

S-29020/103/181(3)/FTP/2015/EHQ भारत सरकार/Government of India श्रम एवं रोजगार मंत्रालय Ministry of Labour & Employment खान सुरक्षा महानिदेशालय/ Directorate General of Mines Safety



No.

446/2160

/EHQ, Dhanbad, dated

31-10-2016

From:

Director General of Mines Safety Directorate General of Mines Safety, P.O & Distt: Dhanbad - 826 016.

To Shri Joydip Chakraborty - Director M/s. Electroteknica Engineering Pvt. Ltd., 1/5 B, Rajabasanta Roy Road, Kolkata - 700026.

Sub: DGMS approval under Regulation 181 (3) of the Coal Mines Regulations, 1957 for 500 KVA, 6.6KV-3.3KV / 1100V-550V flameproof Transwitch Unit Type: FTSU-1 for use at 3.3KV / 550V (as mentioned in Annexure-B) manufactured by M/s. Electroteknica Engineering Pvt. Ltd., Kolkata for use in belowground coal mines, under Regulation 181 (3) of the Coal Mines Regulations, 1957.

Ref: CIMFR Project Report No. CNP/3272/2012-13F and CIMFR test reports as mentioned in Annexure-B.

IDENTIFICATION MARK DGMS APPROVAL NO. 715... OF 2016

Dear Sir,

Based on performance report received from Tata Steel Ltd. Jharia Collieries, Dhanbad above test reports under reference, approval is hereby accorded to the subject equipment for a period of **five (05) years from the date of issue of this** letter for use in belowground Coal Mines, subject to compliance with the conditions stipulated in the Annexure-A.

Please note that application for renewal should be made at least **three (03) months** before the date of expiry of the approval.

Yours faithfully,

(Rahul Gu

Director General of Mines Safety

Encl: Annexure-A&B

DGMS approval no. 715... of 2016 issued by this Directorate's letter no. 646/2160 3140-2016

Conditions for DGMS approval under Regulation 181 (3) of the Coal Mines Regulations, 1957 for 500 KVA, 6.6KV-3.3KV / 1100V-550V flameproof Transwitch Unit Type: FTSU-1 for sue at 3.3KV / 550V (as mentioned in Annexure-B) manufactured by M/s. Electroteknica Engineering Pvt. Ltd., Kolkata for use in belowground coal mines, under Regulation 181 (3) of the Coal Mines Regulations, 1957.

In addition, every unit shall also carry permanently this Directorate's approval mark, as given below:



- 2. (a)The design of the electrical circuit shall not be changed without obtaining prior approval from this Directorate.
 - (b)Conspicuous warning inscriptions against opening the cover of the main enclosure or of any apparatus which gives access to the flameproof enclosures on live parts or which is designed to receive cable attachment unless the supply to the unit is isolated at source, shall be affixed permanently on the respective part to ensure that all live parts within the unit are made dead and safe.
- 3. Spare parts shall be made readily available to the user as and when required for proper maintenance of the equipment.
- 4. (a) The customer shall be supplied the copy of this approval letter, the test report from the testing laboratory with the lab certified drawing, an extract of the condition & special conditions, maintenance schedule, if any, recommended by the testing laboratory in their test report(s) so as to maintain safety features of apparatus/equipment.
 - (b) The customer shall also be provided a copy of factory test report along with drawings, instruction manual on the installation, operation and maintenance of the equipment and spares parts catalogue at the time of delivery of the equipment.
- 5. Any modification to the equipment that might be considered necessary at a later date shall be effected upon being so directed by this Directorate.
- 6. While seeking renewal of approval, valid BIS license in the case of Indian manufacturers and in case of foreign manufacturers QAR/QAN, as may be applicable, shall be submitted.

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- Based on the rating of equipment for which field trial was conducted, the final approval for transwitch is accorded for rating of 500 KVA, 3.3 KV Primary / 550V Secondary.
- 8. An officer of this Directorate may at any time draw a sample either from the factory or from the user and get it tested at the cost of the manufacturer. If the test reports are not satisfactory, this approval shall be deemed to be suspended.
- 9. If there occurs any revision of standards applicable to the product/equipment, the manufacturer shall get the product/equipment tested as per revised standards and submit test reports to the customer for information and to this Directorate for further approval/renewal.
- 10. The cable entry devices, threaded adaptors and stopping plugs shall be suitable for the equipment and be considered as a part of equipment (not a component). The cable entry device and cabling methods used shall be suitable for their intended duty and for the special type of cable used in mining. Such cable entry devices shall be duly certified as per relevant IS/IEC standards.
- 11. In case of any permissible variations issued from this Directorate, they shall also be read along with this letter and the original approval letter.
- 12. The approval is accorded for a period of **five (05) years from the date of issue of this letter.**
- 13. The equipment manufactured subsequently shall be identical to the proto type tested at CIMFR Project Report No. CNP/3272/2012-13F and CIMFR test reports as mentioned in Annexure-B.
- 14. At the time of applying for renewal, details of supply with name of mines, purchase order and date shall be furnished with the application.
- 15. If at any time any of the conditions subject to which this approval has been granted, is violated or not complied with, this approval shall be deemed to have been revoked with immediate effect.
- 16. The above approval may be amended or withdrawn at any time, if considered so necessary in the interest of safety and is being issued without prejudice to any other provisions of law which may be or may become applicable at any time.

(Rahul Guha) Director General of Mines Safety

Annexure-B

List of 6.6KV-3.3 KV / 1100V-550V flameproof Transwitch unit Type: FTSU-1 manufactured by M/s. Electroteknica Engineering Pvt. Ltd., for use in belowground coal mines in India under Regulation 181(3) of the Coal Mines Regulations, 1957 issued by Directorate's letter no...../EHQ, dated...../EHQ, dated...../EHQ, dated...../EHQ, dated...../EHQ, dated...../EHQ, dated...../EHQ

S.No.	Apparatus	Test report No. & date	Standard to which the test is conducted	
1.	Flameproof Transformer Tank for FLP Transwitch, Type: FTSU- 1, rated at 500 KVA (Primary 6.6KV - 3.3KV, Secondary 1100 V - 550V.	CIMFR/TC/P/342 dated 21.08.2015	IS/IEC 60079-0:2004, IS/IEC 60079-1:2007,	
2.	Flameproof LT Chamber for TSU, Type: FLT, rated at 1100 V & 550V AC	CIMFR/TC/P/H274 dated 30.07.2014 CIMFR/TC/S/554 dated 05.09.2016	IS/IEC 60079-1:2007, IS/IEC 60079-0-2007	
3.	Flameproof VCB Panel, Model FCB rated at 6.6KV, 13.1 KA, 400Amp	CIMFR/TC/S/H331 dated 20.08.2014	IS/IEC 60079-0:2004, IS/IEC 60079-1:2007,	
4.	Flameproof VCB Panel, Model: FCB, rated at 3.3KV, 13.1 KA, 400 Amp	CIMFR/TC/SR/H138 dated 29.05.2013	IS/IEC 60079-0: 2004, IS/IEC 60079-1:2007,	

(Rahul Guha) Director General of Mines Safety