



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 : 1506

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
30	E550 CONVENTIONAL METERS FOR LPU CUSTPMERS		
	➤ DIRECT ON LINE WITH 125A IMAX		

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

The E550 direct connected I&C meters record active and reactive energy consumption in 1-phase 2-wire, 2-phase 3-wire, 3-phase 4-wire and 3-phase 3-wire (no neutral) networks.

Basic Version

The basic version provides energy registers for tariffication, red test diodes for active and reactive energy, an optical interface for meter reading and an electrical interface.

Interfaces

The Series 2 now supports two independent electrical interfaces.

The meter supports RS232, RS485, RS422, CS and a specially powered RS232 to supply external modems.

Installation support

The monitoring of voltage, current, demand and power factor supports the installation.

E550 Series 2 ZMG310AR/CR – Technical specifications

General

Voltage

Nominal voltage U_n ZMG310xR	
	3 x 220/380 V to 240/415 V
	3 x 110/190 V to 133/230 V
	3 x 110/190 V to 277/480 V

Voltage range	80% to 115% U_n
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Frequency

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

Application

1 phase 2 wire; 2 phase 3 wire; 3 phase 4 wire; 3-phase 3-wire (without neutral)	
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IEC-specific Data

Current

Base current I_b	selectable: 5, 10, 20 or 40 A
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Maximum current I_{max}

Metrological	selectable: 40, 60, 80, 100 or 125 A
Thermal	125 A
With aluminium wires	80 A

Short circuit ≤ 10 ms	10,000 A
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Measurement Accuracy

ZMG310xR	
Active energy, to IEC 62053-21	class 1
Reactive energy, to IEC 62053-23	class 2

Measurement Behaviour

Starting current

According to IEC	0.4% I_b
Typical	0.3% I_b
The startup 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

MID-specific Data

Current (for class B)

Reference current I_{ref}	selectable: 5, 10, 15 or 20 A
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Minimum current I_{min}	$\leq 0.05 \times I_{ref}$
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Transitional current I_{tr}	$0.1 \times I_{ref}$
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Maximum current I_{max}	125 A
With aluminium wires	80 A

Measurement Accuracy to EN 50470-3

ZMG310xR	class B
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Measurement Behaviour

Starting current I_{st}	$\leq 0.004 \times I_{ref}$
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General

Operating Behaviour

Voltage failure (Power Down)	
Bridging time	0.5 s
Data storage	after another 0.2 s
Switch off (at rated voltage)	after approx. 10 s