

# Weidmüller HB - Series Miniature Circuit Breakers

## Datasheet



Single Pole OFF



Double Pole OFF



Triple Pole ON

### Features:

- AC/DC UL 489 Branch Circuit Breaker
- Ultra compact - 13 mm wide module
- Hydraulic-Magnetic technology
- Can be switched on immediately after tripping
- DIN mount, 57 mm escutcheon (Black)
- ON and OFF indication
- Suitable for electrical isolation
- 100% Rating capability independent of ambient temperature
- One, two, three pole
- RoHS compliance
- Box type main terminals

### Application:

- AC branch circuit protection
- Telecom / datacom equipment
- Lighting control
- UPS Equipment
- Alternative energy equipment
- Mobile power-generation equipment
- Railway signaling equipment
- Residential equipment
- Industrial equipment

### Approvals:



LISTED (UL 489)



Pending

IEC / EN 60947-2



Pending

## Technical Data

| Product Type             | Circuit Breaker  |                             |                                 |                            |
|--------------------------|------------------|-----------------------------|---------------------------------|----------------------------|
|                          | Approvals        |                             |                                 |                            |
| Number of Poles          |                  | 1                           | 2                               | 3                          |
| Operating Voltages & AIC | IEC / EN 60947-2 | 240 Vac @<br>6 kA           | 415 Vac @<br>6 kA               | 415 Vac @<br>6 kA          |
|                          | UL 489           | 240Vac/<br>80VDC @<br>10 kA | 120/240Vac/<br>80Vdc @<br>10 kA | 240Vac<br>80Vdc @<br>10 kA |
| IC = 5 kA                |                  |                             |                                 |                            |
| Minimum Current Ratings  |                  | 0.5 A                       | 0.5 A                           | 0.5 A                      |
| Maximum Current Ratings  |                  | 32 A                        | 32 A                            | 32 A                       |

| Product Type                    | Circuit Breaker                                                                                                       |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Ambient Operating Temperature   | -40 °C to +85 °C                                                                                                      |
| Mounting Options                | DIN rail mount                                                                                                        |
| Time Delay Curves               | Instantaneous, Short, Medium, Long                                                                                    |
| Endurance                       | 10000 operations; 1500 with current, 8500 without current<br>(IEC 60947 - 2 Clause 7.2.4.2)*                          |
| Dielectric Strength             | 1000 - 2000 Vac for one minute (IEC 60947 - 2 Clause 8.3.3.3)*                                                        |
| Rated Impulse Withstand Voltage | 4 kV (IEC 60947 - 2 Clause 8.3.3.2)*                                                                                  |
| Weight                          | 110 g per pole                                                                                                        |
| Altitude                        | Certification tests conducted at altitude ≈ 2000 meters.<br>Will operate at higher altitudes.                         |
| Shock                           | 10 G (IEC 60068-2-27) Test: Fc (Edition 4.0:2008-02)                                                                  |
| Vibration                       | 5 G (IEC 60068-2-6) Test: Fc (Edition 7:2007-12) (sinusoidal wave)                                                    |
| Flammability                    | I3 - ignition does not persist at 850 °C after glow wire is withdrawn with an oxygen index of ≥ 28                    |
| Toxicity                        | F1 - Smoke index of ≤ 20 which determines the fume class                                                              |
| Pollution Degree                | PD2 - Normally only non-conductive pollution occurs. Temporary conductivity caused by condensation is to be expected. |

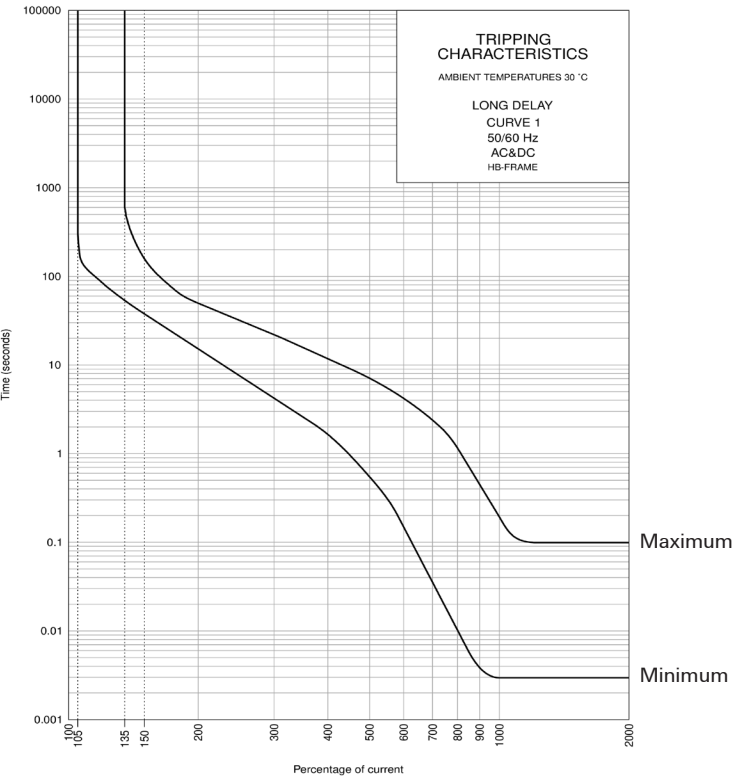
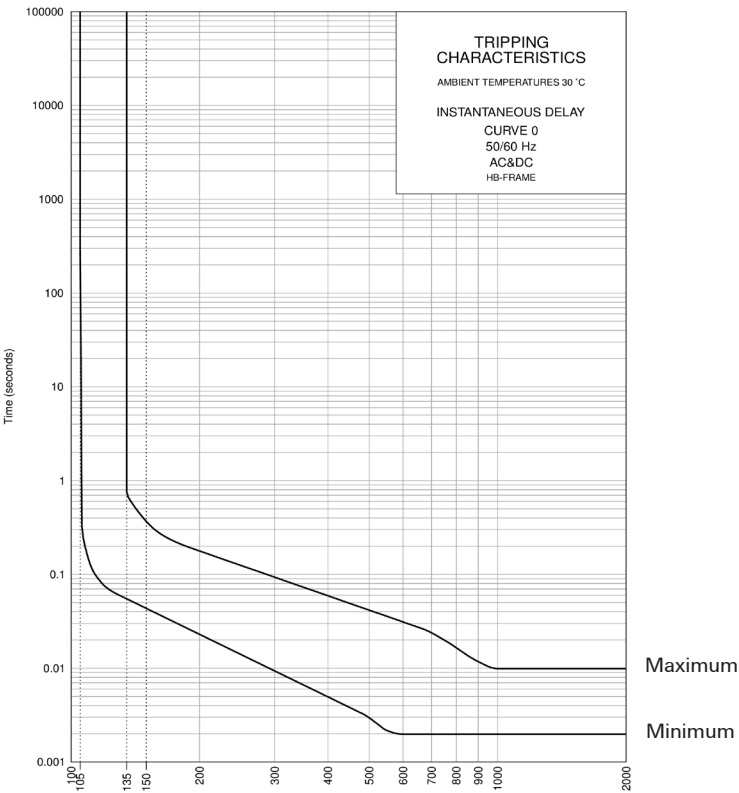
\* Refer to the standard for details

| Circuit Breaker | Wire Size mm <sup>2</sup> (IEC)           | Wire Gauge (UL) | Torque (IEC) | Torque(UL) | Comments                  |
|-----------------|-------------------------------------------|-----------------|--------------|------------|---------------------------|
| Main Terminals  | .75 mm <sup>2</sup> to 16 mm <sup>2</sup> | 18 - 6 - AWG    | 3.5 Nm       | 30 in-lb   | Pozidriv #2<br>Combi head |

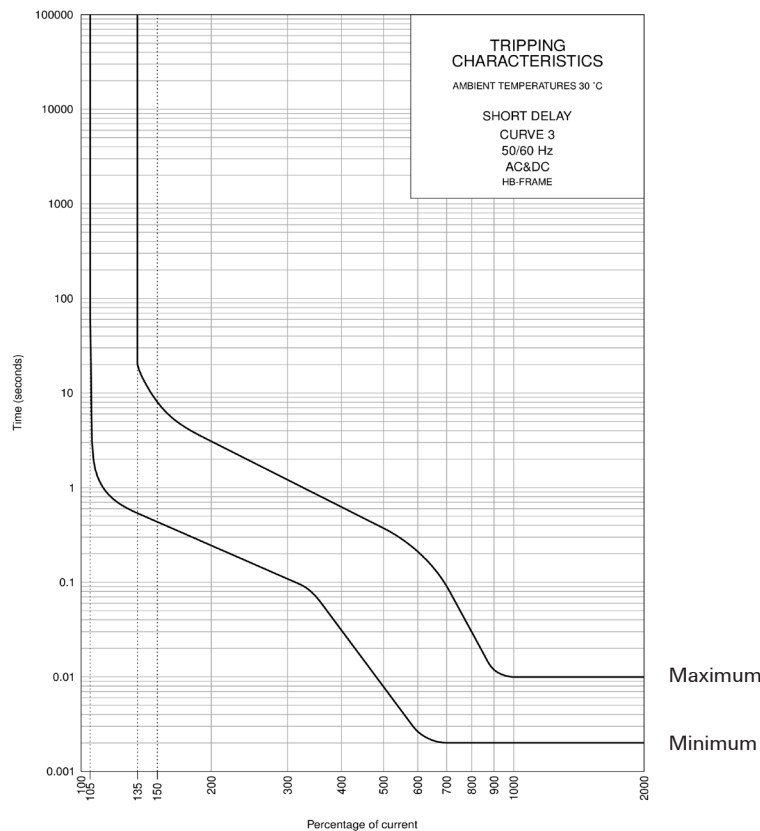
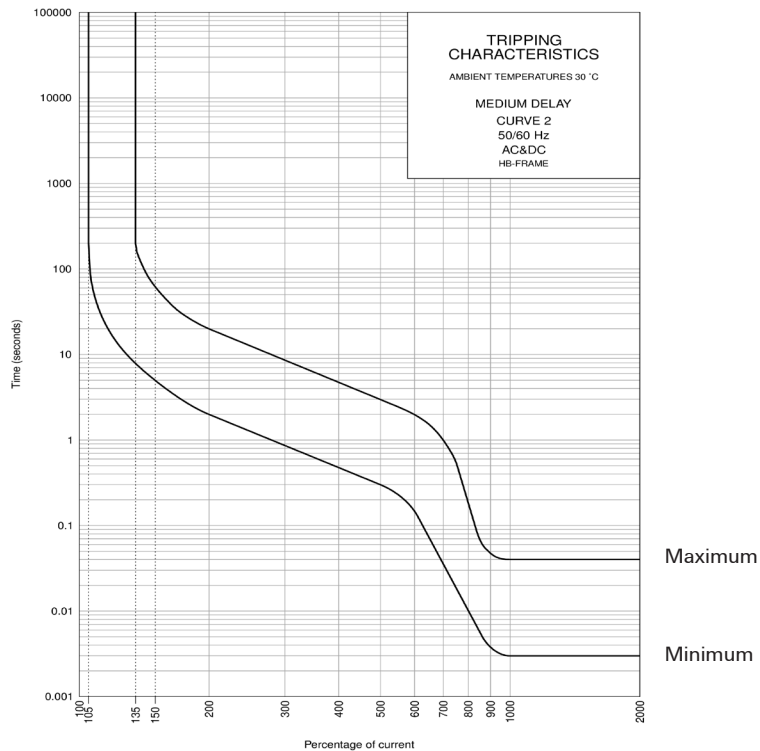
| Group            | 1         | 3               | 5                | 6                               | 7                         |
|------------------|-----------|-----------------|------------------|---------------------------------|---------------------------|
| Requirement      | HB Frame  | Number of poles | Time delay curve | Current rating (A)<br>Ex: 1 Amp | Voltage rating<br>(AC/DC) |
| <b>Long Code</b> | <b>HB</b> | <b>1</b>        | <b>2</b>         | <b>01</b>                       | <b>UC</b>                 |

|                                     |             |                                                             |                 |
|-------------------------------------|-------------|-------------------------------------------------------------|-----------------|
| <b>Group 1:<br/>Frame Type</b>      | <b>Code</b> | <b>Description</b>                                          | <b>Comments</b> |
|                                     | HB          | Frame (13 mm circuit breaker DIN mounting 57 mm escutcheon) | Black shell     |
| <b>Group 2:<br/>Number of poles</b> | <b>Code</b> | <b>Description</b>                                          | <b>Comments</b> |
|                                     | 1           | One pole                                                    |                 |
|                                     | 2           | Two pole                                                    |                 |
|                                     | 3           | Three pole                                                  |                 |
| <b>Group 3:<br/>Time Delay</b>      | <b>Code</b> | <b>Description</b>                                          | <b>Comments</b> |
|                                     | 0           | Instantaneous delay                                         |                 |
|                                     | 3           | Short delay                                                 |                 |
|                                     | 2           | Medium delay                                                |                 |
|                                     | 1           | Long delay                                                  |                 |
| <b>Group 4:<br/>Current Rating</b>  | <b>Code</b> | <b>Description</b>                                          | <b>Comments</b> |
|                                     |             | 0.5, 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 16, 20, 25, 30, 32    |                 |
| <b>Group 5:<br/>Voltage Rating</b>  | <b>Code</b> | <b>Description</b>                                          | <b>Comments</b> |
|                                     | UC          | 1 & 3 Pole 240Vac/80Vdc<br>2 Pole 120/240Vac/80Vdc          |                 |

Time Delay Curves



Standard Time Delay Curves



| One pole - (240 Vac / 80 Vdc) - 13 mm total width |                 |                               |                                                         |
|---------------------------------------------------|-----------------|-------------------------------|---------------------------------------------------------|
| Order Number                                      | Material Number | Trip Curve                    | Description                                             |
| 2823440000                                        | HB100.5UC       | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 0.5A AC/DC  |
| 2823450000                                        | HB1001UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 1.0A AC/DC  |
| 2823460000                                        | HB1002UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 2.0A AC/DC  |
| 2823470000                                        | HB1003UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 3.0A AC/DC  |
| 2823480000                                        | HB1004UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 4.0A AC/DC  |
| 2823490000                                        | HB1005UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 5.0A AC/DC  |
| 2823500000                                        | HB1006UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 6.0A AC/DC  |
| 2823510000                                        | HB1008UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 8.0A AC/DC  |
| 2823520000                                        | HB1010UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 10.0A AC/DC |
| 2823530000                                        | HB1012UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 12.0A AC/DC |
| 2823540000                                        | HB1015UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 15.0A AC/DC |
| 2823550000                                        | HB1016UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 16.0A AC/DC |
| 2823560000                                        | HB1020UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 20.0A AC/DC |
| 2823570000                                        | HB1025UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 25.0A AC/DC |
| 2823580000                                        | HB1030UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 30.0A AC/DC |
| 2823590000                                        | HB1032UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 0 32.0A AC/DC |
| 2822480000                                        | HB110.5UC       | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 0.5A AC/DC  |
| 2822490000                                        | HB1101UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 1.0A AC/DC  |
| 2822500000                                        | HB1102UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 2.0A AC/DC  |
| 2822510000                                        | HB1103UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 3.0A AC/DC  |
| 2822520000                                        | HB1104UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 4.0A AC/DC  |
| 2822530000                                        | HB1105UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 5.0A AC/DC  |
| 2822540000                                        | HB1106UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 6.0A AC/DC  |
| 2822550000                                        | HB1108UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 8.0A AC/DC  |
| 2822560000                                        | HB1110UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 10.0A AC/DC |
| 2822570000                                        | HB1112UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 12.0A AC/DC |
| 2822580000                                        | HB1115UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 15.0A AC/DC |
| 2822590000                                        | HB1116UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 16.0A AC/DC |
| 2822600000                                        | HB1120UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 20.0A AC/DC |
| 2822610000                                        | HB1125UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 25.0A AC/DC |
| 2822620000                                        | HB1130UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 30.0A AC/DC |
| 2822630000                                        | HB1132UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 1 32.0A AC/DC |
| 2822000000                                        | HB120.5UC       | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 0.5A AC/DC  |
| 2822010000                                        | HB1201UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 1.0A AC/DC  |
| 2822020000                                        | HB1202UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 2.0A AC/DC  |
| 2822030000                                        | HB1203UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 3.0A AC/DC  |
| 2822040000                                        | HB1204UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 4.0A AC/DC  |
| 2822050000                                        | HB1205UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 5.0A AC/DC  |
| 2822060000                                        | HB1206UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 6.0A AC/DC  |
| 2822070000                                        | HB1208UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 8.0A AC/DC  |

|            |           |                        |                                                         |
|------------|-----------|------------------------|---------------------------------------------------------|
| 2822080000 | HB1210UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 10.0A AC/DC |
| 2822090000 | HB1212UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 12.0A AC/DC |
| 2822100000 | HB1215UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 15.0A AC/DC |
| 2822110000 | HB1216UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 16.0A AC/DC |
| 2822120000 | HB1220UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 20.0A AC/DC |
| 2822130000 | HB1225UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 25.0A AC/DC |
| 2822140000 | HB1230UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 30.0A AC/DC |
| 2822150000 | HB1232UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 2 32.0A AC/DC |
| 2822960000 | HB130.5UC | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 0.5A AC/DC  |
| 2822970000 | HB1301UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 1.0A AC/DC  |
| 2822980000 | HB1302UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 2.0A AC/DC  |
| 2822990000 | HB1303UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 3.0A AC/DC  |
| 2823000000 | HB1304UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 4.0A AC/DC  |
| 2823010000 | HB1305UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 5.0A AC/DC  |
| 2823020000 | HB1306UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 6.0A AC/DC  |
| 2823030000 | HB1308UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 8.0A AC/DC  |
| 2823040000 | HB1310UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 10.0A AC/DC |
| 2823050000 | HB1312UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 12.0A AC/DC |
| 2823060000 | HB1315UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 15.0A AC/DC |
| 2823070000 | HB1316UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 16.0A AC/DC |
| 2823080000 | HB1320UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 20.0A AC/DC |
| 2823090000 | HB1325UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 25.0A AC/DC |
| 2823100000 | HB1330UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 30.0A AC/DC |
| 2823110000 | HB1332UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 1P Curve 3 32.0A AC/DC |

| Two pole - (120/240 Vac / 80 Vdc) - 26 mm total width |                 |                               |                                                             |
|-------------------------------------------------------|-----------------|-------------------------------|-------------------------------------------------------------|
| Order Number                                          | Material Number | Trip Curve                    | Description                                                 |
| 2823600000                                            | HB200.5UC       | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 0.5A AC/DC  |
| 2823610000                                            | HB2001UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 1.0A AC/DC  |
| 2823620000                                            | HB2002UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 2.0A AC/DC  |
| 2823630000                                            | HB2003UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 3.0A AC/DC  |
| 2823640000                                            | HB2004UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 4.0A AC/DC  |
| 2823650000                                            | HB2005UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 5.0A AC/DC  |
| 2823660000                                            | HB2006UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 6.0A AC/DC  |
| 2823670000                                            | HB2008UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 8.0A AC/DC  |
| 2823680000                                            | HB2010UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 10.0A AC/DC |
| 2823690000                                            | HB2012UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 12.0A AC/DC |
| 2823700000                                            | HB2015UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 15.0A AC/DC |
| 2823710000                                            | HB2016UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 16.0A AC/DC |
| 2823720000                                            | HB2020UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 20.0A AC/DC |
| 2823730000                                            | HB2025UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 25.0A AC/DC |
| 2823740000                                            | HB2030UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 30.0A AC/DC |
| 2823750000                                            | HB2032UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 0 32.0A AC/DC |
| 2822640000                                            | HB210.5UC       | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 0.5A AC/DC  |
| 2822650000                                            | HB2101UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 1.0A AC/DC  |
| 2822660000                                            | HB2102UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 2.0A AC/DC  |
| 2822670000                                            | HB2103UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 3.0A AC/DC  |
| 2822680000                                            | HB2104UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 4.0A AC/DC  |
| 2822690000                                            | HB2105UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 5.0A AC/DC  |
| 2822700000                                            | HB2106UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 6.0A AC/DC  |
| 2822710000                                            | HB2108UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 8.0A AC/DC  |
| 2822720000                                            | HB2110UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 10.0A AC/DC |
| 2822730000                                            | HB2112UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 12.0A AC/DC |
| 2822740000                                            | HB2115UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 15.0A AC/DC |
| 2822750000                                            | HB2116UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 16.0A AC/DC |
| 2822760000                                            | HB2120UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 20.0A AC/DC |
| 2822770000                                            | HB2125UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 25.0A AC/DC |
| 2822780000                                            | HB2130UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 30.0A AC/DC |
| 2822790000                                            | HB2132UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 1 32.0A AC/DC |
| 2822160000                                            | HB220.5UC       | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 0.5A AC/DC  |
| 2822170000                                            | HB2201UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 1.0A AC/DC  |
| 2822180000                                            | HB2202UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 2.0A AC/DC  |
| 2822190000                                            | HB2203UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 3.0A AC/DC  |
| 2822200000                                            | HB2204UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 4.0A AC/DC  |
| 2822210000                                            | HB2205UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 5.0A AC/DC  |
| 2822220000                                            | HB2206UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 6.0A AC/DC  |
| 2822230000                                            | HB2208UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 8.0A AC/DC  |
| 2822240000                                            | HB2210UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 10.0A AC/DC |

|            |           |                        |                                                             |
|------------|-----------|------------------------|-------------------------------------------------------------|
| 2822250000 | HB2212UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 12.0A AC/DC |
| 2822260000 | HB2215UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 15.0A AC/DC |
| 2822270000 | HB2216UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 16.0A AC/DC |
| 2822280000 | HB2220UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 20.0A AC/DC |
| 2822290000 | HB2225UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 25.0A AC/DC |
| 2822300000 | HB2230UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 30.0A AC/DC |
| 2822310000 | HB2232UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 2 32.0A AC/DC |
| 2823120000 | HB230.5UC | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 0.5A AC/DC  |
| 2823130000 | HB2301UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 1.0A AC/DC  |
| 2823140000 | HB2302UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 2.0A AC/DC  |
| 2823150000 | HB2303UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 3.0A AC/DC  |
| 2823160000 | HB2304UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 4.0A AC/DC  |
| 2823170000 | HB2305UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 5.0A AC/DC  |
| 2823180000 | HB2306UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 6.0A AC/DC  |
| 2823190000 | HB2308UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 8.0A AC/DC  |
| 2823200000 | HB2310UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 10.0A AC/DC |
| 2823210000 | HB2312UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 12.0A AC/DC |
| 2823220000 | HB2315UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 15.0A AC/DC |
| 2823230000 | HB2316UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 16.0A AC/DC |
| 2823240000 | HB2320UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 20.0A AC/DC |
| 2823250000 | HB2325UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 25.0A AC/DC |
| 2823200000 | HB2310UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 10.0A AC/DC |
| 2823210000 | HB2312UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 12.0A AC/DC |
| 2823220000 | HB2315UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 15.0A AC/DC |
| 2823230000 | HB2316UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 16.0A AC/DC |
| 2823240000 | HB2320UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 20.0A AC/DC |
| 2823250000 | HB2325UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 25.0A AC/DC |
| 2823260000 | HB2330UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 30.0A AC/DC |
| 2823270000 | HB2332UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 120/240Vac/80Vdc 2P Curve 3 32.0A AC/DC |

| Three pole - (240 Vac / 80 Vdc) - 39 mm total width |                 |                               |                                                         |
|-----------------------------------------------------|-----------------|-------------------------------|---------------------------------------------------------|
| Order Number                                        | Material Number | Trip Curve                    | Description                                             |
| 2823760000                                          | HB300.5UC       | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 0.5A AC/DC  |
| 2823770000                                          | HB3001UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 1.0A AC/DC  |
| 2823780000                                          | HB3002UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 2.0A AC/DC  |
| 2823790000                                          | HB3004UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 4.0A AC/DC  |
| 2823800000                                          | HB3005UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 5.0A AC/DC  |
| 2823810000                                          | HB3006UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 6.0A AC/DC  |
| 2823820000                                          | HB3008UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 8.0A AC/DC  |
| 2823830000                                          | HB3010UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 10.0A AC/DC |
| 2823840000                                          | HB3012UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 12.0A AC/DC |
| 2823850000                                          | HB3015UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 15.0A AC/DC |
| 2823860000                                          | HB3016UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 16.0A AC/DC |
| 2823870000                                          | HB3020UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 20.0A AC/DC |
| 2823880000                                          | HB3025UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 25.0A AC/DC |
| 2823890000                                          | HB3030UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 30.0A AC/DC |
| 2823900000                                          | HB3032UC        | Instantaneous Delay - Curve 0 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 0 32.0A AC/DC |
| 2822800000                                          | HB310.5UC       | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 0.5A AC/DC  |
| 2822810000                                          | HB3101UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 1.0A AC/DC  |
| 2822820000                                          | HB3102UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 2.0A AC/DC  |
| 2822830000                                          | HB3103UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 3.0A AC/DC  |
| 2822840000                                          | HB3104UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 4.0A AC/DC  |
| 2822850000                                          | HB3105UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 5.0A AC/DC  |
| 2822860000                                          | HB3106UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 6.0A AC/DC  |
| 2822870000                                          | HB3108UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 8.0A AC/DC  |
| 2822880000                                          | HB3110UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 10.0A AC/DC |
| 2822890000                                          | HB3112UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 12.0A AC/DC |
| 2822900000                                          | HB3115UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 15.0A AC/DC |
| 2822910000                                          | HB3116UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 16.0A AC/DC |
| 2822920000                                          | HB3120UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 20.0A AC/DC |
| 2822930000                                          | HB3125UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 25.0A AC/DC |
| 2822940000                                          | HB3130UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 30.0A AC/DC |
| 2822950000                                          | HB3132UC        | Long Delay - Curve 1          | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 1 32.0A AC/DC |
| 2822320000                                          | HB320.5UC       | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 0.5A AC/DC  |
| 2822330000                                          | HB3201UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 1.0A AC/DC  |
| 2822340000                                          | HB3202UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 2.0A AC/DC  |
| 2822350000                                          | HB3203UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 3.0A AC/DC  |
| 2822360000                                          | HB3204UC        | Medium Delay - Curve 2        | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 4.0A AC/DC  |

|            |           |                        |                                                         |
|------------|-----------|------------------------|---------------------------------------------------------|
| 2822370000 | HB3205UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 5.0A AC/DC  |
| 2822380000 | HB3206UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 6.0A AC/DC  |
| 2822390000 | HB3208UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 8.0A AC/DC  |
| 2822400000 | HB3210UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 10.0A AC/DC |
| 2822410000 | HB3212UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 12.0A AC/DC |
| 2822420000 | HB3215UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 15.0A AC/DC |
| 2822430000 | HB3216UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 16.0A AC/DC |
| 2822440000 | HB3220UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 20.0A AC/DC |
| 2822450000 | HB3225UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 25.0A AC/DC |
| 2822460000 | HB3230UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 30.0A AC/DC |
| 2822470000 | HB3232UC  | Medium Delay - Curve 2 | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 2 32.0A AC/DC |
| 2823280000 | HB330.5UC | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 0.5A AC/DC  |
| 2823290000 | HB3301UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 1.0A AC/DC  |
| 2823300000 | HB3302UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 2.0A AC/DC  |
| 2823310000 | HB3303UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 3.0A AC/DC  |
| 2823320000 | HB3304UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 4.0A AC/DC  |
| 2823330000 | HB3305UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 5.0A AC/DC  |
| 2823340000 | HB3306UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 6.0A AC/DC  |
| 2823350000 | HB3308UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 8.0A AC/DC  |
| 2823360000 | HB3310UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 10.0A AC/DC |
| 2823370000 | HB3312UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 12.0A AC/DC |
| 2823380000 | HB3315UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 15.0A AC/DC |
| 2823390000 | HB3316UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 16.0A AC/DC |
| 2823400000 | HB3320UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 20.0A AC/DC |
| 2823410000 | HB3325UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 25A AC/DC   |
| 2823420000 | HB3330UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 30A AC/DC   |
| 2823430000 | HB3332UC  | Short Delay - Curve 3  | HYDRAULIC MCB UL489 240Vac/80Vdc 3P Curve 3 32A AC/DC   |

Mounting Options

If the product is not vertically mounted in the normal DIN-rail mounting orientation, a rating factor must be applied. Figure below shows a diagram of the rating factor to apply. The published curves for these circuit breaker products are produced with the circuit breaker in the vertical mounting position. The rating factor only applies to the must hold and must trip points of the curve as the other parts (instantaneous trip point) stay largely unaffected.

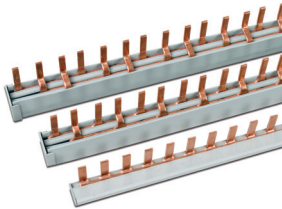
It is important to note that in environments that are exposed to a high degree of vibration, the cables that connect to the circuit breaker must be securely held in place, as the breaker is not designed to carry the weight of the cables. A maximum of 35N can be applied to the terminal area, in a direction perpendicular to the mounting axis.

Optional Accessories:

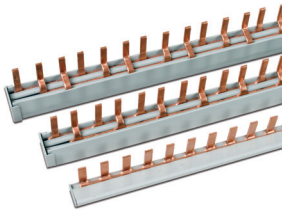
- Handle Lock
- Busbar
- Power Lugs

Accessories

| Type                                          | Order #    |
|-----------------------------------------------|------------|
| Bus - bar (1 pole, insulated, 1 Meter Length) | 7940099731 |
| Bus bar end cap, 1 pole                       | 7940099740 |



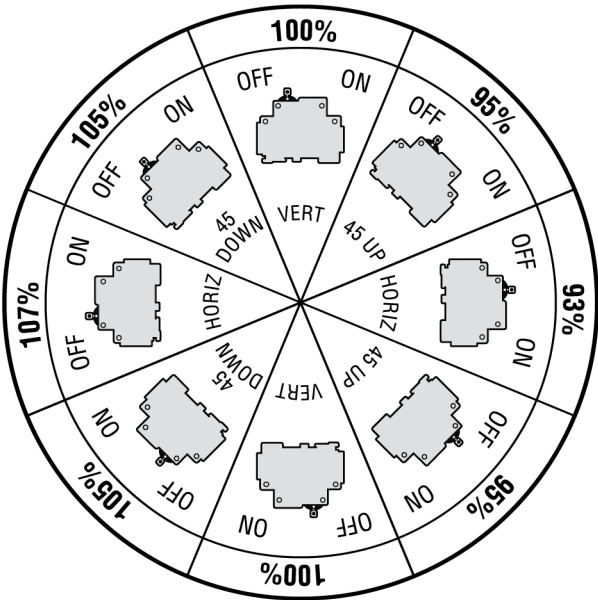
| Type                                          | Order #    |
|-----------------------------------------------|------------|
| Bus - bar (2 pole, insulated, 1 Meter Length) | 7940099739 |
| Bus - bar (3 pole, insulated, 1 Meter Length) | 7940099738 |
| Bus - bar end cap, 2/3 pole                   | 7940099741 |



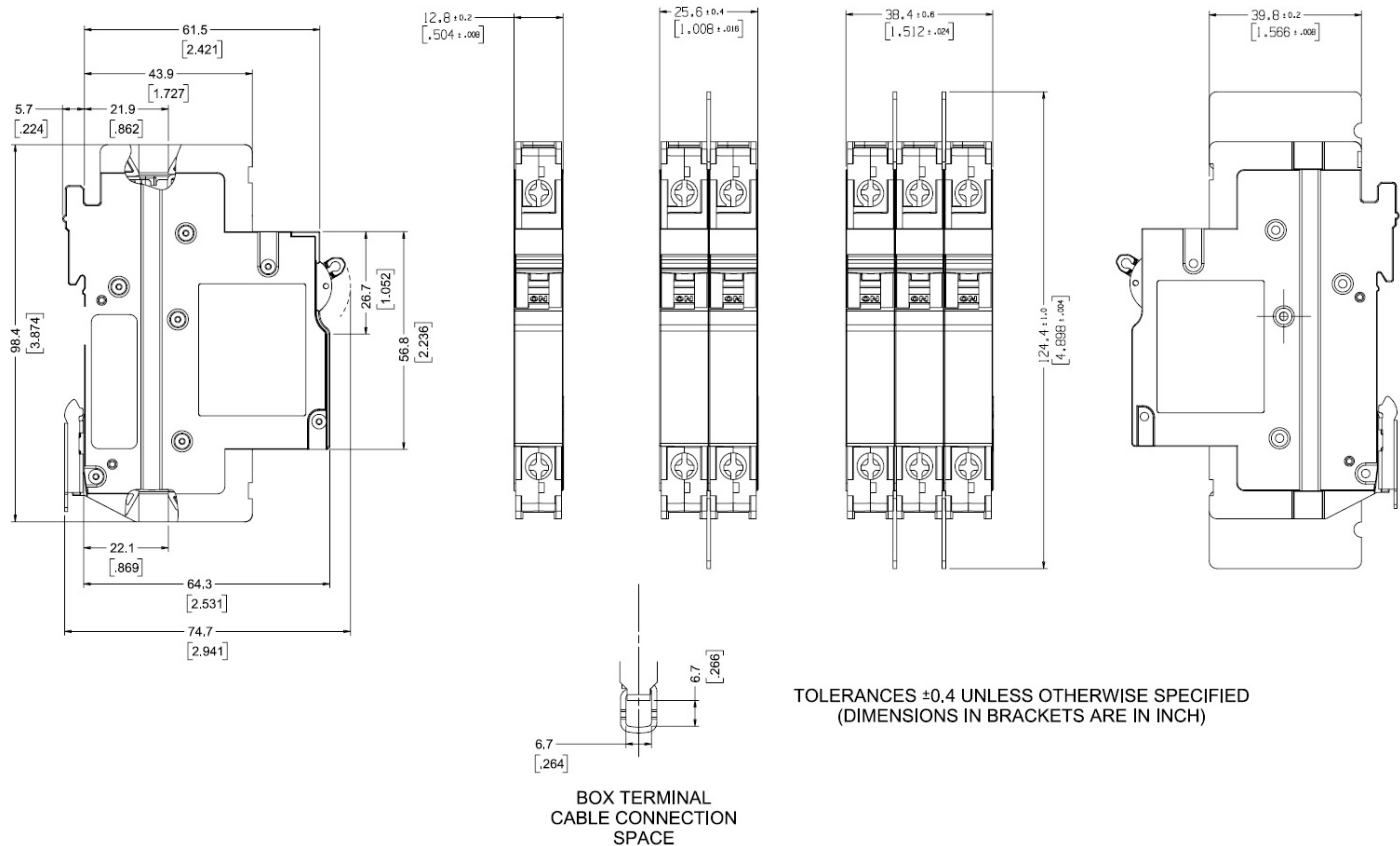
| Type                        | Order #    |
|-----------------------------|------------|
| Power lug, straight (14 mm) | 7940099736 |
| Power lug, 90° (14mm)       | 7940099737 |
| Power lug, straight (32 mm) | 7940099746 |
| Power lug, 90 (32mm)        | 7940115090 |



| Type            | Order #    |
|-----------------|------------|
| Lock-out handle | 7940099734 |



## Outline Dimensions: DIN mount



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2/22 U1988

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| <a href="#"><u>2822800000</u></a> | <a href="#"><u>2822810000</u></a> | <a href="#"><u>2822820000</u></a> | <a href="#"><u>2822830000</u></a> | <a href="#"><u>2822840000</u></a> | <a href="#"><u>2822850000</u></a> | <a href="#"><u>2822860000</u></a> | <a href="#"><u>2822870000</u></a> |
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| <a href="#"><u>2822960000</u></a> | <a href="#"><u>2822970000</u></a> | <a href="#"><u>2822980000</u></a> | <a href="#"><u>2822990000</u></a> |                                   |                                   |                                   |                                   |