



Technical Datasheet for Mahniroo Alternators DSG52 M1-4

Generator data

Generator:	DSG52 M1-4	poles:	4	Standard:	IEC60034
Rated power:	360 KVA	Rated Current:	518.9 A	Rated Voltage:	400 V
Active Power:	280 Kwatt	Reactive Power:	216 kvar	Power Factor:	0.8
Speed:	1500 rpm	Freq:	50 HZ	Mech Power:	302
Voltage range/frequency range :		Zone A according IEC 60034-1 (dU=+/-5%,df=+/-2%)			

Insulation class:	stator: Class H	Rotor: Class H	Temperature Rise: H
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Winding Pitch: 2/3

Ambient Temperature: 40°C

Site altitude: 1000 m

Enclosure: IP23

Enviroment: Standard Enviroment

Cooling: 1C 01-Open-circuit ventilation

Cooling Air Vol: 65 m³/min

Weight: 1130 Momment of Inertia: 5.8 Kg/m²

Temperature Air inlet: 40°C

Cooling Water Quantity: n/a

Losses(enviroment): 22 Kwatt Losses(cooling): n/a

Wires: 4 terminals, starpoint connected in terminal box

Voltage regulator: Cosimat C /MN

Operation mode

Single yes

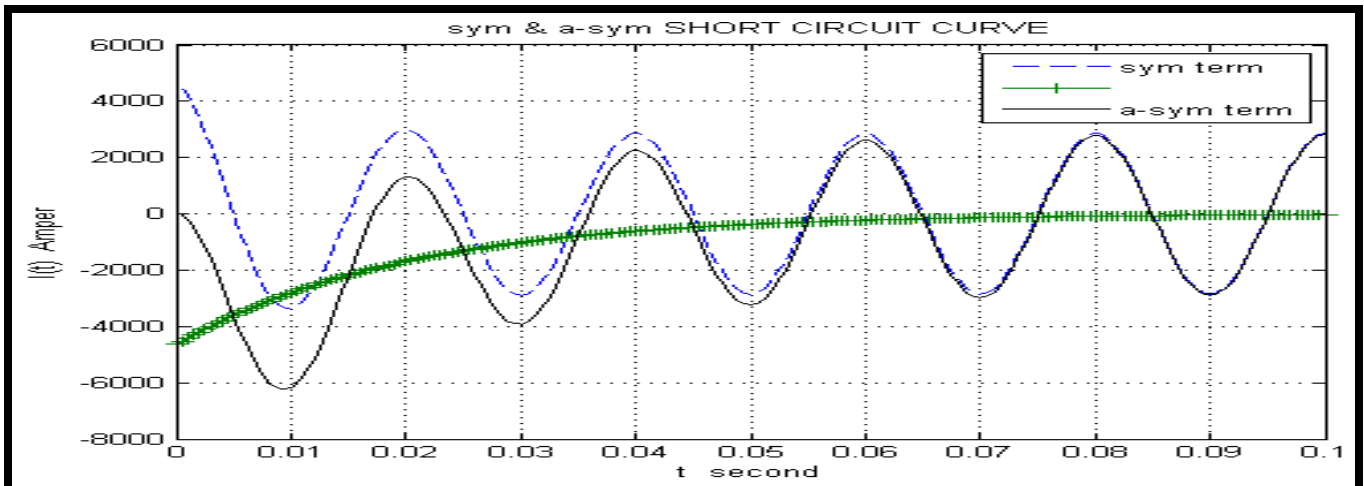
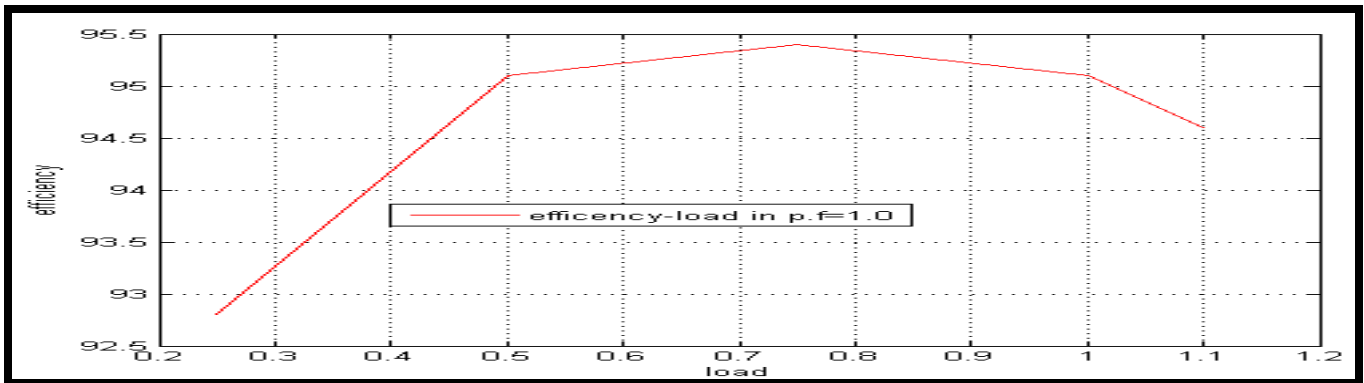
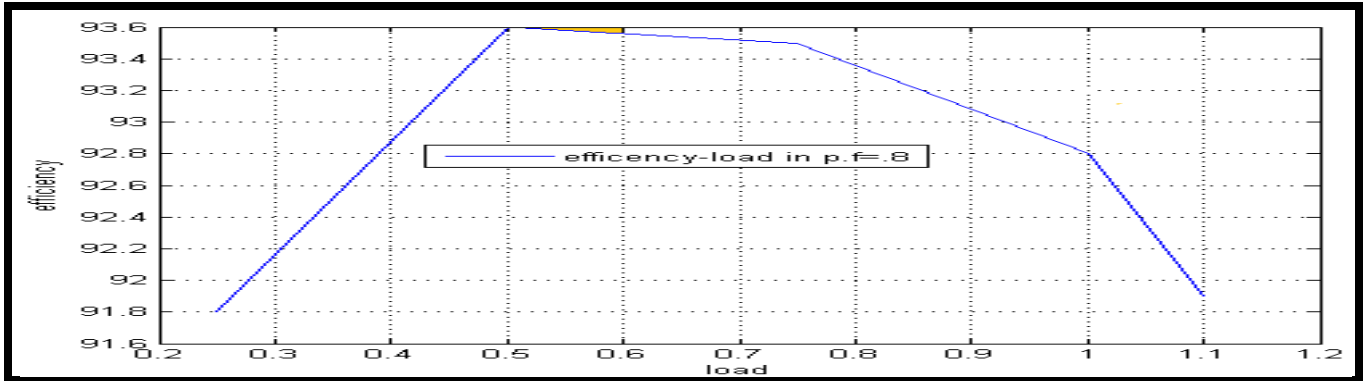
Parallel yes

Electrical Data (aac,IEC)

Efficiencies	110%	100%	75%	50%	25%
P.F 0.8	91.9	92.8	93.5	93.6	91.8
P.F 1.0	94.6	95.1	95.4	95.1	92.8

Reactances (p.u.) and time constants (second)

$X_d^{\text{saturated}}$	2.63	$X_q^{\text{saturated}}$	1.23	$T_{d0'}$	1.64 s
$X_{d'}^{\text{saturated}}$	0.236	$X_{q''}^{\text{saturated}}$	0.17	$T_{d'}$	0.149 s
$X_{d''}^{\text{saturated}}$	0.145	$X_0^{\text{saturated}}$	0.071	$T_{d''}$	0.0079 s
$X_2^{\text{saturated}}$	0.157			T_a	0.0198 s
$X_{1s}^{\text{saturated}}$	n.a.			$T_{q'}$	0.0107 s





General Arrangement for Mahniroo
Alternators DSG52 M1-4

