



## Technical Datasheet for Mahniroo Alternators DSG43 L2-4

### Generator data

Generator :	DSG43 L2-4	poles:	4	Standard:	IEC60034
Rated power :	250 KVA	Rated Current:	360 A	Rated Voltage:	400 V
Active Power :	200 Kwatt	Reactive Power:	150 kvar	Power Factor:	0.8
Speed:	1500 rpm	Freq:	50 HZ	Mech Power:	215 kwatt
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		
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:	35 m <sup>3</sup> /min		
Weight:	825	Momment of Inertia:	2.8 Kg/m <sup>2</sup>		
Temperature Air inlet	40°C	Cooling Water Quantity:	n/a		
Losses(enviroment):	15 Kwatt	Losses(cooling):	n/a		
Wires:	4 terminals, starpoint connected in terminal box			] Single	yes
Voltage regulator:	Cosimat C /MN	Operation mode	Parallel		yes

### Electrical Data (aac,IEC)

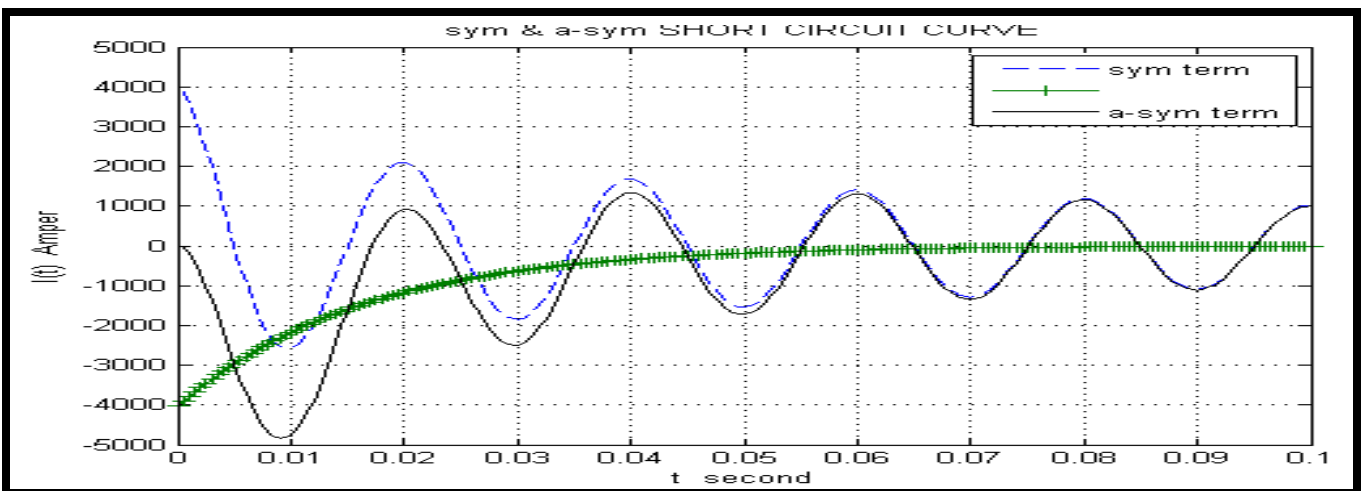
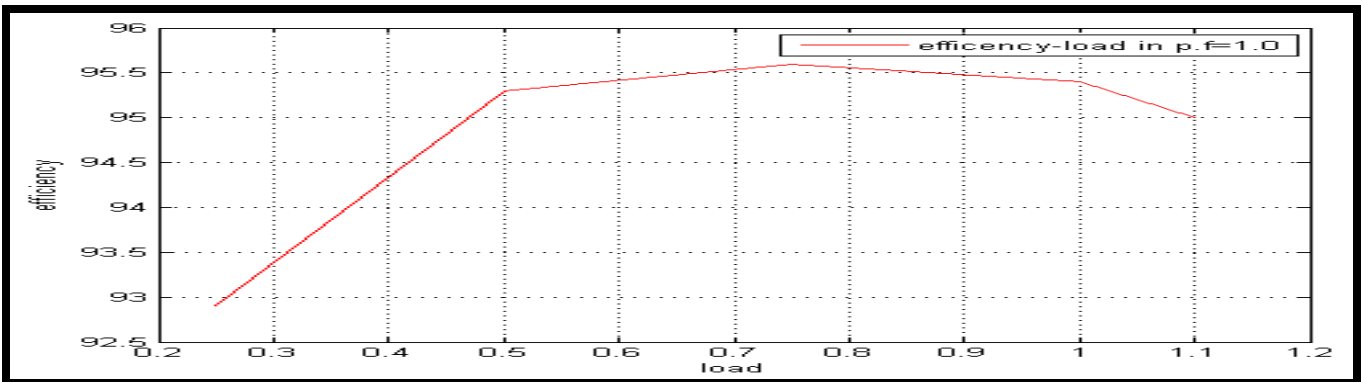
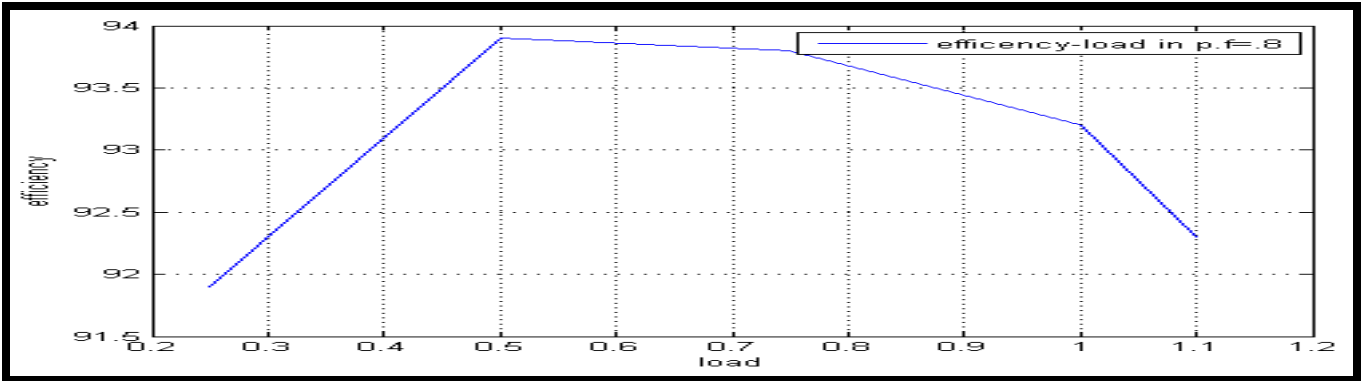
Efficiencies	110%	100%	75%	50%	25%
P.F 0.8	92.3	93.2	93.8	93.9	91.9
P.F 1.0	95	95.4	95.6	95.3	92.9

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

$X_d^{\text{saturated}}$	2.37	$X_q^{\text{saturated}}$	0.11	$T_{d0}'$	1.21 s
$X_{d'}^{\text{saturated}}$	0.194	$X_{q''}^{\text{saturated}}$	0.145	$T_{d'}$	0.1 s
$X_{d''}^{\text{saturated}}$	0.116	$X_0^{\text{saturated}}$	0.048	$T_{d''}$	0.0068 s
$X_2^{\text{saturated}}$	0.13			$T_a$	0.0162 s
$X_{1s}^{\text{saturated}}$	n.a.			$T_{q'}$	0.0083 s

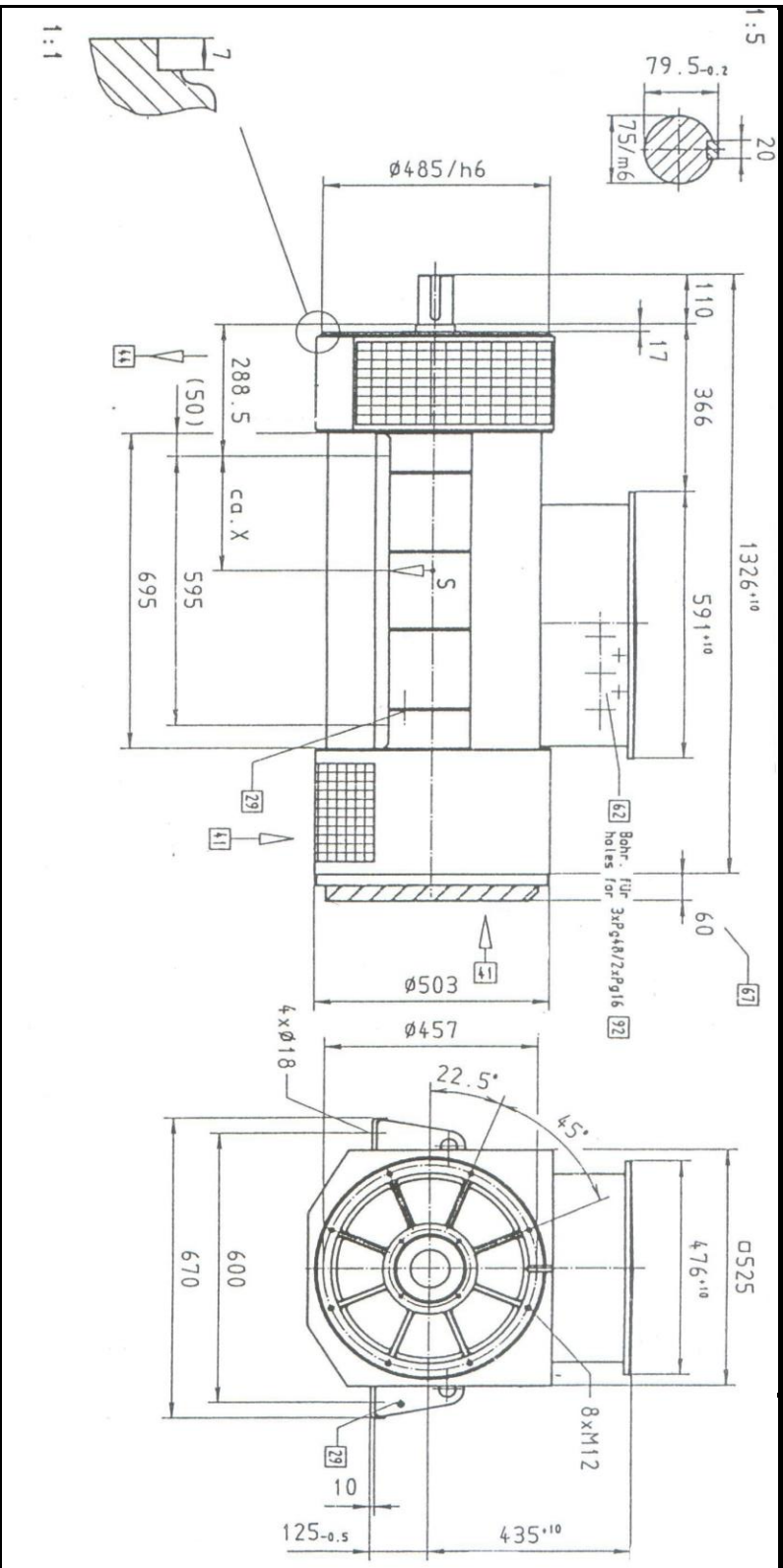


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General Arrangement for Mahniroo  
Alternators DSG43 L2-4



Printed in Iran @  
Avk/IMN 2016

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