Motor Protection Circuit Breakers
3VU13 & 3VU16

Introduction:
Robust and compact circuit breakers type 3VU, for protection of motors and other loads, designed and developed by Siemens Germany for the world market are now available in India.

3VU13/3VU16 are suitable for use in fuseless motor feeders upto 11kW/22kW and for other loads upto 25Amps/63Amps respectively.

Application
In machine tools, textile machinery, automobile, food and many other process industries robust and compact devices are required for disconnection and protection of plant and individual loads.

Although such loads are of smaller ratings, the protection devices still have to have adequate short circuit breaking capacity. Further the devices should be compact, for simple, efficient and suitable for maintenance free installation.

Siemens 3VU circuit breakers have proved themselves in such applications.

Motor Protection
Circuit breakers type 3VU13 & 3VU16 offer overload, short circuit and single phase protection for 3 phase motors upto 11kW and 22 kW respectively. The breaker has a toggle switch for ease of operation and can be offered with auxiliary contacts, trip indicating contacts, U/V or Shunt release. For ratings upto 6A in 3VU13 and upto 25A in 3VU16, the breakers have high S/C capacity of 100kA. 3VU16 is also available with only S/C release for use with an external overload relay as in case of motor starters.

Transformer protection
For protection of transformers on primary side having rated currents upto 20A, 3VU13 breakers having setting ranges of 0.16 to 20A are offered. The S/C release of such breakers do not have the usual 12 times Ir setting, but the S/C release is set at 19 times the rated current. The release is of instantaneous type. Thus, these breakers safely allow the ‘Switching On’ in-rush current peaks upto 30 times the rated current.

Distribution Feeder Protection
Standard 3VU13 and 3VU16 with adjustable O/L- and fixed S/C release can be offered for disconnecting and protecting the distribution feeders, upto 25A and 63A respectively. A large number of overlapping ranges are available for offering closer protection to various loads.
Fuse Monitor:

3VU1300-MS00 is offered for Fuse Monitor application. The three poles of this circuit breaker can be connected in parallel to the fuses. In the event of one fuse blowing, the breaker gets actuated through its release & offers tripping signal through its auxiliary contacts, to the motor control device for switching off the motor (refer connection diagram on Page 7). Thus, the motors are not subjected to single phasing and costly motor burn outs are prevented. The fuse monitor can be used for AC voltages of 24 to 690V, 50/60Hz and DC voltages from 24 to 250V. For DC voltages greater than 250V & upto 600 V three current paths can be connected in series.

Circuits Breakers for DC System

The circuit breaker type 3VU13 & 3VU16 can be used in DC circuits also upto 450V, DC. Details upon enquiry.

Description

Safety First Concept

Fast Reaction:

The circuit breakers operate on the Current Limiting Principle. In case of a short circuit, the contacts are opened electro-dynamically by the short circuit current. The instantaneous overcurrent release, through the switching mechanism, trips all the three poles of the breaker. A large arc voltage is quickly built up in the arc chamber limiting the short circuit current.

Trip Free Mechanism

The breakers have a trip-free mechanism and tripping cannot be prevented by the toggle switch position.

Other features:

- The breaker operates on Current Limiting Principle.
- The breaker has a trip free mechanism.
- Space saving compact modular design.
- Finger touch proof and open terminals with SIGUT™ connection technique.
- Integrated auxiliary contacts save space and time. Additional aux contacts available as an add-on block.
- Phase failure protection.
- Ambient temperature compensation upto 55°C.
- Approved by all major international standards for worldwide installation.
- Material resistant to temperature extremes.
- Strict safety and quality standards ensure reliable operation in all possible applications.
- Can be used as a main and EMERGENCY STOP switch.
- Positive ON/OFF indication through toggle switch.
- High rated insulation voltage.
- Similar design concept of both the breakers, allows easy handling.
- Identical accessories reduce stock levels.
- Technical data of the circuit breaker can be read from the front.
- Box terminals ensure connections even with different conductor cross-section.

Current-Limiter

The circuit breakers 3VU13 for motor protection are short circuit proof for rated continuous currents upto 6 A at rated voltages AC 380/415V, i.e. no back-up fuses are required.

Breakers with a rated continuous current of 8 A & 10 A at the same voltage, have a rated short circuit breaking capacity or 10kA, breakers with 16, 20 and 25 A have 6 kA.

If the short circuit current at the point of installation is greater than the breaking capacity of the circuit breaker then backup fuses are normally required.

For the 3VU13, therefore, a special limiter (current limiter) has been developed for connecting in series with the breaker, this increases the switching capacity of the combination to 50 kA at AC 380/415V.

Current-Limiter Operation

When a short circuit occurs the limiter trips and breaks the current paths, as well as the series connected circuit breaker. The short circuit causes the limiter contacts to open, due to the current separation forces, as well as by the electro-magnetic high-speed trip mechanism, and remain open.

With this method welding of the current-limiter contacts via a self-closing spring is prevented.

After clearing the fault which caused the short circuit, the limiter must be re-set by hand before the circuit breaker can be switched “ON” again.

This prevents inadvertently switching onto a still present short circuit.

The development of our current-limiter provides triple protection:

- short circuit-proof up to 50 kA
- Weld-free by means of contacts which remain open after tripping
- re-closing lock out after a short
The Module adapts on top of 3VU13 circuit breaker to enable positive visual disconnection from main three phase supply.

The Isolating Module can be padlocked in either connected or disconnected position.

**Accessories**

The following can be added to the left hand side:
- Shunt release for remote tripping
- Undervoltage release to prevent restarting of the motor when the supply returns
- Undervoltage release with 2 leading auxiliary contacts, which in the open position avoid accidental energization to the control circuit.
- Remote Switching Module with which the 3VU13 can be switched ON and OFF remotely. The Remote Switching Module has the same housing dimensions as the 3VU13 and is snapped on to a Rail on the left hand side of the breaker. To switch the Breaker ‘ON’ the module is energised via “ON” push button. To hold the solenoid, a NO auxiliary contact of the 3VU13 is required.

The following can be added to the right hand side:
- Short circuit signalling contacts (1NO + 1NC) which sings a short circuit trip. Since it must be reset by hand, it also fulfills the function of a reclosing lockout
- Auxiliary contacts 1NO + 1NC which can be added in addition to the integrated auxiliary contacts in the circuit breaker, increasing the number of auxiliary to 2NO + 2NC

The auxiliary contacts, short circuit and signalling contacts are compatible with electronic systems.

**Characteristic Curves**

The characteristic curves for overload and short circuit release, and the current limiting feature of the 3VU breakers are depicted on pages 4&5 along with the technical data.
- Specification** IEC 947-1, IEC 947-2, IEC 947-4-1
- Type 3VU13 3VU16
- No of poles 3 3
- Max Rated Current
  - Distribution Amps 25 63
  - Motor Amps 25 50
- Permissible Ambient Temperature °C -20 to +55
  at Full Rated Current
- Rated Voltage Ue AC V 690
- Rated Frequency Hz 50/60
- Rated Insulation Voltage V 750
- Rated Impulse kV 6
  Withstand Voltage
- Utilization Category
  IEC947-1 (Circuit Breaker) A
  IEC947-4 (Motor starters) AC 3
- Rated Breaking Capacity Refer Table I
- S/C Protection Refer Table I
- Rated Breaking Capacity DC
  \[ t = 15 \text{ms} \]
  1 Contact 2Contacts 3Contacts
  in series in series
  110V 220V 330V kA 10 Upon Enq
  to 150V to 300V to 450 kA 10 Upon Enq
- KW Rating With Max Current Rating
  220/230V kW 7 18 11
  240V kW 7.5 20 15
  380/400V kW 12.5 31 22
  415V kW 13 34 22
  500V kW 16 41 30
  660V kW 22 55 37
  690V kW 23 57 45
- Wattloss Per Breaker
  A W A W
  0.6 5 2.4 8
  4 6 6 7
  6 7 25 14
  25 9 63 23
- Protection Class With Open
  Terminals & With Cable Connection IP00/IP2LO
- Protection Against Touch as per
  DIN VDE Available
- Mechanical Life at 25A/above 25A
  100000 100000/30000
- Switching Frequency with
  Current Loading OP/hr 25 25
- Single Phase Protection Sensivity Available
- Temperature Compensation Available
- Auxiliary Switch
  - Rated Voltage AC, V 200 400 500
  - Rated Current Amps 3 1.5 1.2
  - Utilization Category AC - 15
    - Rated Voltage DC, V 24 60 220
    - Rated Current Amps 2.3 0.7 0.3
    - Utilization DC - 13
  ** NEMA Rating upon enquiry
Technical Data-3VU13/3VU16

- **Under Voltage Release**
  - Consumption During Pick-up, VA/W: 10/6
  - Consumption During Running, VA/W: 4.7/2
  - Dropout: 0.7 to 0.35 times Ue
  - Pickup: 85 to 110% of Ue
  - Max Operating Time: ms 20

- **Shunt Release**
  - Consumption: VA/W 10/6
  - Max Continuous Rating: Sec 5
  - Pickup: 0.7 to 1.1 times Ue

- **Power Connections (Incoming from top or bottom possible)**
  - Method: SIGUT®
  - Single / Multiple Core Cable: mm² 2 x (1 to 6)
    - 1 x 1.5 to 2 x 16
    - or 1 x 25+1 x 10
  - Finely Stranded with Pin type Lugs: mm² 2 x (1 to 4)
    - 1 x 1.5 to 2 x 10
    - or 1 x 16+1 x 10
  - Tightening Torque: Nm 1 to 1.5
    - 2.5 to 3
  - Control Terminals method: SIGUT
  - Single / Multiple Core Cable: mm² 1 x 0.5 to 2 x 2.5
  - Finely Stranded with Pin type Lugs: mm² 1 x 0.5 to 2 x 2.5
  - Tightening Torque: Nm 1 to 1.3
  - S/C Protection for Auxiliary Circuit g/Lg Fuses: Amps 10
    - Breaker: Amps 6

- **Current Limiter for 3VU13**
  - Rated current In: 56 Amps
  - Rated Voltage Ue: 500 V 50 / 60 Hz.
  - Power Connection: mm² 2 x (1 to 6)
  - Power Connection with special feed In terminals Type 3VU9135-IBB01 mm² 25

- **Remote Controlled Operating**
  - Mechanism for 3VU13
    - Rated Operational control voltage, VAC: Us 220/240
    - During Pick Up: W 230
    - In Continuous Operation: W 5

- **Mounting**
  - on DIN Rail in any position.

### Table 1 3VU13 / 3VU16 breaking capacity at 415V

<table>
<thead>
<tr>
<th>Current Rating In</th>
<th>0.16</th>
<th>1.6</th>
<th>2.4</th>
<th>3.2</th>
<th>5</th>
<th>8</th>
<th>13</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>to 1 &amp; 4 &amp; 6 &amp; 10 &amp; 16 &amp; 25 &amp; 32 to 63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated S/C Breaking Capacity at 415 V:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Icu KA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>6(50)</td>
<td>6(50)</td>
</tr>
<tr>
<td>Ics KA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>6(50)</td>
<td>6(50)</td>
</tr>
<tr>
<td>Max Back up fuse (g/Lg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diazed A</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>NH A</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>* Fuse not required</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

( ) Values in bracket are with Current Limiter.

For 3VU13 breakers of ratings 8A & above, in place of fuses, the Current Limiter can be used to increase the S/C breaking capacity.

### 3VU16

<table>
<thead>
<tr>
<th>Current Rating In</th>
<th>1.6</th>
<th>4</th>
<th>6</th>
<th>10</th>
<th>16</th>
<th>25</th>
<th>32 to 63</th>
</tr>
</thead>
<tbody>
<tr>
<td>&amp; 2.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated S/C Breaking Capacity at 415 V:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Icu KA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>35</td>
</tr>
<tr>
<td>Ics KA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>50</td>
<td>17</td>
</tr>
<tr>
<td>Max Back up fuse (g/Lg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diazed A</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>NH A</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>* Fuse not required</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Selection Table for 3VU13 and 3VU16 MPCBs.

### 3VU13 Circuit - breakers with 1no + 1nc auxiliary contacts for motor and plant protection

<table>
<thead>
<tr>
<th>Rated Current In A</th>
<th>Overload release range A</th>
<th>Shortcircuit release setting A</th>
<th>Type</th>
<th>Recommended 415V Motor Ratings in Kw/HP (DOL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.16</td>
<td>0.1 - 0.16</td>
<td>1.9</td>
<td>3VU1340-1MB00</td>
<td>-</td>
</tr>
<tr>
<td>0.24</td>
<td>0.16 - 0.24</td>
<td>2.9</td>
<td>3VU1340-1MC00</td>
<td>-</td>
</tr>
<tr>
<td>0.4</td>
<td>0.24 - 0.4</td>
<td>4.8</td>
<td>3VU1340-1MD00</td>
<td>-</td>
</tr>
<tr>
<td>0.6</td>
<td>0.4 - 0.6</td>
<td>7.2</td>
<td>3VU1340-1ME00</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>0.6 - 1</td>
<td>12</td>
<td>3VU1340-1MF00</td>
<td>0.25/0.33</td>
</tr>
<tr>
<td>1.6</td>
<td>1 - 1.6</td>
<td>19</td>
<td>3VU1340-1MG00</td>
<td>0.37/0.5</td>
</tr>
<tr>
<td>2.4</td>
<td>1.6 - 2.4</td>
<td>29</td>
<td>3VU1340-1MH00</td>
<td>0.75/1</td>
</tr>
<tr>
<td>3.2</td>
<td>2 - 3.2</td>
<td>38</td>
<td>3VU1340-1NH00</td>
<td>1.1/1.5</td>
</tr>
<tr>
<td>4</td>
<td>2.4 - 4</td>
<td>48</td>
<td>3VU1340-1NJ00</td>
<td>1.5/2</td>
</tr>
<tr>
<td>5</td>
<td>3.2 - 5</td>
<td>60</td>
<td>3VU1340-1NK00</td>
<td>2.2/3</td>
</tr>
<tr>
<td>6</td>
<td>4 - 6</td>
<td>72</td>
<td>3VU1340-1MK00</td>
<td>3/4</td>
</tr>
<tr>
<td>8</td>
<td>5 - 8</td>
<td>96</td>
<td>3VU1340-1ML00</td>
<td>3.7/5</td>
</tr>
<tr>
<td>10</td>
<td>6 - 10</td>
<td>120</td>
<td>3VU1340-1MN00</td>
<td>4.5/4</td>
</tr>
<tr>
<td>13</td>
<td>8 - 13</td>
<td>156</td>
<td>3VU1340-1ML00</td>
<td>5.5/7.5</td>
</tr>
<tr>
<td>16</td>
<td>10 - 16</td>
<td>190</td>
<td>3VU1340-1MM00</td>
<td>7.5/10</td>
</tr>
<tr>
<td>20</td>
<td>14 - 20</td>
<td>240</td>
<td>3VU1340-1MN00</td>
<td>9.3/12.5</td>
</tr>
<tr>
<td>25</td>
<td>18 - 25</td>
<td>300</td>
<td>3VU1340-1MP00</td>
<td>11/15</td>
</tr>
</tbody>
</table>

### 3VU16 Circuit - breakers with 1no + 1nc auxiliary contacts for motor and plant protection

<table>
<thead>
<tr>
<th>Rated Current In A</th>
<th>Overload release range A</th>
<th>Shortcircuit release setting A</th>
<th>Type</th>
<th>Recommended 415V Motor Ratings in Kw/HP (DOL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>4 - 6</td>
<td>72</td>
<td>3VU1640-1MK00</td>
<td>3/4</td>
</tr>
<tr>
<td>10</td>
<td>6 - 10</td>
<td>120</td>
<td>3VU1640-1ML00</td>
<td>4/5.4</td>
</tr>
<tr>
<td>16</td>
<td>10 - 16</td>
<td>190</td>
<td>3VU1640-1MM00</td>
<td>7.5/10</td>
</tr>
<tr>
<td>25</td>
<td>16 - 25</td>
<td>300</td>
<td>3VU1640-1MN00</td>
<td>11/15</td>
</tr>
<tr>
<td>32</td>
<td>22 - 32</td>
<td>380</td>
<td>3VU1640-1MP00</td>
<td>15/20</td>
</tr>
<tr>
<td>40</td>
<td>28 - 40</td>
<td>480</td>
<td>3VU1640-1MO00</td>
<td>18.5/25</td>
</tr>
<tr>
<td>52</td>
<td>36 - 52</td>
<td>600</td>
<td>3VU1640-1MR00</td>
<td>22/30</td>
</tr>
</tbody>
</table>

### Circuit - breakers for plant protection

<table>
<thead>
<tr>
<th>Rated Current In A</th>
<th>Overload release range A</th>
<th>Shortcircuit release setting A</th>
<th>Type</th>
<th>Unit Price Rs.</th>
<th>Std. Pkg. Nos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>-</td>
<td>600</td>
<td>3VU1640-1LS00</td>
<td>6326.1</td>
<td>1</td>
</tr>
</tbody>
</table>

### Circuit - breakers for starter protection, with 1NO + 1NC auxiliary contacts

<table>
<thead>
<tr>
<th>Rated Current In A</th>
<th>Overload release range A</th>
<th>Shortcircuit release setting A</th>
<th>Type</th>
<th>Recommended 415V Motor Ratings in Kw/HP (DOL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6</td>
<td>19</td>
<td>3VU1640-1CG00</td>
<td>0.37/0.5</td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>29</td>
<td>3VU1640-1CH00</td>
<td>0.75/1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>48</td>
<td>3VU1640-1CJ00</td>
<td>1.5/2</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>72</td>
<td>3VU1640-1CK00</td>
<td>3/4</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>without thermal overload releases</td>
<td>120</td>
<td>3VU1640-1CL00</td>
<td>4/5.4</td>
</tr>
<tr>
<td>16</td>
<td>190</td>
<td>3VU1640-1CM00</td>
<td>7.5/10</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>300</td>
<td>3VU1640-1CN00</td>
<td>11/15</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>380</td>
<td>3VU1640-1CP00</td>
<td>15/20</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>480</td>
<td>3VU1640-1CQ00</td>
<td>18.5/25</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>600</td>
<td>3VU1640-1CR00</td>
<td>22/30</td>
<td></td>
</tr>
</tbody>
</table>

The 3VU13 and 3VU16 circuit breakers are also available without auxiliary contacts.

To order the same, the 8th place of the type number is to be replaced with the digit 0.
Connection diagram

Diagram for 3VU13 / 16 and current limiter (Applies for 3VU13 only)

Connection diagrams

Wiring diagram for under voltage release with 2 leading auxiliary contacts

Wiring diagram for under voltage release of 3VU13 / 16

Wiring diagram for Remote control with 3VU13 AC 50/60 Hz 220/240V.
Switching command <5s. Connection command not recommended.

Wiring diagram for Shunt release for 3VU13 / 16
Spares and Accessories 3VU13/16

- 3VU9131-4AA00
  Auxiliary block for retrofitting in 3VU13, 1NO.

- 3VU9161-4AA00
  Auxiliary block for retrofitting in 3VU16, 1NO.

- 3VU9131-3AA00
  Add on Auxiliary block
  1NO + 1NC

- 3VU9131-7AA00
  S/C Trip indicating contacts
  1NO + 1NC

- 3VU9132-0AB15
  220/230V 50Hz
  Under Voltage release

- 3VU9132-0AB18
  415V 50Hz
  Under Voltage release

- 3VU9132-0AB55
  220/230V 50Hz
  Shunt release

- 3VU9132-0AB58
  415V 50Hz
  Shunt release

- 3VU9132-0AB35
  220/230V 50Hz
  Under Voltage release with 2 Leading contact

- 3VU9132-0AB38
  415V 50Hz
  Under Voltage release with 2 Leading contact

- 3VU9138-1AA14
  Remote Switching Module
  for 3VU13 (Solenoid)
  220/240VAC, 50/60Hz

- 3VU9168-0KA00
  Padlocking for Toggle Handle 3VU13/16

- 3VU9138-0AA00
  Adapter plate for screw mounting 3VU13

- 3VU9138-3AA00
  Isolating Module for fitting to 3VU13 (lockable)

Door operating mechanism for 3VU13/16*

![Door operating mechanism diagram]

Breaker Operator Kit for 3VU13 – 3VU9133
Breaker Operator Kit for 3VU16 – 3VU9163

1. Handle with masking frame
2. Gasket
3. Door
4. Fixing screws
5. Drive coupling
6. Extension shaft - 300 mm
7. Adapter
8. Breaker operator

* For complete assembly, please order both front drive and breaker operator kit.
3Ø Insulated Bus-bar System for 3VU13

- 3VU9135-1BB01
  3Ø feed-in Terminal max 63A, for bus-bar system

- 3VU9135-1AB03
  3Ø Busbars for 3 Breakers Max. 63 Amps

- 3VU9135-1AB05
  3Ø Busbar for 5 Breakers Max 63 Amps

Also available
- 3VU9135-1AB02
  3Ø Busbar for 2 Breakers
- 3VU9135-1AB04
  3Ø Busbar for 4 Breakers

Padlock for rotary operating mechanism of 3VU13 Housing

- 3VU9165-1BB01
  3Ø feed-in Terminal max 100A, for bus-bar system

- 3VU9165-1AB03
  3Ø Busbars for 3 Breakers

- 3VU9133-3KA00

Also available
- Cast aluminium housing (IP65) for 3VU13
- Busbar adaptor system for 3VU13

3Ø Insulated Bus-bar System for 3VU16

Moulded Plastic Housings for 3VU13

With rotary operating mechanism

- 3VU9133-2GA00
  Suitable to accommodate 3VU with one voltage release & Aux. contact

Moulded Plastic Housings of 3VU13 for direct actuation

- 3VU9133-3BA00
  Suitable to accommodate 3VU with one voltage release

Also available
- 3VU9133-0AA00
  Suitable to accommodate 3VU without any release & aux. contact
- 3VU9133-0CA00
  Suitable to accommodate 3VU with one voltage release & aux. contact

3Ø Bus-bars for 2 breakers : 3VU9165-1AB02
Circuit-Breakers

3VU13 circuit-breakers and accessories

3VU13 circuit-breakers can be combined with:
a) undervoltage or shunt release
   and/or
b) short-circuit signalling switch and/or
c) auxiliary contacts

3VU13-2AB00 limiter
The limiter has the same dimensions as the standard version of the
3VU13 circuit-breaker

3VU9 138-3AA00 isolating module

3VU9 138-1AA14 remote control mechanism

3VU9 133-OA00 moulded-plastic housing

3VU9 133-2BA00 moulded-plastic housing

3VU13-20A00 moulded-plastic housing.
3VU9 133-2DA00 cast-aluminium housing

3VU9 135-1AB02, 3VU9 135-1AB03,
3VU9 135-1AB04, 3VU9 135-1AB05
three-phase breaker
   ① For 2 devices: 3VU9 135-1AB02
   ② For 3 devices: 3VU9 135-1AB03
   ③ For 4 devices: 3VU9 135-1AB04
   ④ For 5 devices: 3VU9 135-1AB05

3VU9 135-1BB01
three-phase feed-in terminal,
raised design
3VU16 circuit-breakers can be combined with:

a) undervoltage or shunt release
   and/or
b) short-circuit signalling switch and/or
c) auxiliary contacts

3VU9 165–1AB02, 3VU9 165–1AB03
three-phase busbar

- For 2 devices: 3VU9 135–1AB02
- For 3 devices: 3VU9 135–1AB03

Required space above arc chutes for 3VU13 and 3VU16

Minimum clearance to adjacent parts as well as non-insulated live parts.

3VU13

3VU16

Door operating mechanism with extension shaft (300mm) with door interlock & padlocking facilities.

Mounting bracket

Handle

(Figures in bracket are for 3VU16)