



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

ELECTRIC MOTOR PLANT

NAMEPLATE VALUES

Motor Type	Q3E100L2D	Voltage	230/400V	Nominal limit for IE3	87.1%
Serial Number	6040	Current	9.5 / 5.5 A	Duty Type	S1
Power	3kW	RPM	2915	Insulation Class	F
Frequency	50Hz	Power Factor	0,88	IC	41

NOLOAD TEST	TEST NUM:	: 11109	REV	: 2
	DATE:	: 15.07.2010		

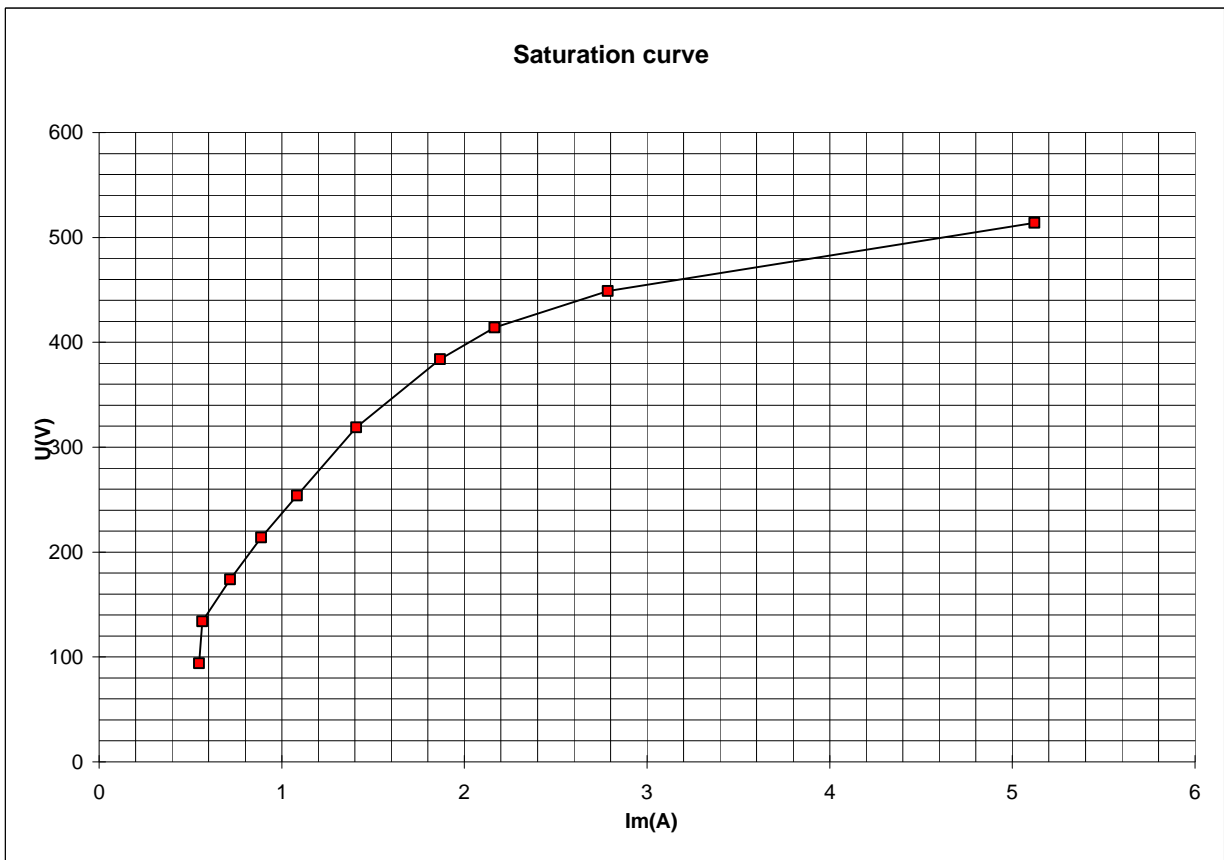
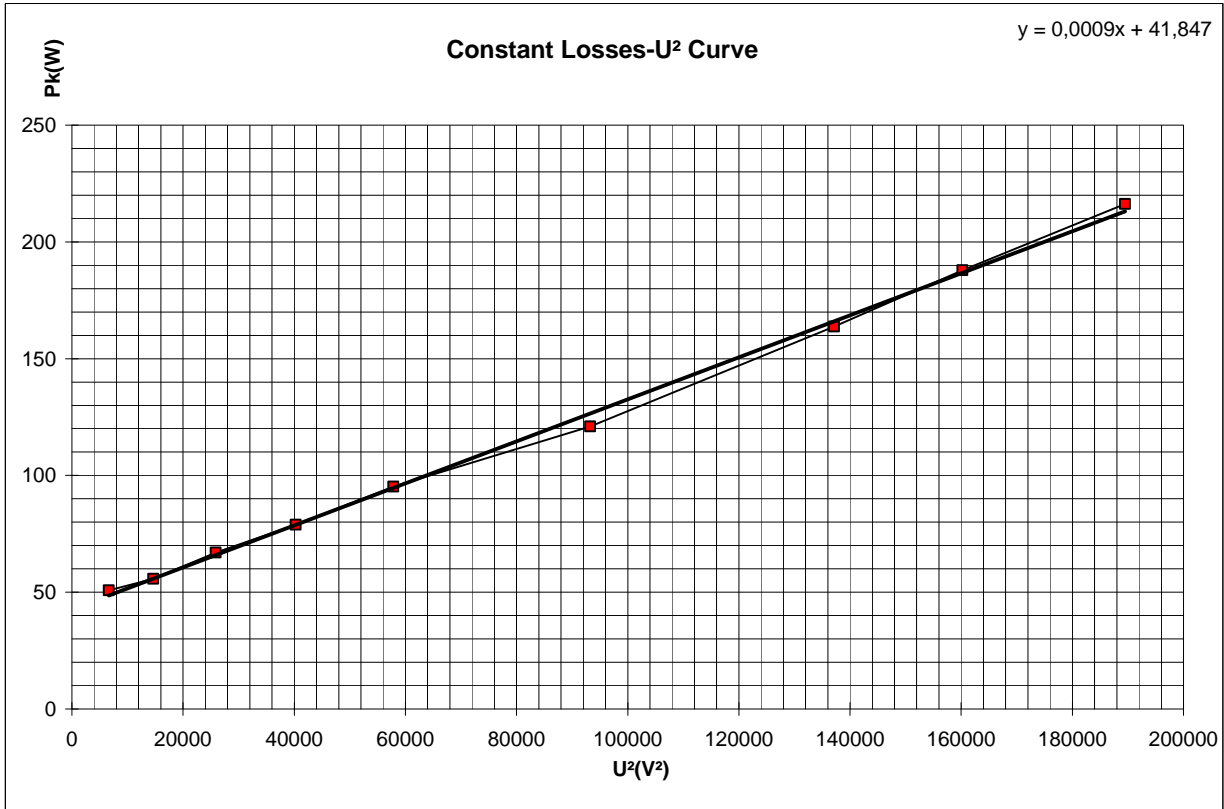
U(V)	U ²	Im(A)	Pin(W)	Pcu(W)	Pfe+Pstv	P fe(W)	P stv(W)	R(ohm)
80	6400	0,54	51	1,2	49,8	8,0	41,8	1,374
120	14400	0,56	56	1,3	54,7	12,9	41,8	1,374
160	25600	0,71	68	2,1	65,9	24,1	41,8	1,374
200	40000	0,88	81	3,2	77,8	36,0	41,8	1,374
240	57600	1,08	99	4,8	94,2	52,4	41,8	1,374
305	93025	1,40	128	8,1	119,9	78,1	41,8	1,374
370	136900	1,86	177	14,3	162,7	120,9	41,8	1,374
400	160000	2,16	206	19,2	186,8	145,0	41,8	1,374
435	189225	2,78	247	31,8	215,2	173,4	41,8	1,374
500	250000	5,11	403	107,8	295,2	253,4	41,8	1,374

PERFORMANCE	Amb.Temp	24 °C	Dt	: 29 K
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Voltage	U(V)	400	402	401	401	399	398
Phase current	Im(A)	2,54	3,33	4,32	5,44	6,59	7,82
Input Power	Pin(W)	929	1718	2532	3345	4198	5078
Resistance	R()	1,374	1,374	1,374	1,374	1,374	1,374
Copper Losses	Pcu(W)	27	46	77	122	179	252
Iron Losses	Pfe(W)	145	145	145	145	145	145
	Pcu+Pstv(W)	172	191	222	267	324	397
	Pin-Pcu-Pstv(W)	757	1527	2310	3078	3874	4681
slip	s(%)	1,10	1,67	2,23	2,87	3,63	4,27
Rotor Losses	Pr(W)	8	25	52	88	141	200
Friction Losses	Pstv(W)	42	42	42	42	42	42
Stray load losses	PLL(W)	1,9	7,7	17,3	30,8	48,1	69,3
	Pr+Pstv+PLL (W)	52	75	111	161	231	311
Output Power	Pout (W)	705	1452	2199	2917	3643	4370
Apparent Power	S(VA)	1762	2319	2998	3781	4552	5388
Power Factor	COSphi	0,527	0,741	0,845	0,885	0,922	0,942
Efficiency	Eta(%)	75,9	84,5	86,9	87,2	86,8	86,1
Torque	M(Nm)	2,5	4,9	7,4	9,8	12,3	14,7
Speed	n(U/min)	2967	2950	2933	2914	2891	2872
	Pmech(W)	762	1515	2260	2994	3713	4426

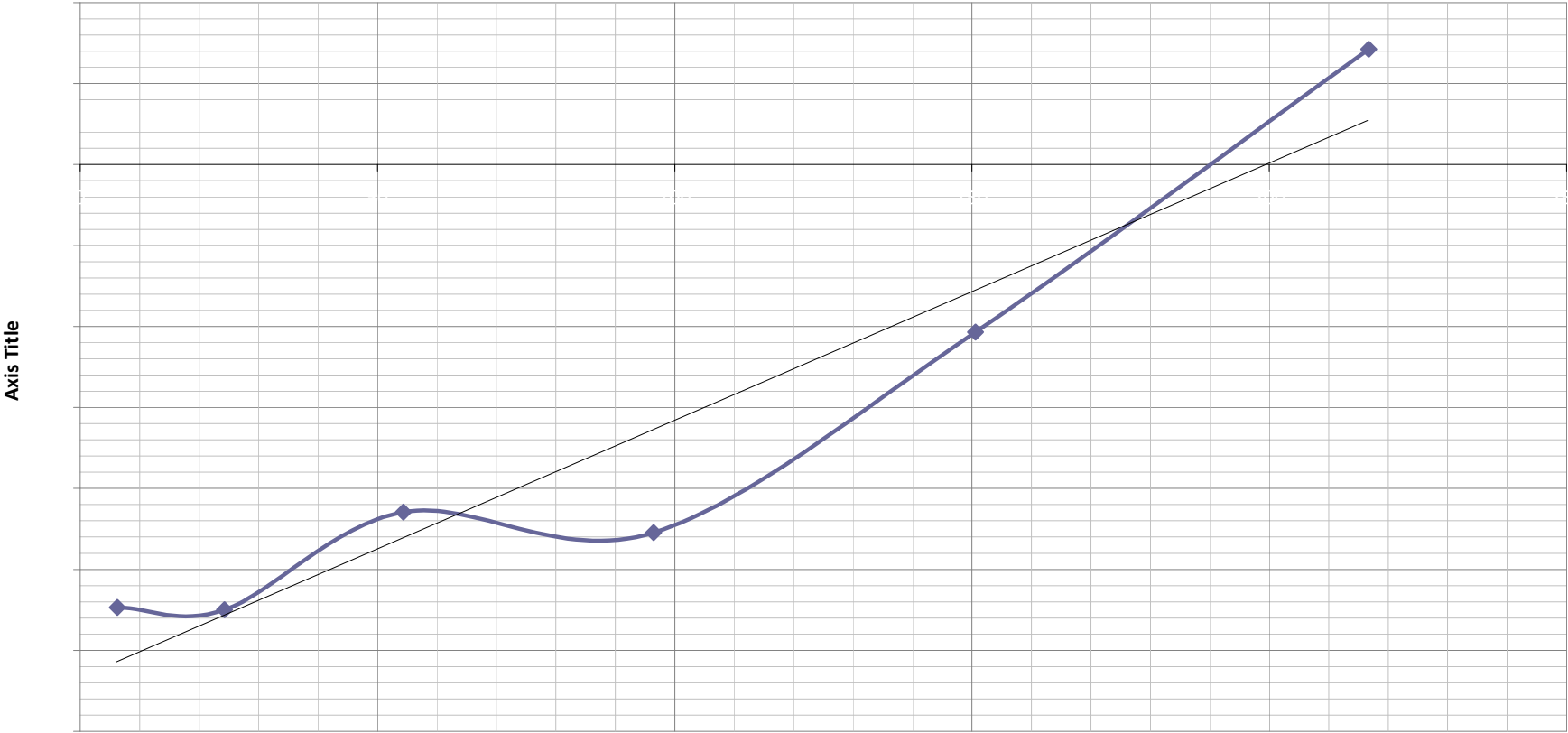
PREPARED BY : H.GEDIK

CONTROL : C.ERTÜRK



Stray load losses curve

$y = 0,3175x - 63,33$
 $R^2 = 0,9104$



Axis Title

—◆— T²(Nm²) — Linear (T²(Nm²))