

Malaviya National Institute of Technology Jaipur – 302017

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CORRIGENDUM

The following amendments are hereby made to the Tender Enquiry No. **F5(1894)ST/MNIT/EE/2022** for Procurement of Three Phase Air Circuit Breaker ACB Trainer:-

S.No.	Item	Before Amendment	After Amendment
1.	Specifications (Clause 3.1)	<p><u>Three Phase Air Circuit Breaker (ACB) Trainer</u> To study the working principle of ACB and to test the ACB (Air circuit breaker) under over current fault and Earth Fault conditions. This set up should consist of</p> <ol style="list-style-type: none"> 1. Three phase ACB (Air Circuit Breaker) 2. ACB Test Kit with Panel set up <p>Panel with ACB Test set up (current injection source) This panel should consist of</p> <ol style="list-style-type: none"> 1. Meter with Relay (Numerical Type), Over current, Earth Fault 2. Variable ac current source with trip time indicator /meter 3. Earth Fault SIMULATOR: 3 p induction motor to simulate Earth Fault, Necessary Earth side CT necessary terminals for Earth Fault simulation, Current limit resistor to adjust/limit the Earth Fault current 4. Digital meters, voltmeter and ammeter 5. Autotransformer to adjust the current output. 6. Automatic trip time measurement circuit (ATTM Circuit), start push button, stop push button, 7. Digital stop Clock to measure relay trip time 8. ACB busbar input & output indicator 9. Necessary CT With suitable rating 10. Breaker trip status indicator with manual on/off switch 11. All to be mounted on a nice cabinet with diagram stickered on front panel 12. Mimic diagram to be printed 	<p><u>Three phase Air Circuit Breaker (ACB) Trainer</u> To study the working principle of ACB and to test the ACB (Air circuit breaker) under over current fault and Earth Fault conditions. This set up should consist of</p> <ol style="list-style-type: none"> 1. Three phase ACB (Air Circuit Breaker) 2. ACB Test Kit with Panel set up <p>The Trainer should have following features</p> <ul style="list-style-type: none"> • Requisite relay testing kit typically consisting of voltage injector, current injector, elapsed time counter, trip logic etc. all mounted in a light weight sturdy aluminum profile flat demo panel system. • Each panel with ABS molded plastic sturdy enclosure, & colorful screw less overlays showing circuits diagrams & its connection tag numbers for easy understanding & connection • Set of Instructor Guide /Manual & Student Workbook <p>Technical Specifications The Trainer should have Aluminum profile sturdy Modular flat panel (table top) system, carrying various high voltage components housed in plastic enclosures (panel) to minimize shock possibility</p> <p>Control Power Supply & 1 Ph. AC Distribution Panel</p> <ul style="list-style-type: none"> • +12V, -12V, 500mA • +5V, 300mA • Unregulated 17VDC/750mA <p>Variable voltage & current injector panel</p> <ul style="list-style-type: none"> • Consist of 1 phase dimmer 230VAC/1A • Short circuit transformer with primary 230VAC/1A, secondary 0-2-8V/12A taps. <p>Over current & elapsed time measurement panel</p> <ul style="list-style-type: none"> • Consists of AC ammeter of 20A <p>Fuse & MCB Panel Zero Current Detector Panel Earth Fault SIMULATOR: Simulate Earth Fault, Necessary Earth side CT & all necessary terminals for Earth Fault simulation, Current limit resistor to adjust/limit the Earth Fault current</p> <p>Air Circuit Breaker (ACB)- Table top</p> <ul style="list-style-type: none"> • ACB 3ph, 440V, 3 pole, 50Hz, fixed type • Rated current- 400A • Rated voltage- 415V

		<p>on panel front plate for easy understanding</p> <p>EXPERIMENTS</p> <ol style="list-style-type: none"> 1. Testing of ACB under Over current fault conditions (under different fault current & study the tripping characteristics) 2. Testing of ACB under Earth fault conditions (under different fault current & study the tripping characteristics) 3. Study the construction & operation of ACB (AIR CIRCUIT BREAKER) 	<ul style="list-style-type: none"> • Rated S.C. breaking- 50KA • Rated (S.T.) with stand capacity 1sec- 50KA <p>Over Current Relay Panel All the connecting of relay should have brought out on this panel & it should consist of 2 NO trip contacts and Relay Coil</p> <p>Protection relay type (Numerical) Should consist of numerical type IDMT over current relay and earth Fault realy, current rating 5A, with current setting of 2-250% in seven equal steps of 2%, time setting 0.1 to 1.</p> <p>Necessary CT with suitable rating</p> <p>List of Experiments</p> <ul style="list-style-type: none"> • To study & plot characteristics of Fuse • To study & plot characteristics of MCB • To study & plot characteristics of Air Circuit Breaker • Testing of ACB under Over current fault conditions (under different fault current & study the tripping characteristics) • Testing of ACB under Earth fault conditions (under different fault current & study the tripping characteristics) • Study the construction & operation of ACB (AIR CIRCUIT BREAKER)
2.	Warranty (Schedule)	Standard OEM Warranty not less than One Year	Warranty not less than Two Year
3.	Training	NA	Training of five personnel for three days

The last date of submission of tender is extended up to 02.00 PM on 05.05.2023. The tender shall be submitted to Central Store Section, MNIT Jaipur. The tender will be opened on same day i.e. 05.05.2023 at 3.00 PM in presence of the committee.

However, all the terms & conditions of the original NIQ will remain unchanged.

For details visit: www.mnit.ac.in and <https://eprocure.gov.in/epublish/app>

Deputy Registrar
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