



S.26020/36/181(3)/A/2015/EHQ  
भारत सरकार/Government of India  
श्रम एवं रोजगार विभाग  
Ministry of Labour & Employment  
खान सुरक्षा महाविभाग  
Directorate General of Mines Safety

**By Registered Air Mail**



No. 483/454

/EHQ, Dhanbad, dated the

09-03-2017

From:  
Chief Inspector of Mines  
Directorate General of Mines Safety,  
P.O & Distt: Dhanbad - 826 016,  
Jharkhand (India).

To  
Shri Shik Brownix – Country Head  
M/s. Joy Global (UK) Ltd.,  
Kirkby Lane, Pinxton,  
Nottinghamshire NG 16 6HX  
United Kingdom.

Sub: Approval under Regulation 181 (3) of the Coal Mines Regulations, 1957 for flameproof and intrinsically safe electrical equipment (as per Annexure-B), associated with the Feeder Breaker, Model UFB-14B-3-7C, manufactured by M/s. Joy Global (UK) Ltd. for use in belowground coal mines in India.

Ref: Test Reports as per Annexure-B

IDENTIFICATION MARK  
DGMS APPROVAL No. 723 of 2017

Dear Sir,

In reference to the field trial permission issued vide letter No. 265/EHQ dated 09.02.2016 and based on the performance report received from the Agent, Haldibari UG Mine of M/s. South Eastern Coalfields Ltd., Bhaspur and test reports as referred above, I hereby accord approval for Flameproof and Intrinsically Safe electrical equipment (as per Annexure-B), associated with the Feeder Breaker, Model UFB-14B-3-7C, manufactured by M/s. Joy Global (UK) Ltd. for use in belowground coal mines in India for a period of **five (05) years from the date of issue of this letter** for use in belowground coal mines in India, subject to compliance with conditions stipulated in Annexure-A.

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

Yours faithfully,

(Prasanta Kumar Sarker)  
Chief Inspector of Mines

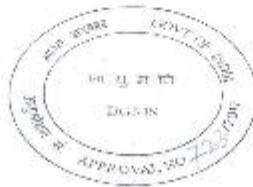
Enc. : Annexure-A&B

Annexure-B

DGMS approval no. 723 of 2017, issued by Directorate's letter no. 483/454 /HQ dated 09-03-2017

Conditions for DGMS approval under Regulation 181(3) of the Coal Mines Regulations, 1957 for flameproof and intrinsically safe electrical equipment (as per Annexure-B), associated with the Feeder Breaker, Model UFB-1/B 3-7C, manufactured by M/s. Joy Global (UK) Ltd. for use in belowground coal mines in India.

1. Every Feeder Breaker, Model UFB-1/B 3-7C shall carry conspicuously in a permanent manner the aforesaid identification mark, i.e. "DGMS APPROVAL NO 723 of 2017 approved by Directorate's letter No. 483/454 /HQ dated: 09-03-2017". In addition, every machine shall also carry permanently this Directorate's approval mark as below:

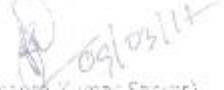


2. The relevant provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 shall be complied with in all matter relating to the installation, operation and maintenance of the equipment.
3. The electric supply to the machine shall be controlled from flameproof Gate-end-Box with intrinsically safe supply for control circuit of suitable rating along with sensitive earth leakage protection.
4. All covers, doors/access covers of the electrical equipment mounted on the equipment, on opening/removal which may expose live internal conductors, shall have warning instructions either by raised lettering or by other suitable means against such opening/removal of covers, doors and access covers, without isolating supply of energy to the equipment from its source.
5. The plug and socket assembly affixed to the motors/panel, if provided, will be so interlocked as to prevent removal of plug from the socket while alive.
6. Any replacement of part required for maintenance of the equipment which is directly or indirectly connected to the flameproof features thereof shall be supplied by the manufacturer as and when required.
7. The electrical equipment associated with the machine shall be checked by the Electrical Supervisor of the mine for their flameproofness. The condition of cables in the machine shall be checked at the beginning of each working shift and the findings thereof entered in a bound-page: book maintained for that purpose which shall be duly signed by the Electrical Supervisor with the date.
8. The user shall furnish the performance report of the equipment directly to this Directorate after one (01) year of actual use.

9. (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.
10. The electrical and mechanical personnel who may be entrusted with the responsibility for the use, maintenance and operation of the machine shall be given adequate training.
11. The users in consultation with the manufacturer, shall frame a code of practice to provide the guidance of persons employed for installation, operation and maintenance of Feeder Breaker, Model UFB-14B-3-7C and associated equipments, as well as to provide safety, health, convenience and discipline of persons so employed.
12. Technical assistance shall be provided by the supplier at the time of initial installation. The supplier shall also maintain close contact with the users to get themselves fully apprised of any difficulty that may be faced by the user with regard to the use, maintenance and operation of the equipment.
13. The fire resistant hydraulic fluid shall conform to the standards and parameters as prescribed in the DGMS/Mech/Tech.Cir (Approval) No. 03, Dhanabd, dated 13.02.2015.
14. The high pressure hydraulic hoses supplied with the machine shall conform to the standards and parameters as prescribed in the DGMS/Mech/Tech.Cir (Approval) No. 04, Dhanabd, dated 13.02.2015.
15. The cables in Machine shall conform to requirement or provisions of the DGMS Tech. Circular (Electrical) No. 12 dated 25.05.2015 and DGMS Tech. Circular (Electrical) Approval No. 01 dated 19.02.2010 in addition to the special requirement, if any, specifically for the safe operation of the machine.
16. 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.
17. While seeking renewal of approval, valid BIS license in the case of Indian manufacturers and in case of foreign manufacturers QAR/QAN for the associated flameproof / weatherproof / intrinsically safe apparatus, as may be applicable, shall be submitted and the same shall remain valid as long as the apparatus is manufactured and marketed.
18. 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 mine. Such cable entry devices shall be

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19. The approval is accorded for a period of five (05) years from the date of issue of this letter.
20. At the time of applying for renewal, details of supply with name of mines, purchase order and date shall be furnished with the application.
21. Any modification/alteration to the machine that might be considered necessary at a later date in the interest of safety or/and efficient handling, operation, maintenance and maneuverability of the machine shall be carried out upon being so directed.
22. 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.
23. The above approval may be amended or withdrawn at any time, if considered so necessary in the interest of safety and is hereby issued without prejudice to any other provisions of law which may be or may become applicable at any time.

  
(Prashant Kumar Sarker)  
Chief Inspector of Mines

List of Flameproof and Intrinsically Safe electrical equipment associated with Feeder Breaker, Model UFB-14B-3-7C manufactured by M/s. Joy Global (UK) Ltd. in belowground coal mines in India under Regulation 181(3) of the Coal Mines Regulations, 1957 issued by Directorate's letter No. 483/484...../FHQ, dated 09/03/2017

S. No	Description of electrical equipment	Manufacturer	Test report and date	Standards to which the test is conducted
1.	FLP Induction motor rated at 175 kW, 1100 V, 50/60, 3 phase, 4 pole	Sulitor	CIMFR/TC/P/H644 dated 31.12.2012	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
2.	FLP Traction controller, Model-TC-05, rated at 1050V, 3 phase, 50 Hz	Joy	CIMFR/TC/SR/H442 dated 07.10.2013	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
3.	FLP connector/switch box rated at 240V, 2:0VA max. MS model 00102-0018	Joy	ERTI (E)/I/S/105//0053/09-12 dated 05.03.2013	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
4.	FLP Connection box, rated at 300A, 1100V, 3 phase	Joy	CIMFR/TC/P/H673 Dated 10.01.2013	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
5.	H/P Siren Model -HS1K	Hytronic	ERTI (E)/IES/005//0026/01-13 Dated 04.03.2013	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
6.	H/P Multi pin Connector (Ex Components) Rated upto 120v, 20A per pin	Joy	CIMFR/TC/P/H757 Dated 31.03.2013	IS/IEC 60079-0:2004, IS/IEC 60079-1:2006 IS/IEC 60529-2001
7.	H/P Solenoid valve rated at 126V, 16.09 W	Joy	CIMFR/TC/P/H-66 dated 08.05.2012	IS/IEC 60079-0:2004, IS/IEC 60079-1:2007 IS/IEC 60529-2001
8.	FLP Switch connection Box, rated at 10A, 250V	Joy	CIMFR/TC/P/H661 dated 13.01.2014	IS/IEC 60079-0:2004 IS/IEC 60079-1:2007
9.	FLP/WP Fluorescent Luminaire rated at 250V model 411A	Victor	CIMFR/TC/P/H634 dated 26.11.2013	IS/IEC 60079-0:2004, IS/IEC 60079-1:2007 IS/IEC 60529-2001
10.	FLP/WP A 42 range restrained of connectors (Plug, Socket, plug coupler & test plug) rated upto 250V, 1300V	Victor	CIMFR/TC/P/H475 dated 23.10.2013	IS/IEC 60079-0:2004, IS/IEC 60079-1:2007 IS/IEC 60529-2001

*(Prasanta Kumar Sarker)*  
Chief Inspector of Mines