



# 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:	230 V	
Active Power:	280 Kwatt	Reactive Power:	216 kvar	Power Factor:	0.8	
Speed:	1500 rpm	Freq:	50 HZ	Mech Power:	302	
Voltage range/ferquency range :		Zone A according IEC 60034-1 (dU=+/-5%,df=+/-2%)				
Insulation class:	stator: Class H	Rotor: Class H	Temperature Rise: H			
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 m <sup>3</sup> /min				
Weight:	1130	Momment of Inertia:	5.8	Kg/m <sup>2</sup>		
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			] Operation mode	Single	yes
Voltage regulator:	Cosimat C /MN				Parallel	yes

## Electrical Data (aac,IEC)

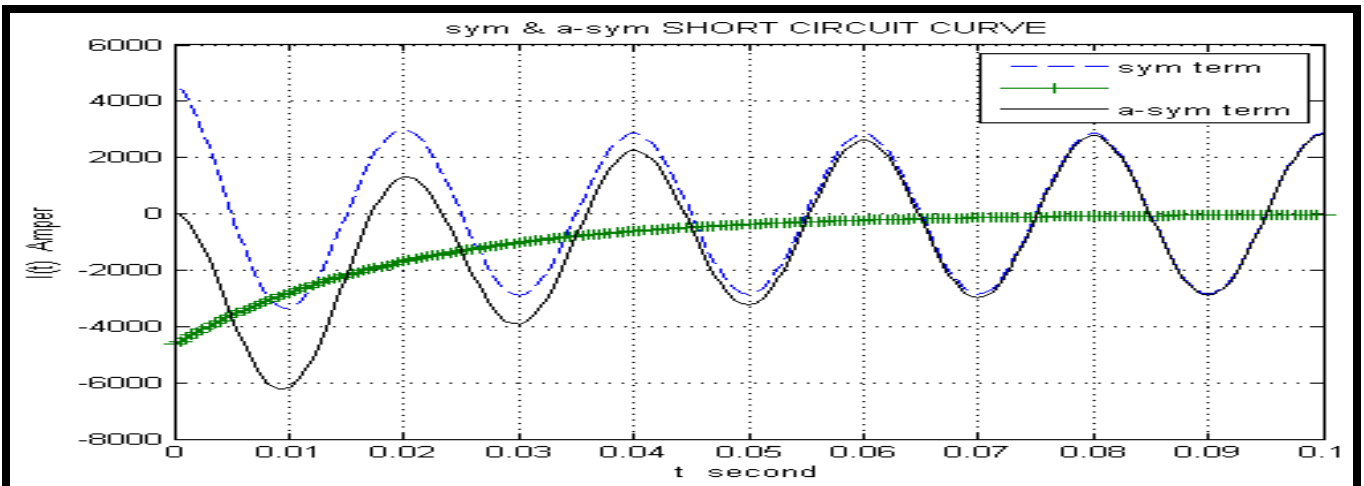
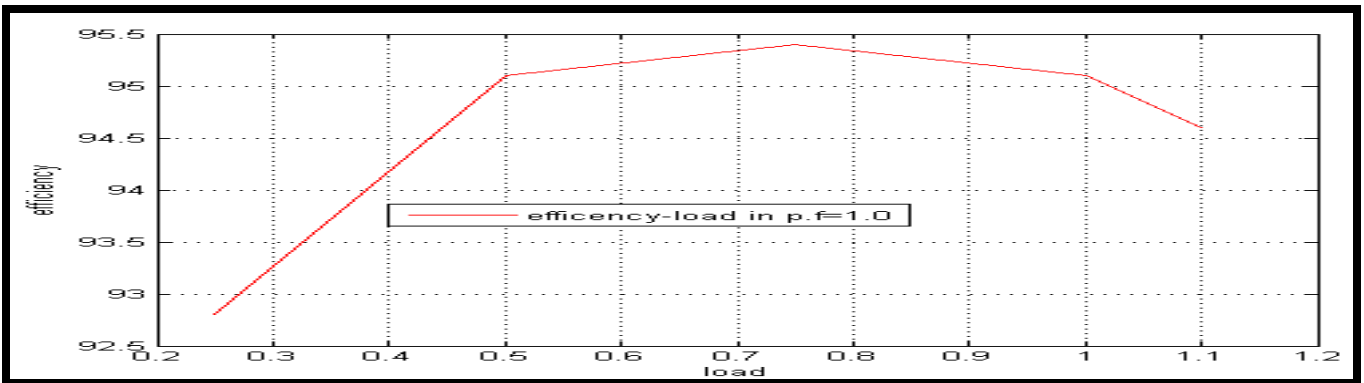
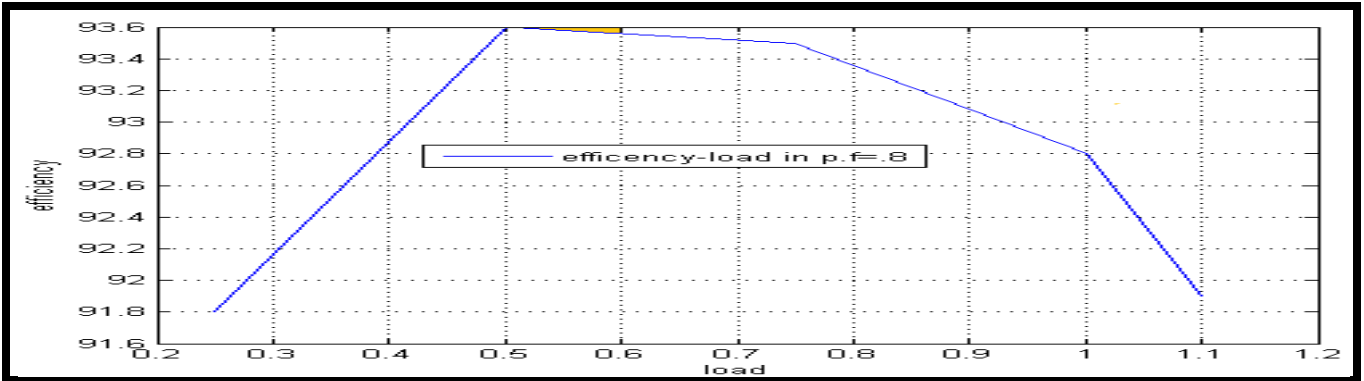
Efficiencies	110%	100%	75%	50%	25%
P.F 0.8	91.9	92.8	93.5	93.6	91.8
P.F 1.0	94.6	95.1	95.4	95.1	92.8

## 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



# Technical Datasheet for Mahniroo Alternators DSG52 M1-4





General Arrangement for Mahniroo  
Alternators DSG52 M1-4

