Schedule

Issue date: 15 October 2024
Valid Until: 15 October 2029

NO: MIBAS 002
(Issue 2, 15 October 2024 replacement
of MIBAS 002 dated 15 October 2024)

INSPECTION BODY/ CENTRAL OFFICE:	TNB Labs Sdn. Bhd. (Product Inspection Section, Quality Assurance Unit) No.1, Lorong Air Hitam, Kawasan Institusi Latihan dan Penyelidikan Bangi, 43000 Kajang, Selangor. , 43000, SELANGOR MALAYSIA
ACCREDITED SINCE :	15 OCTOBER 2024
TYPE OF INSPECTION :	B
FIELD(S) OF INSPECTION :	ELECTROMAGNETIC RADIATION - TYPE B MANUFACTURED GOODS/PRODUCTS - TYPE B

An inspection body's fulfilment of the requirements of ISO/IEC 17020:2012 means the inspection body meets both the technical competence requirements and **management system requirements** that are necessary for it to consistently deliver technically valid inspection results. The **management system requirements** in ISO/IEC 17020:2012 (Section 8) are written in language relevant to inspection body operations and are aligned with the pertinent requirements of ISO 9001. (Joint IAF-ILAC-ISO Communiquè dated September 2013).

Issue date: 15 October 2024
Valid Until: 15 October 2029

NO: MIBAS 002
(Issue 2, 15 October 2024 replacement
of MIBAS 002 dated 15 October 2024)

CENTRAL LOCATION:	TNB Labs Sdn. Bhd. (Product Inspection Section, Quality Assurance Unit) No.1, Lorong Air Hitam, Kawasan Institusi Latihan dan Penyelidikan Bangi, 43000 Kajang, Selangor. , 43000, Selangor
FIELD(S) OF INSPECTION :	ELECTROMAGNETIC RADIATION - TYPE B
TYPE OF INSPECTION :	B

SCOPE OF INSPECTION :

Central CAB

CAB Name : TNB Labs Sdn. Bhd. (Product Inspection Section, Quality Assurance Unit)

Inspection

Items, Materials or Products Inspected	Type and Range of Inspection	Inspection Methods and Procedures
A - MANUFACTURED GOODS/PRODUCTS - TYPE A		
Electrical Equipment - Switchgears up to 33 kV	1. Dielectric Test on Main Circuit 2. Test on Auxiliary and Control Circuit 3. Measurement of Resistance of Main Circuit 4. Design and Visual Check 5. Mechanical Operating Test 6. Tightness Test (Sniffer Method)	1. IEC 62271-1, Edition 1.1:2008-08 (Clause 7.1, 7.2, 7.3, 7.4 & 7.5) 2. IEC 62271-100, Edition 2.0:2008-4 (Clause 7.1, 7.2, 7.3, 7.4, 7.5 & 7.101) 3. IEC 62271-200, Edition 2.0:2011-10 (Clause 7.1, 7.2, 7.3, 7.4, 7.5, 7.101, 7.102 & 7.104)
Electrical Equipment - Transformer up to 33 kV	1. Measurement of Winding Resistance 2. Measurement of Voltage Ratio and Check of Phase Displacement 3. Measurement of Short Circuit Impedance and Load Loss 4. Measurement of No Load Loss	IEC 60076-1, Edition 2.1:2000-4 (Clause 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7 & 10.8)
	1. Separate Source AC Withstand Voltage Test 2. Induced AC Voltage Test	IEC 60076-3, 2nd Edition:2000-03 (Clause 10 & 11)
	1. Physical Inspection	Client's Method
Electrical Equipment - Cable up to 33 kV	1. Conductor resistance 2. Voltage test	IEC 60502-1, 2nd Edition:2004-04 Cables for Rated Voltages of 1 kV

Issue date: 15 October 2024
Valid Until: 15 October 2029

NO: MIBAS 002
(Issue 2, 15 October 2024 replacement
of MIBAS 002 dated 15 October 2024)

Items, Materials or Products Inspected	Type and Range of Inspection	Inspection Methods and Procedures
	3. Measurement of insulation thickness 4. Measurement of external diameter	and 3 kV (Clause 15.2, 15.3, 16.4, 16.5, 16.6, 16.7 & 16.8)
Electrical Equipment - Street Lighting Components i) Lantern	1. Physical & visual check 2. Construction, Mechanical, Electrical connection and current carrying parts	IEC 60598-1:2008, Edition 7.0 (Clause 3.2, 4.13 & 4.11)
Electrical Equipment - Street Lighting Components ii) Lamp	1. Physical and visual check 2. Electrical characteristics 3. Photometric characteristic 4. Cap torsion test	1. IEC 60662:2011, Edition 2.0 (Clause 4, 5 & 7.4) 2. IEC 62035:2003, Edition 1.1 (Clause 4.3.2.2)
Electrical Equipment - Street Lighting Components iii) Ballast	1. Physical & visual check 2. Dielectric test 3. Temperature rise test 4. Circuit power factor 5. Loses	1. MS IEC 61347-1:2003 (Clause 7.1) 2. MS IEC 61347-2-9:2003 (Clause 7.1, 14.2 & 15.1) 3. MS IEC 60923:1995 (Clause 5 & 7)
Electrical Equipment - Street Lighting Components iv) Ignitor	1. Physical & visual check 2. Switching test 3. Pulse voltage 4. Ignitor wit cut-out/Test temperature	IEC 60927:2007, Edition 3.0 (Clause 7.1, 10.4, 10.5 & 12.5)
Electrical Equipment - Street Lighting Components v) Photoelectric Control Unit (PECU)	1. Physical & visual check 2. Functional test	BS 5972:1980 (Clause 6.1, 10 & 11)
Electrical Equipment - Overhead Accessories i) LV cut out fuse switch disconnector	1. Physical Inspection 2. Dimension Measurement	IEC 60947 – 1: 2014, Edition 5.2 (Clause 8.2)
Electrical Equipment - Overhead Accessories ii) LV fuse switch 400A iii) LV fuse switch 160A	1. Dielectric Test 2. Mechanical operation test 3. Physical Inspection	1. IEC 60947 – 1: 2014, Edition 5.2 (Claus 8.2, 8.3.3.4.2) 2. IEC 60947 – 3: 2015, Edition 3.2 (Claus 8.1.3.2, 8.1.3.3, 8.2)
Electrical Equipment - Overhead Accessories iv) Neutral Link	1. Physical Inspection (Marking, Dimension, Construction) 2. Insulation resistance	BS 5733 : 2010 + A1 : 2014 (Clause 8, 9, 13, 19)
Civil Equipment - Spun Concrete Poles	1. Physical & visual check 2. Bending strength test	JIS A 5309:1995 (Clause 8.1, 8.2, 8.3, 8.4 & 8.5)

Issue date: 15 October 2024
Valid Until: 15 October 2029

NO: MIBAS 002
(Issue 2, 15 October 2024 replacement
of MIBAS 002 dated 15 October 2024)

Items, Materials or Products Inspected	Type and Range of Inspection	Inspection Methods and Procedures
	3. Breaking test	