

**3 PHASE ASYNCHRON MOTOR TEST REPORT ACCORDING TO
IEC 60034-2-1****ELECTRIC
MOTOR PLANT**

NAMEPLATE VALUES

Motor Type	Q2E225M2B	Voltage	400/690V	Nominal limit for IE2	92.9%
Serial Number	27772 VH	Current	82.1 / 47.4 A	Duty Type	S1
Power	45kW	RPM	2960	Insulation Class	F
Frequency	50Hz	Power Factor	0.85	IC	41

NOLOAD TEST	TEST NUM:	: 10871	REV: 1
	DATE:	: 15.12.2010	

U(V)	U ²	Im(A)	Pin(W)	Pcu(W)	Pfe+Pstv	P fe(W)	P stv(W)	R(ohm)
80	6400	8,28	855	9,8	845,2	4,1	841,1	0,143
120	14400	8,10	910	9,4	900,6	59,5	841,1	0,143
160	25600	9,40	984	12,6	971,4	130,2	841,1	0,143
200	40000	11,25	1072	18,1	1053,9	212,8	841,1	0,143
240	57600	13,60	1161	26,4	1134,6	293,4	841,1	0,143
305	93025	17,69	1356	44,8	1311,2	470,1	841,1	0,143
370	136900	22,62	1570	73,1	1496,9	655,7	841,1	0,143
400	160000	26,48	1670	100,2	1569,8	728,6	841,1	0,143
435	189225	31,00	1930	137,5	1792,5	951,4	841,1	0,143
500	250000	53,43	2450	408,3	2041,7	1200,6	841,1	0,143

PERFORMANCE

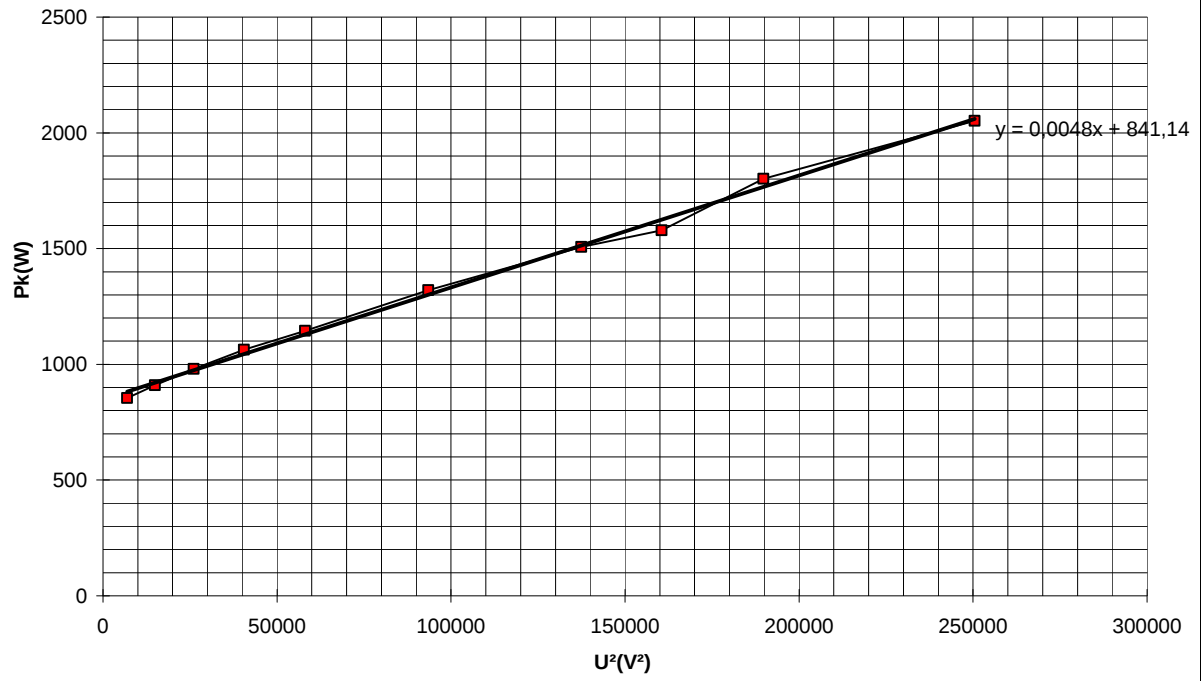
Amb.Temp 26 C Dt : 61 K

Voltage	U(V)	400	401	399	402	402	400
Phase current	Im(A)	33,81	46,53	62,20	82,13	96,60	115,37
Input Power	Pin(W)	13070	24600	36400	48420	60140	72540
Resistance	R()	0,143	0,143	0,143	0,143	0,143	0,143
Copper Losses	Pcu(W)	163	310	553	965	1334	1903
Iron Losses	Pfe(W)	729	729	729	729	729	729
	Pcu+Pstv(W)	892	1038	1282	1693	2063	2632
	Pin-Pcu-Pstv(W)	12178	23562	35118	46727	58077	69908
slip	s(%)	0,37	0,70	0,90	1,03	1,23	1,63
Rotor Losses	Pr(W)	45	165	316	483	716	1142
Friction Losses	Pstv(W)	841	841	841	841	841	841
Stray load losses	PLL(W)	21,0	83,8	188,6	335,2	523,8	754,2
	Pr+Pstv+PLL (W)	907	1090	1346	1659	2081	2737
Output Power	Pout (W)	11271	22472	33772	45068	55996	67171
Apparent Power	S(VA)	23424	32320	42986	57188	67261	79928
Power Factor	COSphi	0,558	0,761	0,847	0,847	0,894	0,908
Efficiency	Eta(%)	86,2	91,3	92,8	93,1	93,1	92,6
Torque	M(Nm)	36,3	72,6	108,9	145,2	181,5	217,8
Speed	n(U/min)	2989	2979	2973	2969	2963	2951
	Pmech(W)	11362	22648	33904	45145	56317	67306

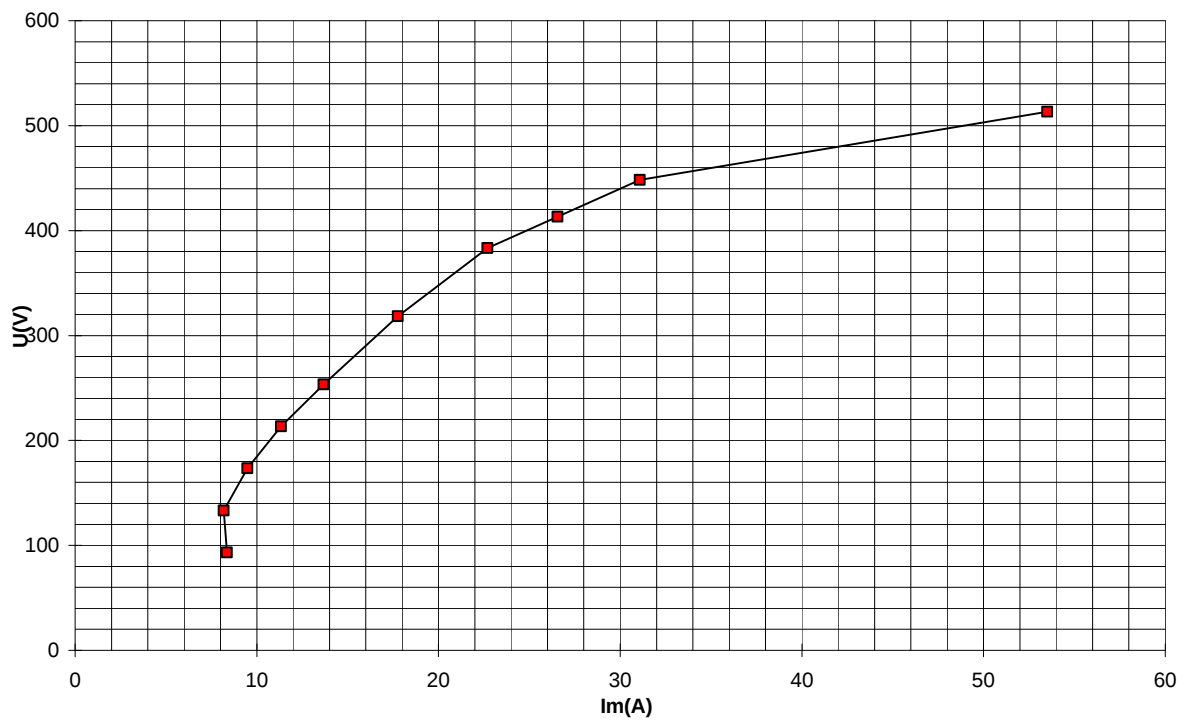
PREPARED BY : H.GEDİK

CONTROL : H.AÇIKGÖZ

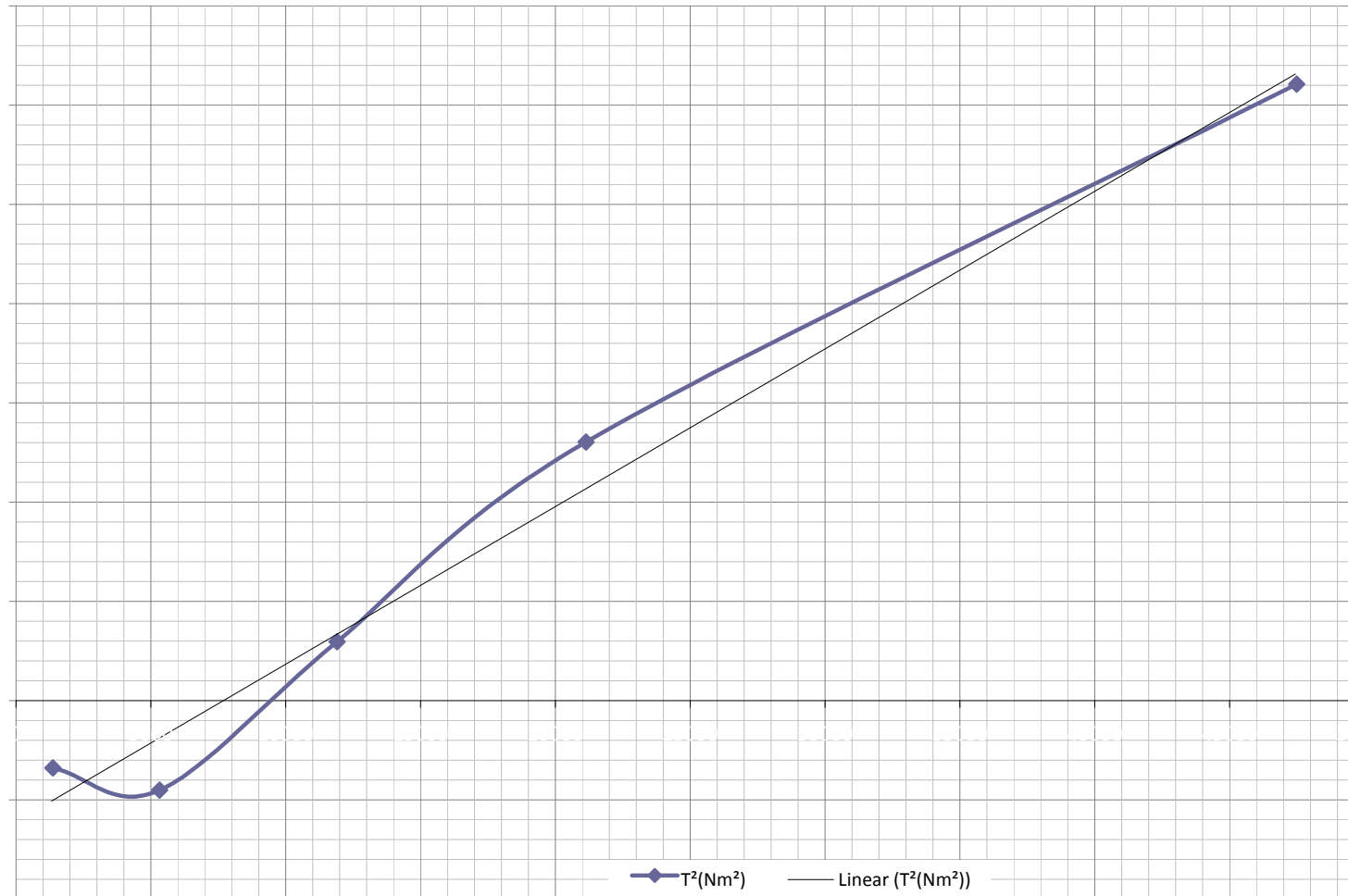
Constant Losses & U2 Curve



Saturation Curve



Stray load losses curve



$y = 0,0159x - 122,03$
 $R^2 = 0,9821$