CWM_N

NEMA Rated Contactors
NEMA contactors have been a mainstay in the industrial marketplace in the US for decades. NEMA contactors were known for being robust & able to handle any industrial application.

WEG’s NEMA rated contactors meet or exceed the standards defined by the National Electrical Manufacturers Association (NEMA), for full voltage or reduced voltage motor starting\(^1\).

Notes: 1) NEMA Standards Publication ICS 2-2000 (R2005), Industrial Control and Systems Controllers, Contactors and Overload Relays Rated 600 Volts.

- Available from size 00 to size 5
- Designed for industrial applications with reliability in mind
- Enclosed NEMA Starters & Custom NEMA Starter panels, available on request
- Reduced inventory with common accessories
- Ease of choosing product
- Adjustable overload protection available (no heaters needed)
The WEG CWM_N series NEMA rated contactor line has been designed for industrial duty and with reliability in mind. Rated for inductive loads up to 300 Amps or 200 HP @ 460 V, WEG can offer the suitable contactor for your application.

Customers who are used to specifying contactors (and starters), by a particular NEMA Size (size 00, 0, 1, 2, 3, 4, 5), now can use the WEG CWM_N series, NEMA rated contactors. Customers get the ease of choosing the product, the reliability of WEG quality, and still get the sophisticated arc quenching techniques to reduce excess heat on the contacts.

Given their compact footprints, CWM_N contactors allow total panel space optimization, with only a few compact frame sizes from 5 to 200 HP @ 460 V.

Reducing inventory is a “snap” with CWM’s common accessories. For example, side mounted auxiliary contact blocks are the same from 5 to 200 HP @ 460 V.

- Ease of choosing product
- Compact footprint
- Arc quenching technique
- Reduced inventory with common accessories
- Adjustable thermal overload relay for motor protection
- Reliable WEG quality

<table>
<thead>
<tr>
<th>NEMA size</th>
<th>NEMA continuous amp rating</th>
<th>WEG continuous amp rating</th>
<th>HP @ 230 V</th>
<th>HP @ 415 V</th>
<th>HP @ 460 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>9</td>
<td>9</td>
<td>1.5</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>18</td>
<td>18</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
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<td>1</td>
<td>27</td>
<td>32</td>
<td>7.5</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>45</td>
<td>50</td>
<td>15</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>90</td>
<td>95</td>
<td>30</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>135</td>
<td>150</td>
<td>50</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>270</td>
<td>300</td>
<td>100</td>
<td>750</td>
<td>200</td>
</tr>
</tbody>
</table>
### CWM_N Series

#### 3 Pole NEMA Contactors with AC Coil

**NEMA Rated Contactors**

**CWM_N Series**

3 Pole NEMA Contactors with AC Coil

<table>
<thead>
<tr>
<th>NEMA size</th>
<th>Maximum UL horsepower</th>
<th>Auxiliary contacts</th>
<th>Current rating amps</th>
<th>Catalog number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Single phase</td>
<td>Three phase</td>
<td>N.O.</td>
<td>N.C.</td>
</tr>
<tr>
<td>00</td>
<td>1/3</td>
<td>1</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>01</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>7.5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>7.5</td>
<td>15</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>-</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>-</td>
<td>75</td>
<td>100</td>
</tr>
</tbody>
</table>

**AC Coil Voltage Code Selection**

#### AC / DC Coil Voltage Code Selection

Notes: CWM_N series - 9 to 95 A - AC coil.
CWM_N series - 150 to 300 A - AC/DC coil with electronic module.

For contactors: CWM9N...CWM95N

<table>
<thead>
<tr>
<th>Code</th>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>V04</td>
<td>24 V</td>
</tr>
<tr>
<td>V18</td>
<td>120 V</td>
</tr>
<tr>
<td>V24</td>
<td>208-240 V</td>
</tr>
<tr>
<td>V47</td>
<td>480 V</td>
</tr>
<tr>
<td>V56</td>
<td>600 V</td>
</tr>
</tbody>
</table>

For contactors: CWM150N, CWM300N

<table>
<thead>
<tr>
<th>Code</th>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>E02</td>
<td>24-28 V ac / V dc</td>
</tr>
<tr>
<td>E10</td>
<td>110-130 V ac / V dc</td>
</tr>
<tr>
<td>E13</td>
<td>208-250 V ac / V dc</td>
</tr>
<tr>
<td>E21</td>
<td>430-500 V ac / V dc</td>
</tr>
</tbody>
</table>
CWM_N Series - Accessories

### Auxiliary contacts block

<table>
<thead>
<tr>
<th>Location/description</th>
<th>Mounting on contactors</th>
<th>Auxiliary contacts</th>
<th>Catalog number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front mounting</td>
<td>CWM9N…95N</td>
<td>1 0</td>
<td>BCXMFL10</td>
</tr>
<tr>
<td>Front mounting</td>
<td></td>
<td>0 1</td>
<td>BCXMFL01</td>
</tr>
<tr>
<td>Front mounting, early make</td>
<td></td>
<td>1 0</td>
<td>BCXMFLA10</td>
</tr>
<tr>
<td>Front mounting, late break</td>
<td></td>
<td>0 1</td>
<td>BCXMFLR01</td>
</tr>
<tr>
<td>Side mounting</td>
<td>CWM9N…CWM300N</td>
<td>1 1</td>
<td>BCXMML11</td>
</tr>
<tr>
<td>Side mounting</td>
<td></td>
<td>2 0</td>
<td>BCXMML20</td>
</tr>
<tr>
<td>Side mounting, second block</td>
<td></td>
<td>- 1</td>
<td>BCXMRL11</td>
</tr>
<tr>
<td>Side mounting, second block</td>
<td></td>
<td>2 0</td>
<td>BCXMRL20</td>
</tr>
</tbody>
</table>

Notes: Maximum # of added auxiliary contacts per contactor frame size: note that side mountable version has 2 aux. contacts per block. CWM9N…25N = 4 aux. contacts; CWM32N…40N = 6 aux. contacts; CWM50N…300N = 8 aux. contacts.

### Mechanical interlock block

<table>
<thead>
<tr>
<th>Location/description</th>
<th>Mounting on contactors</th>
<th>Auxiliary contacts</th>
<th>Catalog number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side mounted between two contactors</td>
<td>CWM9N…95N</td>
<td>0 0</td>
<td>BLIM 9-105</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 2</td>
<td>BLIM 02 9-105</td>
</tr>
<tr>
<td></td>
<td>CWM150N…CWM300N</td>
<td>0 0</td>
<td>BLIM 112-300</td>
</tr>
</tbody>
</table>

Note: For CWM9N…CWM95N the mechanical interlock can be used to interlock different frame sizes. For CWM150N…CWM300N, the mechanical interlock has to be used with contactors that have the same mechanical frame size.

### Surge suppressors

<table>
<thead>
<tr>
<th>Description</th>
<th>Mounting on contactors</th>
<th>Voltage range</th>
<th>Catalog number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limits switching transients from contactor pick-up</td>
<td>CWM9N…32N</td>
<td>24…48 V</td>
<td>BAMRC4 D53</td>
</tr>
<tr>
<td></td>
<td>CWM50N…95N</td>
<td>50…127 V</td>
<td>BAMRC5 D55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>130…250 V</td>
<td>BAMRC6 D63</td>
</tr>
<tr>
<td></td>
<td>CWM9N…95N</td>
<td>24…48 V</td>
<td>BAMRC7 D53</td>
</tr>
<tr>
<td></td>
<td>CWM50N…95N</td>
<td>50…127 V</td>
<td>BAMRC8 D55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>130…250 V</td>
<td>BAMRC9 D63</td>
</tr>
<tr>
<td></td>
<td>CWM9N…95N</td>
<td>270 - 380 V</td>
<td>BAMV D68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>400 - 510 V</td>
<td>BAMV D73</td>
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</tbody>
</table>

Note: CWM150N…300N with electronic module already have the surge suppressor built-in on the electronic module.
NEMA Rated Contactors

CWM_N Series - Replacement Coil

<table>
<thead>
<tr>
<th>Description</th>
<th>AC coil</th>
<th>DC coil</th>
<th>DC coil electronic module &amp; coil 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWM9N…18N</td>
<td>BCA4-25*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWM32N</td>
<td>BCA4-40*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWM50N…95N</td>
<td>BCA-105*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWM9N…25N</td>
<td>BCC-25+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWM32N</td>
<td>BECC4-40+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWM50N…95N</td>
<td>BECC-105+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CWM150N</td>
<td>BCE-150#</td>
<td>BCE-150#</td>
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</tr>
<tr>
<td>CWM300N</td>
<td>BCE-300#</td>
<td>BCE-300#</td>
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</tbody>
</table>

**Note:** 1) Module & coil must be purchased together for proper contactor operation.

* AC Coil Voltage Code Selection for Contactors CWM9N…CWMN105

<table>
<thead>
<tr>
<th>Voltage</th>
<th>60 Hz</th>
<th>50 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>V04</td>
<td>V03</td>
</tr>
<tr>
<td>Code</td>
<td>V10</td>
<td>V12</td>
</tr>
<tr>
<td>Code</td>
<td>V18</td>
<td>V18</td>
</tr>
<tr>
<td>Code</td>
<td>V24</td>
<td>V24</td>
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<tr>
<td>Code</td>
<td>V37</td>
<td>V37</td>
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<tr>
<td>Code</td>
<td>V47</td>
<td>V47</td>
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<td>Code</td>
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<td>Voltage</td>
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<td>Voltage</td>
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<tr>
<td>Voltage</td>
<td>47</td>
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<tr>
<td>Voltage</td>
<td>56</td>
<td>12</td>
</tr>
<tr>
<td>Voltage</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Voltage</td>
<td>10</td>
<td>12</td>
</tr>
</tbody>
</table>

+ DC Coil Voltage Code Selection

<table>
<thead>
<tr>
<th>Voltage</th>
<th>24 V ac / V dc</th>
<th>110 V ac / V dc</th>
<th>208-250 V ac / V dc</th>
<th>430-500 V ac / V dc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>E02</td>
<td>E10</td>
<td>E13</td>
<td>E21</td>
</tr>
<tr>
<td>Code</td>
<td>C03</td>
<td>C12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# AC/DC Coil Voltage Code Selection for Contactors CWM150N, CWM300N

<table>
<thead>
<tr>
<th>Voltage</th>
<th>24-28 V ac / V dc</th>
<th>110-130 V ac / V dc</th>
<th>208-250 V ac / V dc</th>
<th>430-500 V ac / V dc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>E02</td>
<td>E10</td>
<td>E13</td>
<td>E21</td>
</tr>
<tr>
<td>Code</td>
<td>C03</td>
<td>C12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Motor Protection and Starters
- Modular contactors up to 800 A (AC-3)
- Compact contactors up to 22 A (AC-3)
- Control relays
- Motor protective circuit breakers up to 100 A
- Enclosed starters (plastic or metallic enclosures)
- Customized starters for OEM applications
- Overload relays

Electrical Circuit Protection
- Miniature circuit breakers up to 125 A
- Molded case circuit breakers up to 1,600 A (3P and 4P)
- Air circuit breakers up to 6,300 A
- D gG fuses up to 63 A
- NH gL-G fuses up to 630 A
- NH aR fuses up to 1,000 A
- Switch-disconnectors for door or base mounting up to 160 A
- Residual current circuit-breaker up to 100 A (30 or 300 mA)
- Surge suppressors

Pushbuttons and Pilot Lights
- IP66 pushbuttons and pilot lights
- Flush, guarded, extended or mushroom illuminated or non illuminated pushbuttons
- Selector switches lever or knob illuminated or non illuminated or with key
- Emergency pushbuttons (according EN 418)
- Contact blocks with “positive break” system
- Double pushbutton
- Pilot lights with LED technology
- Customized descriptions
- Decentralized control stations - PBW

Electrical Connections
- Terminal blocks with screw type connection
- Terminal block with spring type connection
- Terminal blocks for fuses
- Busbar and busbar connectors
- Identifiers for terminals and cables
- Printing system

Smart Relay
- Low voltage electric motor management system
- Compact and modular concept
- Full motor protection and monitoring through current and voltage measurements
- Multiple operating modes including PLC functions
- Easy network module change via exclusive drawer system (Modbus, DeviceNet, Profinbus modules)
- USB communication
- Free WLP programming software

Electronic Relays
- Timing, monitoring and level relays
- 22.5 mm width frame
- LED for status indication
- Multifunction three-phase monitoring relays and timer relays

Capacitors
- Power factor compensation up to 35 kvar (@480 V)
- Lighting
- Motor-run