

CONTINUOUS DUTY

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

AMBIENT TEMPERATURE TEMPERATURE RISE INSULATION CLASS POWER FACTOR	40°C H H 0,8	WINDING DATA							
		Winding code		Number of leads		Winding pitch			
		80		6		2/3			
FREQUENCY	Hz	50 Hz			60 Hz				
VOLTAGE	Star	V	380	400	415	416	440	460	480
RATING		kVA	1020	1050	1050	1200	1250	1250	1320
		kW	816	840	840	960	1000	1000	1056
EFFICIENCY [%] @ 0,8 p.f.	4/4		95,1	95,3	95,4	95,3	95,5	95,6	95,7
	3/4		95,5	95,5	95,5	95,6	95,7	95,8	95,9
	2/4		95,6	95,6	95,6	95,7	95,7	95,8	95,9
EFFICIENCY [%] @ 1 p.f.	4/4		96,2	96,3	96,3	96,3	96,4	96,5	96,6
	3/4		96,5	96,5	96,5	96,5	96,6	96,7	96,8
	2/4		96,6	96,5	96,5	96,6	96,6	96,7	96,8
SHORT CIRCUIT RATIO	SCR		0,37	0,4	0,43	0,32	0,34	0,37	0,38
REACTANCES [%]									
Direct axis synchronous	X _d		330	307	285	389	362	332	322
Quadrature axis synchronous	X _q		183	170	158	216	201	184	178
Direct axis transient	X' _d		31,6	29,4	27,3	37,3	34,7	31,8	30,8
Direct axis subtransient	X'' _d		14,4	13,4	12,4	17,0	15,8	14,5	14,0
Quadrature axis subtransient	X'' _q		14,6	13,6	12,6	17,2	16,1	14,7	14,2
Negative sequence	X ₂		14,5	13,5	12,5	17,1	15,9	14,6	14,1
Zero sequence	X ₀		3,4	3,2	2,9	4,0	3,7	3,4	3,3
TIME CONSTANTS [s]									
Open circuit	T' _{do}					2,4			
Transient	T' _d					0,23			
Subtransient	T'' _d					0,018			
Armature	T _a					0,022			

MECHANICAL CHARACTERISTICS

D-end bearing/Lubrication	6324 C3 / With grease nipple
N-end bearing/Lubrication	6318 Z C3 / Prelubricated
Overspeed [r.p.m.]	2250
Inertia (J) [kgm ²]	Refer to B34 construction 17
Weight [kg]	Refer to B34 construction 2300
Method of cooling	IC01
Cooling air required [m ³ /s] @ 50/60 Hz	1,30 / 1,55
Degree of protection	IP23
Types of construction available	B2 (SAE) - IM B34 - IM B20
Direction of rotation (Standard)	CW

OTHER DATA

Phase resistance [Ω] @ 20 °C - Star series	2,4
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

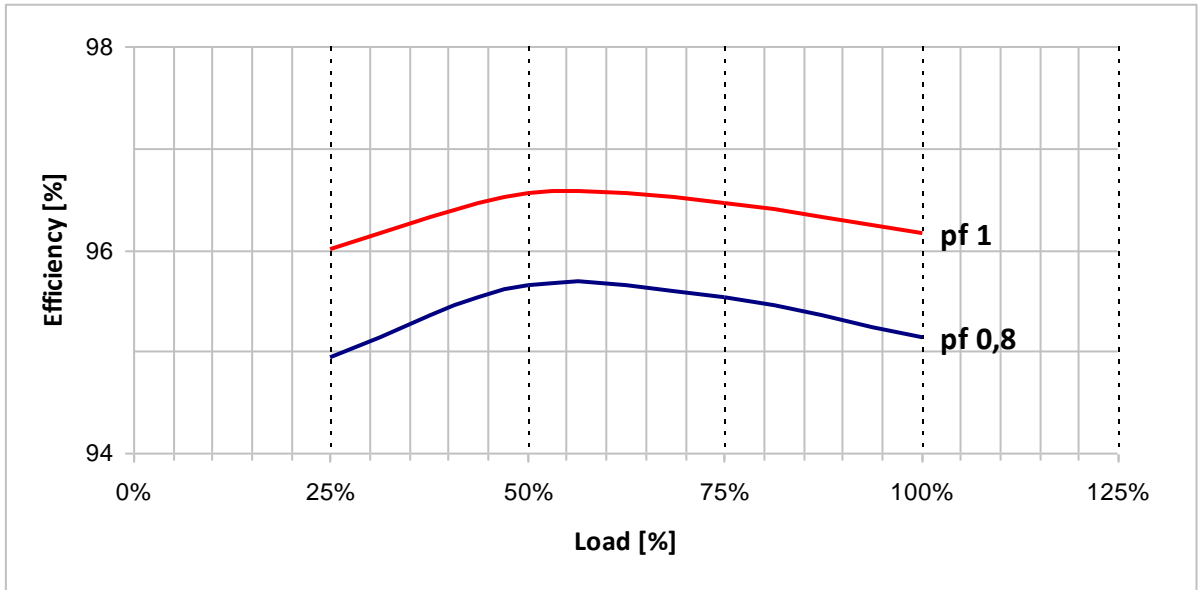
IEC 60034-1; CEI 2-3; BS 4999-5000; VDE 0530; NF 51-100,111; OVE M-10, NEMA MG 1.22.

Typical efficiency curves
50 Hz - 1500 rpm

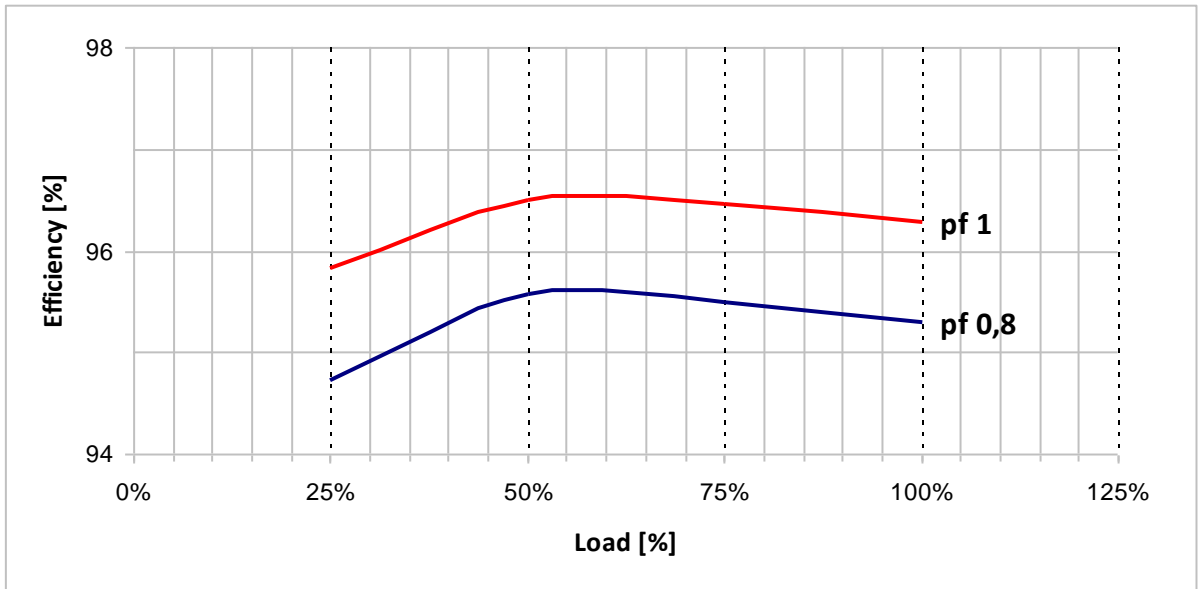
Typical efficiency curves

50 Hz - 1500 rpm

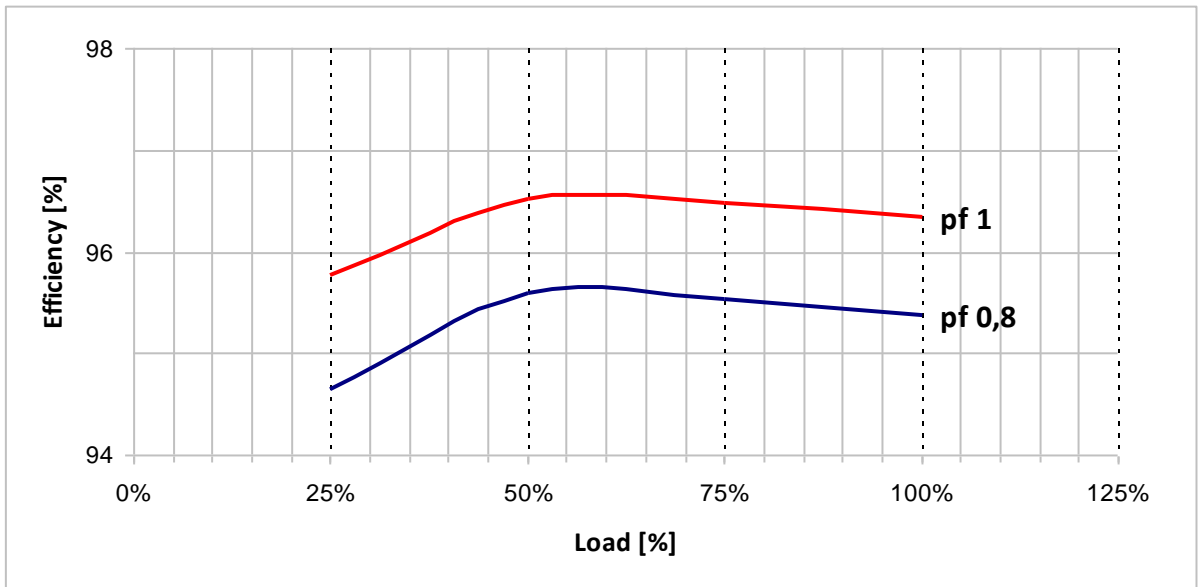
380 V

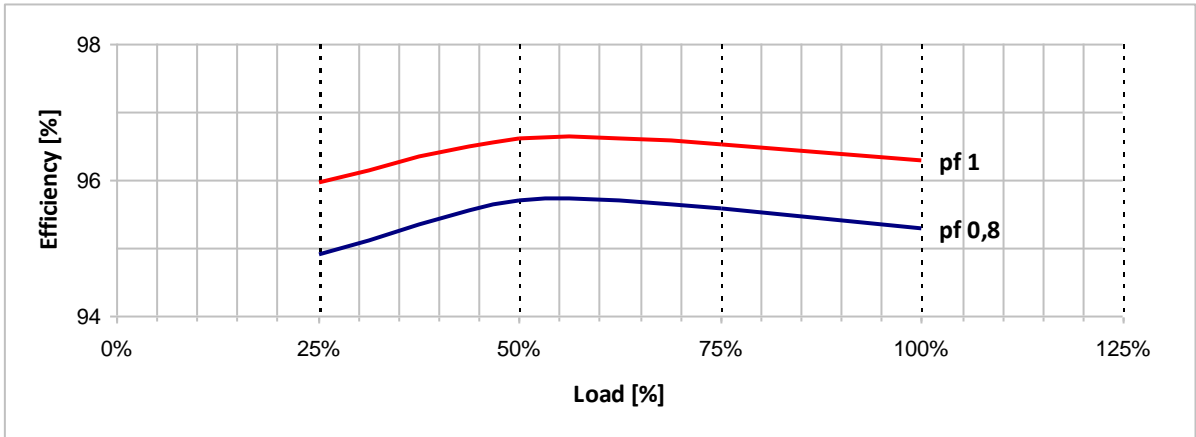
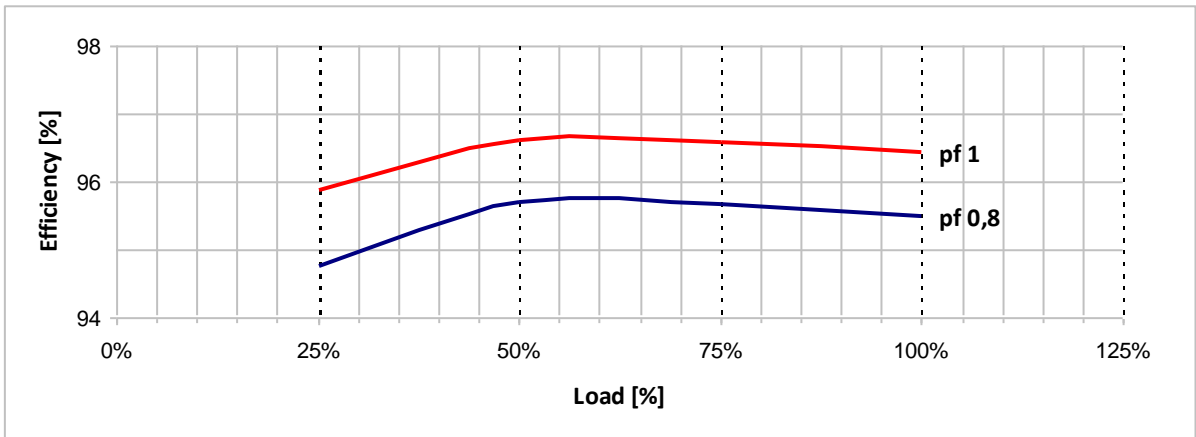
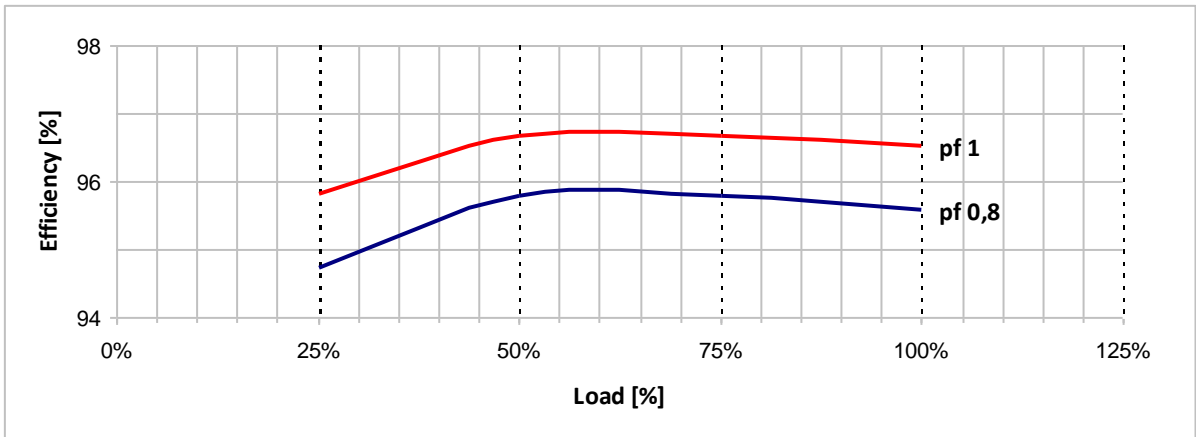
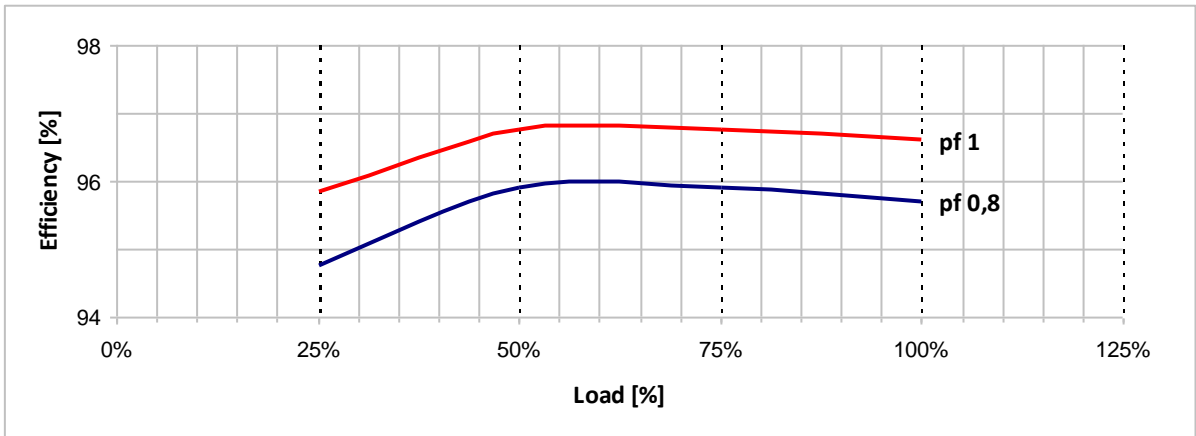


400 V

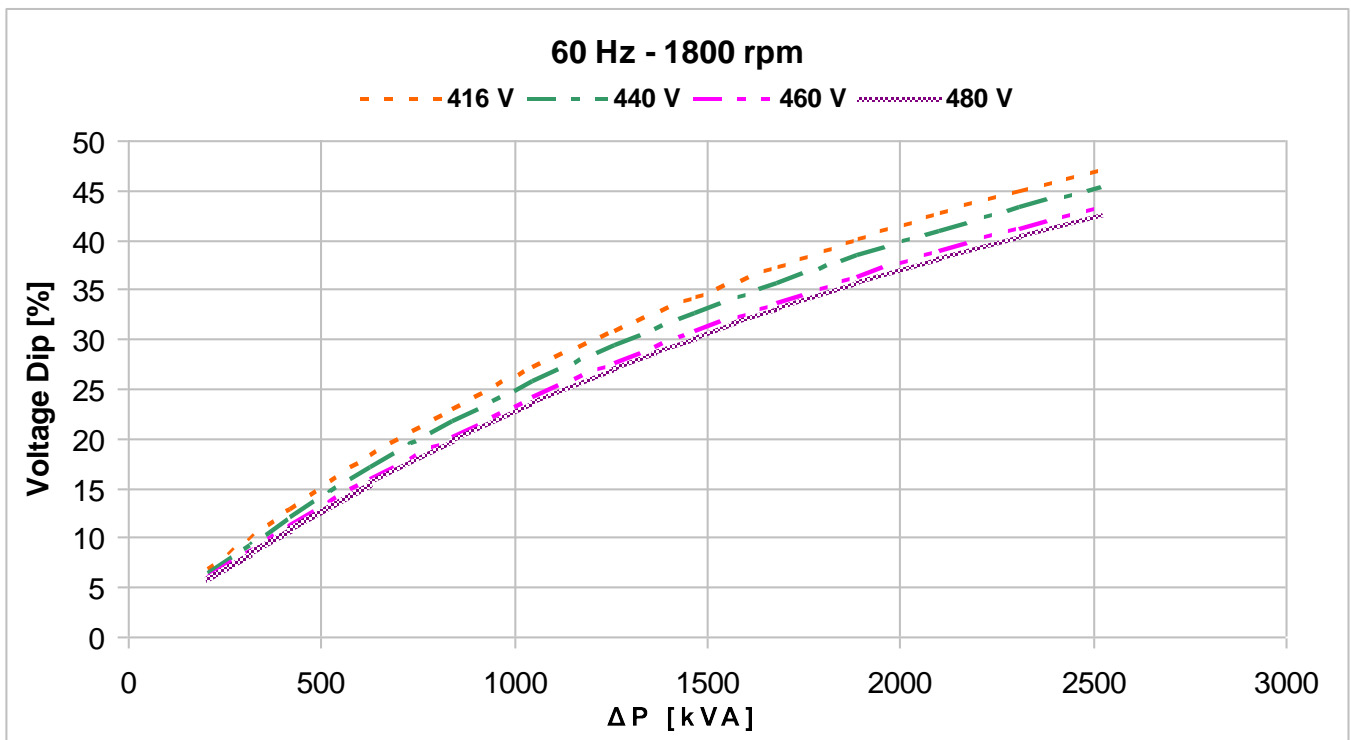
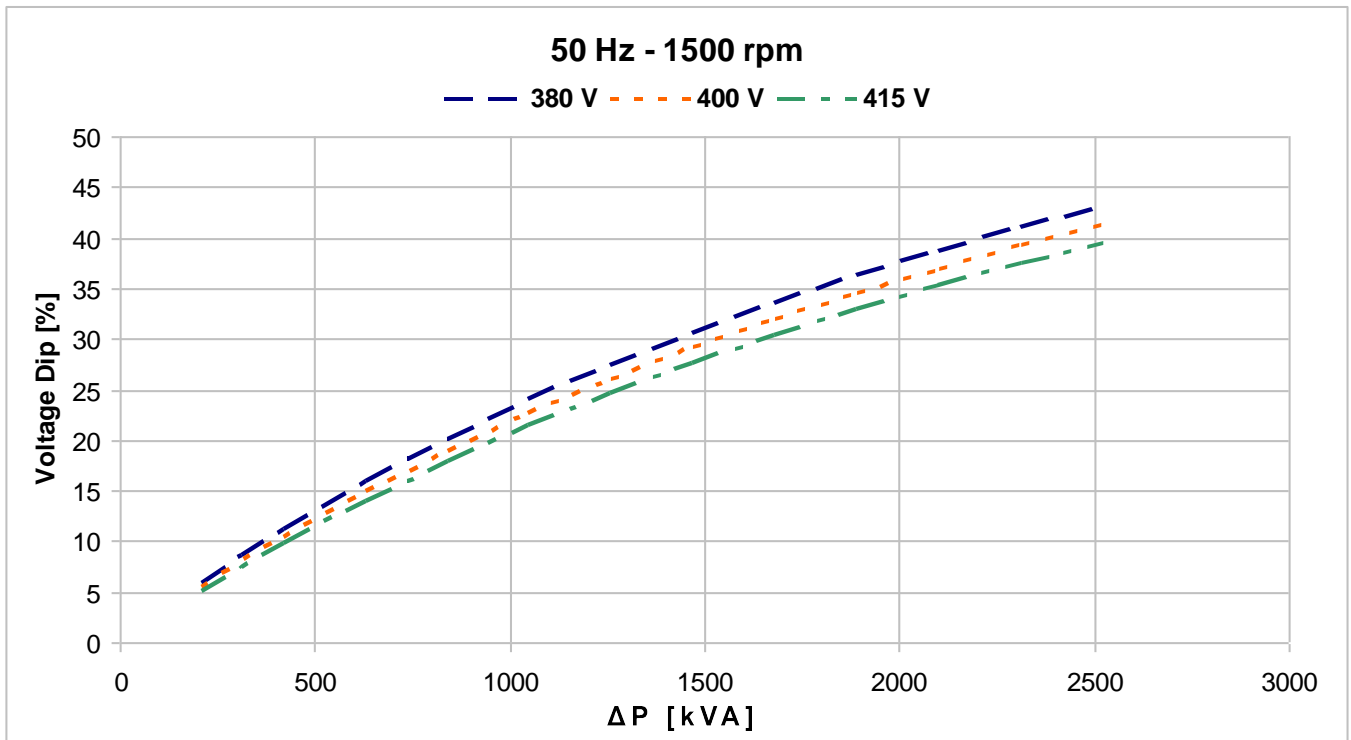


415 V



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.