EAGLE SQUARE
LIGHTING & ELECTRICAL

Lighting Your Savings
Lighting Your Success

Product
Data Sheet

DGB1LE-40 RCBO

Product Description

DGB1LE-40 is a range of MCB sized RCBOs,apply to circuit of AC50/60Hz, rated voltage to 230V, and current up to 40A,bring higher levels of safety to an electrical installation and its users because they include switched neutral as standard,which will guarantee that healthy circuits remain in service and that only a faulty circuit is switched off and bring cost savings by reducing installation and testing times

Functions

- Switching and isolation
- Overload and short circuit protection
- Protection against the effects of sinusoidal alternation earth fault currents
- Indirect and direct contacts protection
- Protection against fire hazard caused by insulation faults.

Technical Specifications

- Standard: IEC61009-1
- Certifications: CE,CB,SEMKO,SAA
- Type(wave form of the earth leakage sensed): AC,A
- Number of poles (P): 1+N
- Rated current In (A): 6, 10, 16, 20, 25,32,40
- Rated frequency (Hz): 50/60
- Rated voltage Ue (VAC): 230
- Rated insulation voltage Ui (VAC): 500
- Rated residual current I△n (mA): 30,100, 300
- Rated breaking capacity acc.to IEC61009 ultimate Icn (kA): 6
- Rated breaking capacity acc.to IEC60947-2 ultimate IA m (kA): 10
- Rated residual breaking capacity I△m (kA): 6
- Rated impulse withstand voltage(1.2/50) Uimp(kV): 8
- Dielectric test voltage at ind.freq.for 1min.(kV): 2.5
- Surge current resistance(wave 8/20)(A): 3000
- Tripping characteristic: B,C:

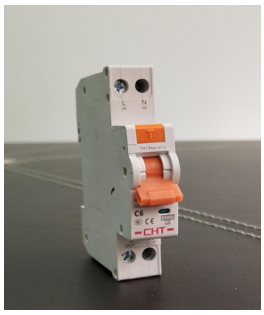
Characteristic B(In): 3-5
Characteristic C(In): 5-10

- Electrical life(times): 4000
- Mechanical life(times): 100000
- Degree of protection: IP20, with connected conductors
- Mounting position: Any
- Conductor cross-sections:

Solid and stranded(mm2): 0.75-35
Finely stranded with end sleeve(mm2): 0.75-25

- Terminals:

Terminal tightenning torque(N.m): 2.8



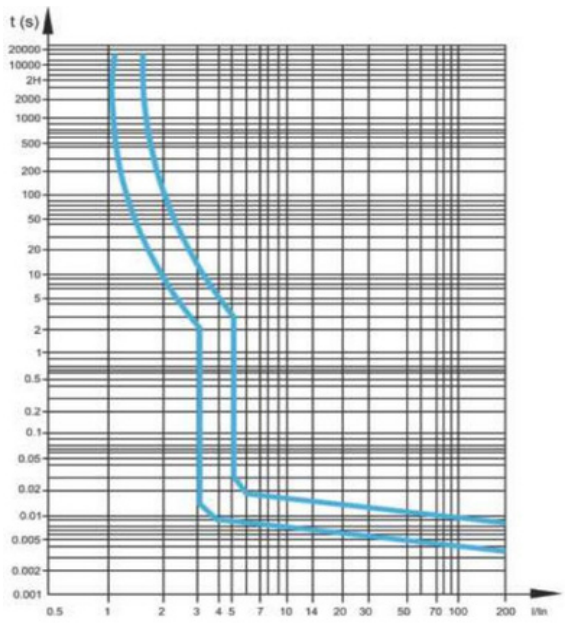
• Ambient temperature(oC): -25~+45,max. humidity is 95%
• Storage temperature(oC):-40~+75
• Altitude Max(meters): 2000

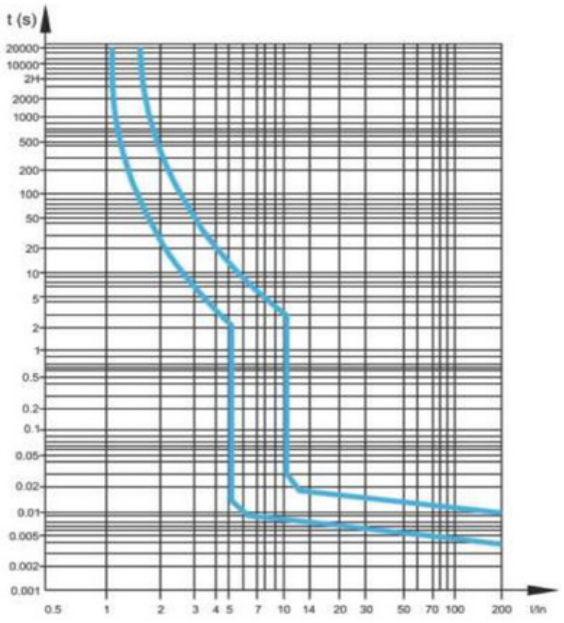
Features

• Both live and neutral line can be switched off,bring higher safety to an electric installations and its users.
• Insulated openings for easy busbar installations
• The MCB protects wires against overload and short circuit and available in chraracteristics B and C
• The handle provides a clear indication of contact position
• The earth reference cable ensures protection against earth leakage in case of loss of neutral supply

Tripping Curves

Curve B Curve C





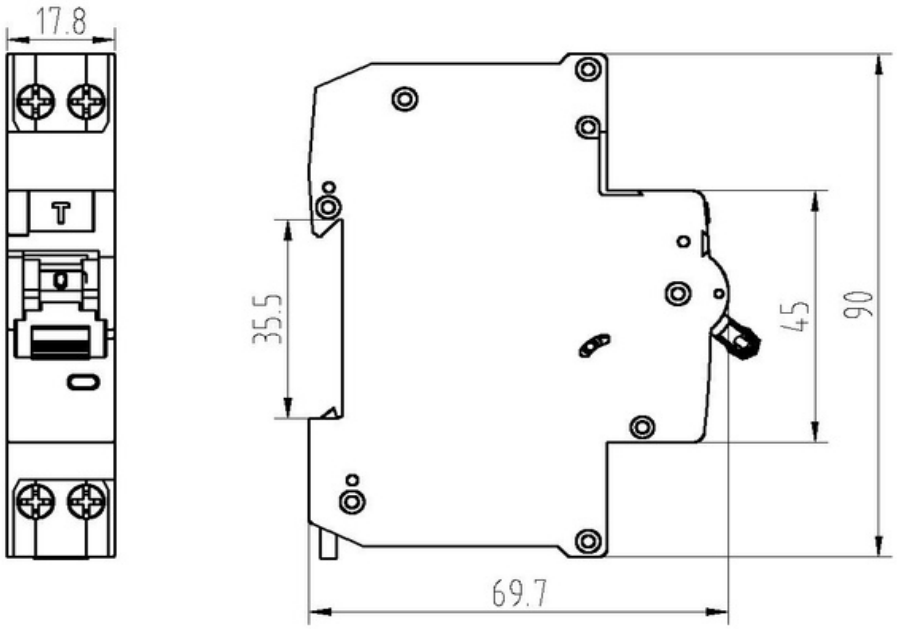
Types

Both RCCBS and RCBOS ar divided into two types according to the operating function:
• Type AC: For which tripping is ensured for residual sinusoidal alternating currents, whether sunddenly applied or slowly rising
• Type A: For which tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether
suddenly applied or slowly rising.

Tripping Sensitivity Data

• RCD with a rated residual current of maximum 30mA is used for personnel,material and fire protection, as well as for protection
agianst contact.
• RCD with a rated residual current of maximum 300mA as preventative fire protection in case of insulation faults
• RCD with a rated residual current of 100mA co-ordinates with earth system according to the formula I△n<50/R. to provide protection against indirect contacts.

Product And Installation Dimensions



Electrical Connection Note:

1. An RCBO must be installed by a licensed electrical contractor or electrician only in accordance with national and local building regulations and the Australian and New Zealand wiring rules AS/NZS 3000 latest edition thereof

2. RCBO's must be verifed by test as having been correctly installed on installation

- With the RCBO energised, verify the RCD function of the RCBO at least twice by operation of the test button or by use of special test equipment

- In all cases, isolation of all switched poles shall be verifed after the RCBO has operated to disconnect the designated circuit

- Isolation of all poles shall be verifed by voltage tests or, after removing supply, by continuity checks through each pole

3. Ensure no power or electricity is connected during installation to avoid electric shock and N terminal can only be connected to neutral line

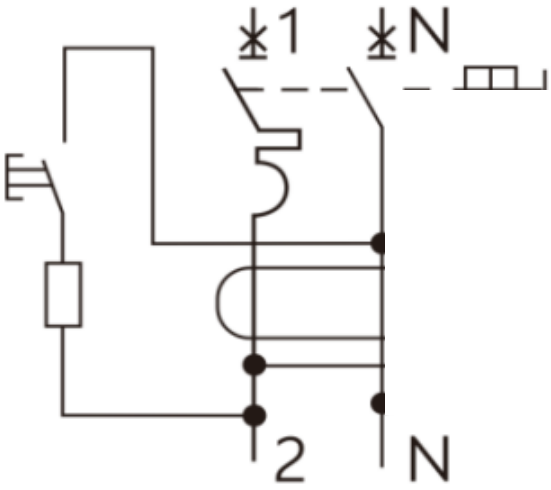
4. Don't connect live wire to live wire or live wire to neutral directly under any circumstances to avoid personal harm

5. Use 2.0N.m torque and make sure the wires are well tightened.

6. A wet hand is strictly forbbiden during installation

7. Please use insulation protection for exposed wires or copper busbar to avoid short circuit

240V(230) 50/60HZ



WIRING DIAGRAM

WARNING

Must be installed by a licensed electrical contractor or licensed electrician only.