

**APPROVAL OF ELECTRICAL APPARATUS & CABLES UNDER REGULATION  
75(2) OF THE OIL MINES REGULATIONS, 1984**

**The list of approved flameproof switchgear is not exhaustive and subject to verification of the approval documents.**

| <b>Sl. No.</b> | <b>Description of equipments</b>   | <b>Name of Manufacturer (M/S)</b>   | <b>Approval no.</b> | <b>Valid upto</b> |
|----------------|--|---|---------------------|-------------------|
| K1             | Flameproof/weatherproof (IP66) junction box, category no. KJB-A and B, suitable for voltage upto 1100 V AC and 25 A in cast aluminium alloy LM-6 construction conforming to IS:2148-2004 & IS:13346-2004 of use in Zone-1 and Zone-2 hazardous areas of Oil Mines.   | Kaysons Techno Equipments Pvt. Limited<br>1802/7 : Phase-IV<br>GIDC Estate<br>Vithal Udyognagar – 388 121(Gujarat). | 137 of 2004         | 08.02.2012        |
| K2             | Flameproof & weatherproof isolator & control box rated upto 440 V, 400 A, type no. KIB-1 in cast aluminium alloy LM-6 construction manufactured by M/S Kaysons Techno Equipments Pvt. Limited, Vithal Udyognagar conforming to IS: 2148-2004, IS:13346-2004 and IS12063-1987 for use in Zone 1 and Zone 2 hazardous areas of Oil Mines | Kaysons Techno Equipments Pvt. Limited<br>1802/7 : Phase-IV<br>GIDC Estate<br>Vithal Udyognagar – 388 121(Gujarat). | 191 of 2008         | 07.11.2009        |
| B1             | Flameproof-weatherproof multiple entry junction box in cast aluminium alloy construction LM-6 rated upto 250 A, 550 V, 3 phase, 50 Hz AC category no. DB 6031 fitted with approved type FLP double compression cable glands conforming to IS:2148-2004 & IS:13346-2004 of use in Zone-1 and Zonew-2 hazardous areas of Oil Mines.      | Baliga Lighting Equipment Ltd., 63-A, CP Ramaswamy Road, Alwarpet, PB no. 6910, Chennai-600 018                     | 135 of 2003         | 04.04.2009        |
| B2             | Flameproof-weatherproof intrinsically safe telephone in cast aluminium alloy LM-6 construction. category no. IST-3003 conforming to IS:2148-2004 & IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines.  | Baliga Lighting Equipment Ltd., 63-A, CP Ramaswamy Road, Alwarpet, PB no. 6910, Chennai-600 018                     | 139 of 2004         | 31.03.2011        |

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| FE1 | <p>(1)Flameproof/weatherproof enclosure consisting of two nos. of FLP/WP compartments with two nos.FLP/WP plug &amp; socket, 25 A, 500 V single phase or three phase in cast aluminium LM-6 construction, type-FLP-RH-5800 conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 &amp; Zone 2 hazardous areas of Oil Mines.</p> <p>(2)Flameproof/weatherproof direct entry type instrument box in cast aluminium alloy LM-6 construction rated at 30 A, 550 V DC, type-FLP-RH-6000 conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 &amp; Zone 2 hazardous areas of Oil Mines.</p> <p>(3)Flameproof/weatherproof on-off Rotary switch in cast aluminium alloy LM-6 construction rated at 25 A, 550 V AC, type-FLP-RH-1600 conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 &amp; Zone 2 hazardous areas of Oil Mines.</p> | Flameproof Equipments Pvt. Ltd.<br>Plot No.B-39 (Near Monginis)<br>New Link Road,<br>Andheri (W),<br>Mumbai – 400 053. | 121 of 2002 | 25.09.2009 |
| FE2 | Flameproof 3 pin switch plug combined type FLP-RH-110 in cast aluminium alloy LM-6 construction rated upto 15 A and 550 V conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines.  | Flameproof Equipments Pvt. Ltd.<br>Plot No.B-39 (Near Monginis)<br>New Link Road,<br>Andheri (W),<br>Mumbai – 400 053. | 72 of 1991  | 21.04.2010 |
| FE3 | Flameproof/weatherproof push button station, designated type-FLP-RH-900 rated upto 15 A, 550 V AC or 5 A, 230 V DC conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 2 hazardous areas of Oil Mines.  | Flameproof Equipments Pvt. Ltd.<br>Plot No.B-39 (Near Monginis)<br>New Link Road,<br>Andheri (W),<br>Mumbai – 400 053. | 73 of 1991  | 18.10.2009 |
| FE4 | Flameproof/weatherproof switch socket combined with plug and HRC fuse rated upto 15/25 A, 550 V AC and 250 V AC, designated type-FLP-RH-500 conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines.  | Flameproof Equipments Pvt. Ltd.<br>Plot No.B-39 (Near Monginis)<br>New Link Road,<br>Andheri (W),                      | 67 of 1991  | 18.10.2011 |

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|     |  | Mumbai – 400 053.  |             |            |
| FE5 | Flameproof cum weatherproof control panel in light aluminium alloy LM-6 construction, type-FLP-RH-1301 rated at 550 V AC/DC, upto 60 A conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines.   | Flameproof Equipments Pvt. Ltd.<br>Plot No.B-39 (Near Monginis)<br>New Link Road,<br>Andheri (W),<br>Mumbai – 400 053. | 105 of 1999 | 25.09.2011 |
| FE6 | (1)Flameproof/weatherproof (IP65) ceiling fan, type-FLP-RH-2020, size of 49”, single phase, in cast aluminium alloy LM-6 construction duly fitted with certified and approved FLP/WP junction box type-FLP-RH-01 conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines.<br>(2)Flameproof single phase capacitor start 1.0 HP motor in cast iron construction for 24” frame size exhaust fan unit as designation by type-FLP-RH-EXF-2000 with M.S. fabricated blad conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines. | Flameproof Equipments Pvt. Ltd.<br>Plot No.B-39 (Near Monginis)<br>New Link Road,<br>Andheri (W),<br>Mumbai – 400 053. | 123 of 2002 | 25.09.2011 |
| FE7 | Flameproof/weatherproof junction box in cast aluminium alloy LM-6 construction designated by type no. FLP-RH-01 and FLP/WP double compression type cable gland in aluminium alloy LM-6 construction type no. FLP-RH-GL-01, FLP-RH-GL-08, FLP-RH-GL-11 conforming to IS:2148-2004 and IS:13346-2004 for use in Zome-1 & Zone 2 hazardous areas of Oil Mines.  | Flameproof Equipments Pvt. Ltd.<br>Plot No.B-39 (Near Monginis)<br>New Link Road,<br>Andheri (W),<br>Mumbai – 400 053. | 124 of 2002 | 25.09.2009 |
| FE8 | (1)Flameproof/weatherproof control station in cast aluminium LM-6 construction, 550 V, 50 Hz, 32 A or 250 V DC, 10 A type-FLP-RH-4200 conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines<br>(2)Flameproof/weatherproof tube light fitting in cast aluminium LM-6 construction, 250 V, 2X9 W each, type-FLP-RH-1850 conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 &  | Flameproof Equipments Pvt. Ltd.<br>Plot No.B-39 (Near Monginis)<br>New Link Road,<br>Andheri (W),<br>Mumbai – 400 053. | 125 of 2002 | 25.09.2011 |

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|      | Zone 2 hazardous areas of Oil Mines and (3)Flameproof/weatherproof push button station, 500 V, 60 A or 230 V, 6 A DC in cast aluminium LM-6 construction, type-FLP-RH-5200 conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines.   |  |             |            |
| FE9  | FLP/WP light fitting with max. 3 nos., 5 watt LEDs (in white/yellow colour) working voltage upto 110/250 V AC (max.) designated by type no. FLP-RH-LED-01 with control gear in cast iron construction and duly fitted with FLP/WP double compression type cable glands conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines. | Flameproof Equipments Pvt. Ltd.<br>Plot No.B-39 (Near Monginis)<br>New Link Road,<br>Andheri (W),<br>Mumbai – 400 053. | 181 of 2008 | 27.06.2009 |
| SF1  | Flameproof/weatherproof control gear box type no.CG-401 in cast aluminium alloy LM-6 construction conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines   | Safex Flameproof Controls (P) Ltd.<br>Ashirwad Complex<br>:PO-Nagnagar Near Hawaiiadda :<br>Dhanbad-826 004.           | 144 of 2005 | 08.07.2009 |
| SF2  | Flameproof/weatherproof junction box (IP-65) in cast aluminium alloy, LM-6 construction, type JB-5 rated at 25 A, 550 V max. conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines  | Safex Flameproof Controls (P) Ltd.<br>Ashirwad Complex<br>: PO-NagnagarNear Hawaiiadda :<br>Dhanbad-826 004.           | 111 of 1999 | 23.04.2010 |
| SF3  | Flameproof/weatherproof junction box in cast aluminium alloy LM-6 construction, type-JB-4 rated at 25 A, 550 V (max.) conforming to IS:2148-2004 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines   | Safex Flameproof Controls (P) Ltd.<br>Ashirwad Complex<br>: PO-NagnagarNear Hawaiiadda :<br>Dhanbad-826 004.           | 112 of 1999 | 09.06.2009 |
| SF4  | Flameproof/weatherproof push button station type PB-330 in cast aluminium alloy LM-6 rated at 16 Amps, 550 Volts (max.) conforming to IS:2148-2004, IS:12063-1987 and IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines  | Safex Flameproof Controls (P) Ltd.<br>Ashirwad Complex<br>: PO-Nagnagar Near Hawaiiadda :<br>Dhanbad-826 004.          | 472 of 2000 | 31.08.2009 |
| FEP1 | (1)FLEXPRO make FLP/WP hand lamp fittings, Cat No.MFH/76/2 in LM-6 construction for 40/60 watt(Max)  | Flexpro Electricals Pvt Ltd<br>C-1/27 & 37, GIDC   | 101 of 1996 | 23.11.2010 |

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| <p>GLS lamp 24 volt max. conforming to IS:2148/1981 and IS:2147/1962 (2)Flexpro make FLP/WP Integral Well Glass fitting Cat. No.MFW/193/I in AL Alloy LM-6 construction, 200/300 watt GLS Lamp 110V/250V, 80/125W HPMV lamp or 160 MLL lamp at 250V maximum conforming to IS-2148/1981 and IS-2147/1962 (3)Flexpro make FLP/WP control Gear Box, Cat. No.MFC/1100/4 in LM-6 construction for 250W/400W HPMV, 250V max. A.C. conforming to IS-2149/1981 and IS:2147/1962 (4)Flexpro make FLP/WP Local Control Station in LM-6 construction, Cat. No. MFPB/302/1 15amps, 500V conforming to IS:2148/1981 and IS:2147/1962 (5)Flexpro make FLP/WP Switch Socket Plug unit in LM-6 construction, Cat. No. MFSS/900/6/1, 63 Amps, 550V AC/DC conforming to IS:2148/1981 and IS:2147/1962 (6)Flexpro make FLP/WP Control Gear Box, Cat. No.MFC/1100/3 in LM-6 construction 80W/125W/250W, HPMV Lamp, 250V maximum conforming to IS:2148/1981 and IS:2147/1962 (7)Flexpro make FLP/WP Switch Socket &amp; Plug Cat. No. MFSS/900/4 in LM-6 construction up to 25amps TPN 4 pole 500v AC/DC conforming to IS:2148/1981 and IS:2147/1962 for use in Zone I and Zone 2 areas of Oil Mines.</p> <p>(8)Flexpro make FLP/WP well Glass Fitting Cat. No.MFW/196/1 in LM-6 construction, 300w GLS Lamp at 110V/250V, 250W HPMV lamp or 250W MLL Lamp at 250V maximum conforming to IS:2148/1981 and IS:2147/1962 (9)Flexpro make FLP/WP Industrial panel Board Cat. No.MFP/1500, in LM-6 construction,100 amps, TPN 550V (max.) AC/DC conforming to</p> | <p>Kabilpore<br/>Navsari - 396 424<br/>(Gujarat).</p> |  |  |
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|      | <p>IS:2148/1981 and IS:2147/1962<br/> (10)Flexpro make, FLP/WP Well glass Fitting, Cat. No.MFW/196 in LM-6 construction, 200W GLS Lamp, 110V/250V, 80W/125W HPMV Lamp or 160W MLL Lamp,max 250V conforming to IS:2148/1981 and IS:2147/1962<br/> (11)Flexpro make, FLP/WP, 60Amps, 500Volt, Cat. No.MFJB/201, Junction Box, 4 way in LM-6 construction, conforming to IS:2148/1981 and IS:2147/1962<br/> (12)Flexpro make, FLP/WP, Rotary Switch/Toggle Action Switch, Cat. No. MFRS/104 in LM-6 construction, 16Amps DP/TP ,500 Volt, conforming to IS:2148/1981 and IS:2147/1962<br/> (13)Flexpro make FLP/WP Portable Transformer with Switch Socket &amp; Plug, Cat. No.MFT/206/1 in LM-6 construction, 500VA, 240V primary &amp; 24V secondary conforming to IS:2148/1981 and IS:2147/1962<br/> (14)Flexpro make, FLP/WP Push Button Control Station, cat. No.MFPB/303/9, 2 NO+ 2NC, 15A , 500V max ,3 phase AC/DC, in LM-6 construction conforming to IS:2148/1981 and IS:2147/1962 for use in Zone I and Zone 2 areas of Oil Mines.<br/> (15)Flexpro make, FLP/WP Well Glass Fittings, Cat. No.MFH/76/1 in LM-6 construction, 40W/60W/100W GLS Lamp, 250Volt maximum, conforming to IS:2148/1981 and IS:2147/1962 for use in Zone I and Zone 2 areas of Oil Mines.</p> |  |             |            |
| FCG1 | <p>Flameproof/weatherproof junction box in cast aluminium alloy LM-6 construction rated upto 550 V, 32 A, type-IJ-31100 conforming to IS:2148-2004 and IS:13346-2004 for use in Zone-1 and Zone-2 hazardous areas of oil mines.</p>   | <p>FCG Flameproof Control Gears Pvt. Ltd.<br/> A1/53 : Shah &amp; Nahar Industrial Estate<br/> Sitaram Yadhav Road : Lower Parel</p> | 157 of 2006 | 12.12.2009 |

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|      |   | (West)<br>Mumbai-400 013.   |                                      |            |
| FCG2 | FLP/WP local control station type 30311 rated upto 10 A and upto 500 V AC or upto 2 A DC  | FCG Flameproof Control Gears Pvt. Ltd.<br>A1/53 : Shah & Nahar Industrial Estate<br>Sitaram Yadhav Road : Lower Parel (West)<br>Mumbai-400 013. | 59<br>Group-<br>IIA & IIB<br>of 1989 | 13.12.2008 |
| FCG3 | (1)FLP/WP switch socket combined with plug category no. FCG/PLG/307/5 rated at 63 A, 550 V, 50 Hz AC in cast aluminium alloy LM-6 construction conforming to IS:2148-1981 & IS:13947(Part-I)-1993<br>(2)FLP/WP distribution board in cast aluminium LM-6 construction type (non extensible) SC-31352 & cast DB/351 rated 200 A/660 V maximum TPN-3 phase 50 Hz AC conforming to IS:2148-1981 & IS:13947(Part-I)-1993<br>(3)FLP/WP design BT-6 control gear box for 250 V, HPMV lamp upto 400 W, category FCG/LC-31400 in cast aluminium alloy LM-6 construction conforming to IS:2148-1981 & IS:13947(Part-I)-1993<br>(4)FLP/WP interlocked switch socket combined with plug rated at 32 A, upto 550 V, 3 phase, 50 Hz AC type FCG-30072 in cast aluminium alloy LM-6 construction conforming to IS:2148-1981 & IS:13947(Part-I)-1993 | FCG Flameproof Control Gears Pvt. Ltd.<br>A1/53 : Shah & Nahar Industrial Estate<br>Sitaram Yadhav Road : Lower Parel (West)<br>Mumbai-400 013. | 99 of<br>1996                        | 15.04.2011 |
| S1   | (1)FLP/WP DC starter motor, rated at 10 HP, 24 V DC, 1300 in rush, 1800 RPM, 50/60 Hz in frame size 56CZ model no. ST-531EP2 conforming to IS:2148-2004, IS:13346-2004 and IS:4691-1985<br>(2)FLP/WP DC Alternator, rated at 24 V DC, 30 A in rush, 1800 RPM, 50 Hz/60 Hz in frame size BDX/56 model no. TA281EP-2 conforming to IS:2148-   | Siddhartha Engineering & Sales<br>33, Chittaranjan Avenue<br>Kolkata-700 012.   | 175 of<br>2008                       | 21.01.2010 |

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|    | 2004, IS:13346-2004 and IS:4691-1985<br>(3)FLP/WP enclosure for DC Starter Contactor with Push Button in die cast aluminium alloy A380.0 construction designated by model no. TSW-99 EP-25 conforming to IS:2148-2004, IS:13346-2004 and IS:12063-1987 manufactured by M/S United States Energy Corporation, California (USA) for use in Zone 1 and Zone 2 hazardous areas of Oil Mines in India.  |   |                |            |
| Y1 | (1)FLP/WP Intrinsically Safe EJA110A series Differential Pressure Transmitter model : EJA 110A-EMS5A-62EC/KU2 in low copper cast aluminium alloy ADC12 construction conforming to IS:2148-2004, IS:5780-2002 & IS:12063-1987 for use in Zone 1 and Zone 2 hazardous areas of Oil Mines.<br>(2)FLP/WP Intrinsically Safe EJA110 series temperature transmitter model : YTA110-EA2DB/KU2 in cast aluminium alloy construction conforming to IS:2148-2004, IS:5780-2002 & IS:12063-1987 for use in Zone 1 and Zone 2 hazardous areas of Oil Mines.<br>(3)FLP/WP Intrinsically Safe Enclosure for Yokogawa PK200 series Current to Pneumatic Converter in copper free cast aluminium alloy construction conforming to IS:2148-2004, IS:5780-2002 & IS:12063-1987 manufactured by M/S Yokogawa Electric Corporation, Tokyo conforming to IS: 2148-2004, IS:5780-2002 & IS:12063-1987 for use in Zone 1 and Zone 2 hazardous areas of Oil Mines. | Yokogawa Electric Corporation<br>2-9-32, Nakacho<br>Musashino-shi<br>Tokyo, 180-8750<br>(JAPAN).                                      | 182 of<br>2008 | 25.07.2009 |
| S1 | Flameproof / weatherproof electrical equipments as mentioned in Annexure-B for use with drilling Rig NAT 110 UE of M/s SHIV-VANI Oil & Gas Exploration Services Ltd., New Delhi conforming to IS:2148-2004, IS:13346-2004, IS:12063-1987 and IS:5780-2002 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines.   | SHIV-VANI Oil & Gas Exploration Services Ltd.<br>F-213/C, 3 <sup>rd</sup> Floor :<br>Lado Sarai<br>M B Road : New<br>Delhi – 110 030. | 190 of<br>2008 | 14.10.2009 |
| I1 | Oil Immersed Transformer with  | Indian Oiltanking   | 164 of         | 02.07.2011 |

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|    | increased safety enclosure rated at 75 KVA, 415/23000 V AC, 181 A, 50 Hz, type: EOXG 75 manufactured by M/S BETRA Transformatoren Behncke Gmbh, Germany conforming to IS:7693-1975, IS:6381-1972 & IS:13346-1992 for use in Zone 2 hazardous areas of Oil Mines   | Limited<br>103, Spectra,<br>Hiranandani<br>Business Part<br>Powai : Mumbai-<br>400 076.                       | 2007           |            |
| L1 | (1)Flameproof Rotary Valve Actuator model no. L120-10, in cast aluminium alloy LM-6 construction with double compression gland conforming to IS:2148-2004 & IS:13346-2004<br>(2)Flameproof enclosure for Rotary Valve Actuator model no. L120-20, in cast aluminium alloy LM-6 construction with double compression gland conforming to IS:2148-2004 & IS:13346-2004 for use in Zone 1 & Zone 2 hazardous areas of Oil Mines        | Limitorque India<br>Limited<br>Plot no. 148, Sector-<br>24, Faridabad-121<br>005(Haryana).                    | 165 of<br>2007 | 04.07.2009 |
| E1 | FLP/WP Remote Ignition System for firing the burner inside furnace manufactured by M/s Eltech, Mumbai housed in M/s Sudhir Switchgears Pvt. Ltd., Mumbai make DGMS approved FLP/WP enclosure in LM-6 construction conforming to IS:2148-2004 & IS:13346-2004 and 2X2.5 mm <sup>2</sup> silicon rubber insulated cable manufactured by M/S Industrial Fabricators, Mumbai for use in Zone-1 and Zone-2 hazardous areas of Oil Mines. | Eltech, A/6, Plot no.<br>48, Konkan Prantiya<br>Building,<br>Shivsrushti, Kurla-<br>East : Mumbai-400<br>024. | 198 of<br>2009 | 17.02.2010 |