



BA-PHALABORWA MUNICIPALITY
MEMORANDUM
- BUDGET AND TREASURY _

To : Prospective service provider
From : SCM /stores
Date : 15/07/2024
Enquiries : Procurement Office
Telephone : 015 780 6361/62
Ref : 1507

Kindly furnish this office with a written quotation for supply of goods/ services as detailed below. The quotation must be submitted on the letterhead of your Business and Brought to our offices No.3 Nyala Street, Phalaborwa not later than 23/07/2024 at 12H00

Please number your quotes (Your Ref no)

| QUANTITY | Description | Price/unit (Inc. Vat) | Delivery Period |
|----------|-----------------------------------|--------------------------|--------------------|
| 20 | E650 KVA METERS FOR LPU CUSTOMERS | | |
| | ➤ CT DRIVEN | | |
| | ➤ WITH 10A MAX | | |
| | ➤ 3 PHASE 4 WIRE SYSTEM | | |
| | | | |
| | | | |
| | | | |

The following conditions will apply:

- Price (s) quoted must be valid for at least thirty (30) days from date of your offer.
 - The municipality retains the prerogative to reject any quotes it deems to be excessive
 - A firm delivery period must be indicated.
 - Tax Clearance Pin
 - A service provider be registered with central supplier database (CSD)
 - Completed MBD4 (Declaration of Interest) Form
 - Evaluation criteria: 80/20 (Whereby 80 is for price and 20 is for Objective goals)
- 20 is further evaluated: 20 for 100% Black owned;
18 for +51% Black owned; and
14 for Less than 51% Black owned

E650 Series 4 ZxD400AT/CT – Technical Data

General

Voltage

| | |
|----------------------------------|--|
| Nominal voltage U_n ZMD400xT | 3 x 58/100 to 69/120 V 3 x 110/190 to 133/230 V 3 x 220/380 to 240/415 V |
| Extended operating voltage range | 3 x 58/100 to 240/415 V |

Nominal Voltage U_n ZFD400xT

| | |
|----------------------------------|--------------------------------------|
| | 3 x 100 to 120 V 3 x 220 to 240 V |
| Extended operating voltage range | 3 x 100 to 415 V (mid-point earthed) |

| | |
|---------------|------------|
| Voltage range | 80 to 115% |
|---------------|------------|

Frequency

| | |
|-------------------------|-------------|
| Nominal frequency f_n | 50 or 60 Hz |
| Tolerance | $\pm 2\%$ |

IEC-specific data

Current

| | |
|-----------------------|-----------------------|
| Nominal current I_n | 1 A, 2 A, 5 A, 5 1 A |
|-----------------------|-----------------------|

Maximum current I_{max}

| | |
|---|-----------------------|
| Metrological for $I_n = 1$ A | 1.2 A, 2 A, 6 A, 10 A |
| Metrological for $I_n = 2$ A | 2.4 A, 4 A |
| Metrological for $I_n = 5$ A | 6 A, 10 A, 15 A, 20 A |
| Metrological for $I_n = 5 1$ A | 6 A |
| Overload for $I_{max} = 1.2$ A ... 10 A | 12 A |
| Overload for $I_{max} = 15$ A, 20 A | 20 A |

| | |
|-----------------------|--------------------------------|
| Short-circuit current | 0.5 s with $20 \times I_{max}$ |
|-----------------------|--------------------------------|

Measurement accuracy

ZxD405xT

| | |
|----------------------------------|-------------|
| Active energy, to IEC 62053-22 | class 0.5 S |
| Reactive energy, to IEC 62053-24 | class 1 S |

ZxD410xT

| | |
|----------------------------------|-----------|
| Active energy, to IEC 62053-21 | class 1 |
| Reactive energy, to IEC 62053-24 | class 1 S |

Measurement behaviour

Starting current ZxD405xT

| | |
|------------------|--------------|
| According to IEC | 0.1% I_n |
| Typical | 0.07% I_n |
| 5 1 A | as 1 A meter |

Starting current ZxD410xT

| | |
|------------------|--------------|
| According to IEC | 0.2% I_n |
| Typical | 0.14% I_n |
| 5 1 A | as 1 A meter |

The start-up of the meter is controlled by the starting power and not by the starting current.

Starting power in M-circuit single-phase

Nominal voltage x starting current

Starting power in F-circuit all phases

Nominal voltage x starting current x $\sqrt{3}$

MID-specific data

Current (for classes B and C)

| | |
|---------------------|--------------|
| Rated current I_n | 1.0 A, 5.0 A |
|---------------------|--------------|

| | |
|---------------------------|----------------|
| Minimum current I_{min} | 0.01 A, 0.05 A |
|---------------------------|----------------|

| | |
|-------------------------------|----------------|
| Transitional current I_{tr} | 0.05 A, 0.25 A |
|-------------------------------|----------------|

| | |
|---------------------------|---------------|
| Maximum current I_{max} | 2.0 A, 10.0 A |
|---------------------------|---------------|

Measurement accuracy to EN 50470-3

| | |
|----------|-----------------|
| ZxD400xT | classes B and C |
|----------|-----------------|

Measurement behaviour

Starting current I_{st}

| | |
|-------------------|------------------|
| Class B: I_{st} | 0.002 A, 0.01 A |
| Class C: I_{st} | 0.001 A, 0.005 A |

General

Operating behaviour

Voltage failure (power-down)

| | |
|---------------|---------------------|
| Bridging time | 0.5 s |
| Data storage | after another 0.2 s |
| Switch off | after approx. 2.5 s |

Voltage restoration (power-up)

| | |
|---|----------------|
| Function standby 3 phases | after 2 s |
| Function standby 1 phase | after 5 s |
| Detection of energy direction and phase voltage | after 2 to 3 s |