



**CRANE SPARES FOR ISIOLO ROAD, MBARAKI AND ELDORET- PART NUMBERS
SPECIFICATION**

A Document of the Kenya Power & Lighting Co. Ltd
June 2020



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0.1 CIRCULATION LIST

COPY NO.	COPY HOLDER
1	In charge, E/plant workshop
2	

0.2 AMENDMENT RECORD

Rev No.	Date (YYYY-MM-DD)	Description of Change	Prepared by (Name & Signature)	Approved by (Name & Signature)
0	2023-03-27	New issue	Daniel Acheroi	George Welimo

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FOREWORD

This specification have been prepared by the E/plant workshop of The Kenya Power and Lighting Company Limited (KPLC) and it lays down requirements for part number specifications of crane spares at Isiolo road, Mbaraki and Eldoret

Cranes are used by the E/plant workshops to untank and tank transformers

This part number specification was prepared to establish requirements for crane spares to be used at Kenya Power and Lighting Company Ltd Isiolo road, Mbaraki and eldoret workshops.

There are no other part number specifications in this series.

This part number specification stipulates the minimum requirements for overhead crane spares acceptable for use in the company and it shall be the responsibility of the supplier to ensure that the offered spares is of the highest quality and guarantees excellent service to KPLC, good workmanship and good engineering practice.

Users of Kenya Power specifications are responsible for their correct interpretation and application.

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1. SCOPE

1.1. This Part number specification is for overhead crane spares at Isiolo road, Mbaraki and Eldoret

2. NORMATIVE REFERENCES

The following standards contain provision, which, through reference in this text, constitute provisions of this specification. For dated editions, the cited edition will apply; for undated editions, the latest edition of the referenced document shall apply.

IEC/ISO 17025

3. DEFINITIONS AND ABBREVIATIONS

For the purpose of this specification, the definitions and abbreviations given in the reference standards shall apply together with the following abbreviations.

3.1. ABBREVIATIONS

A-Amp

AC-Alternating Current

Hz-Hertz

KPLC- Kenya Power and Lighting Company Limited

ISO – International Organization for Standardization.

IEC- International electrotechnical commission

Kg –Kilogram

KV - Kilovolt

LV – Low Voltage

EN – European Standard

mA-milliAmp

RMS-Root mean Square

RPM-Revolution per minute

V-Volt

W-Watt

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4. REQUIREMENTS

4.1. REQUIREMENTS FOR ISIOLO ROAD WORKSHOP OVERHEAD CRANE SPARES

4.1.1. Isiolo road overhead crane is Wire rope hoist type from nova swf krantechnik

4.1.2. Crane spares shall consist of the following

4.1.2.1. Brake assembly

4.1.2.1.1. Brake assembly name plate details type BMG . Mayr Roba stop (32091000161 R108927 180 V 45W 42NM) part no. N0000282

4.1.2.1.2. Brake disk part no.N0000286,

4.1.2.1.3. Friction disk part no. N0000834 ,

4.1.2.1.4. Screw set part N0000290

4.1.2.2. Hoist motor complete assembly

4.1.2.2.1. Hoist motor name plate details: 3 ph MF 10X - 106N 3P85003Ee- IP55
No.838971, 6 min ON 4 off 30/min ENCL TEFC, 4.5/ 0.7kw S3 -60
INS.CI-F, 2750/415R/MIN 0.92/0.61 cos Ø, 380-415V Y/Y 9.9/5.5A 50HZ
5.4/0.9KW Temp 40°C, 3350/425R/MIN 0.93/0.6 COS Ø 440 480 V Y/Y
10 / 5.4 A 60HZ

4.1.2.3. Push button controller- Pendant type with 12 core cable

4.1.2.3.1. Pendant type No. 1302 012 core, Part no. N00001257

4.1.2.4. Brake disc : Thickness 6 mm and Braking torque 1.2

4.1.2.4.1. Brake type MBG 02, Part no. 0574326 5 (item code N0000286), Braking torque 1.2 and Voltage 460/500

4.1.2.5. Short transvers (trolley motors)

4.1.2.5.1. Name plate detail: 3Phase MF06LA 200 132E 85002E- IP55,SP 4MIN ON 6
MIN OFF 30 MIN ,KW -0.5 S3 - 40 INSCL .F, R/MIN -2850 Cos Ø-
0.52 ,volt - 400v Y,A-1.8, HZ 100, 0.55KW Temp 40 °C Hz -120, R/min
3440 No. 52293027 ,Cos Ø LR 25821, Volts -460V Y A-1.8

4.1.2.6. Long transvers travel motors

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- 4.1.2.6.1. Name plate details: Motor Serial No. 7110142338.3.01.710001-002 (code N00001384)
- 4.1.2.6.2. Type R47 DT 80N4/BM6/HR/Z1-KIF VOL 415, CON Y Cos Ø 0.73,Hz 50
- 4.1.2.6.3. Amp -2.10 m/pos MI T/Box oip 55
- 4.1.2.6.4. Kw-0.75R/Min 1380,sp70
- 4.1.2.6.5. Vb 400 nm 10 ratio 19:27

4.2. REQUIREMENTS FOR MBARAKI AND ELDORET WORKSHOP OVERHEAD CRANE SPARES

4.2.1. Mbaraki and Eldoret workshops overhead crane have the following details Overhead crane name plate details

- 4.2.1.1. Bauj 2009 05
- 4.2.1.2. Type SH4012204/1
- 4.2.1.3. Fabric nr 2117384
- 4.2.1.4. Stahl crane system gmbh d74653 kunzelsau
- 4.2.1.5. Tromeel zugkraft 1250 dan FEM 9061 2M
- 4.2.1.6. Trommelgeschw 33/200 m/min FEM 9511 2M
- 4.2.1.7. D motor type 12/2m42/100522 150lk1f , Volt 415, Amp 4.9/ /9.6 A , frequency 50 Hz, 6.70 /4.80 kw , pf 0.65/0.95 cos p Temperature 40 °C, IP55,45 / 2780 rev/min, 20/40 led 240/12 ch
- 4.2.1.8. Made in Germany

4.2.2. Crane spares shall consist of the following

4.2.2.1.Host motor assembly

- 4.2.2.1.1. Name Plate details:3ph motor 1LA71091AU99 ZN29, E0904/810809 37 013 EC/EN 00034, N 35 100L P55/66 THCL 1505FJ AMB 40, 50HZ 400V Y/Y 60HZ 460V Y/Y

4.2.2.2.Brake assembly

- 4.2.2.2.1. Mayr Roba stop RM L1111929, 32891.010.1.S 104V 70W

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- 4.2.2.2.2. Sh4 Drawing 12/2h42 complete brake assembly
- 4.2.2.2.3. Part no. 567092 m32
- 4.2.2.3. Brake disk
 - 4.2.2.3.1. Mayr Roba stop RM L1111929, 32891.010.1.S 104V 70W
 - 4.2.2.3.2. Sh4 Drawing 12/2h42 assembly
 - 4.2.2.3.3. Part no. 567086 brake disk
- 4.2.2.4. Contactor k23,K24 and K20
 - 4.2.2.4.1. Contactor k23 part number 5791640
 - 4.2.2.4.2. Contactor k24 part number 5791640
 - 4.2.2.4.3. Contactor k20 part number 57911660
- 4.2.2.5. Pendant 1302 012 12 core
 - 4.2.2.5.1. Type sth 1202021 part no 173971219, cable length 20m
- 4.2.2.6. AC / DC rectifier
 - 4.2.2.6.1. G21 400v 3.0A 1.034.000.4
- 4.2.2.7. Long traverse motor
 - 4.2.2.7.1. Plate details :3 ph motor 8/2f13/220233, 564930 802863/2008, Ip55
thcl.f40c
- 4.2.2.8. Cross transvers motor
 - 4.2.2.8.1. Plate details:3 ph motor 6/2f13/220.233, NO. 5664930 802841/ 2008, IPSS
THCL40 C TEFC
- 4.2.2.9. Wire rope
 - 4.2.2.9.1. Hoist drum Capacity to hoist 5000kg, 30 meters
- 4.2.2.10. Long transvers gear box shaft seal
 - 4.2.2.10.1. Shaft seal prt 5610200
- 4.2.2.11. Long transvers gear box seal

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4.2.2.11.1. Limit switch xck mr ,Iec 947.5.1 en 600 947.5.1, 500v uimp 6kV, Ac 15
240v 3A, DC 13 120V 0.55A, IP66

4.2.2.12. Remote joystick and charger for Stahl crane system gmbh d74653 kunzelsau

5. INSPECTION REQUIREMENTS

5.1. On receipt of the Crane spares Kenya Power will inspect them in order to verify compliance with the specification. The supplier shall replace without charge to Kenya Power, any ordered crane spares, which upon examination or use fail to meet any or all of the requirements in the specification.

6. PACKING

6.1. Crane spares shall be packed to protect them from damage during transportation, handling and storage.

7 DOCUMENTATION

- a. Bidder (supplier) shall submit the following documents/details to The Kenya Power & Lighting Company for tender evaluation:
- b) Guaranteed Technical Particulars,
- c) Design manufacturer's drawings showing outline together with all pertinent dimensions. Any variation in these dimensions due to manufacturing tolerances shall be indicated.
- d) Catalog for all the components. Catalog numbers for the offered items shall be highlighted.

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To be filled and signed by the Supplier and submitted for tender evaluation, should be in English Language)

Tender No.

Bidder's name and Address.....

Clause number	Bidder's offer (indicate full details of the offered item for each requirement of the tender & specification)
Bidder's Name	
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4.1.2.6. Long transvers travel motors

4.1.2.6.1. Name plate details: Motor Serial No. 7110142338.3.01.710001-002 (code N00001384)

4.1.2.6.2. Type R47 DT 80N4/BM6/HR/Z1-KIF VOL 415, CON Y Cos Ø 0.73,HZ 50

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d) Catalog for all the components. Catalog numbers for the offered items shall be high-lighted.	

.....
Supplier's Name, Signature, Stamp and Date

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