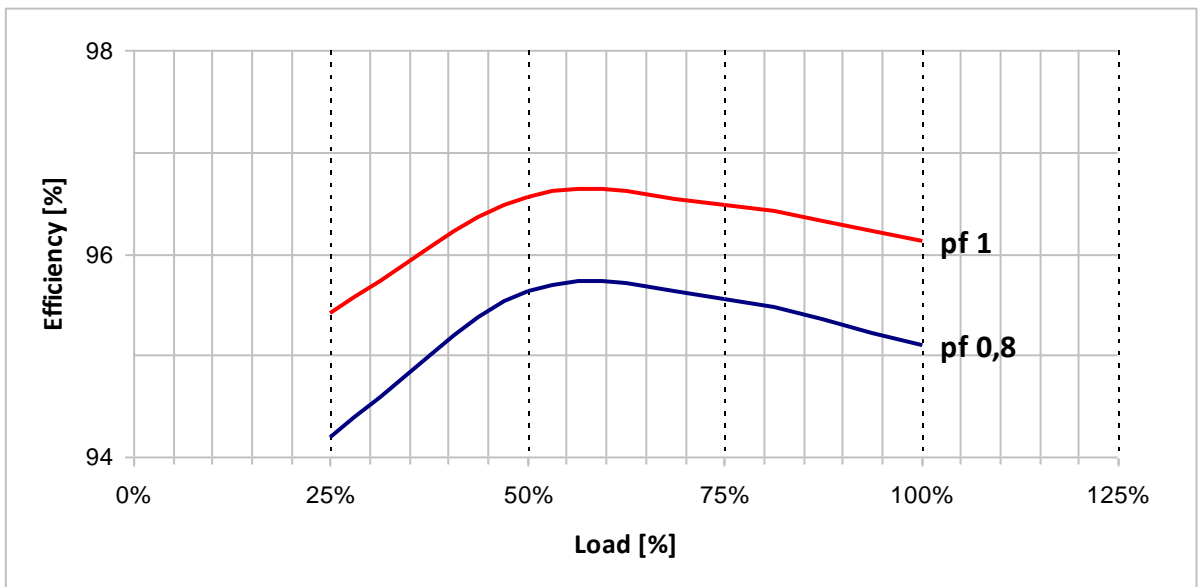
380 V

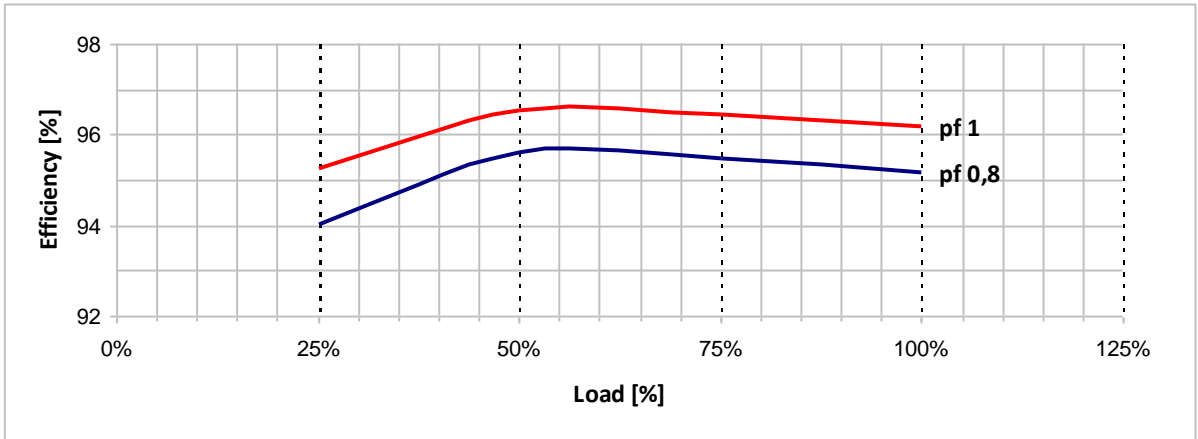
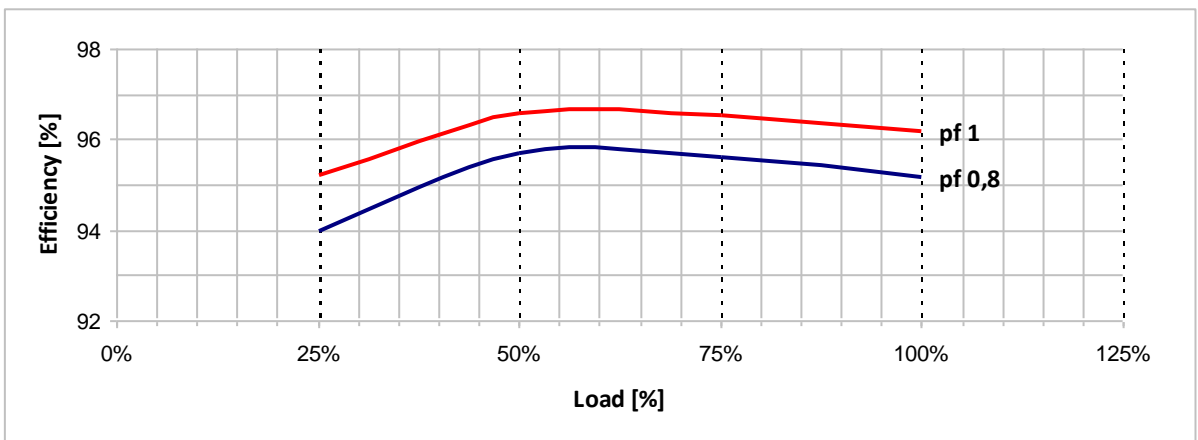
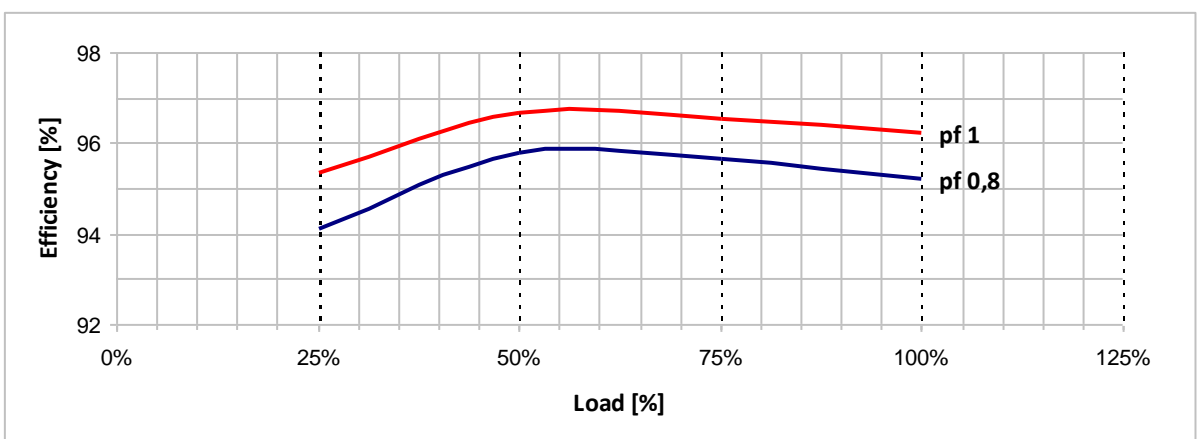
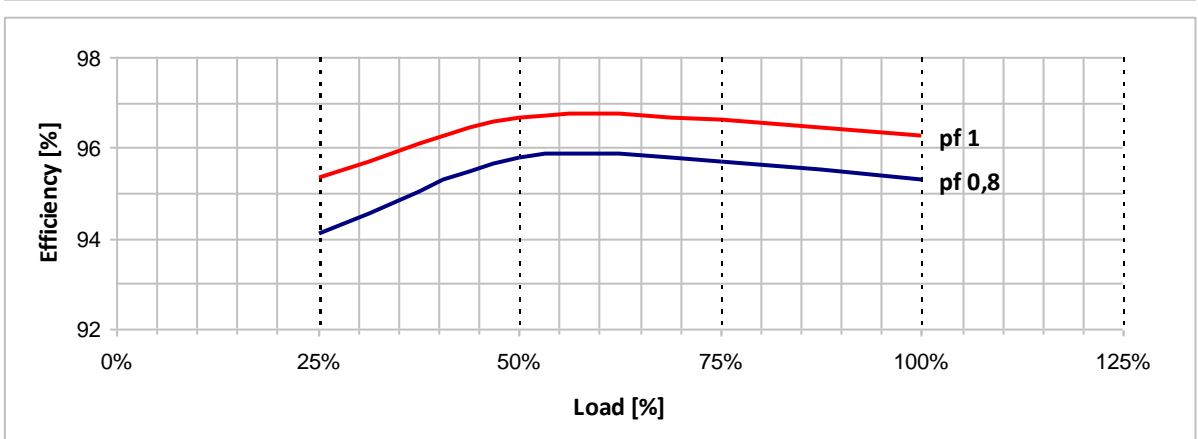


400 V

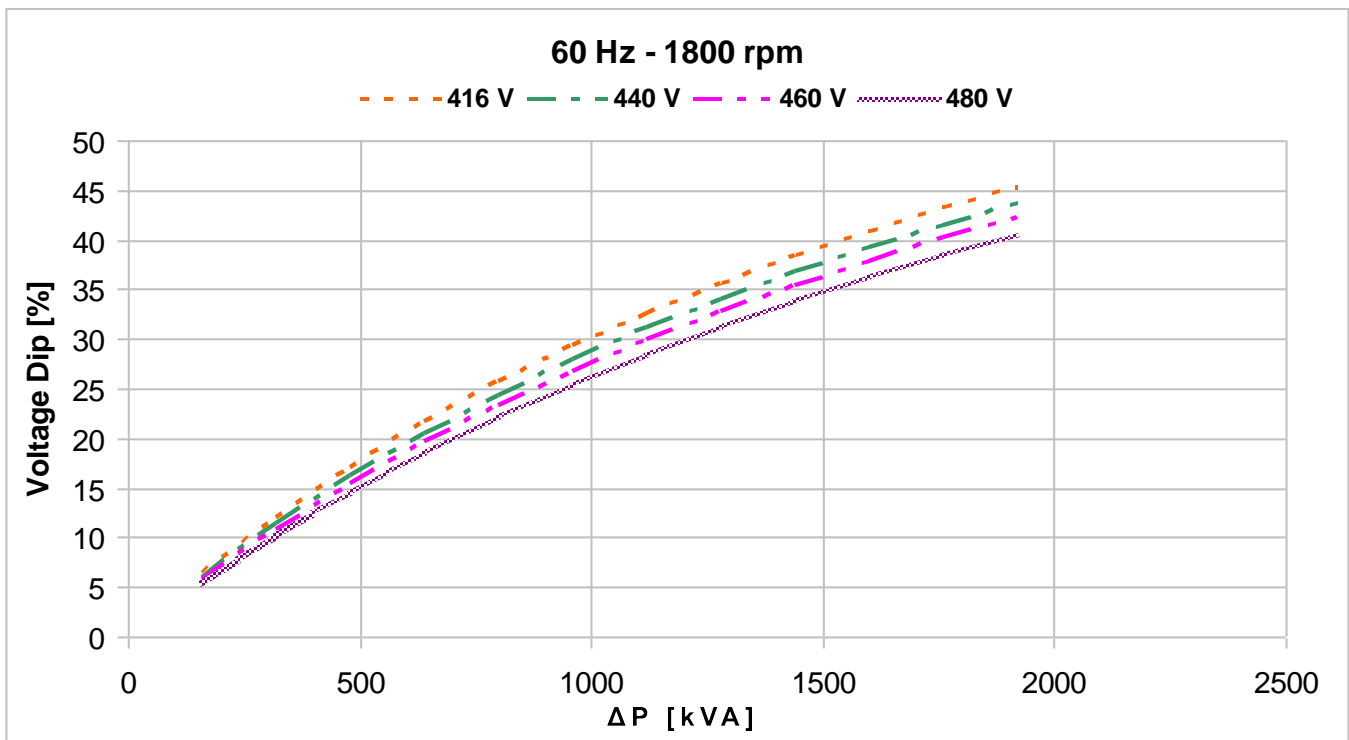
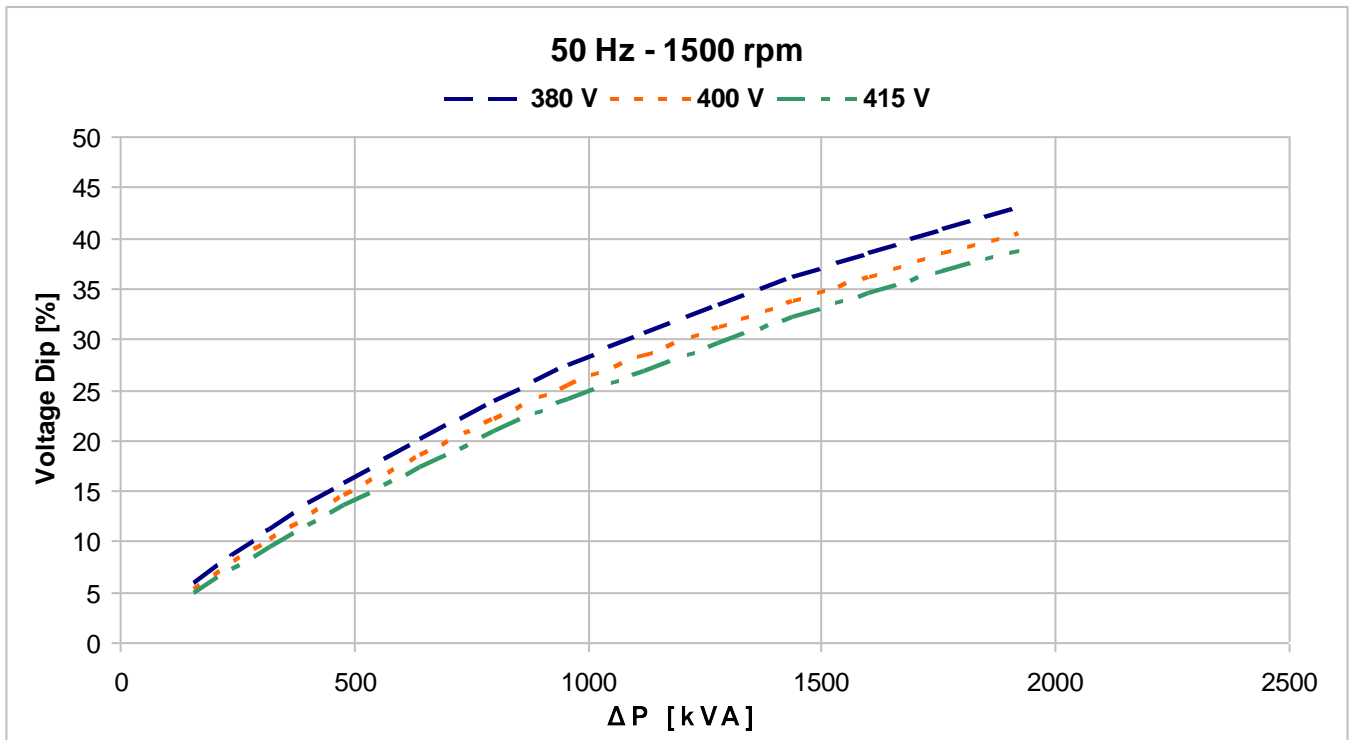


415 V



Typical efficiency curves
60 Hz - 1800 rpm
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.