



**PRODUCT STANDARD**  
SWITCHGEAR ENGINEERING DIVISION

SG 24309

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**GEAR BOX(MANUAL DRIVEN) FOR 36KV GIS**

**1.0 APPLICATION :**

A gearbox with a worm and worm wheel arrangement is required for driving the isolator of 36kV GIS with provision of manual operation. This gearbox will be used with a fractional h.p. motor directly mounted on the gearbox. The output shaft rotates at a slow speed and provides sectoral movement of <math><360^{\circ}</math>. The limits are controlled, electrically, by limit switches. The assembly is engaged to the load by means of splines provided in the worm wheel.

**2.0 GEAR BOX SPECIFICATIONS:**

- 2.1 Output : Spline as per drawing RDDG43513050\_2912-001
- 2.2 Input shaft dia : To suit motor-drive ( $\phi 15.5$ )
- 2.3 Size : 170x120x100mm, refer Drawing No - RDDG43513050\_2911-001 Rev 00
- 2.4 Ratio : 25:1
- 2.5 Body : HE-15 (IS736-GR24345(WP))
- 2.6 Worm : EN-19
- 2.7 Wheel : Ferrous/Non-Ferrous
- 2.8 Bearings : Needle/Ball
- 2.9 Lubrication : Grease/Ball/Spherical of SKF/FAG/NSK/NTN make only
- 2.10 Sealing : Neoprene oil seals at shaft

- 2.11 Manual operation : As per drawing RDDG 43513050\_2914 - 001
- 2.12 Dimension Drawings :- Refer Drawing no.:- RDDG43513050\_2911-001 Rev 00

**3.0 SURFACE FINISH : As per Drawing RDDG43513050\_2910 V00**

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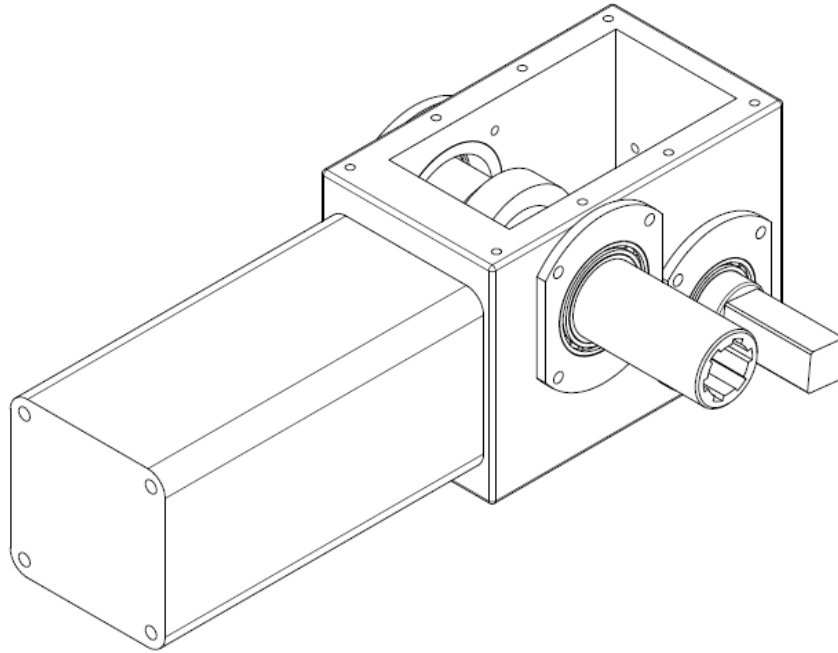
<b>REV.</b>	00	<b>PRINTS TO:-</b>		<b>APPROVED –</b>		
<b>ALTD.</b>	AK			HRP		
<b>APPD.</b>	HRP			<b>PREPARED</b>	<b>ISSUED</b>	<b>DATE</b>
<b>DATE.</b>	24.04.15			AK	VD	24.04.15



**4.0 TEST CERTIFICATE :**

The gear box shall be subjected to a load-cycling test. Load-cycle is defined as operation of the gear from rest to 350° clock wise and return to original position 350° counter clock wise. 1000 No-load operations and 200 On-load operations shall be carried out during inspection. The gear box shall be inspected for wear and tear of the parts. Heavy wear shall reject the supply.

**5.0 Gear Box assembly**



Note: Motor is not in the scope of supply.  
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