DATA SHEET
Synchronous Alternator

Customer	:	Notes:	
Customer reference	:		
Product line	: GTA352EIYS	Product code	: 14631275
Area classification	: Safe		1051939428

General data

Frame (IEC)	: 355	Degree of protection	: IP23
Insulation Class	: 180°C (H)	Mounting style	: B15T
THD (L-L, no load)	: ≤ 3%	Number of poles	: 4
Stator winding pitch	: 2/3	Type of Pole	: Salient
Altitude	: up to 1000 m.a.s.l	Rated speed - 50 Hz	: 1500 rpm
Number of Leads	: ALTERNADOR_QTDE_CABOS_LIGACAO_ESTATOR	Nominal rotation - 60 Hz	: 1800 rpm
		Overspeed	: 2250 rpm
Power factor	: 0.8 to 1.0	Approx. weight	: 2550 kg
Excitation system	: Brushless with Auxiliary Coil	Overload	: 1.1x In per 1h each 6h
Cooling	: IC01	Momentary Overload	: 1.5x In per 30s

	Frequency and number of phases	50 Hz										60 Hz									
		3ph									1ph	3ph									1ph
Voltages (V)	Y (series star) connection	**400**									**-**	**480**									**-**
	YY (parallel star) connection										-										-
	Δ (series delta) connection	230									-	277									-
	ΔΔ (parallel delta) connection										-										-
	Zig-zag or single phase delta	-									-	-									-
Output power (kVA)	Continuous 80/40	787										968									
	Continuous 105/40	909										1118									
	Continuous 125/40	**1017**										**1250**									
	Standby 150/40	1024										1265									
	Standby 163/27	1068										1319									
Electrical data (FP=0.8 / Continuous 125/40 (H)) Satured reactances values	Xd(%) Dir. axis synchronous reactance	315.0										325.0									
	X'd(%) Dir. axis transient reactance	21.7										22.2									
	X"d(%) Dir. axis subtrans. reactance	15.5										15.9									
	Xq(%) Quad. axis sync. reactance	121.0										124.0									
	X"q(%) Quad. axis subtrans. react.	18.2										18.7									
	X2(%) Negative sequence reactance	17.4										17.1									
	X0(%) Zero sequence reactance	2.5										2.6									
	T'd(ms) Short Circ.Trans.time const.	138.8										138.8									
	T"d(ms) Short Circ. Sub. time const.	1.2										1.2									
	T'do(ms) Open Circ. time const Trans	2087										2050									
	T"do(ms) Open Circ. time const Subt	1.9										1.9									
	Ta(ms) Armature time const.	24										24									
	uc(V) Full load excitation voltage	39.0										40.5									
	ic(A) Full load excitation current	3.8										3.9									
	ic(A) No load excitation current	1.1										1.2									
	Icc(A) Sustained Short-Circ. Current	4404										4511									
	Kcc Short-circuit ratio	0.3										0.3									
Efficiency (%)	Power factor	0.8	1.0									0.8	1.0								
	25% of load	87.5	90									89.9	92								
	50% of load	92	93.8									93.7	95.3								
	75% of load	93	94.6									94.6	96								
	100% of load	93.1	94.8									94.7	96.1								
	125% of load	92.9	94.6									94.5	96								

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Other characteristics	
Air flow	: 3.2 m³/s
Exciter stator winding resistance at 20ºC	: 10.25 ohm
Stator winding resistance at 20ºC	: 0.00232 ohm
Rotor winding resistance	: 3.26 ohm
Stator winding layers	: 2
Inertia WR²	: 15.98 kgm²
NDE Bearing	: 6220-C3
DE bearing	
Flange	: SAE 0
Coupling disc	: SAE 14

Automatic voltage regulator	
Accuracy (stability)	: +/- 0.5%
Rated current	: 7 A
Analog input	: Yes
Digital input	: No
Peak current	: 10 A/10 s
Droop / TC	: Yes
Dynamic recovery	: 8 to 500 ms
U/F	: Yes
Internal voltage adjustment	: +/- 15%
External voltage adjustment	: +/- 10%
Transient recovery time for ΔU=20%	: 500 ms

According to:
IEC 60034
NBR 5117
NEMA MG1
VDE530
ISO 8528
CSA

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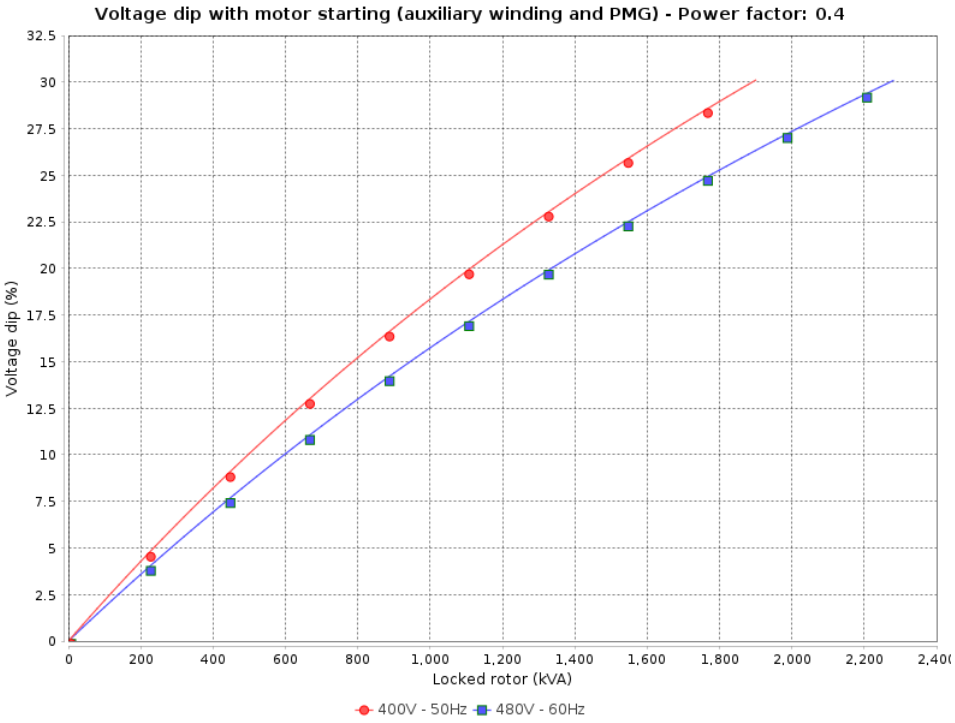

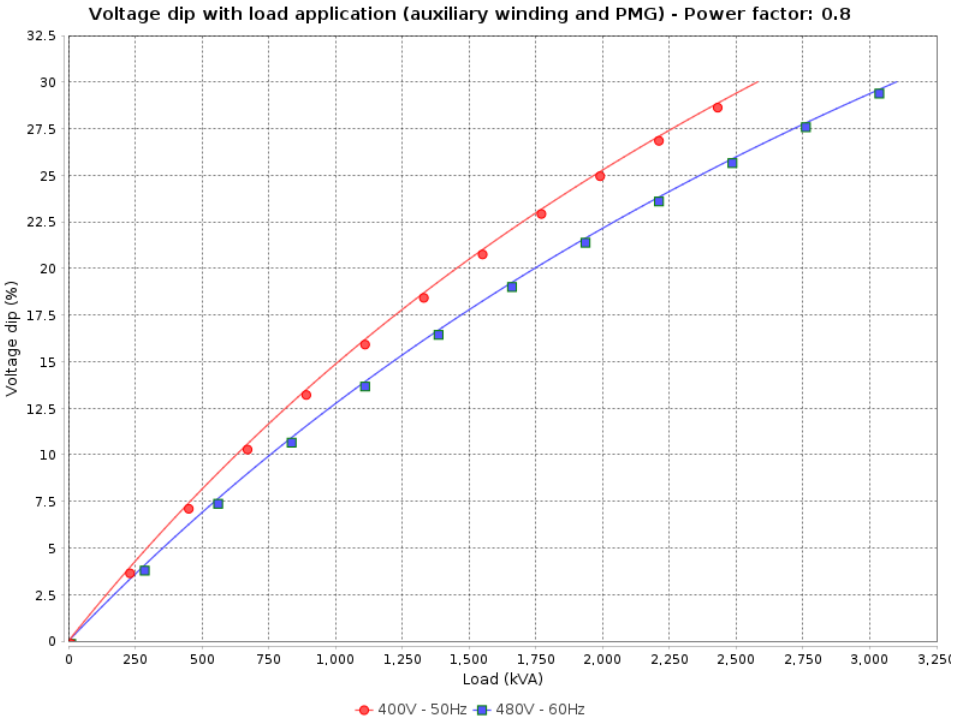

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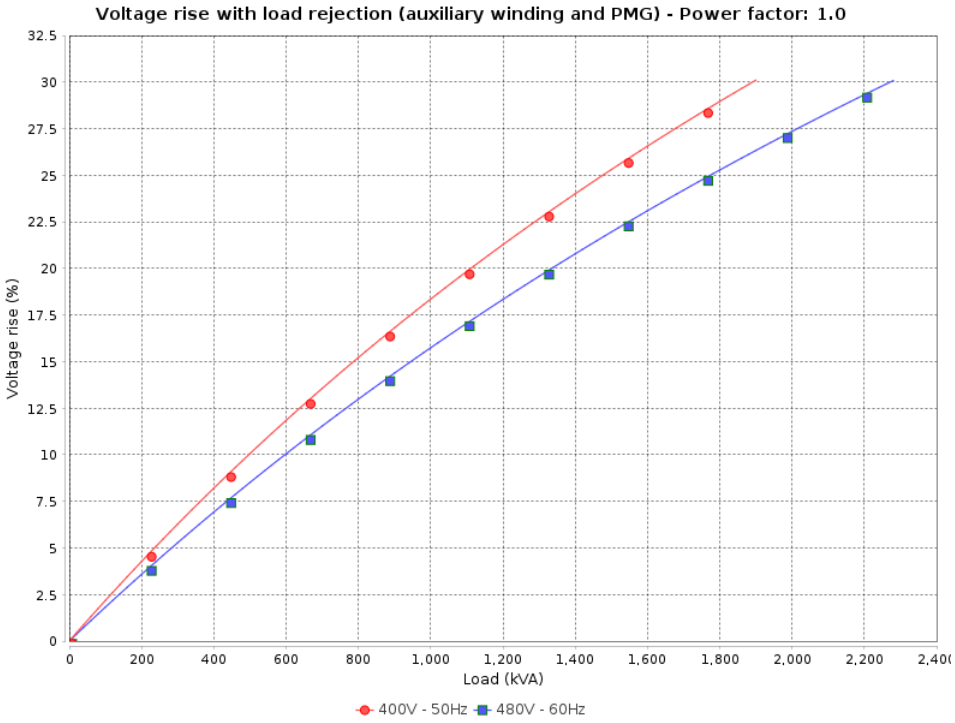

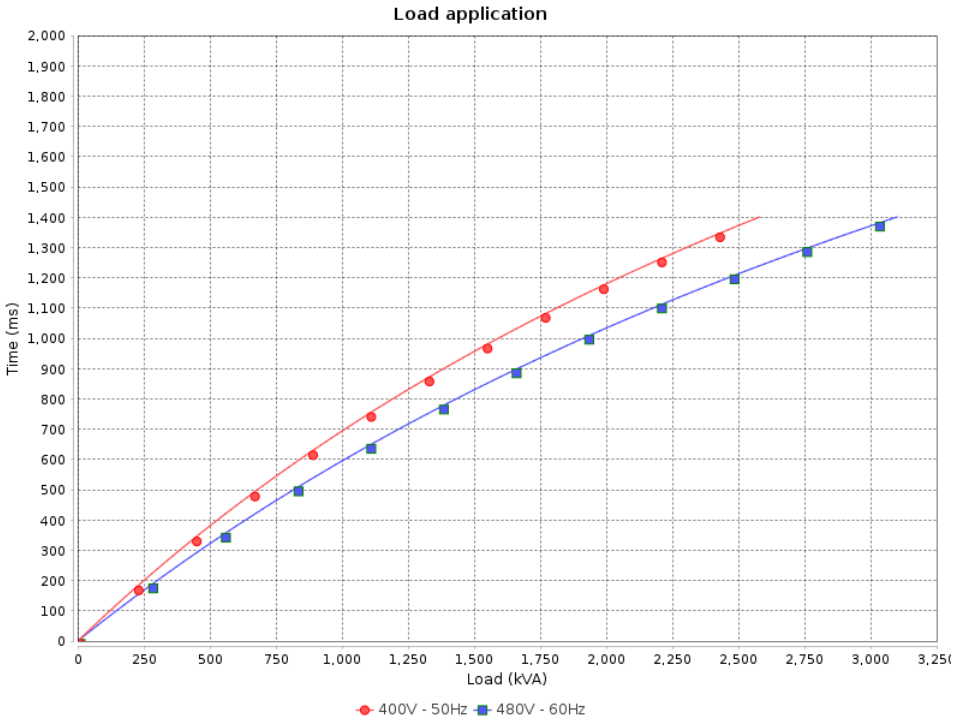

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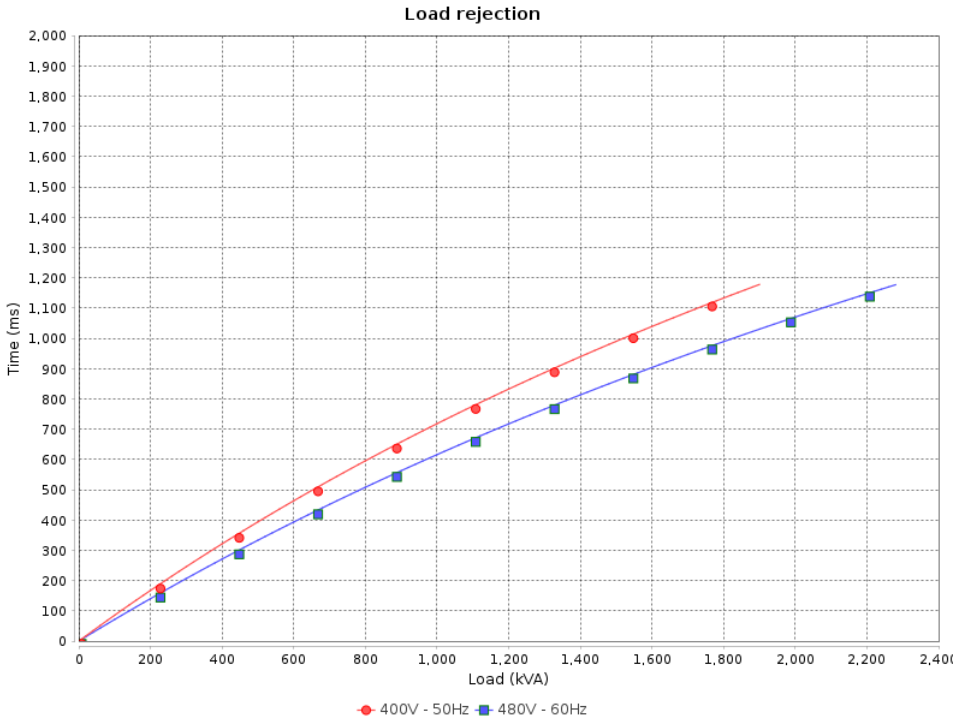

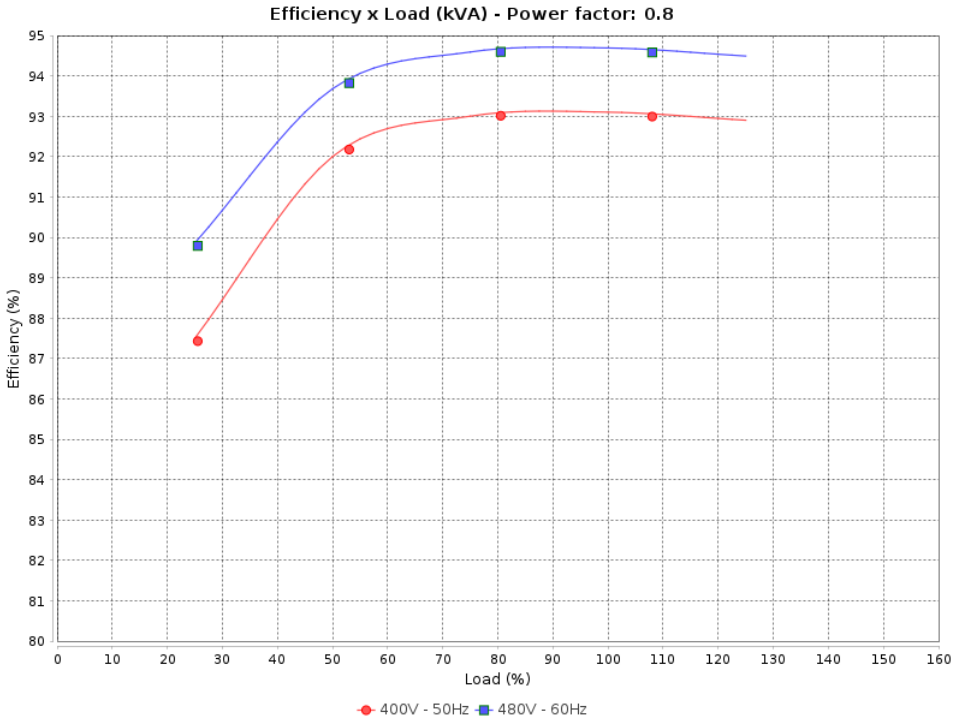

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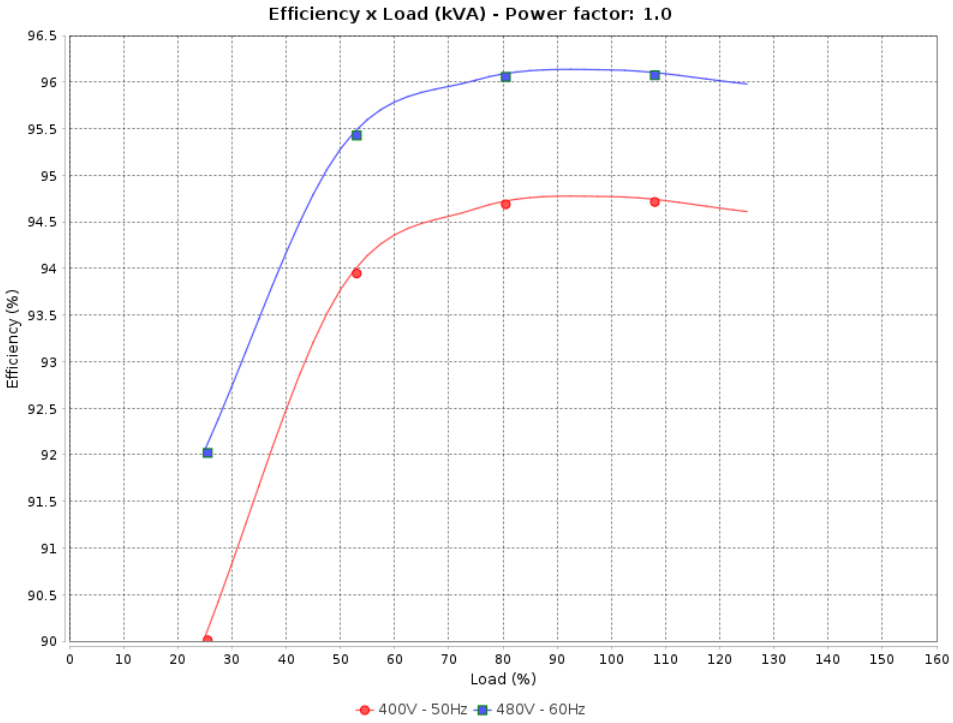

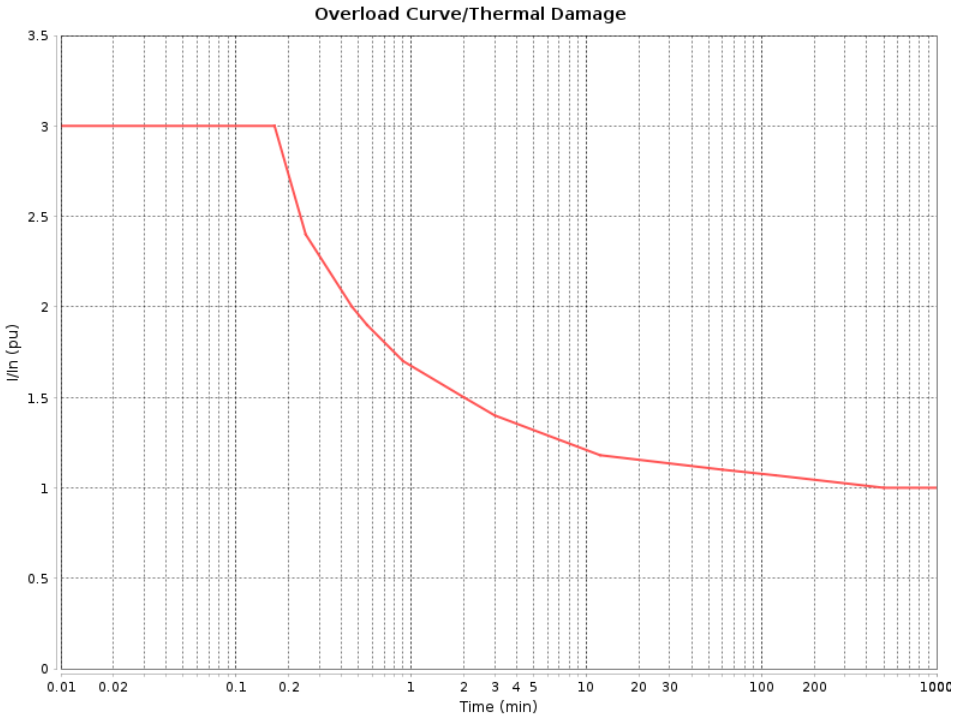

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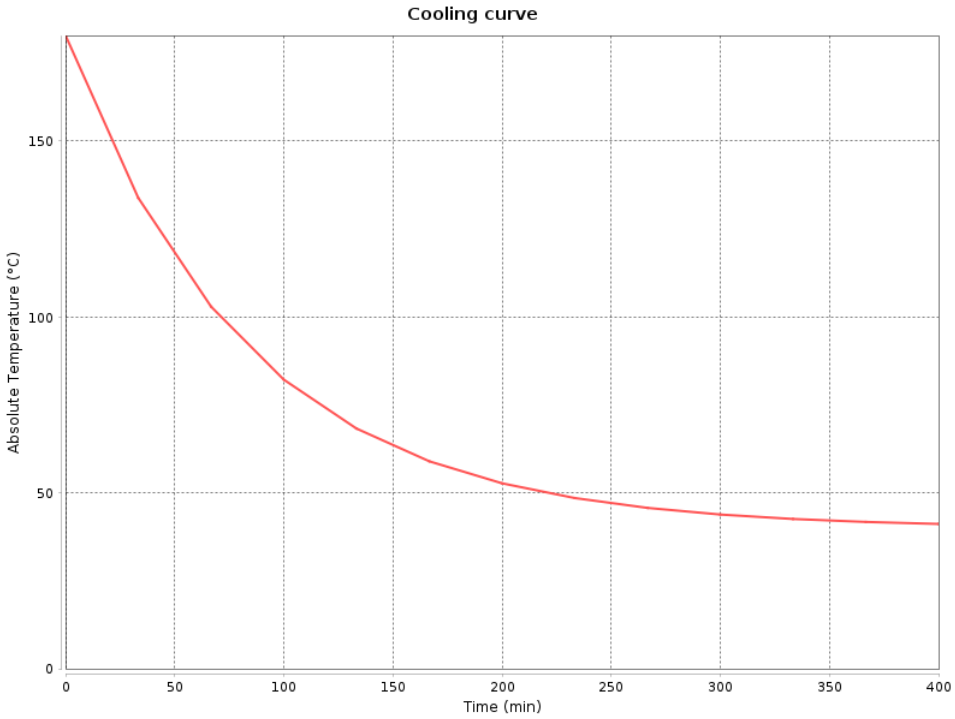

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