



**JABATAN KERJA RAYA MALAYSIA
CAWANGAN KEJURUTERAAN ELEKTRIK
UNIT PENSIJILAN BAHAN DAN STANDARD**

TECHNICAL INFORMATION

MINIATURE CIRCUIT BREAKER

| A. COMPANY INFORMATION | |
|--|------------------------------------|
| COMPANY NAME : | |
| ADDRESS : | Telephone No. : |
| | Fax No. : |
| | Company Email : |
| B. TEST REPORT/CERTIFICATE AND LOCAL APPROVALS | |
| TEST REPORT NO. (IEC/MS IEC 60898-1 and IEC/MS IEC 60898-2): (To attach a copy of Test Report summary. New Application needs to submit full copy of Test Reports) | TESTING LABORATORY: |
| | DATE OF ISSUE: |
| CB TEST CERTIFICATE NO. : (To attach a copy of CB Test Certificates) | CERTIFICATION BODY: |
| | DATE OF ISSUE: |
| SIRIM QAS PRODUCT CERTIFICATION LICENSE NO. : (To attach a copy of Certificates and full copy of Certification Report) | DATE OF ISSUE : |
| | VALID UNTIL : |
| SURUHANJAYA TENAGA CERTIFICATES : (To attach a full copy of certificate) | DATE OF ISSUE : |
| | VALID UNTIL : |
| ISO CERTIFIED COMPANY? (Please tick \checkmark where applicable) | |
| ISO 9001 Yes <input type="checkbox"/> No <input type="checkbox"/> | Scope of ISO Certification : |
| ISO 14001 Yes <input type="checkbox"/> No <input type="checkbox"/> | Scope of ISO Certification : |
| ISO 50001 Yes <input type="checkbox"/> No <input type="checkbox"/> | Scope of ISO Certification : |
| C. PRODUCT DETAILS | |
| BRAND : | MODEL : |
| RATED CURRENT (In): | RATED BREAKING CAPACITY (Icn): |
| NAME OF MANUFACTURER: | |
| ADDRESS AND COUNTRY OF MANUFACTURER: | |

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| D. STANDARDS AND SPECIFICATIONS (Please tick \checkmark where applicable) | | | | | |
|--|---|--------------------------|--------------------------|----------------------------|-----------------------|
| No. | Descriptions | Yes | No | Test Report No. & Page No. | Remarks (For JKR use) |
| 1. CLASSIFICATION & CONSTRUCTION | | | | | |
| 1.1 | Fully tropicalised and suitable for use on 240/415 V, 50 Hz. a.c. supply system | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.2 | Suitable to be used up to an ambient temperature of 40°C | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.3 | Breaking capacity not less than 6kA (rms) | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.4 | B-type with Class 3 energy limiting characteristics and marked '3' on circuit breakers. | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.5 | C-type with Class 3 energy limiting characteristics and marked '3' on circuit breakers. | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.6 | D-type with Class 3 energy limiting characteristics and marked '3' on circuit breakers. | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.7 | Quick-make, quick-break and trip free type complete with de-ion arc interrupters. | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.8 | The tripping elements shall be of thermal magnetic type with inverse time delay overcurrent and instantaneous short circuit characteristic. | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.9 | The respond to overload shall be independent of variations in ambient temperature. | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.10 | They shall be manually operated by means of toggle type handles having visual indication of whether the breaker is opened, closed or tripped. | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.11 | Multipole MCB shall be of all pole protected type and provided with common-trip mechanism for simultaneous operation of all the poles. | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 1.12 | Resistance to abnormal heat and fire (glow wire test), temperature:.....°C | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2. TYPE TEST | | | | | |
| 2.1 | Indelibility of marking | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.2 | Reliability of screws, current-carrying parts and connections | <input type="checkbox"/> | <input type="checkbox"/> | | |

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MINIATURE CIRCUIT BREAKER

E. STANDARDS AND SPECIFICATIONS (Please tick \checkmark where applicable)

| No. | Descriptions | Yes | No | Test Report No. & Page No. | Remarks (For JKR use) |
|------|--|--------------------------|--------------------------|----------------------------|-----------------------|
| 2.3 | Realibility of terminals for external conductors | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.4 | Protection against electric shock | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.5 | Dielectric properties and isolating capability | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.6 | Temperature-rise | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.7 | 28-day test | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.8 | Tripping characteristic | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.9 | Mechanical and electrical endurance | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.10 | Short circuit | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.11 | Resistance to mechanical shock and impact | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.12 | Resistance to heat | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.13 | Resistance to abnormal heat and to fire | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 2.14 | Resistance to rusting | <input type="checkbox"/> | <input type="checkbox"/> | | |

3. LIST OF COMPONENTS MINIATURE CIRCUIT BREAKER (MCB)

| No. | Part Name | Manufacturer | Type of Material | Mill Certificate Number |
|-----|----------------------|--------------|------------------|-------------------------|
| 1 | Cover | | | |
| 2 | Moving Contact | | | |
| 3 | Fixed Contacts | | | |
| 4 | Handle | | | |
| 5 | Arc Chambers | | | |
| 6 | Bi-Metal | | | |
| 7 | Terminals | | | |
| 8 | Terminals Screws | | | |
| 9 | Electromagnetic Coil | | | |

4. DETAIL OF MCB INFORMATION (TO FILL UP LAMPIRAN A FORM) Yes No

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F. OTHERS (Please Specify)

- 1.
- 2.
- 3.

G. DECLARATION

Adalah saya dengan ini mengesahkan segala keterangan yang diberikan/dikemukakan bagi produk di atas adalah benar. Jika saya didapati membuat pengakuan **PALSU**, maka tindakan seterusnya boleh diambil oleh pihak JKR ke atas diri saya.

Cop Syarikat :



Tandatangan :

Nama :

Jawatan :

Tarikh :

H. COMMENTS (For officer use)

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MINIATURE CIRCUIT BREAKER

Detail of Miniature Circuit Breaker (MCB)

| No | Model | Rated Current (In) | Types | Rated Voltage (Vac) | Rated Impulse Voltage (Uimp) | Rated Breaking Capacity (Icn) | Maximum Power Loss | Operational Life (Electrical) | Operational Life (Mechanical) | Overall Dimension | Tightening Torque (Nm) | Weight (kg) |
|----|-------|--------------------|-------|---------------------|------------------------------|-------------------------------|--------------------|-------------------------------|-------------------------------|-------------------|------------------------|-------------|
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