

Motor Repair & Rewind Price List

1 off 10 000 kW EFP motor repair and rewind
Motor serial nr.: D005032
Strip & Assess job nr.: HV2021 - 8219

Stock number: 141271

Plant System: MV Motors

Compiled by:



05/12/2021

DJ Dreyer
Engineer

Technical Evaluation criteria:

Eskom Request:	Supplier Response:	Score %
Proof of qualified winder & fitter (Certificates attached)? (Yes/No)		Gatekeeper
Lead time to complete Works (Weeks)?		35
Proof of workshop facility with 36 Ton crane to handle this motor (Submit photos / load test certificates attached)? (Yes/No)		25
Proof of workshop facility with Testbay which can test up to 11kV no-load 10MW motor – Submit test certificate for similar or bigger motor tested		20
Submission of a valid SABS certificate in terms of ISO 9001:2008 – Quality Management Systems (Attached) (Yes/No)		10
Warranty period (Supply signed confirmation letter) – Minimum warranty of 12 Months		10
<i>*Note: A YES on the gatekeeper AND a minimum score of 75% is required to pass the technical evaluation criteria</i>		

ITEM 1: REPAIR & REWIND 10 000KW GEC MOTOR

	Motor description EFP motor	Output Power (kW) 10000	Voltage (V) 11000	Current (A) 601	Speed (rpm) 1492	Weight 25 Ton
	Description	Rate	Quantity	Amount		
1.	COLLECT MOTOR FROM TOMCO ARMATURE WINDERS		1			
2.	BURN OUT STATOR WINDINGS, REMOVE OLD WINDINGS, CLEAN & PREPARE CORE FOR REWIND		1			
3.	TEST CORE AFTER BURN OUT - HOT SPOTS AT 98° C - REPAIR IF NECESSARY		1			
4.	MANUFACTURE NEW COIL & INSULATION KIT		1			
5.	REWIND STATOR, VPI & BAKE (FIT NEW PT100'S & LEADS)		1			
6.	POLISH STATOR FEET		1			
7.	RE-TAP ALL MOUNTING HOLES		1			
8.	OVERHAUL ROTOR & SPRAY WITH INSULATING VARNISH		1			
9.	LIGHT MACHINE NDE VACUUM SEAL LANDING		1			
10.	POLISH ALL BEARING JOURNALS & SEAL LANDINGS		1			
11.	CLEAN & OVERHAUL HEAT EXCHANGER		1			
12.	REMETAL & MACHINE DE & NDE BEARINGS 250mm NEW TYPE GLACIERS		1			
13.	SUPPLY ONE (1) OFF SPARE BEARING		1			
14.	MANUFACTURE NEW 250mm FLOATING LAB SEALS 4 OFF		1			
15.	RE-INSULATE BEARING HOUSINGS (2 OFF)		1			
16.	FIT NEW VACUUM FELT SEALS (2 OFF)		1			
17.	FIT NEW BREATHER PIPES & CLAMPS		1			
18.	REPLACE STRIPPED BOLTS & PLUGS		1			
19.	REPAIR OVER SIZE BEARING HOUSING NIPS		1			
20.	FIT NEW OIL SIGHT GLASSES 4 OFF		1			
21.	SHOT BLAST, CLEAN & PAINT DE & NDE BEARING HOUSINGS		1			
22.	SUPPLY & FIT 3 OFF INSULATORS INCLUDING CONNECTION STUDS AND MATCHING CONNECTION CLAMPS (FLAGS)		1			
23.	SANDBLAST, CLEAN, PAINT AND REPAIR TERMINAL BOX INCLUDING BLOWOUT PANELS		1			
24.	MANUFACTURE NEW SUPPLY TERMINAL BOX COVER		1			
25.	SUPPLY & FIT 2 OFF NEW DESICATORS		1			
26.	SUPPLY & FIT NEW ZORC		1			
27.	FIT NEW EARTH LUGS		1			
28.	SUPPLY & FIT 3 OFF NEW CTS (750:1 ; 30mA; Class PX; Vkp = 300; Secondary resistance should not exceed 10Ω)		1			
29.	SUPPLY & FIT 4 OFF NEW ANTI-CONDENSATION HEATERS		1			

30.	SEAL OFF STARPOINT TERMINAL BOX COMPLETELY FROM THE MOTOR INTERNAL TO PREVENT ANY HOT AIR ENTERING INTO THE STAR POINT TERMINAL BOX		1	
31.	SUPPLY FOR FLOOD LUBE OIL SUPPLY TO MOTOR BEARINGS: - SUPPLY 2 X NEW OIL INLET PIPES TO BEARINGS WITH FLANGES (SEE FLANGE DRAWING ON LAST PAGE) - SUPPLY 2 X NEW OIL FLOW METERS (0-30L/MIN) - SUPPLY 2 X NEW OIL REGULATING VALVES - SUPPLY 4 SPARE FLANGES (SEE FLANGE DRAWING ON LAST PAGE)		1	
32.	DYNAMICALLY BALANCE THE ROTOR AT OPERATING SPEED ACCORDING TO ISO 1940/1 BALANCING GRADE G6.3 (BALANCING CERTIFICATE TO BE INCLUDED IN TEST REPORT).		1	
33.	REPLACE RUBBER SEALS & GASKETS		1	
34.	ASSEMBLE MOTOR COMPLETE		1	
35.	TEST MOTOR INTERNAL		1	
36.	CLEAN & PAINT THE MOTOR (LIGHT GREY GLOSS ENAMEL G29) & PREPARE FOR DELIVERY		1	
37.	CONDUCT CUSTOMER WITNESS TEST - NO LOAD TEST AT FULL VOLTAGE - FULL BEARING RUN WITH TEMPERATURE & VIBRATION READINGS		1	
38.	SUPPLY DATA PACK		1	
39.	FINAL INSPECTION & DELIVERY BACK TO SITE (KRIEL POWER STATION) WITH SHAFT LOCKING DEVICE - 32 000KG		1	
			Total	

Scope of Work

DESCRIPTION OF THE WORKS

Refurbishment and Repair EFP motors

TECHNICAL SPECIFICATIONS OF MOTOR			
<u>MAKE</u>	1 x ACTOM	<u>SERIAL NO.</u>	DOO5232
<u>KILOWATTS</u>	10 000 kW	<u>VOLTAGE</u>	11 000 V
<u>AMPS</u>	620 A	<u>SPEED</u>	1492 rpm
<u>FRAME SIZE</u>	1120	<u>WEIGHT</u>	32 TONS
<u>MOTOR POSITION IN PLANT</u>	Electric Feedpump motor		
<u>CAUSE OF FAILURE</u>	WINDING FAILURE		

Oil Inlet Flange:

