## Enclosed UL 98 fused disconnect switches utilizing the Compact Circuit Protector



## Catalog symbols

- ER01-_ NEMA 1 enclosure
- ER3R-_ NEMA 3R enclosure
- ER04-_ NEMA 4 enclosure
- ER4X-_ NEMA 4X stainless enclosure
- ER4P-_ NEMA 4X plastic enclosure
- ER12-_ NEMA 12 enclosure


## Description

Bussmann ${ }^{\text {TM }}$ series $U L^{\circledR} 98$ fused disconnects utilize the Bussmann series Compact Circuit Protector switch. With ratings up to 600 Vac and 30, 60, 100 and 200 A, these disconnects feature a 200 kA SCCR in a compact footprint and enclosures ratings to meet a wide variety of application needs.
Available with black/gray or red/yellow handles, the 30,60 , and 100 amp switches come in 2and 3 -pole versions, while the 200 amp switch comes in only a 3-pole version.

## Features and benefits

- Compact (both CCP and enclosure) for installation ease.
- NEMA 1, 3R, 4, 4X and 12 enclosures meet most application demands.
- Door/handle interlock feature prevents opening the enclosure while the switch is energized
- Front rotary handles for easy switch operation.
- All disconnects feature a fuse/switch interlock that prevents removing or installing fuses while the switch is energized.
- 30, 60, 100 and 200 A disconnects feature an amp rating rejection feature that prevents a fuse of a higher rating from being installed.
- Class CC and CF CUBEFuse replacements are readily available from major electrical distributors.
- Handles accept up to three $1 / 4^{\prime \prime}$ locks for greater safety and compliance with lockout/ tagout maintenance requirements.
- Handles are defeatable for unique maintenance procedures and can be configured for lock-on, if needed.
- CCP with either Class CC or Class CF fuses provides a 200 kA SCCR to withstand high fault currents.
- 30, 60, 100 and 200 A switches utilizing the UL Class CF CUBEFuse with 200 kA interrupting ratings withstand virtually any fault current level.
- CCP is horsepower rated to serve as a motor disconnect means.*
- Easily applied as an "in-sight disconnect means" for compliance with NEC ${ }^{\circledR} 110.9$.

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Enclosed UL 98 fused disconnect catalog numbers

|  | UL fuse class | Poles | Handle color | Enclosure rating |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amps |  |  |  | NEMA 1 | NEMA 3R | NEMA 4 | NEMA 4X <br> Stainless | NEMA 4X plastic | NEMA 12 |
| 30 | CC | 3 | Black/gray | ER01-030CC3PB | ER3R-030CC3PB | ER04-030CC3PB | ER4X-030CC3PB | ER4P-030CC3PB | ER12-030CC3PB |
|  |  |  | Red/yellow | ER01-030CC3PR | ER3R-030CC3PR | ER04-030CC3PR | ER4X-030CC3PR | ER4P-030CC3PR | ER12-030CC3PR |
|  |  | 2 | Black/gray | ER01-030CC2PB | ER3R-030CC2PB | ER04-030CC2PB | ER4X-030CC2PB | ER4P-030CC2PB | ER12-030CC2PB |
|  |  |  | Red/yellow | ER01-030CC2PR | ER3R-030CC2PR | ER04-030CC2PR | ER4X-030CC2PR | ER4P-030CC2PR | ER12-030CC2PR |
| 30 | CF | 3 | Black/gray | ER01-030CF3PB | ER3R-030CF3PB | ER04-030CF3PB | ER4X-030CF3PB | ER4P-030CF3PB | ER12-030CF3PB |
|  |  |  | Red/yellow | ER01-030CF3PR | ER3R-030CF3PR | ER04-030CF3PR | ER4X-030CF3PR | ER4P-030CF3PR | ER12-030CF3PR |
|  |  | 2 | Black/gray | ER01-030CF2PB | ER3R-030CF2PB | ER04-030CF2PB | ER4X-030CF2PB | ER4P-030CF2PB | ER12-030CF2PB |
|  |  |  | Red/yellow | ER01-030CF2PR | ER3R-030CF2PR | ER04-030CF2PR | ER4X-030CF2PR | ER4P-030CF2PR | ER12-030CF2PR |
| 60 | CF | 3 | Black/gray | ER01-060CF3PB | ER3R-060CF3PB | ER04-060CF3PB | ER4X-060CF3PB | ER4P-060CF3PB | ER12-060CF3PB |
|  |  |  | Red/yellow | ER01-060CF3PR | ER3R-060CF3PR | ER04-060CF3PR | ER4X-060CF3PR | ER4P-060CF3PR | ER12-060CF3PR |
|  |  | 2 | Black/gray | ER01-060CF2PB | ER3R-060CF2PB | ER04-060CF2PB | ER4X-060CF2PB | ER4P-060CF2PB | ER12-060CF2PB |
|  |  |  | Red/yellow | ER01-060CF2PR | ER3R-060CF2PR | ER04-060CF2PR | ER4X-060CF2PR | ER4P-060CF2PR | ER12-060CF2PR |
| 100 | CF | 3 | Black/gray | ER01-100CF3PB | ER3R-100CF3PB | ER04-100CF3PB | ER4X-100CF3PB | ER4P-100CF3PB | ER12-100CF3PB |
|  |  |  | Red/yellow | ER01-100CF3PR | ER3R-100CF3PR | ER04-100CF3PR | ER4X-100CF3PR | ER4P-100CF3PR | ER12-100CF3PR |
|  |  | 2 | Black/gray | ER01-100CF2PB | ER3R-100CF2PB | ER04-100CF2PB | ER4X-100CF2PB | ER4P-100CF2PB | ER12-100CF2PB |
|  |  |  | Red/yellow | ER01-100CF2PR | ER3R-100CF2PR | ER04-100CF2PR | ER4X-100CF2PR | ER4P-100CF2PR | ER12-100CF2PR |
| 200 | CF | 3 Pole | Black/Grey | ER01-200CF3PB* | ER3R-200CF3PB* | ER04-200CF3PB* | ER4X-200CF3PB* | ER4P-200CF3PB | ER12-200CF3PB* |
|  |  |  | Red/Yellow | ER01-200CF3PR* | ER3R-200CF3PR* | ER04-200CF3PR* | ER4X-200CF3PR* | ER4P-200CF3PR | ER12-200CF3PR* |

*Options are in the $20^{\prime \prime} \times 16^{\prime \prime} \times 8^{\prime \prime}$ plastic enclosure. For the $21^{\prime \prime} \times 16^{\prime \prime} \times 10^{\prime \prime}$ carbon and stainless steel options, add "-CST" to the end of the part number (e.g. ER01-200CF3PB-CST).
Switch catalog numbers and horsepower ratings $\dagger$

| Catalog no. | Poles | Amps | Volts | SCCR | Max horsepower rating (Vac) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 120 | 240 | 480 | 600 |
| 30 amp Class CC |  |  |  |  |  |  |  |  |
| CCP2R-2-30CC | 2 | 30 | 600 Vac | $\begin{aligned} & \text { AC: } 200 \mathrm{kA}, \\ & \text { DC: } 20 \mathrm{kA} \end{aligned}$ | - | 2 | - | - |
| CCP2R-3-30CC | 3 |  |  |  | 3/4 | 3 | 5 | 7.5 |
| 30 amp Class CF |  |  |  |  |  |  |  |  |
| CCP2R-2-30CF | 2 | 30 | $600 \mathrm{Vac} / 125 \mathrm{Vdc}$ | AC: 200 kA , DC: 100 kA | - | 3 | - | - |
| CCP2R-3-30CF | 3 |  | 600 Vac |  | - | 5 | 15 | 10 |
| 60 amp Class CF |  |  |  |  |  |  |  |  |
| CCP2R-2-60CF | 2 | 60 | $600 \mathrm{Vac} / 125 \mathrm{Vdc} *$ | AC: 200 kA , DC: 100 kA | - | 7-1/2 | - | - |
| CCP2R-3-60CF | 3 |  | 600 Vac |  | - | 7-1/2 | 20 | 10 |
| 100 amp Class CF |  |  |  |  |  |  |  |  |
| CCP2R-2-100CF | 2 | 100 | $600 \mathrm{Vac} / 125 \mathrm{Vdc} * *$ | AC: 200 kA , DC: 100 kA | - | 10 | - | - |
| CCP2R-3-100CF | 3 |  | 600 Vac |  | - | 20 | 50 | 40 |
| 200 amp Class CF |  |  |  |  |  |  |  |  |
| CCP2-3-200CF | 3 | 200 | 600 Vac | AC: 200 kA | - | 50 | 100 | 150 |

† For more information, see data sheet 10789 for the Class CC switches and data sheet 10801 for Class CF switches.

* 125 Vdc for installed fuse amp ratings up to 40 A .24 Vdc for installed fuse amp ratings from 45 to 60 A .
** 125 Vdc for installed fuse amp ratings up to $80 \mathrm{~A}, 24 \mathrm{Vdc}$ for installed fuse amp ratings from 90 to 100 A .


## Enclosure agency information

- UL Listed, Guide NITW, File E170282


## Enclosed CCP agency information

## UL Class CC fuse versions

- UL 98 Listed, File E302370, Guide WHTY
- cULus to CSA Standard 22.2 No. 4-04, File 302370, Guide WHTY7
- RoHS compliant

For details, see data sheets:
Enclosure Dimensions

| UL fuse class | Amp range | $\mathbf{H} \mathbf{H} \mathbf{~ W} \mathbf{x} \mathbf{D}$ (in) |
| :--- | :---: | :---: |
| CC | 30 | $10 \times 8 \times 6$ |
| CF | 30 |  |
|  | 60 |  |
|  | 100 | $12 \times 10 \times 8$ |
|  | 200 | $20 \times 16 \times 8^{*}$ |

[^1] stainless steel options are $21^{\prime \prime} \times 16^{\prime \prime} \times 10$."

- 10789 for Class CC switches
- 10801 for Class CF CUBEFuse switches

Available Bussmann series fuses

| UL fuse class | Amp range | Type | Catalog symbol | Data sheet |
| :--- | :---: | :---: | :---: | :---: |
| CC | $1 / 2-30$ | Time-delay | LP-CC | 1023 |
|  | $1 / 4-30$ | Time-delay | FNQ-R | 1014 |
|  | $1 / 10-30$ | Fast-acting | KTK-R | 1015 |
| CF | $1-200$ | Time-delay, non-indicating | TCF_RN | 9000 |
|  | $6-200$ | Time-delay indicating | TCF_ |  |

## Box lug terminal conductor data

| Wire type | AWG range | Class | Quantity | Torque $\mathrm{N} \bullet \mathrm{m}$ (lb-in) |
| :---: | :---: | :---: | :---: | :---: |
| 30 A Class CC switches |  |  |  |  |
| $\begin{gathered} 75^{\circ} \mathrm{C} \\ \mathrm{Cu} \end{gathered}$ | 4-18 | Stranded, Class B to K | Single | 2.26 (20) |
|  | 6-8 | Stranded, Class B/C | Dual | 3.39 (30) |
|  | 6-8 | Stranded, Class K | Dual | 2.26 (20) |
|  | 10-18 | Stranded, Class B to K |  |  |
|  | 10-18 | Solid | Single/dual |  |
|  | 4-18 | Stranded, UL ferrule, Class B/C | Single | 3.39 (30) |
|  | 6-18 |  | Twin ${ }^{+}$ |  |
|  | 4-18 | Stranded, UL ferrule, Class K | Single | 2.82 (25) |
|  | 6-18 |  | Twin ${ }^{+}$ |  |
| $\begin{gathered} 75^{\circ} \mathrm{C} \\ \mathrm{Al} \end{gathered}$ | 4-8 | Stranded | Single | 2.26 (20) |
|  | 6 |  | Dual | 2.82 (25) |
|  | 8 |  |  | 2.26 (20) |
| 30 and 60 A Class CF switches |  |  |  |  |
| $\begin{gathered} 75^{\circ} \mathrm{C} \\ \mathrm{Cu} \end{gathered}$ | 4-6 | Stranded, Class B to K | Single | 3.95 (35) |
|  | 8-18 |  |  | 2.26 (20) |
|  | 6-8 | Stranded, Class B/C | Dual | 3.39 (30) |
|  |  | Stranded, Class K |  |  |
|  | 10-18 | Stranded, Class B to K |  | 2.26 (20) |
|  | 10-18 | Solid | Single/dual | 2.26 (20) |
|  | 4-18 | Stranded, UL ferrule, Class B/C | Single | 3.39 (30) |
|  | 6-18 |  | Twin ${ }^{+}$ |  |
|  | 4-18 | Stranded, UL ferrule, Class K | Single | 2.82 (25) |
|  | 6-18 |  | Twin ${ }^{+}$ |  |

$\dagger$ Two stranded conductors placed in one UL Listed twin ferrule.

## Lineside and loadside fork terminal

- Fork terminal suitable for line, load or accessory connection, max. 30 A suitable for use with:
- 10-24 screw for 30 and 60 A switches
- 1/4-28 screw for 100 A switches

| Wire type | AWG range | Class | Quantity | Torque N•m (lb-in) |
| :---: | :---: | :---: | :---: | :---: |
| 100 A Class CF switches |  |  |  |  |
| $\begin{gathered} 75^{\circ} \mathrm{C} \\ \mathrm{Cu} \end{gathered}$ | 12-18 | Stranded, Class B/C | Single | 2.26 (20) |
|  | 10 |  |  | 2.82 (25) |
|  | 8 |  |  | 4.52 (40 |
|  | 4-6 |  |  | 5.08 (45) |
|  | 1-3 |  |  | 6.21 (55) |
|  | 4-12 |  | Dual | 5.08 (45) |
|  | 12-18 | Stranded, UL ferrule, Class B/C | Single | 2.26 (20) |
|  | 10 |  |  | 3.95 (35) |
|  | 1-8 |  |  | 4.52 (40) |
|  | 10-18 |  | Twint | 2.26 (20) |
|  | 6-9 |  |  | 2.82 (25) |
|  | 10-18 | Solid | Single/Dual | 2.26 (20) |
|  | 8-18 | Class K | Single | 2.26 (20) |
|  | 1-7 |  |  | 3.39 (30) |
|  | 3-10 |  | Dual | 5.08 (45) |
|  | 8-18 | Class K, UL ferrule | Single | 2.26 (20) |
|  | 1-7 |  |  | 3.39 (30) |
|  | 6-18 |  | Twin | 2.26 (20) |
| 200 A Class CF switches |  |  |  |  |
| $75^{\circ} \mathrm{C}$ | $\begin{gathered} 350-4 \\ (185- \\ 25) \end{gathered}$ | Solid/standed | Twin | 28.2 (250) |

## Available multi-wire lug kit and conductor ratings

| Catalog no. | Description | Lugs per cat. no. | Wire range AWG ( $\mathrm{mm}^{\mathbf{2}}$ ) | Wire type/temp. |
| :---: | :---: | :---: | :---: | :---: |
| All 30 and 60 A switches |  |  |  |  |
| CCP2-MW1-3 | 3-port multi-wire lug kit with shrouds | 3 | 4-14 (25-2.5) $\dagger$ | Cu/Al $75^{\circ} \mathrm{C} \dagger$ |
| 100 A switches |  |  |  |  |
| CCP2-MW1-6 | 6-port multi-wire lug kit with shrouds | 3 | 4-14 (25-2.5) † | $\mathrm{Cu} / \mathrm{Al} 75^{\circ} \mathrm{C}+$ |
| 200 A switches |  |  |  |  |
| CCP2-L2-1 | Stainless steel lug | 1 | 350-4 (185-25) | $\mathrm{Cu} 75^{\circ} \mathrm{C}$ |
| CCP2-MW2-3 | 3 -port multi-wire terminal with shroud* | 3 | 2-14 (35-2.5) | $\mathrm{Cu} / \mathrm{Al} 75^{\circ} \mathrm{C}$ |
| CCP2-MW2-6 | 6 -port muli-wire terminal with shroud* | 3 | 6-14 (16-2.5) | $\mathrm{Cu} / \mathrm{Al} 75^{\circ} \mathrm{C}$ |

† Conductor material (Cu or Al), conductor class, single/dual per port and torque varies. See data sheet 10801 for details.

* These lugs also accept a $1 / 4$ " quick connect control wire terminal. Order catalog number CCP2-CWK2 (package of 12).


Available multi-wire lug kit extends application flexibility and reduce component count by combining the switch and power distribution block into one, finger-safe unit.


For enclosed units with a pistol grip style handle, an offset screwdriver can be used to engage and disengage the latching mechanism on the enclosure.

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[^0]:    * Not all applications carry a UL horsepower rating

[^1]:    *Size for NEMA 1, 3R, 4, 4P, 12 options with plastic enclosure. Carbon and

