



Bid Bulletin No. 1
July 30, 2019

PUBLIC BIDDING NO. 19-226-5

**SYSTEMATIC REPLACEMENT OF COMPRESSOR MOTOR CONTROL UNIT
(CMCU) FOR THE LIGHT RAIL TRANSIT AUTHORITY (LRTA)**

Issued pursuant to Sec. 22.5 of the IRR of R.A. 9184 to clarify and/or amend certain provisions in the Bidding Documents issued for this project, considering the issues raised and clarifications made by prospective bidders during the **Pre-Bid Conference** held on **23 July 2019**, likewise, respond to bidders' written queries received within the prescriptive period for filing.

A. AMENDMENTS

REFERENCE	BASES FOR AMENDMENT
SECTION V. SPECIAL CONDITIONS OF CONTRACT	
SCC Clause 17.3 page 68 Warranty of one (1) year after acceptance <u>of last delivery</u> by the End-user of the delivered Goods.	To be consistent with the requirement
SECTION V. SPECIAL CONDITIONS OF CONTRACT	
SCC Clause 17.4 page 68 The period for correction of defects in the warranty period is thirty (30) calendar days after acceptance <u>of the last delivery.</u>	To clarify the requirement for better understanding
SECTION VII. TECHNICAL SPECIFICATIONS	
Technical Specifications Lot No. 1 Systematic Replacement of Compressor Motor Control Unit page 76 xxx Warranty Period for the CMCU: - at least one (1) year parts and services <u>after the acceptance of the last delivery</u>	To be consistent with the requirement.

SECTION VIII. BIDDING FORMS	
Bidding Forms: Schedule of Prices	To include the form for Schedule of Prices as part of financial envelope. Please refer to attached Annex "B"

B. CLARIFICATIONS

The Department of Budget and Management - Procurement Service, Bids and Awards Committee hereby clarifies prospective bidders' concerns and queries:

ITEM	CONCERN	REFERENCE	CLARIFICATION/ RESOLUTION
CONCERNS RAISED DURING PRE-BID			
1	<p>A prospective bidder sought to clarify if the similar contract shall only be limited to contract involving electromechanical components.</p> <p>Further, he also asked if a contract for a delivery of electromechanical parts is acceptable</p>	<p>Section III. Bid Data Sheet BDS Clause 5.4</p> <p>xxx</p> <p><i>For this purpose, similar contracts shall refer to any:</i></p> <p>➤ <i>Contract for Supply and Delivery of ELECTROMECHANICAL COMPONENTS</i></p>	<p>The contract need not be specific to Compressor Motor Control Unit (CMCU) but may likewise be referred to other electromechanical components.</p> <p>The Committee answered in the affirmative and stated that any contract for supply and delivery of electromechanical components.</p>
2	<p>One of the BAC members asked the End-User if the reckoning period for the warranty for correction of defects should be after acceptance given that not all items will be installed instantly.</p>	<p>Section V. Special Conditions of Contract SCC Clause 17.4</p>	<p>The reckoning of warranty period for correction of defects shall be thirty (30) calendar days after the acceptance of the last delivery, as clarified by the end-user</p>
3	<p>One of the BAC members observed that there is inconsistency in the definition of the period of warranty between the Special Conditions of the Contract (SCC) and Technical Specifications</p>	<p>Section V. Special Conditions of Contract SCC Clause 17.3</p> <p>Section VII. Technical Specifications Warranty period for the CMCU</p>	<p>The warranty for parts and services shall be one (1) year after the acceptance of the last delivery</p>

All other portions of the Bidding Documents affected by these amendments shall be made to conform to the same.

Amendments/inclusions/clarifications made herein shall be considered an integral part of the Bidding Documents.

(Sgd.)
JACK G. MERCADO
Vice-Chairperson, DBM-PS BAC 5

Technical Specifications

LOT NO. 1	SYSTEMATIC REPLACEMENT OF COMPRESSOR MOTOR CONTROL UNIT (CMCU)
QUANTITY	: 32 units
APPROVED BUDGET PER UNIT	: Php ₱ 2,147,500.00
APPROVED BUDGET FOR THE CONTRACT	: Php ₱ 68,720,000.00

AGENCY'S SPECIFICATIONS	QTY	BIDDER'S STATEMENT OF COMPLIANCE	REFERENCE
COMPRESSOR MOTOR CONTROL UNIT, brand new	32 units	Brand & Model:	
Conforms to the following:			
<ul style="list-style-type: none"> Nominal Input Voltage – 3 phase, 380-500VAC, 60Hz 			
<ul style="list-style-type: none"> Voltage Range Operation for CMCU - 380 VAC (-15%) to 480 VAC (+10%), 3 phase 			
<ul style="list-style-type: none"> Nominal Control (Output) Voltage - Maximum 3-phase voltage equal to 380 Vac, 3-phase 			
<ul style="list-style-type: none"> Speed range for control power – 1,000 rpm in closed loop mode with incremental encoder feedback – smooth start and smooth stop control in line with characteristics of the programmable regulated supply system that can eliminate the inrush of current for the smooth operation 			

<ul style="list-style-type: none"> • Ambient temperature - up to +50% °C 			
<ul style="list-style-type: none"> • Dimension (W x L x H): <ul style="list-style-type: none"> - Box - 455 mm x 450 mm x 530mm (+/- 2mm); - Unit (VSD) - 245mm x 330mm x 190mm (+/- 2mm); 			
<ul style="list-style-type: none"> • Weight: 35 kg (+/-10%) 			
<ul style="list-style-type: none"> • Cooling of Semi Conductors Natural Air Convection 			
<ul style="list-style-type: none"> • Type of Control System - Inverter system: voltage source type-PWM Inverter 			
<ul style="list-style-type: none"> • Output voltage: 3 phase, 0 to 380 VAC 			
<ul style="list-style-type: none"> • Inverter frequency: 0.5 to 500 Hz 			
<ul style="list-style-type: none"> • Starting/stopping system: smooth start/stop system by voltage & frequency control in line with characteristics of the programmable regulated supply system that can eliminate the inrush of current for the smooth operation (by programming the required voltage and frequency in the CMCU) 			
<ul style="list-style-type: none"> • Protection: <ul style="list-style-type: none"> - Over voltage detection - Over current detection - Over heat detection 			
<ul style="list-style-type: none"> • Thermal state of thresholds of 105° motors and inverter 			
COMPONENTS:			

1. Control Unit			
<ul style="list-style-type: none"> • The drive unit in the CMCU equipment is controlled by a micro-processing control unit. The logic control has the following functions: <ul style="list-style-type: none"> - in line with characteristics of the programmable regulated supply system that can eliminate the inrush of current for the smooth operation (by programming the required voltage and frequency in the CMCU) - Fault protection 			
2. Variable Speed Control			
<ul style="list-style-type: none"> • Logic Inputs: 5 programmable logic inputs 24 V, compatible with level 1 PLC, IEC 65A - 68 standard; <ul style="list-style-type: none"> - Impedance = 3.5 kΩ 			
<ul style="list-style-type: none"> • Analog inputs: 1 bipolar differential analog input $\pm 10V$ (maximum safe voltage 24 V) 			
<ul style="list-style-type: none"> • Maximum sampling time: 2 ms (± 0.5 ms.) 			
<ul style="list-style-type: none"> • Resolution: 11 bits + 1 sign bit 			
<ul style="list-style-type: none"> • Industrial Temperature Available-concerns the availability of enclosure/ box that will endure the dissipation of heat – IP 55 type available 			
<ul style="list-style-type: none"> • Compare / Flux Control Vector Pulse Width Modulation (PWM) 			
<ul style="list-style-type: none"> • Programmable Multiplexed I/O pins 			

<ul style="list-style-type: none"> • Graphic Display terminal with option card that can be disconnected and connected remotely using cables and accessories available- for the variable speed drive to be supplied 			
<ul style="list-style-type: none"> • 3-phase Inverter FCVPWM. 			
<ul style="list-style-type: none"> • Safety Input (PWR) for power removal- input for the on/off safety function 			
<ul style="list-style-type: none"> • Safety Function: *Power Supply: 24 V (Max 30 V) *Impedance: 1.5 kΩ 			
<ul style="list-style-type: none"> • Module for Program Debugging / Download – an electronic board that is available on the VSD unit used for diagnostic test and program analysis for maintenance. 			
<ul style="list-style-type: none"> • Control the Inverter Run/Stop and sequence circuit (Pressure Sensor, Relay) 			
<ul style="list-style-type: none"> • Auto-adapts to its environment, "Plug & Play"- modules and diagnostic equipment for downloading are plug and play type 			
<ul style="list-style-type: none"> • Application functions, control, communication and diagnostics embedded in the drive 			
3. Electronic Sensor For Pressure Control 24Vdc (17-33Vdc)			
<ul style="list-style-type: none"> • Universal Sensor, analog output : 0-10V 			
<ul style="list-style-type: none"> • Digital output: 200mA (max) 			
<ul style="list-style-type: none"> • Range: 0 to 10 Bar / 145 psi / 1,000 Kpa 			
4. Circuit Breaker			

• Rating: 50 amps., 3 pole / 3 phase			
• Suitable for use at 50°C without de-rating			
• Square D Molded Case			
5. Control Relays			
• Relay 110 Vdc			
• Coil Voltage: 110Volts			
• No. of Pins: 11 pins			
Warranty Period for the CMCU: - one (1) year parts and services <u>after the acceptance of the last delivery</u>			
Conformity with the Terms and Conditions			
All items to be offered shall fit and must be compatible with the existing Rotem/ Toshiba Megatren Model 2003.			

I hereby certify that the statement of compliance to the foregoing technical specifications are true and correct, otherwise, if found to be false either during bid evaluation or post-qualification, the same shall give rise to automatic disqualification of our bid.

Name of Company / Bidder

Signature Over Printed Name of Authorized Representative

Date

For Goods Offered From Abroad

Name of Bidder _____, Invitation to Bid¹ Number ____. Page ____ of
_____.

1	2	3	4	5	6	7	8	9
Item	Description	Country of origin	Quantity	Unit price CIF port of entry (specify port) or CIP named place (specify border point or place of destination)	Total CIF or CIP price per item (col. 4 x 5)	Unit Price Delivered Duty Unpaid (DDU)	Unit price Delivered Duty Paid (DDP)	Total Price delivered DDP (col 4 x 8)

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

¹ If ADB, JICA and WB funded projects, use IFB.

For Goods Offered From Within the Philippines

Name of Bidder _____ . Invitation to Bid² Number _ . Page of ____.

1	2	3	4	5	6	7	8	9	10
Item	Description	Country of origin	Quantity	Unit price EXW per item	Transportation and Insurance and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit (col 5+6+7+8)	Total Price delivered Final Destination (col 9) x (col 4)

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

² If ADB, JICA and WB funded projects, use IFB.