

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 kW	930 744	930 744	930 744	1070 856	1120 896	1120 896	1175 940	
EFFICIENCY [%] @ 0,8 p.f.	4/4 3/4 2/4	94,9 95,3 95,4	95,2 95,5 95,6	95,2 95,4 95,4	95,0 95,3 95,4	95,3 95,5 95,6	95,5 95,7 95,7	95,7 95,9 95,8	
EFFICIENCY [%] @ 1 p.f.	4/4 3/4 2/4	96,0 96,3 96,4	96,2 96,4 96,5	96,2 96,4 96,4	96,1 96,3 96,4	96,3 96,5 96,5	96,4 96,6 96,6	96,6 96,7 96,7	
SHORT CIRCUIT RATIO	SCR	0,42	0,46	0,50	0,36	0,39	0,42	0,44	
REACTANCES [%]									
Direct axis synchronous	X _d	279	252	234	322	301	275	265	
Quadrature axis synchronous	X _q	156	141	131	180	168	154	148	
Direct axis transient	X' _d	27,5	24,8	23,0	31,7	29,6	27,1	26,1	
Direct axis subtransient	X'' _d	12,9	11,6	10,8	14,8	13,9	12,7	12,2	
Quadrature axis subtransient	X'' _q	13,2	11,9	11,1	15,2	14,2	13,0	12,5	
Negative sequence	X ₂	13,1	11,8	11,0	15,1	14,1	12,9	12,4	
Zero sequence	X ₀	3,2	2,9	2,7	3,7	3,5	3,2	3,1	
TIME CONSTANTS [s]									
Open circuit	T' _{do}	2							
Transient	T' _d	0,2							
Subtransient	T'' _d	0,007							
Armature	T _a	0,023							

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 16,3
Weight [kg]	Refer to B34 construction 2250
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	2,2
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

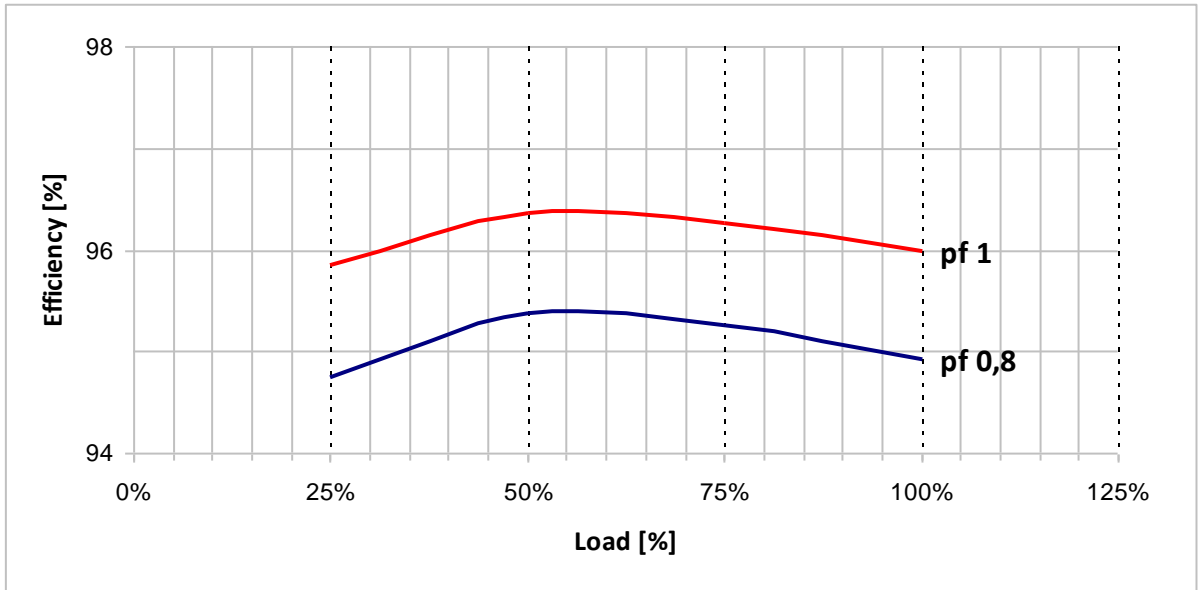
STANDARDS

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

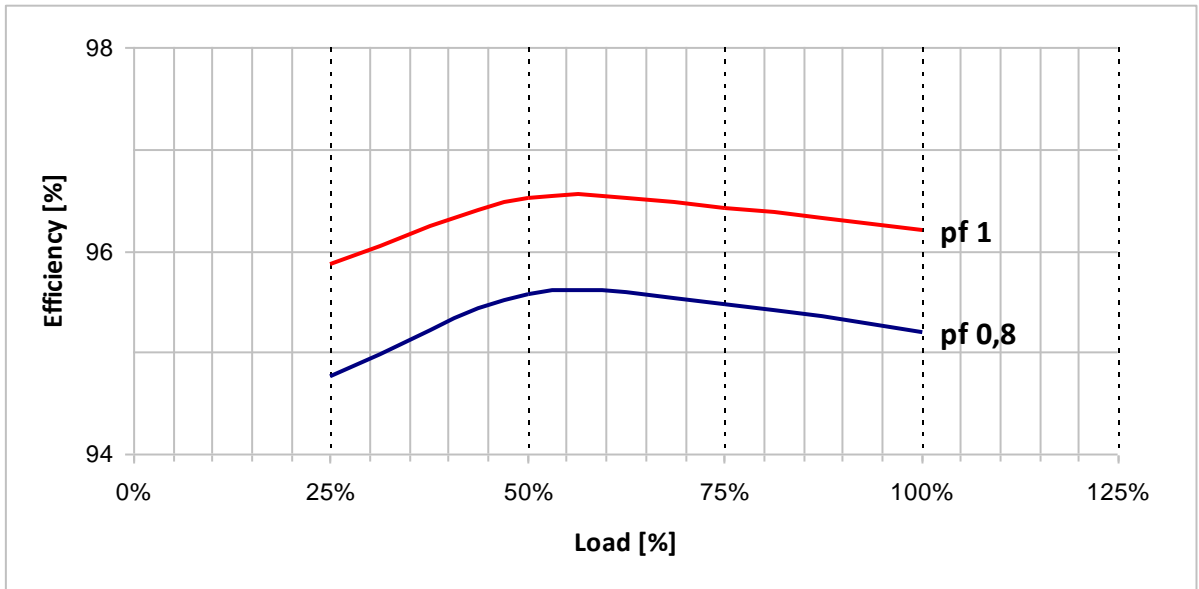
Typical efficiency curves

50 Hz - 1500 rpm

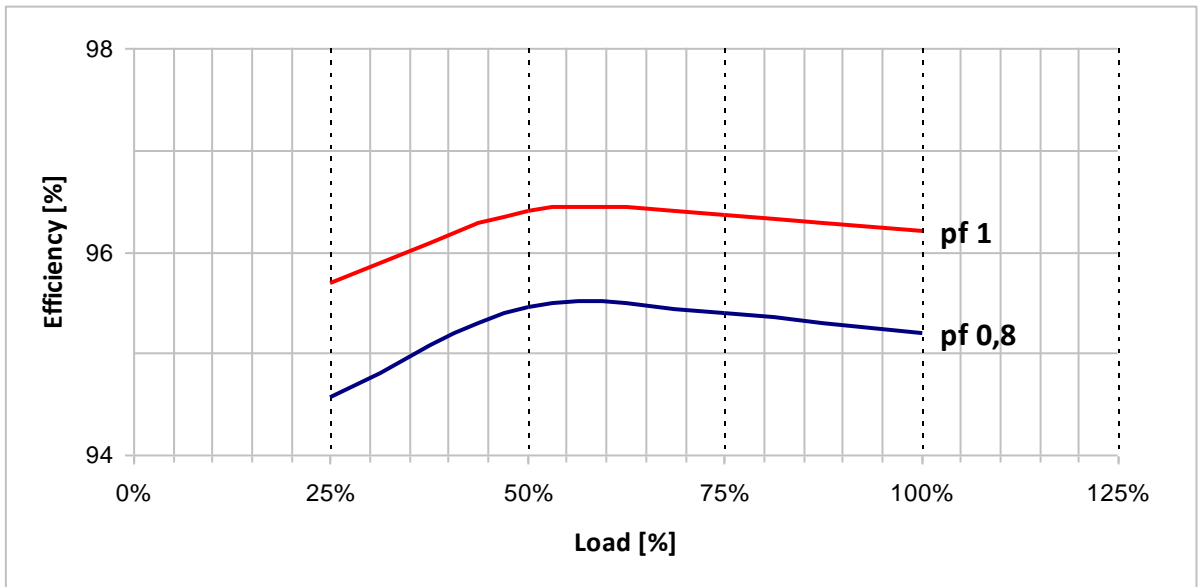
380 V

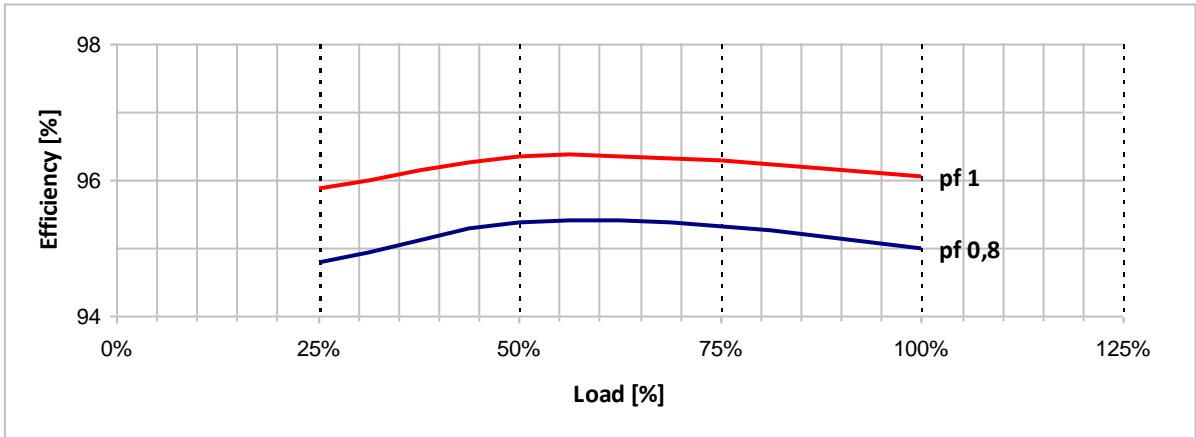
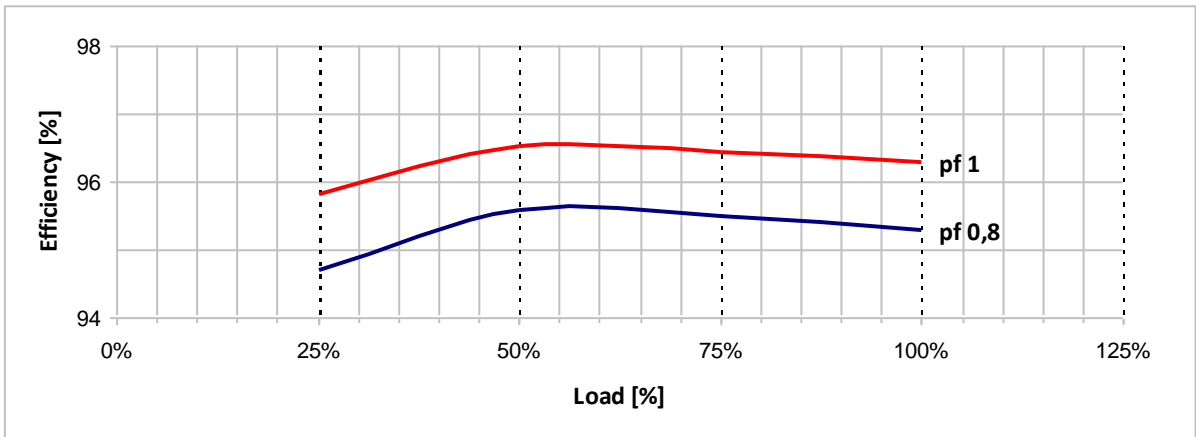
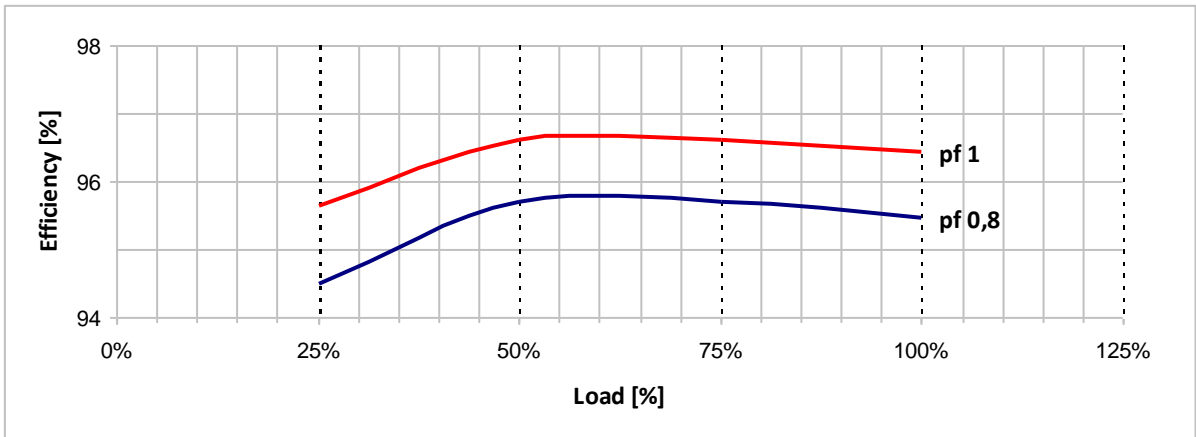
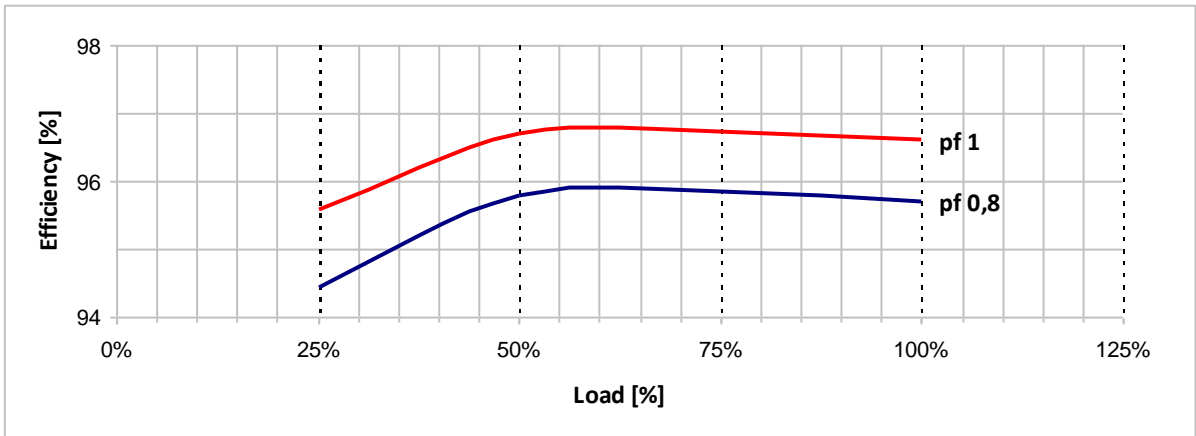


400 V

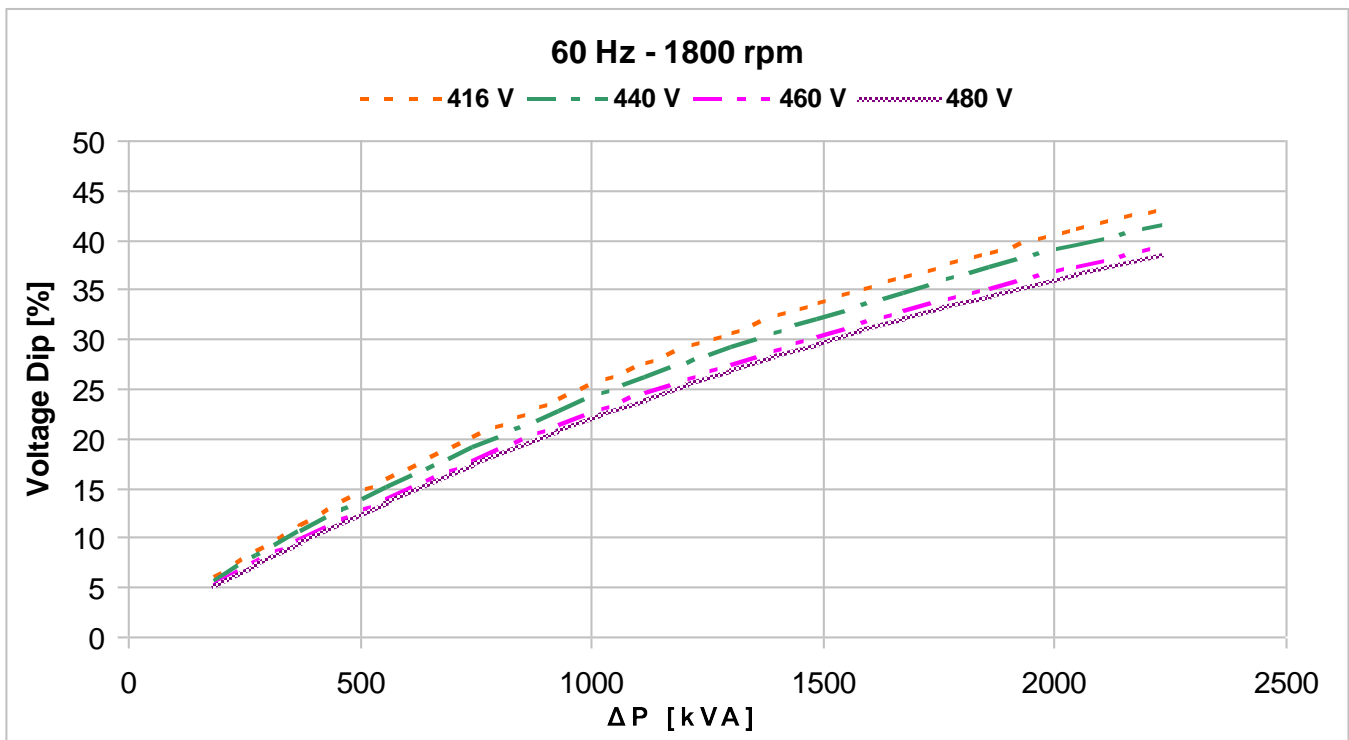
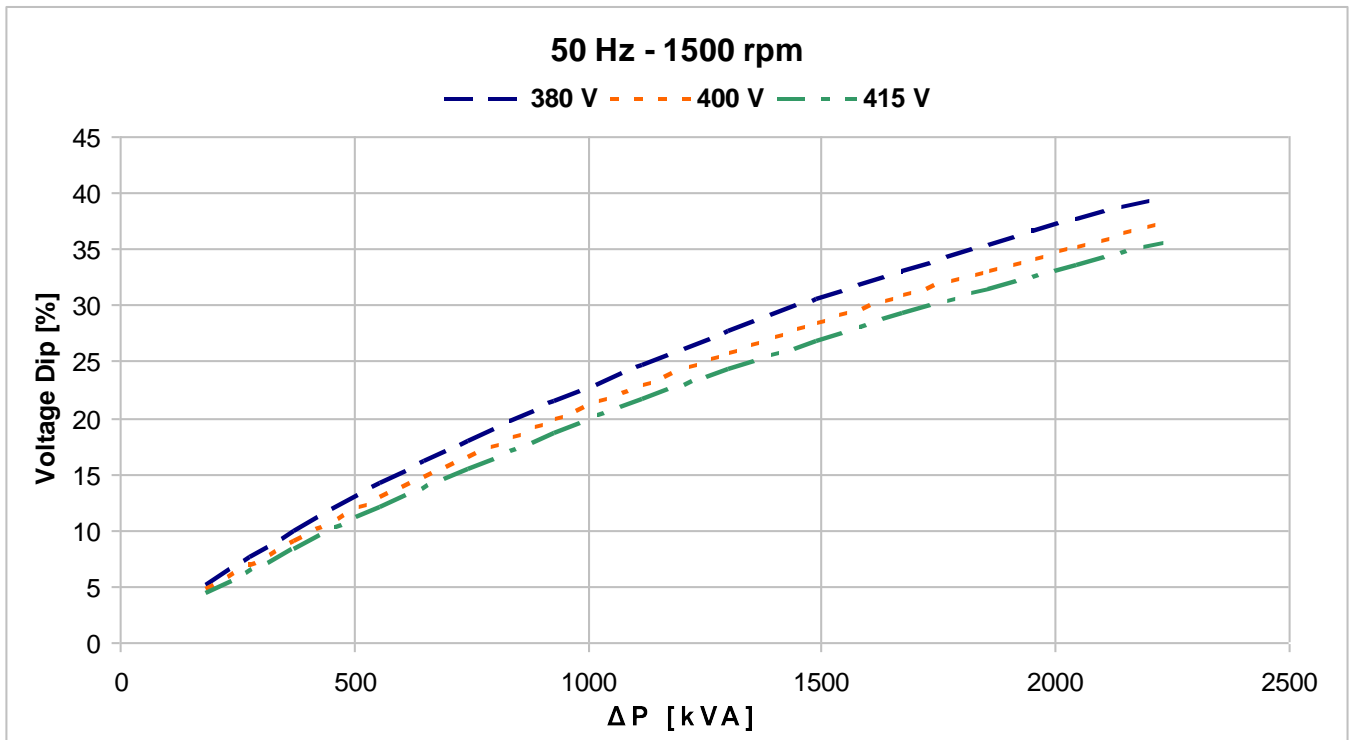


415 V



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.