



TERMS OF REFERENCE

SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF **TWO (2) SETS BRAND NEW VARIABLE FREQUENCY DRIVE MOTOR CONTROLLER**

A. General

1. Scope

- a. The scope of work is to supply, deliver, install and commission two (2) sets of brand-new variable frequency drive motor controller.
- b. Commissioning of motor controller and accessories including miscellaneous equipment shall be borne entirely by the supplier.

2. Conditions

- a. The scope of work is to supply, deliver, install and commission two (2) sets of brand-new variable frequency drive motor controller and its related accessories to CKWD. The motor controller unit and accessories shall be brand-new, at most three years ex-stock.
- b. The supplier shall be responsible for the proper installation of the supplied motor controller unit.
- c. The supplier shall commission the motor controller unit within forty-five (45) days after signing of Contract/ Purchase Order (PO). The 15-day time frame shall be allotted in order to check the proper setting of the motor controller unit and make necessary corrections of both mechanical and electrical failures found during installation and construction. The supplier shall inform the CKWD measures and proper procedures on the unit's operation to guarantee a smooth and proper function of the newly-installed unit.
- d. Field-testing shall be made once the mounted equipment is ready for operation and when both the CKWD and supplier have finished their scopes of work on the installed unit. CKWD engineers shall conduct field testing with the presence of supplier's representative.
- e. In case the unit failed during field testing, the supplier shall make necessary corrections, repair or replace the unit without cost to the owner. All incidental expenses including the pulling out and transporting of the unit shall be borne by the supplier.
- f. The supplier shall provide a comprehensive warranty covering all parts and labor for a minimum period of **one year** from the date of commissioning of the equipment.
- g. The supplier must respond to a warranty repair request within 24 hours of notification by the buyer. The supplier is required to complete the repair or provide a replacement within a **maximum lead time of 1 week from the time of notification**. This includes the time for diagnostics, shipping of parts, and on-site or off-site repair as necessary.
- h. All equipment/ materials must be **brand new**.

3. Location of Commissioning:

- a. PS No. 10 (PRC PS), Prime Regional Center, Brgy. Carpenter Hill, City of Koronadal
- b. PS No. 14 (San Jose PS), Purok Maawain, Brgy. San Jose, City of Koronadal

4. Motor Controller

- a. It shall meet the following operating requirements:

Description	Metric (English) Units
No. of Units:	2
Type:	Variable Frequency Drive
HP Rating:	60 horsepower or higher
Phase:	3
Frequency:	60Hz
Speed:	3450-3600 rpm
Voltage rating:	230 volts

Specification and Features:

- Pre-wired and tested set-up in NEMA enclosure protection
- UL safety level compliance
- Capable of either manual or automatic application
- Status indicator display
- Detection of underload/ overload
- Trouble log
- Ingress protection: 20 or higher
- Includes on-site programming
- Dimension: at least 16"x32"x48"
- Ventilation system: at least 4 fans
- Built-in hour counter
- Applicable for a both **single-phase** and **three-phase** power supply with 3 phase electrical load
- Voltage Fluctuation Protection or Surge Protector

Complete with the following accessories:

- Main circuit breaker, magnetic contactor, overload, over/underload voltage, start/stop push button switch, HOA selector switch, hour counter and frequency, surge protector device, etc.
- At least twenty (20) meters length of 38mm² electrical wire compatible to the maximum load of the unit with twelve (12) pieces terminal lugs.

B. Additional Requirements *(Compliance upon submission of quotation)*

1. Must submit product catalog / brochure.
2. The manufacturer should have ISO 9001:2015 certificate.
3. Must submit a notarized statement of undertaking indicating that the bidder has a Regional Presence or a Regional Service/Support Partner/Center within Mindanao and could comply with the condition set on items A.2.e to A.2.g.



C. Additional Requirements *(Compliance upon delivery)*

1. Must have standard manufacturer's installation accessories.
2. Minimum manufacturer's warranty certificate of one (1) year.
3. The supplier's technical representative shall be present during commissioning for final testing.