

SL No	Description	Qty
01	<p><b>150 KVA OIL IMMERSSED TRANSFORMER</b></p> <p>Three phase transformers, step down type with normal accessories. Indoor on ONAN type natural; cooling, oil immersed. In accordance with IEC726, IEC &amp; NFC52100 (normal test) standards and tolerance according to IEC 76 standards.</p> <p><b>Terminations:</b></p> <p>HV= Connection from top into the connecting bars. LV= Connection from top into flat bus terminals.</p> <p><b>Rated power in KVA</b> : 150  <b>Frequency</b> : 50Hz  <b>High Voltage</b> : 11KV  <b>HV tapping by links (Off- circuit)</b> in + -1.5% / + -2.5%  <b>LV in Volts</b> : 415V  <b>HV insulation Level in KV</b> : 12</p> <p><b>Rated Voltage:</b></p> <p><b>Primary</b> : 11,000V  <b>Secondary</b> : 415V</p> <p><b>Rated Current:</b></p> <p><b>Primary</b> : 7.87A  <b>Secondary</b> : 208.68A  <b>Power frequency KV rms</b> : 28  <b>Vector group</b> : DYN 11  <b>Max. Ambient temp. In Deg. C.</b> : 40  <b>Altitude Lower than in meter</b> : 1000  <b>Temp. Rise in Winding /oil in Deg.K</b> : 40/55  <b>No load loss</b> : 380W  <b>Load loss at 75 deg.c</b> : 1800W  <b>Impedance voltage</b> : 4%</p> <p><b>Accessories:</b> 4 No LT Bushing &amp; 3 Nos. HT Bushing  Silica Gel, Breather Dial Type  Thermometer  Horn Gap Arrestor  Conservator  Lifting Lugs  Earthing Terminals  Name plate</p> <p>Silicon core - : Nippon steel- Kawasaki-Japan.  Transformer oil : Hyrax- Malaysia  Super Enamel wire : BRB wire Bangladesh  Copper strip : Oriental Copper Co- Singapore, BRB.</p> <p>ASSEMBLED BY: Uniko Power Ltd.</p>	01 no

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02	<p><b><u>LT SWITCH GEAR:</u></b></p> <p>a) 16 SWG Steel Sheet, floor mounting, free standing, 500V, 50HZ, indoor type Low Tension Switch Gear with hard drawn Copper bus bars, TPN &amp; E Equipped with.</p> <p><b><u>Technical Specification:</u></b></p> <p><b><u>Incoming:</u></b>  The panel comprising of:  Incoming: 1 x 250A 36KA TP MCCB.</p> <p>4- Current transformer ratio:200/5A with suitable accuracy and burden.  1-Ammeter scaled (Digital) (0-500A) with selector switch.  1-Voltmeter scaled (Digital) (0-500V) with selector switch.  3- Indicating lamp R/Y/B.</p> <p><b><u>Out Going</u></b></p> <p>01x160A, 25KA, TP MCCB with adjustable thermal overload and magnetic Short- circuit releases (PFI)</p> <p>01x125A, 25KA, TP MCCB with adjustable thermal overload and magnetic Short- circuit releases (Generator)</p> <p>08x40/63A, 6KA, TP MCB with adjustable thermal overload and magnetic Short- circuit releases (Unit Load)</p> <p>All MCCB and MCB-A.B.B. Italy/ Hyundai, Korea.  ASSEMBLED BY: Uniko Power Engineering Company Limited.</p>	01 no

### **03) 90 KVAR PFI PLANT:**

**Sheet steel clad, dust and vermin proof, free standing floor mounting, cubical made of 16 SWG sheet steel having front hinged type door with door locked. 90 KVAR, 415V, 3 phase, power factor improvement plant with the following components.**

- 1 Nos. 25 KVAR- power capacitor bank, 3-phase rated 415V, 50HZ with in-built discharge resistor.**
- 1 Nos. 20 KVAR-power capacitor bank, 3-phase rated 415V, 50HZ with in-built discharge.**
- 1Nos. 15 KVAR- power capacitor bank, 3-phase rated 415V, 50HZ with in-built discharge.**
- 1 Nos. 10 KVAR- power capacitor bank, 3-phase rated 415V, 50HZ with in-built discharge.**
- 2 Nos. 7.5 KVAR- power capacitor bank, 3-phase rated 415V, 50HZ with in-built discharge.**
- 1 Nos. 5 KVAR- power capacitor bank, 3-phase rated 415V, 50HZ with in-built Fixt.**
- 6 Nos. triple pole magnetic contactor, of adequate rating**
- 18 Nos. 415V, HRC fuses with base of adequate rating**
- 6 Nos. Indicating Lamps.**
- 3 set of Control fuse with base.**

**\*All Capacitor Origin: ABB, Italy.**

**\*Magnetic Contactor Origin: ABB, Italy/ Hyundai, Korea.**

**\* PFC relay Origin: Mikro-Malaysia.**

**Assembled by: Uniko Power Engineering Company Limited.**

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04.	<p><b><u>Lighting Arrester:</u></b></p> <p><b>Rated Voltage</b> : 11 KV  <b>Rated System Voltage</b> : 12 KV  <b>Frequency</b> : 50Hz  <b>Minimum Spark Over- (rms )</b> : 14 KV  <b>Maximum Spark Over ( rms )</b> : 40 KV  <b>Maximum Impulse Spark</b> : 45KV  <b>Bill (Peak )</b> : 75 KV</p> <p><b>Withstand Voltage :</b></p> <p><b>Wet 10 sec:</b> : 24 KV  <b>Dry 1 Min:</b> : 28 KV  <b>Discharge Current</b> : 5 KA  <b>Impulse current Withstand</b> : 55KA</p>	1 Set
05.	<p><b><u>Drop Out Fuse :</u></b></p> <p><b>Rated Voltage (Nominal)</b> : 11 KV  <b>Rated Maximum Voltage</b> : 15 KV  <b>Rated Frequency</b> : 50Hz  <b>Bill</b> : 75 KV  <b>Rated current</b> : 50A  <b>Interrupting Current( rms )</b> : 35 KA</p> <p><b>Withstand Test Voltage:</b></p> <p><b>Wet 10 sec</b> : 30KV  <b>Dry 1 Min:</b> : 35 KV</p> <p><b>Brand: Gem Co/ Brazil.</b></p>	1 Set

## **06. EARTHING OF SUB-STATION:**

**Supply and Installation of Sub-station earthing as per Specification with the followings:-**

- (a)** Earthing of Sub-station and equipment with 1" dia G.1 pipe 10' each Top and bottom up to a depth of 100 ft. in four pits using Copper Conductor of 4 SWG HDBC excluding making of inspection pits.
- (b)** Earthing of using 4 SWG Copper conductors (04 Nos\*100').
- (c)** Supply Installation testing and Commissioning of 2 Nos Copper earthing block with required Nos of 1/4" hole for Elec Connection Size- 25\*4\*300mm for transformer neutral and another for all Sub-station equipment's ECC Connection.
- (d)** The earth electrode shall be Driven into the ground by tube well sinking method. The Top/head of the GI pipe after Completing all Connection shall be covered with Hessian cloth soaked in bitumen

## **WARRANTY CERTIFICATE**

We stand warranty for trouble free operation of our supplied equipment and we undertake warranty for free replacement of any parts failing due to manufacturing defects, which shall Not Normal operational wear and tear, for a period of Transformer 36 months, LT switchgear and PFI plant 12 months from the date of delivery.

Thanking you,  
Yours faithfully

For,  
**Uniko Power Engineering Company Limited.**