



Technical Datasheet for Mahniroo Alternators DSG43 M2-4

Generator data

Generator :	DSG43 M2-4	poles:	4	Standard:	IEC60034	
Rated power :	170 KVA	Rated Current:	246 A	Rated Voltage:	400 V	
Active Power :	136 Kwatt	Reactive Power:	102 kvar	Power Factor:	0.8	
Speed:	1500 rpm	Freq:	50 HZ	Mech Power:	148 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:	35 m ³ /min			
Weight:	620 Kg	Momment of Inertia:	2.1 Kg/m ²			
Temperature Air inlet	40°C	Cooling Water Quantity:	n/a			
Losses(enviroment):	12 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	91.1	92	92.8	92.8	90.5
P.F 1.0	94.2	94.7	94.9	93	89.6

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

$X_d^{saturated}$	2.34	$X_q^{saturated}$	1.08	T_{d0}^T	1.09 s
$X_{d'}^{saturated}$	0.208	$X_{q''}^{saturated}$	0.157	$T_{d'}$	0.097 s
$X_{d''}^{saturated}$	0.1326	$X_0^{saturated}$	0.054	$T_{d''}$	0.0072 s
$X_2^{saturated}$	0.141			T_a	0.0145 s
$X_{1s}^{saturated}$	n.a.			$T_{q'}$	0.009 s



Technical Datasheet for Mahniroo Alternators DSG43 M2-4



