

**ZIMBABWE ELECTRICITY TRANSMISSION &
DISTRIBUTION COMPANY**



ADDENDUM 1

FOR

**TENDER FOR SUPPLY AND DELIVERY OF LOW
VOLTAGE (LV) AND HIGH VOLTAGE (HV) CIRCUIT
BREAKERS TO ENABLE REMOTE DISCONNECTION
AND RECONNECTION OF SMART METERED
POINTS**

TENDER # ZETDC/INTER/01/2022

ZIMBABWE ELECTRICITY DISTRIBUTION COMPANY
PREPAYMENT METERING PROJECT OFFICE
INCOMING MAIL

DATE RECEIVED: _____
ACTIONED BY: _____
DUE DATE: _____

10/03/2022

SCOPE OF CHANGES IN ADDENDUM 1

Certain clauses of the Technical specification have been amended in response to clarifications sought.

To avoid reference to two documents, the entire technical specification in the RFP has been reproduced with changes incorporated. Addendum 1 therefore supersedes the original technical specification and bidders should refer to the **addendum 1 only** for full technical requirements.

PARTICULARS OF THE MV ELECTRICAL SYSTEM

Unless otherwise specified in the Schedule of Requirements, it must be assumed that the electrical system in which the auto-reclosers will be used in is or has:

- a. Three phase overhead-line construction and underground system. The maximum earth fault factor on the network is 1.5. Fault levels not exceeding 20kA.
- b. Operated at 50 Hz, with approximately sinusoidal wave form with the frequency variation not exceeding 2.5% from 50Hz.
- c. The highest system voltage not normally exceeding the nominal system voltage by more than 10%. The nominal system voltages are 33 kV, 11 kV and 0.4kV.
- d. Designs should allow for these variations.

WARRANTY PERIOD (APPLICABLE TO ALL LOTS)

All lots shall have a warranty period of 12 months. Bidders are required to submit a letter from the Manufacturer (OEM) confirming that they will be a warranty period of twelve (12) months.

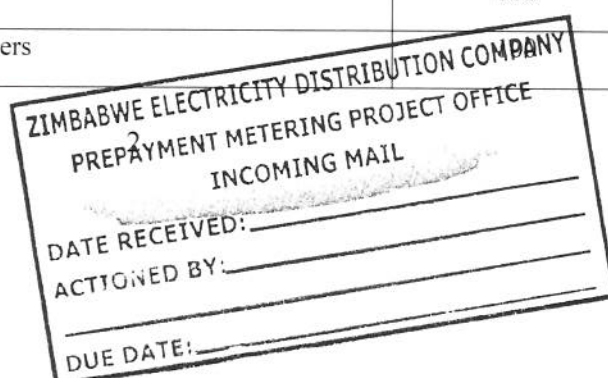
TECHNICAL SCHEDULES

The Technical Schedules shall be filled in and completed by the Bidder, and submitted with the Bid. All data entered in the Schedules of Technical Guarantees are guaranteed values by the Bidder and cannot be departed from whatsoever. All data entered in the Schedules of Informative Data are also guaranteed values by the Bidder. These data may only be altered following the ZETDC's written consent.

LOTS

Table 1: Description and quantities of Lots

Lot Number	Description of Lot	Quantity Required
1	LV Breakers (MCCB)	9,000
2	LV Breakers (Frame Type)	500
3	11kV Pole Mounted Autorecloers	600
4	11kV Ground Mounted Autorecloers	



5	33kV Pole Mounted Autorecloers	400
6	33kV Ground Mounted Autorecloers	100

Notes:

- Offers for partial lots (i.e some items for a lot) shall not be considered
- There shall be no lot limitation
- Bidders can submit offers for all or selected lots
- Award will be on a lot by lot basis

2.4.1 LOT 1 – LV (400V) Breakers (Molded Case Circuit Breakers)

Motorised MCCB or Intelligent circuit breaker with reclosing function integrates residual current protection, electric mechanism and electronic moulded case circuit breaker. It should be suitable for three-phase four wire neutral direct grounding distribution network with rated voltage of 400V and rated current at 300A to 800A to protect lines and equipment from grounding fault, overcurrent, short circuit, phase loss, leakage current, overvoltage and under voltage; Prevent fire and equipment damage caused by electrical failure, and provide indirect protection against electric shock.

The circuit breaker should have provision for overcurrent (OC) and earth fault (EF) protection, and the rated current can be adjusted according to the line load. By adjusting the three-stage protection curve, it can cooperate with the lower circuit breaker to required protection coordination.

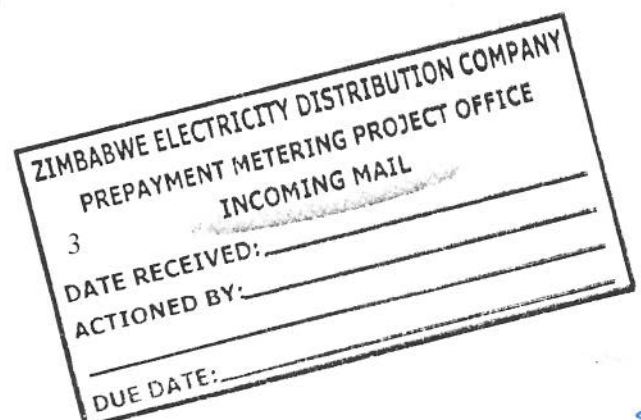
The circuit breaker should be equipped with RS485 serial interface, supports ModBus protocol, quickly integrate into the low-voltage distribution automation system, and conveniently realize the smart distribution network. It should also have provision for wiring closing and tripping inputs from an external source such as an energy smart meter.

2.4.2 LOT 2 – LV (400V) Breakers (Frame-Type Circuit Breaker)

The required frame type circuit breaker shall be drawer type (shell made of plastic shell). The circuit breaker has a more compact structure, high protection level, easy access. The current rating for frame type breakers is 1000A to 1600A.

The circuit breaker should have provision for overcurrent (OC) and earth fault (EF) protection, and the rated current can be adjusted according to the line load. By adjusting the three-stage protection curve, it can cooperate with the lower circuit breaker to required protection coordination.

The circuit breaker should be equipped with RS485 serial interface, supports ModBus protocol, quickly integrate into the low-voltage distribution automation system, and conveniently realize the smart distribution network. It should also have provision for wiring closing and tripping inputs from an external source such as an energy smart meter.



2.4.3 LOT 3 – 11kV Pole Mounted Autoreclosers

The required 11kV circuit breakers should meet all the standard requirements for protection breakers and should have provision or accepting tripping and closing commands from an external source such as a smart meter.

The Autorecloser should be designed and have provision for pole mounting.

2.4.4 LOT 4 – 11kV Ground Mounted Autoreclosers

The required 11kV circuit breakers should meet all the standard requirements for protection breakers and should have provision or accepting tripping and closing commands from an external source such as a smart meter.

The Autorecloser should be designed and have provision for ground mounting (inside or outside enclosures).

2.4.5 LOT 5 – 33kV Pole Mounted Autoreclosers

The required 33kV circuit breakers should meet all the standard requirements for protection breakers and should have provision or accepting tripping and closing commands from an external source such as a smart meter.

The Autorecloser should have provision for pole mounting.

2.4.6 LOT 6 – 33kV Ground Mounted Autoreclosers

The required 33kV circuit breakers should meet all the standard requirements for protection breakers and should have provision or accepting tripping and closing commands from an external source such as a smart meter.

The Autorecloser should be designed and have provision for ground mounting (inside or outside enclosures).

Type Test results and certificates for Lots 1 to 6

Type Test results and certificates from an independent certification board should be submitted with the tender, failure to avail the type tests results and certificates will result in rejection of bids

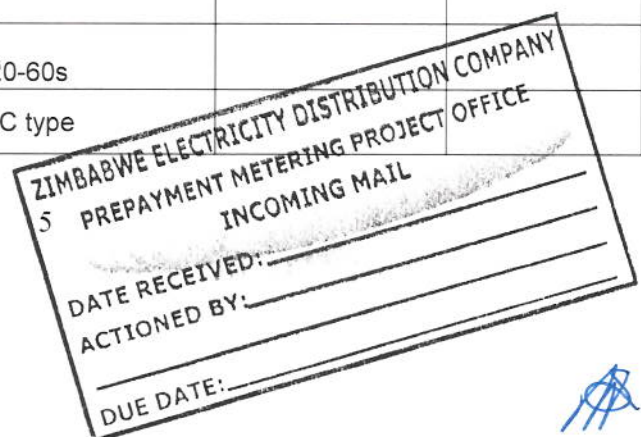


2.5 LOT 1 & 2 - LV CIRCUIT BREAKER REQUIREMENTS

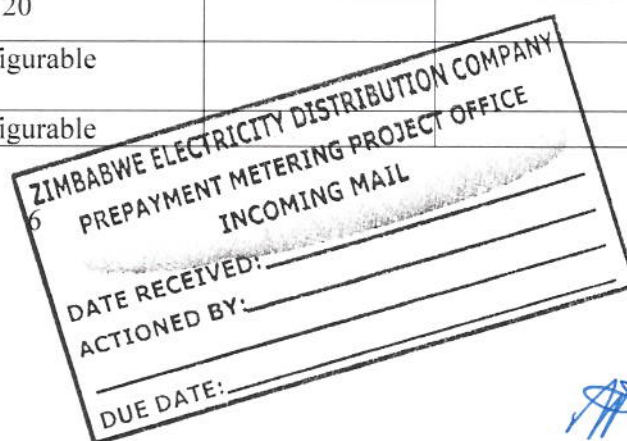
LOT 1 - LOW VOLTAGE CIRCUIT BREAKERS REQUIREMENTS

Table 2 : Technical Schedule & Compliance statement for 300 – 800Amp Motorised MCCBs

Item	Description	Details – As Specified By ZETDC	As Furnished By Bidder	Compliance / Non-Compliance Statement
1	Type of breaker	Motorised MCCB with reclosing function, residual current protection, electric mechanism; with rated voltage of 400V and rated current of 300A to 800A.		
2	Use Category	CATB i.e with an intentional short-time delay (which may be adjustable) provided for selectivity under short-circuit conditions <i>According to IEC 60947-2, Utilization category of a circuit breaker shall be stated with reference to whether or not it is specifically intended for selectivity by means of an intentional time delay with respect to other circuit breakers in series on the load side under short-circuits conditions.</i>		
3	Opening and closing	Configurable Automatic opening and closing, remote opening and closing, remote signaling opening and closing, local opening and closing		
4	Poles	3 Phases + Neutral		
	Voltage Rating			
5	Rated Working Voltage U_e and Frequency f	$U_e=400V$ AC and $f=50Hz$ $\pm 5\%$		
6	Rated Insulation Voltage U_i	100V @50Hz $\pm 5\%$		
7	Rated insulation voltage U_i	1000V		
9	Rated impulse withstand voltage U_{imp}	8kV		
10	Reclosing time (s) For MCCB)	20-60s		
11	Residual current action characteristics For MCCB)	AC type		



12	$I\Delta n$ (mA) For MCCB)		30-1000mA(adjustable)		
13	Delay characteristic For MCCB)		Normal/S		
14	$I\Delta n$ (s) For MCCB)		0.3s/0.5s type delay		
15	Mechanical life (times)		Minimum Times: MCCB ; For Energised (1000), Non-energised (4000) Total times (5000).		
16	Overload, short circuit characteristic		Configurable		
17	Protection action threshold		Configurable		
18	Protection action time threshold		Configurable		
19	Joint control delay time (ms)		≤ 60 ms		
20	Communication delay time (ms)		≤ 200 ms		
21	Limit non driving time (s) (For MCCB)		$\Delta t: 0.06(2I\Delta n)$		
CURRENT RATING					
22	Rated current (A)		300		
			500		
			600		
			800		
23	Setting current I_{r1} (A)		100 - 300		
			200 - 400		
			500 - 600		
			700 - 800		
24	Rated limit short-circuit breaking capacity I_{cu} (kA)	300	50		
		500	65		
		600	65		
		800	65		
25	Rated operating short-circuit breaking capacity I_{cs} (kA)	300	35		
		500	42		
		600	42		
		800	42		
26	I_{cw} Rated Short-time Withstand Current	300	3kA/1s		
		500	3kA/1s		
		600	5kA/1s		
		800	5kA/1s		
			Specified time of 1s as required in IEC/EN 60947-3.		
27	$I\Delta m$ (kA) Rated Residual Breaking Capacity	300	12.5		
		500	12.5		
		600	20		
		800	20		
28	Overload, short circuit characteristic		Configurable		
29	Protection action threshold		Configurable		

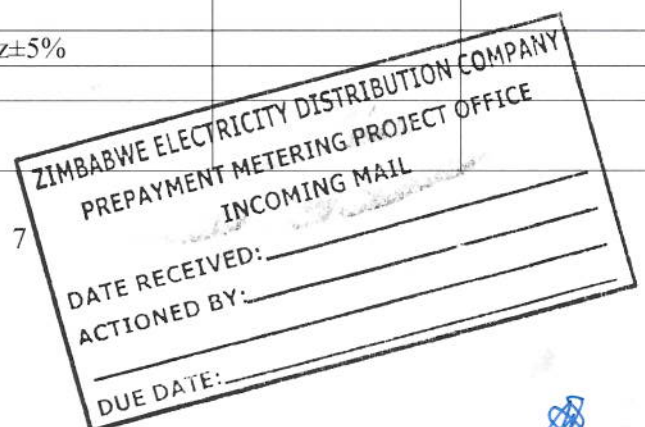


30	Protection action time threshold	Configurable		
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LOT 2 - LOW VOLTAGE CIRCUIT BREAKERS REQUIREMENTS

Table 3: Technical Schedule & Compliance statement for 1000 – 1600Amp Motorised Frametype Breakers

Item	Description	Details – As Specified By ZETDC	As Furnished By Bidder	Compliance / Non-Compliance Statement
1	Type of breaker	Frame-Type Circuit Breaker with overcurrent (OC) and earth fault (EF) protection, suitable for three-phase four wire neutral direct grounding distribution network with rated voltage of 400V and rated current of up to 1600A.		
2	Use Category	CATB i.e. with an intentional short-time delay (which may be adjustable) provided for selectivity under short-circuit conditions According to IEC 60947-2, Utilization category of a circuit breaker shall be stated with reference to whether or not it is specifically intended for selectivity by means of an intentional time delay with respect to other circuit breakers in series on the load side under short-circuits conditions.		
3	Opening and closing	Configurable Automatic opening and closing, remote opening and closing, remote signaling opening and closing, local opening and closing		
4	Poles	3 Phases + Neutral		
5	Rated Working Voltage U_e and Frequency f	$U_e=400V$ AC and $f=50Hz$ $\pm 5\%$		
6	Rated Insulation Voltage U_i	100V @50Hz $\pm 5\%$		
7	Rated insulation voltage U_i	1000V		
9	Rated impulse withstand voltage U_{imp}	8kV		

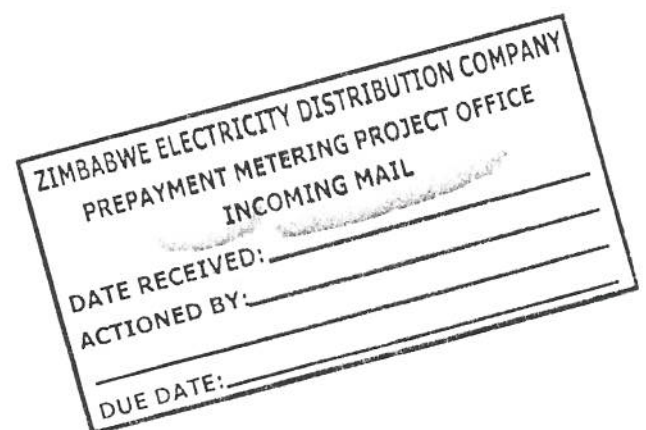


10	Reclosing time (s) For MCCB)		20-60s		
11	Residual current action characteristics For MCCB)		AC type		
12	$I\Delta n$ (mA) For MCCB)		30-1000mA(adjustable)		
13	Delay characteristic For MCCB)		Normal/S		
14	$I\Delta n$ (s) For MCCB)		0.3s/0.5s type delay		
15	Mechanical life (times)		Minimum Times: FRAME TYPE; For Energised (1000), Non-energised (5000) Total times (6000).		
16	Overload, short circuit characteristic		Configurable		
17	Protection action threshold		Configurable		
18	Protection action time threshold		Configurable		
19	Joint control delay time (ms)		≤ 60 ms		
20	Communication delay time (ms)		≤ 200 ms		
21	Limit non driving time (s) (For MCCB)		$\Delta t: 0.06(2I\Delta n)$		
22	Rated current (A)		1200 1600		
23	Setting current I_{r1} (A)		1000 – 1200 1300 - 1600		
24	Rated limit short-circuit breaking capacity I_{cu} (kA)	300	50		
		500	65		
		600	65		
		800	65		
		1200	65		
		1600	65		
25	Rated operating short-circuit breaking capacity I_{cs} (kA)	1200	42		
		1600	42		
26	I_{cw} Rated Short-time Withstand Current	1200	5kA/1s		
		1600	5kA/1s		
			Specified time of 1s as required in IEC/EN 60947-3.		
	$I\Delta m$ (kA)	1200	20		

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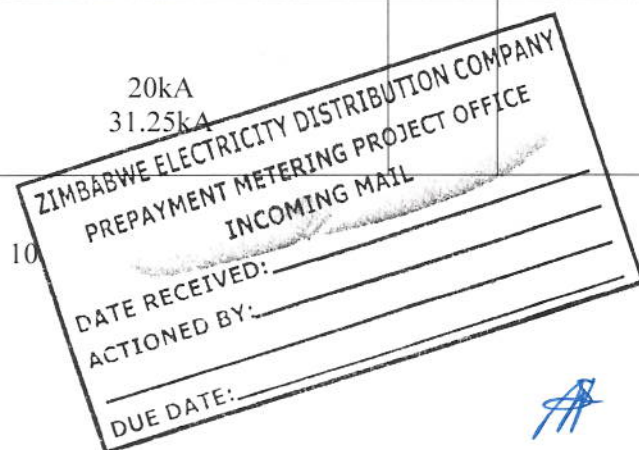
27	Rated Residual Breaking Capacity	1600	20		
28	Overload, short circuit characteristic		Configurable		
29	Protection action threshold		Configurable		
30	Protection action time threshold		Configurable		



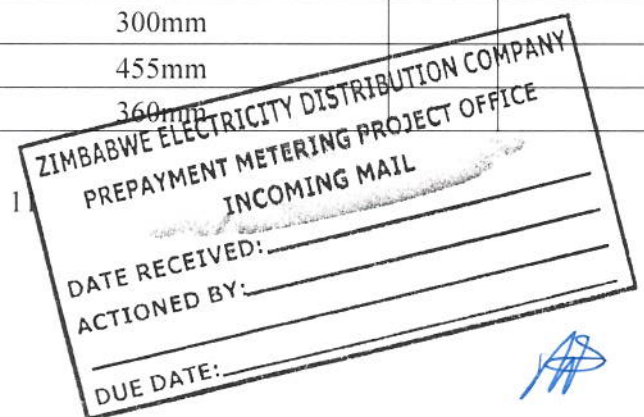
LOT 3 & 4 - 11KV CIRCUIT BREAKERS REQUIREMENTS

Table 4: Technical Schedule & Compliance statement for 11kV Auto-recloser

	Item Description	Unit	ZETDC Requirement	Offered By Bidder	Compliance Statement
1	Name of Manufacturer & Country		Specify		
2	Mounting		Type 1 - Pole Mounted Type 2 – Ground Mounted		
3	Interrupting medium		Vacuum		
4	Insulation Medium		Solid Dielectric		
5	Operating Mechanism (Close & Open)		Magnetic Actuator		
6	International standard it complies with		IEEE C37.60 and IEC 62271-111:Automatic circuit reclosers for alternating current systems up to and including 38 kV		
7	Nominal frequency	Hz	50Hz		
8	CURRENT RATING				
	Continuous current rating	A	630A		
9	Current correction factor for altitude		1.0		
10	Minimum Interruption Capacity:				
	<u>11kV Pole Mounted</u> Symmetrical (rms) Asymmetrical (peak)	kA	8 kA 20 kA		
	<u>11kV Ground Mounted</u> Symmetrical (rms) Asymmetrical (peak)	kA	12.5kA 31.25kA		
11	Minimum making current (peak):				
	Pole Mounted	kA	20kA		
	Ground Mounted	kA	31.25kA		



	Item Description	Unit	ZETDC Requirement	Offered By Bidder	Compliance Statement
12	Minimum sc trip current settings	A	10A		
13	Minimum earth fault settings	A	1A		
14	Time-current curve settings		There should be equipped with four selections for characteristic curve: very inverse, extremely inverse, normal inverse and definite time. The curves should conform to IEC60255.		
15	Are response times A, B and C of IEC 255 available? (y/n)		YES		
16	Range of time increments to facilitate protection co-ordination	S	0-100.00S		
17	Number of time increments		0.01		
18	Variable reclosing time settings	S	1st Reclose Time range 0.3–180 s; 2nd Reclose Time range 2.0–180 s; 3rd Reclose Time range 2.0–180 s; 4th Reclose Time range 2.0–180 s; There should be provision to trip and lockout without auto reclosing		
19	Resetting time settings	S	3–180s		
20	Maximum number of reclosures per cycle		4		
21	Voltage range of closing solenoid	kV	DC0.019-0.029kV		
22	Burden of closing solenoid: Current	A	7A		
23	Type of HV Bushing		Epoxy resin with silicone rubber outside		
24	Nominal voltage	kV	11kV		
25	Maximum rated voltage	kV	16kV		
26	Voltage correction factor for altitude		1.3		
27	Basic Impulse Level	kV	75kV		
28	One minute, 50Hz, voltage withstand, wet	kV	42kV		
29	Clearance: Phase to Phase	mm	300mm		
30	Phase to Earth	mm	455mm		
31	Minimum creepage distance	mm	360mm		

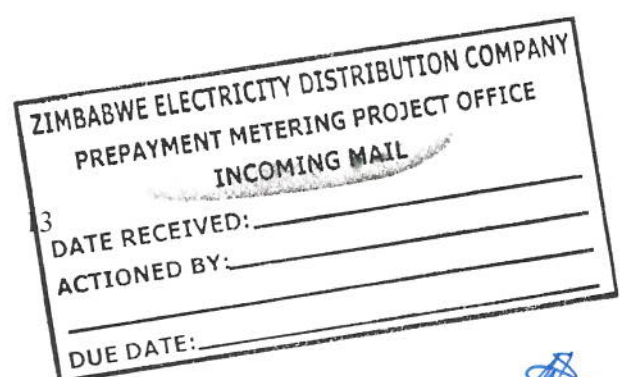


	Item Description	Unit	ZETDC Requirement	Offered By Bidder	Compliance Statement
32	Minimum protected creepage distance	mm	400mm		
33	Type of surge arresters		Gapless metal oxide arresters		
34	Surge arresters rating	kV	11kV		
35	Radio influence voltage	uV	250uV		
36	Spark gap setting range	mm	0mm, Gapless		
37	Is separate bushing CT available? (y/n)		Optional There shall be provision for a separate bushing CT and every CT should have its separate bushing.		
38	Type of Control Box		Stainless Steel		
39	Auxiliary Circuits: Basic Impulse Level	kV	5kV		
40	1 min., 50Hz withstand	kV	3kV		
41	Is changeover switch provided for closing solenoid? (y/n)		YES. Circuit breaker should have its own opening and closing switches meanwhile controller has local and remote control buttons. There should be provision for inputs for tripping and closing commands from an external source such as an energy meter		
42	Are local manual trip and close facilities available? (y/n)		YES. Controller has local and remote control buttons.		
43	Are position indicators visible from ground? (y/n)		YES. There shall be position indicators on the surface visible from ground.		
44	Is operations counter readable from ground? (y/n)		YES. It should be readable to count operation from ground.		
45	Are fault indicators for SC and EF provided in control box? (y/n)		YES. There should be fault indicators for SC and EF provided in control box.		
46	How are the recloser variables entered?		By keypad and LCD screen as well as configuration software from laptop.		
47	Are remote control facilities available? (y/n)		YES. There shall be a remote control facility.		

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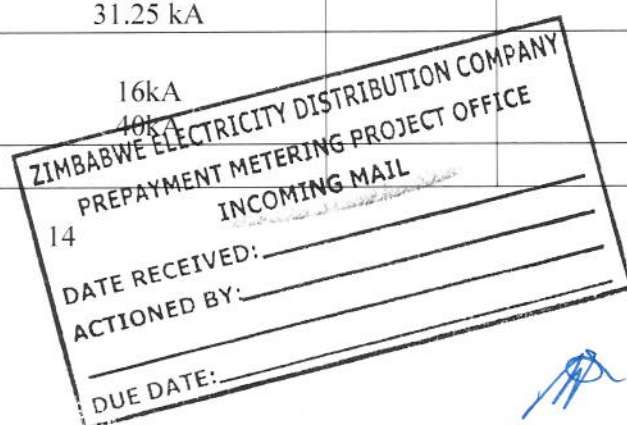
	Item Description	Unit	ZETDC Requirement	Offered By Bidder	Compliance Statement
48	Is there an on/off remote control switch? (y/n)		YES. Controller should have local and remote control buttons.		
49	When, off, can trip be set to delayed or instantaneous without reprogramming cycle? (y/n)		YES. When, off, should trip be set to delayed or instantaneous without reprogramming cycle.		
	Is alarm available for:				
50	Low auxiliary battery voltage? (y/n)		YES. When auxiliary battery voltage is low, there shall be a alarm indicator on.		
51	Microprocessor malfunctioning? (y/n)		YES. When microprocessor malfunction, there shall be a alarm indicator on.		
52	Failure of switching operation? (y/n)		YES. When it is fail to switch operation, there shall be a alarm indicator on.		
	Type of corrosion protection:				
53	Recloser Tank		Stainless Steel		
54	Control Box		Stainless Steel		
55	Steel Mounting Frame		Steel mounting frame is iron galvanized.		
56	Weight	kg	150kg		



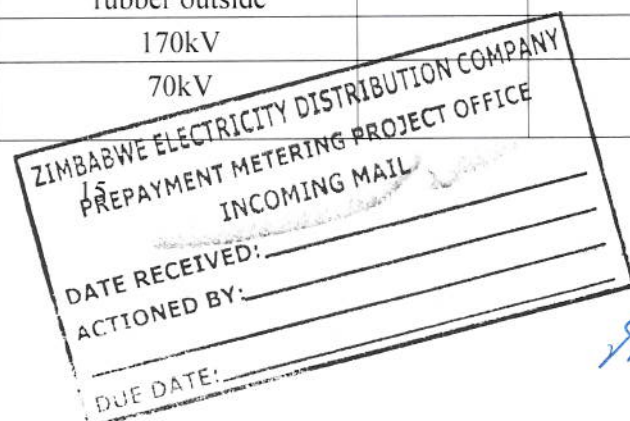
LOT 5 & 6 - 33KV CIRCUIT BREAKERS REQUIREMENTS

Table 5: Technical Schedule & Compliance statement for 33kV Auto-recloser

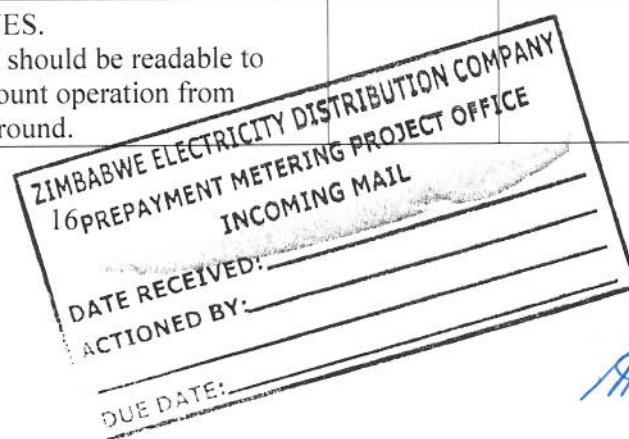
	Item Description	Unit	ZETDC Requirement	Offered By Bidder	Compliance Statement
1	Name of Manufacturer & Country		Specify		
2	Mounting		Type 1 - Pole Mounted Type 2 – Ground Mounted		
3	Interrupting medium		Vacuum		
4	Insulation Medium		Solid Dielectric		
5	Operating Mechanism (Close & Open)		Magnetic Actuator		
6	International standard it complies with		IEEE C37.60 and IEC 62271-111 :Automatic circuit reclosers for alternating current systems up to and including 38 kV		
7	Nominal frequency	Hz	50Hz		
8	Nominal voltage	kV	33kV		
9	Maximum rated voltage	kV	36kV		
10	Voltage correction factor for altitude		1.3		
11	Continuous current rating	A	400A		
12	Current correction factor for altitude		1.0		
13	Minimum Interruption Capacity:				
	<u>33kV Pole Mounted</u> Symmetrical (rms) Asymmetrical (peak)	kA	12.5kA 31.25 kA		
14	<u>33kV Ground Mounted</u> Symmetrical (rms) Asymmetrical (peak)	kA kA	16kA 40kA		
15	Minimum making current				



	Item Description	Unit	ZETDC Requirement	Offered By Bidder	Compliance Statement
	(peak): Pole Mounted Ground Mounted	kA kA	31.25kA 40kA		
16	Minimum sc trip current settings	A	10A		
17	Minimum earth fault settings	A	1A		
18	Time-current curve settings		There should be equipped with four selections for characteristic curve: very inverse, extremely inverse, normal inverse and definite time. The curves should conform to IEC60255.		
19	Are response times A, B and C of IEC 255 available? (y/n)		YES		
20	Range of time increments to facilitate protection co-ordination	S	0-100.00S		
21	Number of time increments		0.01		
22	Variable reclosing time settings	S	1st Reclose Time range 0.3–180 s; 2nd Reclose Time range 2.0–180 s; 3rd Reclose Time range 2.0–180 s; 4th Reclose Time range 2.0–180 s; There should be provision to trip and lockout without auto reclosing		
23	Resetting time settings	S	3–180s		
24	Maximum number of reclosures per cycle		4		
25	Voltage range of closing solenoid	kV	DC0.019-0.029kV		
26	Burden of closing solenoid: Current	A	7A		
27	Type of HV Bushing		Epoxy resin with silicone rubber outside		
28	Basic Impulse Level	kV	170kV		
29	One minute, 50Hz, voltage withstand, wet	kV	70kV		

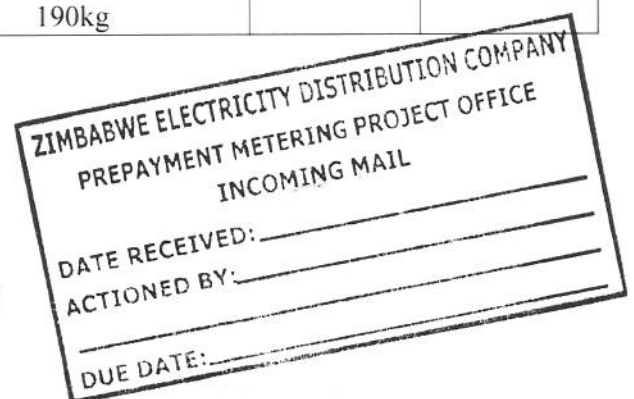


	Item Description	Unit	ZETDC Requirement	Offered By Bidder	Compliance Statement
30	Clearance: Phase to Phase	mm	393mm		
31	Phase to Earth	mm	696mm		
32	Minimum creepage distance	mm	1080mm		
33	Minimum protected creepage distance	mm	1300mm		
34	Type of surge arresters		Gapless metal oxide arresters		
35	Surge arresters rating	kV	33kV		
36	Radio influence voltage	uV	250uV		
37	Spark gap setting range	mm	0mm, Gapless		
38	Is separate bushing CT available? (y/n)		Optional There shall be provision for a separate bushing CT and every CT should have its separate bushing.		
39	Type of Control Box		Stainless Steel		
40	Auxiliary Circuits: Basic Impulse Level	kV	5kV		
41	1 min., 50Hz withstand	kV	3kV		
42	Is changeover switch provided for closing solenoid? (y/n)		YES. Circuit breaker should have its own opening and closing switches meanwhile controller has local and remote control buttons. There should be provision for inputs for tripping and closing commands from an external source such as an energy meter		
43	Are local manual trip and close facilities available? (y/n)		YES. Controller has local and remote control buttons.		
44	Are position indicators visible from ground? (y/n)		YES. There shall be position indicators on the surface visible from ground.		
45	Is operations counter readable from ground? (y/n)		YES. It should be readable to count operation from ground.		



	Item Description	Unit	ZETDC Requirement	Offered By Bidder	Compliance Statement
46	Are fault indicators for SC and EF provided in control box? (y/n)		YES. There should be fault indicators for SC and EF provided in control box.		
47	How are the recloser variables entered?		By keypad and LCD screen as well as configuration software from laptop.		
48	Are remote control facilities available? (y/n)		YES. There shall be a remote controller.		
49	Is there an on/off remote control switch? (y/n)		YES. Controller should have local and remote control buttons.		
50	When, off, can trip be set to delayed or instantaneous without reprogramming cycle? (y/n)		YES. When, off, should trip be set to delayed or instantaneous without reprogramming cycle.		
	Is alarm available for:				
51	Low auxiliary battery voltage? (y/n)		YES. When auxiliary battery voltage is low, there shall be a alarm indicator on.		
52	Microprocessor malfunctioning? (y/n)		YES. When microprocessor malfunction, there shall be a alarm indicator on.		
	Failure of switching operation? (y/n)		YES. When it is fail to switch operation, there shall be a alarm indicator on.		
53	Type of corrosion protection:				
54	Recloser Tank		Stainless Steel		
55	Control Box		Stainless Steel		
56	Steel Mounting Frame		Steel mounting frame is iron galvanized.		
57	Weight	kg	190kg		

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Part 2: Statement of Requirements

2.1 Price Schedule

Procurement Reference Number: ZETDC/INTER/01/2022

Bidder's Name: _____

Table 6: Lot 1 - LV Breakers (Moulded Case Circuit Breaker) Moulded Case Circuit Breaker

#	Item Description	Capacity (A)	Quantity	Unit Price (USD)	Total Price (USD)
1	Moulded Case Circuit Breaker 300A	100 -300A	3,000		
2	Moulded Case Circuit Breaker 400A	200-400A	2,000		
3	Moulded Case Circuit Breaker 600A	500 - 600A	2,000		
4	Moulded Case Circuit Breaker 800A	800A	2,000		
				Sub Total	
				VAT	
				Grand Total	

Table 7: Lot 2– LV Breakers (Frame-Type Circuit Breaker)

#	Item Description	Capacity (A)	Quantity	Unit Price (USD)	Total Price (USD)
1	Frame-type Circuit Breaker	1000A	300		
2	Frame-type Circuit Breaker	1200A	150		
3	Frame-type Circuit Breaker	1600A	50		
				Sub Total	
				VAT	
				Grand Total	

ZIMBABWE ELECTRICITY DISTRIBUTION COMPANY
PREPAYMENT METERING PROJECT OFFICE
INCOMING MAIL

DATE RECEIVED: _____
 ACTIONED BY: _____
 DUE DATE: _____

Table 8: Lot 3 – 11kV Breakers Pole Mounted

#	Item Description	Capacity (A)	Quantity	Unit Price (USD)	Total Price (USD)
1	11kV Auto Reclosers (Pole Mounted)	630A	600		
				Sub Total	
				VAT	
				Grand Total	

Table 9: Lot 4 – 11kV Breakers Ground Mounted

#	Item Description	Capacity (A)	Quantity	Unit Price (USD)	Total Price (USD)
1	11kV Auto Reclosers (Ground Mounted)	630A	100		
				Sub Total	
				VAT	
				Grand Total	

Table 10: Lot 5 – 33kV Breakers Pole Mounted

#	Item Description	Capacity (A)	Quantity	Unit Price (USD)	Total Price (USD)
1	33kV Auto Reclosers (Pole Mounted)	400A	400		
				Sub Total	
				VAT	
				Grand Total	

Table 11: Lot 4 – 33kV Breakers Ground Mounted

#	Item Description	Capacity (A)	Quantity	Unit Price (USD)	Total Price (USD)
1	33kV Auto Reclosers (Ground Mounted)	400A	100		
				Sub Total	
				VAT	
				Grand Total	

