

ANNEXURE-A TO PURCHASE INDENT : <b>240982518</b>		REV.NO.- 00
BHEL	Technical Specification of: FAN FAILURE DETECTION UNIT	
Bhopal	PI No.: <b>240982518</b>	Enq. No.:
SWE		PO No.:
W.O. Nos. : 95044C47602 / 94024A47602/ 97048A47602/ 97049A47602		

**ITEM -01 : FAN FAILURE DETECTION UNIT –**

Fan failure detection unit is used for detecting failure of Cooling fans mounted in switchgear panels in the event of a short or open circuit or in case of absence of power supply to the Fan.

**TECHNICAL SPECIFICATIONS:**

- a) No. of fans : 2
- b) Input (mains) : 110/230V AC, 50 Hz. Single Phase
- c) In built Auxiliary power supply: - Input : 90-270 V AC.
- d) Protection : Short circuit protection for output & Over voltage protection (over 285 V AC) for input
- e) Outputs : (i) 110/230V AC, 50Hz supply to fans individually  
(ii) Fan fault indication relay contact (COM, NO) common for both Fans.
- f) Indications: (i) Power supply : AMBER LED for Power ON  
(ii) Fan module : Dual colour LED, GREEN LED for Fan Healthy and RED LED for Fan fault common for both fans
- g) Protections: Fan short circuit or open circuit, power supply switches OFF to the particular fan
- h) Failure Detection: Fan struck / Stop, Open circuit.
- i) KEY SWITCH DETAILS:  
SEL – For Registering the Fan current.  
ENTER – For Register confirmation & Run mode.  
RESET – For fault reset of both Fans after fault correction
- j) Display : Fan Healthy & Fan failure indication on 7 segment LED Display
- k) Mounting : Plug in base mounted on Din Rail “Omega” Channel.
- l) Overall dimensions : 48 (W) X 51(H) X 122 (D) in mm
- m) Input/Output wiring : Shall be suitable for Screw type terminals.

**OPERATING CONDITIONS :**

- a) Maximum Power Consumption : 45VA with 110 V AC/230V AC, 50 Hz for 4 inch fan.
- b) Ambient humidity:5 to 90% relative humidity (non-condensing)
- c) Insulation Resistance: Between Power and Relay contact outputs: 2000MΩ@1000V DC.
- d) Dielectric Strength: Between input Power terminals and relay contact outputs : 1500V AC for 1 minute.

**Documents to be furnished with offer:**

- a) 2 copies of technical leaflets.
- b) 2 copies of dimensional & mounting details.

**Documents to be furnished along with equipment:**

- a) 2 copies of routine test certificates.
- b) 2 copies of guarantee certificate.

**Acceptance criteria:**

- a) Visual inspection for cracks & surface finish.
- b) Matching of type reference.
- c) Availability of Routine test certificates.
- d) Voltage & current rating.
- e) Make-Model mark on device.
- f) Vendor to essentially provide P.O. No. / It. No. on individual items packing for easy traceability.

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Approved by : Murtaza Hussain

Date : 14.05.2018

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