



Technical Datasheet for Mahniroo Alternators DSG29 L2-4

Generator data

Generator :	DSG29 L2-4	poles:	4	Standard:	IEC60034	
Rated power :	55 KVA	Rated Current:	79 A	Rated Voltage:	400 V	
Active Power :	44 Kwatt	Reactive Power:	33 kvar	Power Factor:	0.8	
Speed:	1500 rpm	Freq:	50 HZ	Mech Power:	49.1 kwatt	
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:	10 m ³ /min			
Weight:	280	Momment of Inertia:	0.5 Kg/m ²			
Temperature Air inlet	40°C	Cooling Water Quantity:	n/a			
Losses(enviroment):	5.1 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	88.6	90.5	89.9	90.6	87.7
P.F 1.0	92.6	93	93.4	92.8	89.3

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

$X_d^{saturated}$	2.03	$X_q^{saturated}$	0.94	T_{d0}'	0.59 s
$X_{d'}^{saturated}$	0.153	$X_{q''}^{saturated}$	0.117	$T_{d'}$	0.045 s
$X_{d''}^{saturated}$	0.093	$X_0^{saturated}$	0.038	$T_{d''}$	0.0035 s
$X_2^{saturated}$	0.104			T_a	0.0085 s
$X_{1s}^{saturated}$	n.a.			$T_{q'}$	0.0043 s



