



**JORDAN PETROLEUM REFINERY
CO. LTD.**

BID No.: 136/2025

شركة مصفاة البترول الأردنية المساهمة المحدودة

مناقصة رقم : 2025/136

**تصميم و توريد و فحص و تشغيل محولين كهربائيين بقدره (2500KVA & 750KVA) لاستبدال المحولين الكهربائيين
الحاليين في مستودعات جنوب العقبة**

**Design, supply, testing and commissioning of two power transformers
(2500KVA & 750KVA)**


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- *TENDER AND CONTRACT INVITATION*

. دعوة المناقصة / الشروط العامة

BID NO. 136/2025	JORDAN PETROLEUM REFINERY CO. LTD	
OR:25010796 OQ:25010386	Design, supply, testing and commissioning of two power transformers (750KVA&2500KVA)	

I. BID& Contract Invitation

1. The following Instructions and General Conditions are integral part of the invitation, and have the power of the purchase contract.
The listed conditions hereunder are binding for the tenderers, unless otherwise is stated in the documents.
Offers (technical & commercial) shall be submitted in triplicate, in **English language**, including the following details, before the **CLOSING DATE on Thursday 25th September of 2025**, at 12.30 PM (Jordan Local Time).
2. **Identifications:**
The Company: Jordan Petroleum Refinery Company Ltd., (JPRC).
The Manager: Chief Executive Officer.
The Contractor: The successful Tenderer/Supplier/ Manufacturer.
The Tenderer: The participant in BID (Company Owner).
3. **Offers shall include the following:**
 - A. Printed price and clearly written in figures and capital letters. (**Currency** shall be stated in words not in abbreviations).
 - B. Clearly stated price for **unit and total price**.
 - C. **Freight Terms:** On the basis of **DDP at Aqaba stores / JPRC**.
 - D. **Valid** for (120) days, at least, from closing date, unless otherwise stated, and also fixed during the completion period.
 - E. **Delivery time:** the shortest delivery period is to be stated in your offer.
 - F. **Country of origin / shipment:** origin of goods, delivery place and port of shipment.
 - G. **Any extra optional and / or additional services** to the required specifications must be clearly detailed & priced.
 - H. **Manufacturer's name and full address.**
 - I. **Packing:** Proper and secure seaworthy packing and / or according to BID requirement. Details of packing shall also be stated.
4. ☒ **Catalogues:** Operation, maintenance and spare parts manuals, as well as any necessary leaflets and information shall be submitted **in English language**, all shall comply with BID documents requirements, if any.
5. **Spare Parts:** Tenderer shall provide separate, detailed, itemized priced spare parts list recommended for (two) years operation under normal circumstances in addition to other requirements of BID documents, if any.

The tenderer shall guarantee and shall secure to the COMPANY the guarantees of the manufacturers for the supply of spare parts for 15 years after commissioning of equipment.
6. ☒ ~~**Samples:** Tenderer shall submit, with his offer, samples for offered materials if necessary or requested.~~

7. **Required Certificates:** Test Reports Laboratory certificate, API, Baseeffa, UL listing, FM approvals, Mill Test Certificate, Third Party Inspection Certificates and/or as required by BID documents, codes, etc.
8. The Tenderer guarantees that materials are to be supplied **brand new, updated in design, free from any failure, fault, damage, or defects in material, design, or manufacturing, and of latest model**, unless the offer states otherwise.
9. Offers shall not include charges for **Insurance**.
10. **Partial award** shall be acceptable by the Tenderer; otherwise, the COMPANY has the right to disregard the offer. Separate price is required for each item.
11. Any items or accessories necessary to have the offered system/ equipment complete in every respect shall be quoted even if they are not mentioned in this standard specification, noting that failure of the Contractor to do so shall be at his full responsibility, and the said equipment / system shall be rectified as necessary at the **Contractor's own expense**.
12. The COMPANY is not obliged to award on any offer or the **lowest offered prices**.
13. The COMPANY has the right to **cancel** any part or the whole BID without justifications.
14. ~~The COMPANY has the right to increase or decreases the required quantities by (±25 %) depending on the COMPANY's requirements.~~
15. The COMPANY is **not bound** to consider any offer which does not follow closely BID requirements.
16. The COMPANY shall be exempted from serving **notarial notice/s** on the tender.
17. The Tenderer is required to provide **qualification documents** with his offers.

These documents shall include details of his production and general catalogues, and explain, in detail, his experience in same required equipment and projects, and provide **reference lists including customers/refineries** to which he delivered similar equipment and projects, dates, and contract values. The COMPANY has the right to disregard any offer, which may be received from unqualified Tenderers and / or Manufacturer. The COMPANY shall not accept any responsibility or liability of any type or any kind in any way whatsoever.
18. The Tenderer shall submit all documents, which show financial statement of the supplier for the latest three years including balance sheet and profit and loss accounts with the offer.

If Qualification Form is attached to the BID documents it shall be completely filled by the Tenderer and submit with the offer
19. It is the full responsibility of the Tenderer to provide all required information during the offering stage, where any lack or misguidance of the required information provided by the Tenderer shall be considered a cause of rejection of his offer.
20. **Payment method:**
 - A- Payment shall be made either by **Letter of Credit, CAD. NET 30 DAYS or COD**.
(All Bank commissions or fees outside JORDAN shall be borne by the **Successful Tenderer(s)**).
 - B- **Payment in advance is not acceptable.**
 - C- All external bank charges including confirmation commissions or fees of L/C shall be borne by the **Successful Tenderers** exception of the initial internal banking charges for opening L/C, which shall be borne by the JPRC.
 - D- The following paragraphs shall be part of **L/ C when shipping by sea** :
 1. Certificate issued by the owners, carriers, master, charterers or agent of the vessel, certifying that the carrying vessel is classified 100 A1 or equivalent and is a (P&I Club) member.
 2. Certificate issued by the owners, carriers, master, charterers or agent of the vessel, certifying that the carrying vessel is subject to International Safety Management

Code (ISM) and International Shipping and Port Security Safety Code (ISPS) and carries valid Safety Certificate.

3. Upon delivery, a signed commercial invoice in 3 original & 3 copies indicating delivery terms shall be provided.
 4. Full set of at least (2/2) long form original clean (on board) bill(s) of lading on the printed forms of carrier issued or endorsed to the order of issuing bank, showing full name and address of the shipping company agent or his representative in the country of destination .
21. **Instructions of the Central Bank:** All parties to this transaction are advised that where the U.S., EU, UN impose specific sanctions against certain countries, entities and individuals banks may be unable to process a transaction that involves a breach of such sanctions , and authorities may require disclosure of information.

II. Successful Tenderer/ Supplier shall be responsible for the following:

1. All the documents pertaining to the General Conditions, Specifications, Drawings and any Annexes shall form an integral part of the **agreement/ contract / purchase order**.
2. **After awarding, any change in the offered specifications shall not be acceptable.**
3. **Performance guarantee (bank guarantee) equal (10%)** of the total amount through a local Jordanian bank. shall be submit within (10) days of award of tender, to guarantee that materials will be supplied according to BID specifications and conditions, submitted offer on this tender, and related correspondences as well as to guarantee that the whole consignment will be delivered within the specified period.

This guarantee must be valid for period of **(12) months from shipping date** unless otherwise is stated, subject to extension when required and payable partially or totally to COMPANY at first demand.

Copy of bank guarantee text is herewith attached.

If the Successful Tenderer/ Supplier refuse the letter of award or not submitting the performance bond for any reason, The COMPANY has the right to confiscate the bid bond amount and the supplier will not be allowed to participate in future tenders.

4. **(6) per one thousands** of Contract value shall be paid to cover **revenue stamps to be paid to the Ministry of Finance** according to prevailing Jordanian law. The total sum shall be paid within (10) ten days after the date of award letter to avoid delay penalty, or deduct it from the purchase order.
5. Accept the **purchase order** based on the submitted offer, in addition to all other conditions, which will be agreed upon by the COMPANY and Successful Tenderer, as an obligatory contract for both parties.
6. No assigning of the awarded BID (partially or totally) to any other supplier without the prior written consent from the COMPANY.
7. All original shipping documents (**commercial invoice, AWB, B/L, LWB**), **detailed packing list , EURO 1 Certificate if applicable**) in the name of JPRC, and shall be delivered to our BANK/ JPRC immediately from dispatching of the goods to avoid delay in Jordanian Customs Department.
8. Upon delivery packing list (1) original and (5) copies showing number of packages / cartons /

rolls/pallets / gross weight and the contents of each package /carton/roll/pallet/ net weight separately.

9. All materials to be supplied from European countries shall be included with EURO 1 Certificate with shipping documents.
10. All materials to be supplied from USA shall be shipped directly from USA to Jordan according to Jordanian Customs Department rules; so any customs duty will be exempt due to implementation of customs agreement between USA and JORDAN.
11. Successful Tenderer shall be responsible for all applicable additional charges as **Taxes, VAT** in any country outside Jordan.
12. Delivery delay **liquidated damages**: in the event that the Supplier failed to supply the required materials, equipment and necessary documents within the specified delivery period, which prevents putting in service of the equipment, the sum of **JOD (20)** per day or any part thereof shall be paid by the supplier to COMPANY. **(Not exceeding 5 % of contract value)**.
13. **In case delay or missing of submitting any of the shipping documents to the bank, which leads to storage fees or any custom fees on the goods from JORDAN CUSTOMS DEPARTMENT, all these charges shall be paid by the supplier.**
14. As the contract is a Jordanian one, any dispute arising between COMPANY and the Contractor on the interpretation or execution of the contract, which can't be solved amicably, shall be governed by and construed in accordance with **Jordanian laws**, and shall be referred to arbitration. Arbitration shall be conducted in Arabic, or English translated into Arabic. The venue of arbitration shall be in Amman – Jordan.
15. The COMPANY , through **cashing the guarantees** shall not be deemed to have waived any of its rights under the Contract. For BID performance purpose, the local agent and the Contractor are jointly and severally liable . The COMPANY has the right to claim its rights legally against either party , or both of them, in case they do not comply with any of the BID conditions.
16. The COMPANY has the right to reject of any supplied materials which not in conformity with the required specification, and shall hold the supplier liable for any damage resulting there from including taxes , custom fees , clearance fees ...etc.)
17. **Transshipment** is not acceptable.
18. **If the defect or function failure can't be corrected**, the Contractor / Supplier shall promptly replace said equipment (free of charge) or remove the equipment with refund the full purchase price
19. Return copy of purchase order, which considered as a **formal contract signed & stamped by an authorized person (beneficiary) within (48 hours)**.

III.

Important Notes For Tenderers:

1. Offers shall be submitted in two separated, closed and sealed envelopes (**One original and two copies**) indicating clearly contents of each envelope as follows:
 - The 1st envelope shall include the **technical offer and qualification documents**.
 - The 2nd envelope shall include the **commercial offer**.
2. **Name and address of Tenderer** is to be printed on closed and sealed envelope in addition to BID number and closing date. Noting that **different offers** shall be treated separately.
3. Offers by e-mail are only acceptable on:
E-mail (JPRC.SubTenders@iopetrol.com.jo),
Offers by telephone are strictly prohibited.
4. **Any questions regarding the BID** shall be addressed in writing to:
EMAIL: (tender.inquiries@iopetrol.com)
5. Tenderer is not permitted to contact and or meet and or visit any one of the technical team during BID study stage without prior post coordination and written approval by **Chief Executive Officer or Executive Director of Refinery or Purchasing Manager**.
6. Any offer after the closing date shall not **be accepted**.
7. **The offers must be signed and stamped by the Tenderer**; otherwise, it shall be disregarded. In addition, shall be submitted to the COMPANY as prepared and arranged by the manufacturer.
8. Tenderers shall provide the COMPANY with the name and full address of the **Agent or Representative / Regional office in Jordan** and his registration number, if available.
9. **Local Agent** shall submit a valid Career License and Registration Certificate with the offer.

☒ **NOT REQUIRED**



ANNEX

- Offers must be submitted in sealed envelopes on or before the closing date on Thursday 25/09/2025 not later than 12.30 PM (Jordan Local Time). Offers were received after that time will be disregarded.
 - Local agents must submit with their offer a valid copy of their registration certificate in the Ministry of Industrial & Commerce as well as their registration certificate in Great Amman Municipality.
 - Enclosed herewith a form (Supplier & Local Agent Information) to be filled accurately and accordingly, as it is an integral part of BID conditions.
 - JPRC is entitled to cancel the BID or to postpone the opening of bids, to whichever date it deems adequate.
 - Please abide strictly with the required conditions and specifications
-
- يجب تسليم العروض بالظرف المختوم قبل الساعة الثانية عشرة والنصف من ظهر يوم الخميس الموافق 2025/09/25 ولن يقبل أي عرض بعد الموعد المذكور.
 - على الوكلاء والوسطاء التجاريين أن يرفقوا مع العرض نسخة صالحة من سجلهم التجاري ورخص المهن صادرة من وزارة الصناعة والتجارة وأمانة عمان الكبرى.
 - مرفق نموذج (معلومات عن المورد والوكيل) لتعبئته وإرفاقه مع العرض وبغير ذلك سوف يتم تجاهل العرض.
 - يحق لشركة JPRC إلغاء المناقصة أو تأجيل فتح صندوق المناقصات إلى أي وقت تراه مناسباً.
 - راحين الالتزام بالشروط والمواصفات العامة المطلوبة.

SUPPLIER & LOCAL AGENT INFORMATION

BID no. 116/2025

الوكيل المحلي Local Agent	المورد Supplier	المعلومات المطلوبة
		الاسم التجاري Commercial Name
		أسماء مالكي الشركة Owner name
		اسم مدير الشركة Director /Manager Name
		هاتف Tel. No:
		فاكس Fax no:
		هاتف خلوي Mobile:
		رخص مهنة Profession License Certificate
		سجل تجاري Trading Registration Certificate
		رأس مال الشركة Company Capital
		البنك Reference Bank
		مجموع الإيرادات السنوية Turnover
		مجموع حقوق المالكين Owners Equity

- *COMMERCIAL OFFER FORM*

- نموذج العرض المالي

COMMERCIAL OFFER

BID NO: 116/2025

				Prices To Be Filled By The Contractor	
Item No.	Description	Unit	Quantity	Currency :- <input type="checkbox"/> \$ <input type="checkbox"/> £ <input type="checkbox"/> €.....	
				Unit Cost	Total Cost
1	Transformer 3kv/0.4kv.2500kva	EA	1		
2	Transformer 3kv/0.4kv.750kva	EA	1		

TOTAL IN WRITTEN	TOTAL :	
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SIGNATURE :-

COMPANY'S STAMP-



Jordan Petroleum Refinery Company

Quote Order

Order Number 25010386 OQ 00001

Branch/Plant F612706

Order Date 06/08/2025 Request Date 06/08/2025

Freight Handling

Delivery Instructions

Design, supply, testing and commissioning of two power transformers for the following equipment:

Line	Item	Description	Ordered	Quantity	Unit	Supplier Offer	Supplier Offer	Original	Orig
	Number					Unit Price	Currency Code	Order No	TypeLine No
1		Transformer, 3KV/0.4KV,2500KVA		1.000	EA			25010796	OR 1
2		Transformer, 3KV/0.4KV,750KVA		1.000	EA			25010796	OR 2

In Accordance with the attached Standard specification No 1259/1/2025.

Purchasing Manager :

Remarks of Purchasing Department :

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- STANDARD SPECIFICATIONS

- المواصفة القياسية



JORDAN PETROLEUM REFINERY COMPANY LTD.
P.O.BOX 1079
AMMAN-JORDAN

STANDARD SPECIFICATIONS NO. 1259 /1/2025

FOR

DESIGN, SUPPLY, TESTING AND COMMISSIONING OF TWO POWER
TRANSFORMERS (2500 KVA & 750KVA) TO REPLACE THE OLD
TRANSFORMERS IN AQABA STORES SITE

ISSUED : JULY, 2025
REVISION :
SUPERSEDES :

STANDARD SPECIFICATION No. 1259/1/2025

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ITEM NO.	SPECIFICATION / REQUIREMENT	DEVIATION
1.	Purpose:	
	The purpose of this publication is to set forth specifications for the design, manufacture, supply, testing and commissioning of two power transformers outdoor type, oil immersed copper winding, transformers to be supplied complete with all necessary fittings, accessories, insulating oil and spare parts . . . etc, to be used for Aqaba Stores Refinery Site hereafter called "the Company". The required transformers are the followings:	
1.	One transformer, 3 KV / 0.4 KV, 2500 KVA, 3 phase, 50Hz, DYn11, Transformer shall be according to data sheet Attachment No.1.	
2.	One transformer, 3 KV / 0.4 KV, 750 KVA, 3 phase, 50Hz, DYn11, Transformer shall be according to data sheet Attachment No.2	
2.	Scope:	
	This statement covers the Company's requirements for the design, manufacture, supply, testing and commissioning of two power transformers for Aqaba Stores Refinery Sit, the general outlines of performance, design conditions, materials, testing and inspection requirement, spare parts, certifications, documentation, guarantee and warranty are provided.	
3.	Deviation from Specifications:	
1.	This publication is part of and complements the inquiry or order to which it is attached and referred.	
2.	Suppliers tendering against this publication shall adhere totally to the Company's requirements.	
3.	Wherever a manufacturer's standard departs from the Company's requirements; the manufacturer shall clearly indicate in his offer where these differences occur; otherwise, the offer shall be considered as complying with the Company requirements. Deviations after awarding shall not be accepted.	
4.	This publication shall be read in conjunction with any standard, code or document referred to herein or attached with. In case of discrepancy between requirements of this publication and reference codes, the requirements of codes shall prevail.	
5.	Suppliers shall submit a copy of this publication with reference to each clause of the specification and mention if they are substituting it with other idea or not complying with in their offers. Deviations from our requirements, if any, shall be clearly explained and specified.	
4.	INSTRUCTIONS TO TENDERERS	
1.	Offers shall be provided in triplicate copies including drawings, technical literature, detailed catalogues, data sheets, certificates, materials, as well as all information necessary to permit comparison and evaluation to be made by the company.	
2.	It is the full responsibility of Tenderers to provide all required information during the offering stage. Any lack or misguidance of the required information provided by the Tenderer shall be considered a cause of rejection of his offer.	
3.	Tenderers shall provide exhaustive Quality Assurance Plan (QAP) of the manufacturer.	
4.	Filling of transformers data sheets and commercial offer form by the Tenderers shall be considered as a mandatory requirement.	
5.	Manufacturers are required to recommend their current best technology, materials, testing and inspection requirements that suit service. Offers shall include full details and specifications for the offered equipment.	
6.	All equipment, materials and parts shall be brand new / unused, of current manufacture, of modern design and of the highest industrial grade, free from all imperfection.	

ITEM NO.	SPECIFICATION / REQUIREMENT		DEVIATION
7.	Manufacturer shall provide the company with latest copy of ISO 9001:2015 (quality management system), ISO14001:2004 (environmental systems) and OHSAS 18001:2007 (Occupational Health & Safety Management System) for your company.		
8.	The transformers shall be of a standard, well tested and proven design which ensures maximum safety to personnel, maximum service reliability and economic operation for an operational lifetime of at least 15 years. Design and construction shall be simple and shall provide good accessibility to components and parts.		
9.	The Manufacturer shall possess authorization / accreditation certificate issued by an authority / agency / association (authorized firm) that authorizes him to manufacture transformers according to IEC 60076, and other related international codes and regulations. A copy of these certificates shall be submitted to the Company		
10.	All information, documents and correspondence shall be in English language.		
11.	list of manufacturer past experience of a min. three projects of similar equipment within the last five years, and also provide clear data and information (names, phone No., E-mail) about contact persons of three of your customers list of previous similar projects.		
5. GUARANTEE AND WARRANTY			
1.	Warranty shall be for 24 months from successful commissioning and acceptance depend on the acceptance criteria set by the company.		
2.	The Contractor shall guarantee that the materials are brand new and free from fault in design, workmanship and material, and are of proper material to fulfill satisfactorily the operating conditions specified herein.		
3.	If any defect or failure to a function cannot be corrected, the Contractor shall replace promptly, free of charge, equipment or materials or remove equipment or materials and refund the full purchase price.		
4.	The contractor shall submit the performance bank guarantee and shall be valid for 12 months from shipping date.		
6. COMMERCIAL CONDITIONS			
1.	The suggested payment terms are as follows:		
	a.	70% payment through (CAD)	
	b.	20% Payment after (3) months from successful commissioning accepted by the company, not later than 6 months from date of shipping.	
7. REFERENCE CODE AND STANDARD:			
	The transformers shall be designed, manufactured and tested according to international codes such as IEC 60076, IEEE Std C57.12.90- 1993 and ANSI C57.12.11 standards.		
8. LOCAL CONDITIONS :			
	1.	The atmosphere is sulfurous, tropical and dusty.	
	2.	The elevation of site is about 100 m above sea level.	
	3.	Minimum ambient shade temperature = -5 °C.	
	4.	Maximum ambient temperature = + 55°C.	
	5.	Relative humidity varies between 50% in Summer at 35 °C to 75% in Winter at 15 °C, maximum relative humidity value = 96%.	
	6.	Earthquake design requirement shall comply with relevant design and construction code, zone IIA according to Jordanian earthquake zoning map. Earthquake loads have to be calculated according to relevant 1997 UBC code.	

ITEM NO.	SPECIFICATION / REQUIREMENT	DEVIATION
9	CONSTRUCTIONAL REQUIREMENTS	
	9.1 General	
	1. Transformers shall be suitable for outdoor installation without sunshade (weather proof degree is not less than IP 55).	
	2. Transformers shall be provided with primary and secondary bushing lugs enclosed in a welded, air filled terminal box having a removable water-tight neoprene gasket cover and suitable bottom opening for metallic threaded conduit.	
	3. Transformers shall be provided with pressure relief vent with alarm/relay contactors.	
	4. Safety signs according to ANSI Z 535 shall be provided.	
	5. Compliance to environment class as per IEC 60076:E0 or E1 or E2.	
	6. Compliance to fire proof class as per IEC 60076:F0 or F1.	
	7. Transformers shall be designed as pressure vessels according to ASME Codes and controls to avoid creates a Dynamic Pressure Peak which may leads to Transformers explode.	
	8. Weight of core and coils, tank and fittings and total assembled transformers including liquid shall be specified in the offer.	
	9. The Manufacturer shall ensure that the design and manufacturing of the transformers shall be such as to reduce noise and vibration level. The sound level of the transformers with its enclosure in position shall not exceed 66 dBA measured in accordance with IEC 60076-10 or NEMA TR-1 standards.	
	10. 2500 KVA Transformer dimension shall be as in attachment No. 3.	
	11. 750 KVA Transformer dimension shall be as in attachment No. 4.	
	12. Transformers kVA and voltage rating shall comply with the preferred values of the standards specified. Unless otherwise specifically stated to the contrary the rated kVA shall be based on natural air cooling. Voltage insulation of windings shall be for unearthed system.	
	13. Transformers shall have the impedance voltage and short circuit current values as per IEC60076 requirements.	
	14. The design shall allow all necessary precaution for the safety of operation and maintenance personnel and a valid ISO 9001 certificate.	
	15. Transformers shall be capable of operating continuously at their normal rating without exceeding temperature rise limits specified in IEC 60076-2	
	16. The rated withstand voltages shall comply with IEC 60076-3.	
	9.2 Internal Arrangement	
	1. Transformers core shall be of robust design adequately braced to prevent displacement due to electromagnetic stresses of short circuits, and the mechanical shocks of normal moving and handling of the transformers without any need for special shipping braces.	
	2. The core laminations shall be evenly secured to prevent settling of the core and minimize noise and vibration when transformers is in operation.	
	3. The core construction shall be such that removal and replacement of the coils would require the removal of minimum possible number of core laminations.	
	9.3 Windings	
	1. Transformers shall have separate low and high voltage windings	
	2. The neutral point of star connected windings shall be brought out separately to a terminal on the respective winding side.	
	3. The MV winding shall have tapping at $\pm 2.5\%$ and $\pm 5.0\%$ of the rated MV voltage.	

ITEM NO.	SPECIFICATION / REQUIREMENT		DEVIATION
	4.	The winding coils shall be adequately braced to prevent distortion of the windings or movement of the coils on the core limbs under short circuit condition or normal moving and handling of the transformers.	
	5.	All windings shall be fully insulated and the insulation shall be free from any composites likely to soften, shunt or collapse during service. The insulating material shall be of a type that does not shrink, disintegrate, carbonize or become brittle in hot oil for oil immersed transformers.	
	9.4 Terminals		
	1.	Transformers shall be a 4-wire system, the low voltage star point connections shall be brought out on a Separate terminal (DYN11)	
	2.	Terminals shall be marked in accordance with the connection diagram marked on the rating plate.	
	3.	The stems and bushing of the terminals shall be sealed in leak proof.	
	4.	For LV single core cable terminations, clamping methods shall be used in order to avoid cable alignment problems associated with lugs.	
	5.	All terminals shall be clearly and indelibly marked to identify the phase connections in accordance with the connection diagram on the rating plate.	
	6.	All bushings shall be self-contained and shall be sealed into the enclosure air/gas and liquid tight with non-deteriorating gaskets suitable for the liquid used.	
	7.	Transformers shall be provided with external earthing terminal. This shall be either a threaded bolt or bolted clamp. The minimum diameter shall be 8 mm.	
	8.	All electrical, electronic and instrument, items shall be designed to have one path to separate earth, and shall be ready for connecting with existing earthing system of the Company.	
	9.5 Grounding		
	1.	MV cable boxes shall have an earthing terminal of adequate dimensions for the cable earthing wires. LV cables boxes shall have earthing terminals of adequate dimensions for each cable earthing sheath wire.	
	2.	Transformers shall be provided with two earth terminals on the outside of the transformers mainframe or tank wall, for connection to an external earthing grid. Each earth connection shall consist of a brass or stainless steel M 10 bolt with nuts and washers. Connections shall be located on opposite sides of the transformers, preferably near the main cable boxes.	
	3.	All metallic components, such as cable boxes and their internal earthing bars or studs, shall be bonded to the transformers mainframe or tank.	
	9.6 Pressure Relief Device		
	1.	A pressure relief device of sufficient size, mechanically operated shall be provided for the rapid release of any pressure that may be generated within the tank and which might result in damage to the equipment.	
	2.	pressure relief devices Calculations shall be provided.	
	9.7 Tap Changer		
	1.	The transformers shall have FIVE taps external manually operated No-load tap changer with two 2.5% full capacity taps above and two 2.5% full capacity taps below rated primary voltage.	
	2.	The switch shall be operable through its handle without the need of additional tool and without risk to personnel safety	
	3.	The contact changing shall be positive snap action arranged so it is impossible for the contacts to be left in a position where the circuit remains interrupted	
	4.	Padlocking of the switch shall be provided.	

ITEM NO.	SPECIFICATION / REQUIREMENT	DEVIATION
	5. Tap positions shall be clearly marked.	
	6. The driving rod through the tank cover or wall shall be sealed to prevent leakage of air, gas or liquid under all service conditions.	
	7. Tap changer shall include a connection plat calibrated to tap position.	
9.8	Tank	
	1. Transformer's tank, cover, radiators and any other attached compartments, shall be rigid steel construction, and compatible with the service (oil).	
	2. Tank shall be subject to endurance test according to EN 50464-4.	
	3. The tank cover, radiators etc. shall have adequate strength to withstand (without deformation) the internal pressure of oil, air and gas under operation conditions.	
	4. Radiator tubes shall be arranged that external cleaning and repainting can be carried out at Site without dismantling.	
	5. Transformer's tank shall be made of welded steel sheet. hooks shall be provided for lifting transformers and core.	
	6. Main transformers tank shall be designed according to ASME VIII, PED, ..etc.	
9.9	Cable Boxes	
	1. Cable connecting boxes shall be made of steel and shall be dimensioned to allow termination of the cables specified on the requisition.	
	2. The enclosures shall offer a minimum degree of protection IP 55, in accordance with IEC 60529.	
	3. Cable connecting boxes shall be air-insulated. Boxes shall be designed to prevent deterioration or failure due to the accumulation of condensation.	
	4. Cable boxes of transformer rated 2500KVA shall be not more than 170 cm from the ground for high voltage and low voltage sides.	
	5. Cable boxes of transformer rated 750KVA shall be not more than 125 cm from the ground for high voltage side, low voltage side is a busbar connection.	
	6. 2500 KVA Transformer shall be fitted with suitable cable box on 3 kV side with suitable three cable glands to terminate three XLPE cable 3-core Cooper conductors $3 \times (3 \times 185 \text{ mm}^2)$, and shall be fitted with suitable cable box on 0.4 kV side with suitable Fourteen cable glands to terminate four XLP armored cables for each phase with size 300 mm^2 for each cable.	
	7. 750 KVA Transformer shall be fitted with suitable cable boxes on 3KV side with suitable cable gland to terminate one XLPE cable Cooper conductor ($3 \times 185 \text{ mm}^2$)	
	8. Auxiliary cable boxes shall be mounted on the side of the transformers in an accessible position.	
	9. The cover of all cable boxes shall be secured, using captive bolts or screws.	
	10. Cable entries into the boxes shall be located such that conductors can be clamped straight without being bent into tortuous shapes inside the box.	
	11. Extension pieces bolted to the actual terminal with additional bolted conductor clamps in line with the cable entry may be required.	
	12. Cable boxes for PVC or XLPE insulated cables shall be dry type. Single core type cables shall be glanded to non-magnetic plates.	
9.10	Oil and Fillings	
	1. Mineral oil for immersed type transformers shall be Shell DIALA B, D or AX alternative oils Complying IEC 60296, or Envirottemp™ FR3 or equivalent natural ester fluids. Natural Complying IEC 62770. Tenderer shall provide two separate quotations, each option shall be accompanied by Manufacturer's technical data sheets, IEC compliance certifications, Safety and handling instructions and MSDS (Material Safety Data Sheet).	
	2. Oil shall be dried prior to filling of the transformers which shall be performed under vacuum.	

ITEM NO.	SPECIFICATION / REQUIREMENT	DEVIATION
	<p>3. PCB synthetic liquids (Poly Chlorinated Biphenyls) or other chlorinated hydrocarbons with trade names Askarel, Pyranol, Clapnen, Pyralene, etc. are not acceptable</p> <p>4. Instructions for cleaning and filtering of liquid used shall be furnished with transformers.</p> <p>5. Transformers shall be filled with the oil at the manufacturer's works.</p> <p>6. Transformers shall be filled with mineral oil complying with IEC 60296</p> <p>7. Transformers shall have a minimum 1200 inch-pounds of mechanical strength without causing oil leakage.</p> <p>8. Transformers shall be fitted with one filling/filter connection valve near the top of the tank and one drain/filter valve near the bottom of the tank</p>	
	9.12 Valves	
	Valves shall be of the fully sealing full-way type suitable for minimum and maximum temperatures specified without any deterioration. Valves to open when turned counter clockwise. All valves other than 'drain' and 'filter' to be fitted with an indicator readily visible from ground level clearly showing position of valve. All valves opening to atmospheres shall be fitted with blanking plates.	
	9.13 Cooling	
	<p>1. Transformers shall be naturally air cooled (ONAN).</p> <p>2. Detachable radiators with valves to be provided and shall be through connected to the main tank. Radiator thickness to be 1.20mm (minimum) and shall be fitted with lifting lugs machined, flanged inlet and outlet pipes.</p> <p>3. Plugs shall be fitted at the top and bottom of each radiator for filling and draining. The oil circuit of all coolers shall be provided with the following as appropriate to tank mounted on separate bank coolers: -</p> <p>a. A valve at each point of connection to the transformers.</p> <p>b. A valve in the main oil connection at the bottom of each cooler.</p> <p>c. Loose blanking plates to permit the blanking off of the main oil connection to the top of each cooler.</p> <p>d. A 50 mm oil filtering valve at the top and bottom of each cooler, the bottom valve shall also function as a drain valve.</p> <p>e. A thermometer pocket fitted with a captive screwed cap on the inlet and outlet oil branches of each cooler.</p>	
	9.14 Bushings	
	<p>1. The bushing insulator shall be rated for maximum system voltage and comply with requirements of IEC60076.</p> <p>2. Minimum current rating shall be 400 Amps or as per load, whichever is higher.</p> <p>3. Bushing shall be replaceable without welding.</p> <p>4. Neutral bushings to be provided for Earthing the neutral.</p> <p>5. All bushings shall be marked with symbols as per rating plate and connecting diagram.</p> <p>6. The internal winding ends shall always remain under the oil/liquid level.</p>	
	9.15 Name Plate:	
	<u>GENERAL</u>	
	<p>1. Transformers shall have nameplate fixed securely .The plates shall be riveted on, or if screws are used, their heads shall be hammered to prevent removal. The manufacturers may add the data required below to their standard plates. The data shall be clearly stamped or preferably engraved. The language used shall be English.</p>	

ITEM NO.	SPECIFICATION / REQUIREMENT		DEVIATION
	2.	The Company's F.P.O. (Foreign Purchase Order) number and date of order.	
	3.	Manufacturer's name, manufacturer's order number or works identification details, serial numbers, type and size.	
	4.	Manufacturer's standard nameplate data.	
	5.	Transformers name plate to be stamped with non-PCBs.	
	6.	The international specification to which the transformers conforms to.	
	7.	Performance data:	
	a.	Rated power (KVA)	
	b.	Rated frequency (in Hz)	
	c.	Rated voltages (kV) and tapping range	
	d.	Rated currents (in A or kA)	
	e.	Rated reactance.	
	f.	Short circuit current withstand for 3 seconds	
	g.	Number of phases	
	h.	Iron loss at rated voltage.	
	i.	Copper loss at full load.	
	j.	Rated ambient temperature.	
	k.	Impedance voltage.	
	l.	Type of cooling.	
	m.	Efficiency at full load at unity and 0.8 power factor.	
	8.	Weights	
	a.	Core and winding assembly.	
	b.	Oil weight in kg.	
	c.	Total weight including oil in kg.	
	9.	Vector group and winding connection.	
	10.	Enclosure class of transformers.	
	11.	Percentage tapping positions of rated voltage.	
	12.	Details of external finish.	
	13.	Outline dimensional drawing.	
	14.	Transformers oil specification.	
	9.17 Fitting and Accessories		
	1.	The following accessories shall be equipped with transformers:	
	a.	Name plate with connection diagram.	
	b.	HV with terminal connector.	
	c.	LV with terminal connector.	
	d.	Off circuit tap changer.	
	e.	Buchholz Relay.	
	f.	Filter valve located at the top of the tank on the HV side. The opening of this valve shall be baffled to prevent aeration of oil.	
	g.	Filter valve located near the bottom of the tank on the LV side of the transformers diagonally opposite to the top filter valve.	
	h.	Oil sampling valves at top of the tank	
	i.	Sludge oil drain valve.	
	j.	Oil drain valve for main tank.	
	k.	Earth terminal.	
	l.	Oil level gauge.	
	m.	Dial type thermometer with contact.	
	n.	Lifting eye for active part.	
	o.	Winding temperature indicator with contacts.	
	p.	Skid under base with bi-directional rollers with stopper locks.	
	q.	Pressure relief device.	
	r.	HV and LV cable boxes (IP 55).	

ITEM NO.	SPECIFICATION / REQUIREMENT	DEVIATION
	2. Transformers shall be furnished with (6) PT100 -RTDs for stator windings (2 RTDs/phase), winding temperatures shall be monitored at transformers case.	
	3. All special tools for opening the transformers shall be furnished by supplier.	
	4. Thermometer pocket with sealing cap. Pocket shall be approximately 150 mm deep and 20 mm inside diameter and welded into the tank wall such that a thermometer or thermo probe can be inserted to measure the top liquid temperature even at the lowest liquid level.	
	5. Winding temperature indicating (W.T.I.) devices shall indicate the temperature of the hottest spot of the winding and shall have a load-temperature characteristic approximating to that of the main winding. Two sets of contacts shall be provided for initiating of alarm and trip relays with separate CT.	
	6. All temperature indicators shall be housed in the marshaling kiosk or box and shall be mounted so that they will not be affected by vibration.	
	7. Dial type vacuum-pressure gauge, 0.5 at vacuum to 0.5 at pressure.	
	8. Dial type oil level indicator with calibration mark at 25°C furnished with alarm contacts.	
10.	TESTING	
10.1	The transformers shall be tested by the manufacturer to the requirements of the specified international standards. Transformers tests shall be carried out at manufacturer site in attendance of the company /Representative(s), Only the expenses of the representative visit shall be borne by the company (i.e air tickets, hotel accommodation) and other costs related to the tests shall be borne by the manufacturer. The witnessed tests shall be indicated on the test sheets or accompanying documents and the manufacturers have to inform the company / Representative four to three weeks in advance of the test dates.	
10.2	Test reports shall be submitted by manufacturer for transformers	
10.3	Factory Acceptance Tests	
	1. Transformers shall be subjected to all routine tests specified in IEC 60076.	
	2. Measurement of winding resistance on all taps	
	3. Measurement of voltage ratio and check of phase displacement.	
	4. Measurement of impedance voltage (at zero tapping), short-circuit impedance	
	5. Measurement of no-load loss and current	
	6. Verification of vector voltage relationship.	
	7. Insulation resistance of each winding in turn to all other windings.	
	8. Dielectric routine tests (IEC 60076-3).	
	9. Separate-source voltage withstand test.	
	10. Measurement of acoustic noise level.	
	11. Test of temperature rise –IEC-60076	
	12. Full – wave impulse-voltage withstand test clause test of IEC 60076-1.	
	13. Dielectric type tests (IEC 60076-3).	
	14. Heat run test at natural cooling.	

ITEM NO.	SPECIFICATION / REQUIREMENT	DEVIATION
11.	TECHNICAL REQUIREMENTS:	
11.1	General Requirements:	
	The Tenderer is required to carry out the following in his offer for the project:	
1.	comprehensive design, materials specifications, installation drawings and procedures, commissioning procedure and operation instructions according to latest editions of approved international standards such as IEC 60076 or equal shall be clearly specified in the offer.	
2.	Drawings showing arrangement of offered systems, equipment with respect to each other and to related accessories, as well as layout drawings showing dimensions required for installing the equipment shall be provided with the offer.	
3.	The required systems and Each part of the systems shall be certified (having certification mark by international approved certification office, institute, and laboratory...etc., such as UL or equal, to be specified in the offer.	
4.	Specify name of manufacturer, origin, manufacturing year of the offered materials.	
5.	Advise names of normal and supplementary tests included in your offer for transformers, test procedures, and confirm that your offer includes test certificates for all tests that will be carried out on the transformers.	
11.2	Presentation of Quotation:	
1.	The quotation shall include all costs of materials, equipment, documents and manuals, spare parts, certifications,...etc., as well as all other works and requirements specified in this document, and supply CFR Aqaba charges, but excluding insurance.	
2.	Printed or written clearly in figures and capital letters. (Currency should be stated in words not in abbreviations).	
3.	Itemized prices for each item shall cover shipment to Aqaba Port, commissioning, test...etc, separately.	
11.3	Test and Commissioning at the company site (JPRC):	
1.	The Contractor engineer shall prepare the required copies of certificates showing final operating conditions and test results.	
2.	Commissioning and startup shall be carried out by the manufacturer according to complete detailed procedure to be submitted by the manufacturer for the Company for review ahead of time.	
3.	Transformers shall pass successful commissioning and continuous test run for not less than 72 hours at the company site, and shall be subject to extension if necessary to meet manufacturer requirements at Contractor's own expense.	
4.	Any failure of any portion of the systems during the above tests shall be the full responsibility of the manufacturer who shall immediately replace the failing part, parts or system(s).	
5.	After all tests have been completed, certified copy of each test report shall be furnished. Each report shall supply the following information:	
6.	a. Complete identification data including serial number of the transformers.	
	b. Method of application, where applied duration and interpretation of results for each tests.	
12.	SPARE PARTS:	
1.	Spare parts lists shall be provided with parts numbers cross-referenced to relevant drawings.	
2.	The spare parts shall be delivered at the same time with the main equipment.	
3.	The Tenderer shall guarantee and shall secure to the Company the Manufacturer(s) guarantee of the supply spare parts during 15 years after receiving equipment at site.	

ITEM NO.	SPECIFICATION / REQUIREMENT	DEVIATION
4.	In case that any spare parts are needed during the first guaranteed year and not included in the offered spare parts, the Contractor shall provide these spare parts for the first guaranteed year at his own expense, within shortest time (by air freight). Transporting expense up to Q.A.I. Airport shall be borne by the Contractor.	
5.	The Tenderer shall furnish a separate priced list of recommended spare parts for two years of operation with itemized prices at the time of submitting his offer and shall include the followings for transformers:	
a.	HV & LV bushing	
b.	Oil level indicator with two contacts.	
c.	Oil temperature indicator with contacts.	
d.	Vacuum pressure gauge	
e.	Buchholz Relay	
13. VENDOR DOCUMENTATION		
13.1	The following shall be provided by the manufacturer with the equipment:	
1.	Foundation fixing arrangement drawings(s)	
2.	General arrangement drawing	
3.	Name/tag plate lists	
4.	Component arrangement drawing(s)	
5.	Material lists	
6.	Material descriptive literature	
7.	Performance data/curve(s)	
8.	Connection/terminal - diagram(s)	
9.	Type test certificate(s)	
10.	Routine test certificate(s)/report(s)	
11.	Weight data sheet(s)	
12.	Transport/lifting instructions.	
13.	Installation instruction(s)	
14.	Operating instructions	
15.	Trouble shooting and fault finding instructions	
16.	Completed data sheets.	
17.	Priced list of spare parts recommended to be on hand during plant start-up and two (2) years of operation.	
14. PREPARATION OF SHIPMENT:		
1.	The equipment shall be suitably packaged and protected against physical damage and damage caused by weather, corrosion, water, dirt, heat, or any other detrimental conditions that may occur during shipping, handling, storage or construction.	
2.	Transformers shall be packed in wooden type seaworthy crates having sufficient strength to withstand normal ship handling and transport.	
3.	The crates shall be marked with the place of destination, the Owner's name, order number, type of equipment etc.	
15. ATTACHMENTS:		
1.	Attachment No.1: 2500 KVA 3/4 KV power transformer data sheet.	
2.	Attachment No.2: 750 KVA 3/4 KV power transformer data sheet.	
3.	Attachment No.3: 2500 KVA transformer dimension	
4.	Attachment No.4: 750 KVA transformer dimension	

ATTACHMENT NO.1

2500 KVA POWER TRANSFORMERS DATA SHEET

SUPPLIER IS TO FILL THIS DATA SHEET FULLY AND SUBMIT IT IN OFFER

THIS DATA SHEET IS REQUIRED TO BE FILLED BY THE SUPPLIER AND ATTACHED TO HIS OFFER

S.NO	DESCRIPTION	JOPETROL REQUIREMENTS	SUPPLIER OFFER	DEVIATIONS
1	MANUFACTURER NAME	T.B.A*		
2	MANUFACTURING YEAR.	T.B.A*		
3	INSULATION MEDIUM	OIL IMMERSED		
4	COOLING METHOD	ONAN		
5	INSULATION CLASS.	A		
6	RATED POWER (KVA)	2500		
7	RATED FREQUENCY (Hz)	50		
8	RATED HIGH VOLTAGE (KV)	3		
9	RATED LOW VOLTAGE (KV)	0.4		
10	TRANSFORMATION RATIO	3/0.4		
11	RATED CURRENT AT H.V. SIDE (A)	T.B.A*		
12	RATED CURRENT AT L.V. SIDE (A)	T.B.A*		
13	VECTOR GROUP	Dyn11		
14	INSTALLATION	OUTDOOR (IP 55)		
15	RATED VOLTAGE IMPEDANCE	T.B.A*		
16	SHORT CIRCUIT IMPEDANCE	T.B.A*		
17	SHORT CIRCUIT WITHSTAND DURATION	ACCORDING TO IEC60076		
18	NO LOAD LOSS AT RATED VOLTAGE	T.B.A*		
19	LOAD LOSSES AT FULL LOAD	T.B.A*		
20	DUTY	CONTINUOUS		
21	OFF LOAD TAP CHANGER	REQUIRED		
22	RATED H.V. SIDE ISULATION LEVEL	T.B.A*		
23	RATED L.V. SIDE ISULATION LEVEL	T.B.A*		
24	NO LOAD CURRENT (A)	T.B.A*		
25	EFFICIENCY (%) AT FULL LOAD AT (UNITY & 0.8) POWER FACTOR.	Not less than 95		
26	PHASES	THREE		
27	REGULATION AT (UNITY & 0.8) POWER FACTOR.	T.B.A*		
28	MATERIAL THERMAL CLASS INSULATION	ACCORDING TO IEC 60085 CLASS A		
29	MAX. TEMP. & ALTITUDE	55°C. (540 M.A.S.L)		
30	MAX. TEMPERATURE RISE OF WINDINGS	T.B.A*		

ATTACHMENT NO.1

31	TEMPRATURE RISE OF DIELECTRIC	T.B.A*		
32	MANUFACTURING STANDARDS ALOSSES TOLERANCES	ACCORDING TO IEC60076		
33	TOTAL WEIGHT	T.B.A*		
34	H.V. WINDING MATERIAL	COPPER		
35	L.V. WINDING MATERIAL	COPPER		
36	PROTECTION DEGREE	IP 55 (minimum)		
37	EARTHING TERMINAL(S)	SOLIDLY EARTHING		
38	NOISE LEVEL (DBA)	T.B.A*		
39	TESTS (CODE)	IEC60076		
40	TRANSFORMER DIMENSIONS	T.B.A		
41	DIELECTRIC LIQUID	MINERAL OIL or Natural ester ACCORDING TO IEC OR ANSI STANDARD		
ACCESSORIES				
42	BUCHOLOZ RELAY	REQUIRED WITH ALARM AND TRIPPING CONTACTS		
43	NO. OF BIDIRECTIONAL ROLLERS	4		
44	NO. OF LUGS	2		
45	PRESSURE RELIEF VALVE	REQUIRED		
46	OIL LEVEL INDICATOR	REQUIRED		
47	TEMPRATURE INDICATOR WITH RTD INDICATOR	REQUIRED WITH ALARM AND TRIPPING CONTACTS		
48	FILLING VALVE	REQUIRED		
49	OIL TYPE	MINEARL OR Natural (FREE OF PCB)		
50	DRAIN VALVE FOR SAMPLING	REQUIRED		
51	NAME PLATE AND RATING DIAGRAM	REQUIRED		
52	TERMINAL BOX	REQUIRED		
53	CABLE BOX ON MV/LV SIDES	REQUIRED		

Notes:

*T.B.A : To Be Advised.

JOPETROL			SUPPLIER		
DATE:	ENG:	APPROVED:	DATE:	ENG:	APPROVED:
7/7/2025	Ahmad Shatnawi				

ATTACHMENT NO.2

750 KVA POWER TRANSFORMERS DATA SHEET

SUPPLIER IS TO FILL THIS DATA SHEET FULLY AND SUBMIT IT IN OFFER

THIS DATA SHEET IS REQUIRED TO BE FILLED BY THE SUPPLIER AND ATTACHED TO HIS OFFER

S.NO	DESCRIPTION	JOPETROL REQUIREMENTS	SUPPLIER OFFER	DEVIATIONS
1	MANUFACTURER NAME	T.B.A*		
2	MANUFACTURING YEAR.	T.B.A*		
3	INSULATIONG MEDIUM	OIL IMMERSED		
4	COOLING METHOD	ONAN		
5	INSULATION CLASS.	A		
6	RATED POWER (KVA)	750		
7	RATED FREQUENCY (Hz)	50		
8	RATED HIGH VOLTAGE (KV)	3		
9	RATED LOW VOLTAGE (KV)	0.4		
10	TRANSFORMATION RATIO	3/0.4		
11	RATED CURRENT AT H.V. SIDE (A)	T.B.A*		
12	RATED CURRENT AT L.V. SIDE (A)	T.B.A*		
13	VECTOR GROUP	Dyn11		
14	INSTALLATION	OUTDOOR (IP 55)		
15	RATED VOLTAGE IMPEDANCE	T.B.A*		
16	SHORT CIRCUIT IMPERANCE	T.B.A*		
17	SHORT CIRCUIT WITHSTAND DURATION	ACCORDING TO IEC60076		
18	NO LOAD LOSS AT RATED VOLTAGE	T.B.A*		
19	LOAD LOSSES AT FULL LOAD	T.B.A*		
20	DUTY	CONTINUOUS		
21	OFF LOAD TAP CHANGER	REQUIRED		
22	RATED H.V. SIDE ISULATION LEVEL	T.B.A*		
23	RATED L.V. SIDE ISULATION LEVEL	T.B.A*		
24	NO LOAD CURRENT (A)	T.B.A*		
25	EFFICIENCY (%) AT FULL LOAD AT (UNITY & 0.8) POWER FACTOR.	Not less than 95		
26	PHASES	THREE		
27	REGULATION AT (UNITY & 0.8) POWER FACTOR.	T.B.A*		
28	MATERIAL THERMAL CLASS INSULATION	ACCORDING TO IEC 60085 CLASS A		
29	MAX. TEMP. & ALTITUDE	55°C. (540 M.A.S.L)		
30	MAX. TEMPRATURE RISE OF WINDINGS	T.B.A*		

ATTACHMENT NO.2

31	TEMPRATURE RISE OF DIEELECTRIC	T.B.A*		
32	MANUFACTURING STANDARDS ALOSSES TOLERANCES	ACCORDING TO IEC60076		
33	TOTAL WEIGHT	T.B.A*		
34	H.V. WINDING MATERIAL	COPPER		
35	L.V. WINDING MATERIAL	COPPER		
36	PROTECTION DEGREE	IP 55 (minimum)		
37	EARTHING TERMINAL(S)	SOLIDLY EARTHING		
38	NOISE LEVEL (DBA)	T.B.A*		
39	TESTS (CODE)	IEC60076		
40	TRANSFORMER DIMENSIONS	T.B.A		
41	DIELECTRIC LIQUID	MINERAL OIL or Natural ester ACCORDING TO IEC OR ANSI STANDARD		
ACCESSORIES				
42	BUCHOLOZ RELAY	REQUIRED WITH ALARM AND TRIPPING CONTACTS		
43	NO. OF BIDIRECTIONAL ROLLERS	4		
44	NO. OF LUGS	2		
45	PRESSURE RELIEF VALVE	REQUIRED		
46	OIL LEVEL INDICATOR	REQUIRED		
47	TEMPRATURE INDICATOR WITH RTD INDICATOR	REQUIRED WITH ALARM AND TRIPPING CONTACTS		
48	FILLING VALVE	REQUIRED		
49	OIL TYPE	MINEARL OR Natural (FREE OF PCB)		
50	DRAIN VALVE FOR SAMPLING	REQUIRED		
51	NAME PLATE AND RATING DIAGRAM	REQUIRED		
52	TERMINAL BOX	REQUIRED		
53	CABLE BOX ON MV/LV SIDES	REQUIRED		

Notes:

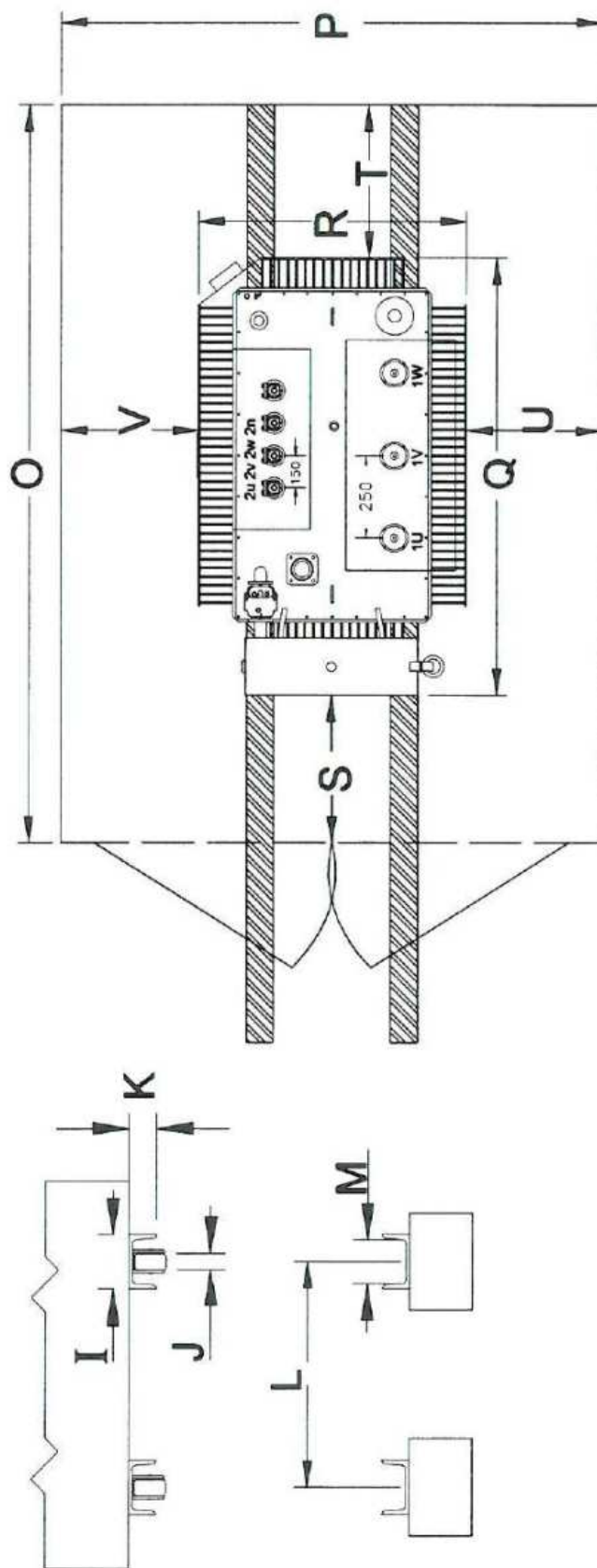
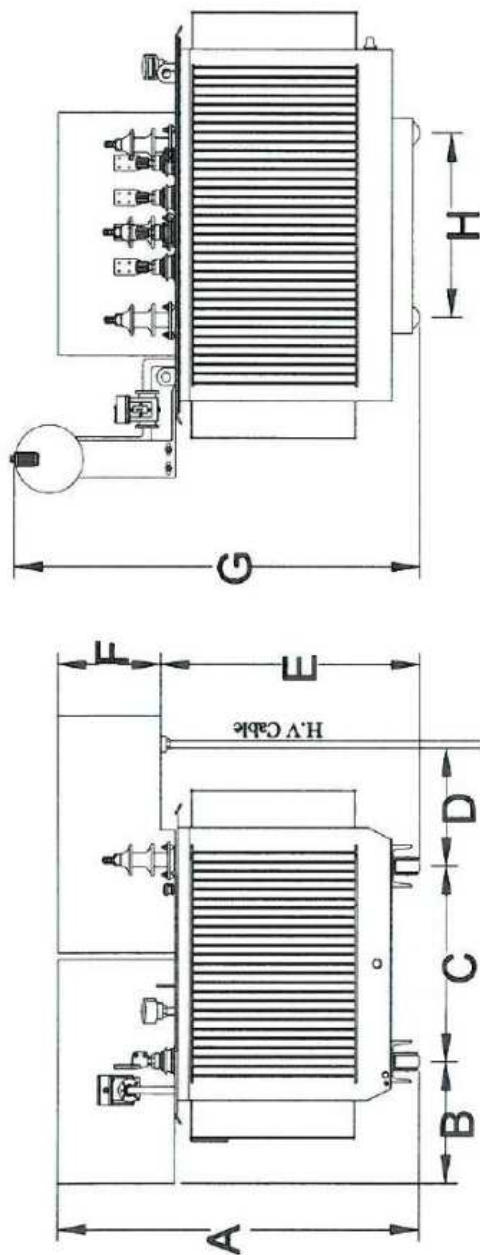
*T.B.A : To Be Advised.

JOPETROL			SUPPLIER		
DATE:	ENG:	APPROVED:	DATE:	ENG:	APPROVED:
7/7/2025	Ahmad Shatnawi				

Attachment No.3: 2500 KVA 3/0.4 KV Power transformer

All Dimension in mm

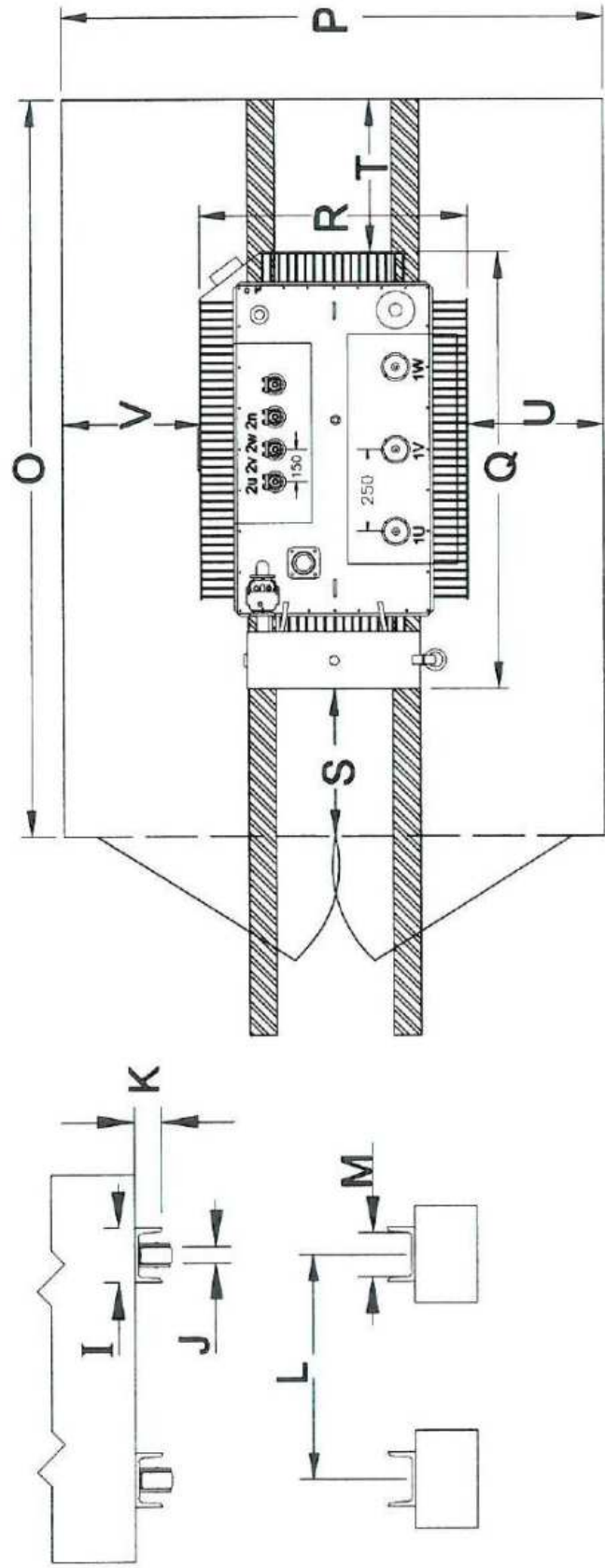
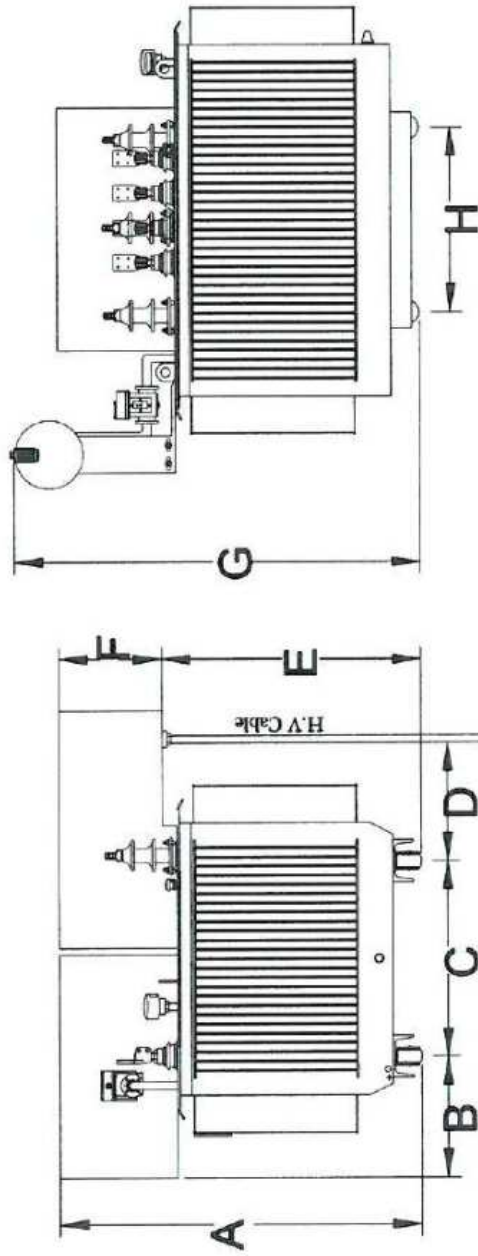
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B 1720	M 80
C 860	
D 470	O 3900
E 1740	P 5050
F 600	Q 2000
G 2380	R 1400
H 820	S 1650
I 240	T 450
J 60	U 1840
K 160	V 1840



Attachment No.4: 750 KVA 3/0.4 KV Power transformer

All Dimension in mm

A	2150	L	820
B	930	M	80
C	830		
D	600	O	3150
E	1230	P	3900
F	550	Q	1800
G	1700	R	780
H	820	S	100
I	140	T	570
J	55	U	1030
K	160	V	2150



- ATTACHMENTS

- الملاحقات

PERFORMANCE GUARANTEE

MESSRS : JORDAN PETROLEUM REFINERY CO. LTD
P.O.80X 1079
AMMAN-JORDAN

DEAR SIRs,

AT THE REQUEST OF MESSRS.....
(HEREINAFTER CALLED "THE ACOUNTEE"), WE HEREBY ISSUE IN YOUR
FAVOUR OUR L/G NO. AS FOLLOWS:

WE..... BANK.....,AMMAN / JORDAN
IRREVOCABLY AND UNCONDITIONALLY HEREBY UNDERTAKE TO PAY YOU
WITHOUT DELAY ON YOUR FIRST WRITTEN DEMAND AND NOTWITHSTANDING
ANY OPPOSITION OR OBJECTION BY THE ACOUNTEE WITHIN THE VALIDITY
OF THIS GUARANTEE, THE AMOUNT OF.....

.....
.....
IN RELATION TO TENDER NO.
FOR THE SUPPLY OF.....

THIS GUARANTEE SHALL REMAIN VALID UNTIL, AND
THE VALIDITY OF THIS GUARANTEE SHALL BE RNEWED AUTOMATICLLY AND
WILL NOT BE CANCALLED WITHOUT YOUR WRITTEN CONSENT (ON THE
ACOUNTEE OWIN EXPENSE)