

BCBS 600Vdc and 1000Vdc Series Standard Combiner Boxes

Features

- 4 to 24 Input circuits
- 600Vdc or 1000Vdc Rated units
- Finger-safe Cooper Bussmann modular fuse holders*
- Configured for both positive and negative grounded arrays
- Single or dual 90°C output terminals
- Negative input terminal blocks
- Steel or fiberglass NEMA 3R, 4 or 4X enclosures with seamless door gaskets
- Operating temperature -40°C to 50°C
- Common configurations in stock for fast shipment**



BCBS Series Standard Box

| Specifications | | | | | | |
|---|---|-----------------|-----------------|--|-----------------|-----------------|
| Voltage | 600Vdc Series | | | 1000Vdc Series | | |
| Rating standard | Listed to UL1741 cETL Certified to CSA Standard C22.2 No. 29 | | | IEC Rated Components Self-Certified Fuse Gear | | |
| Fuse type | 600Vdc Midget fuses*** | | | 1000Vdc PV fuses† | | |
| Number of input circuits | 4 to 12 | 16 | 20 to 24 | 4 to 12 | 16 | 20 to 24 |
| Input conductor range | 4-16AWG | 4-16AWG | 4-16AWG | 4-16AWG | 4-16AWG | 4-16AWG |
| Number of output conductors | 1 or 2 | 1 or 2 | 1 or 2 | 1 or 2 | 1 or 2 | 1 or 2 |
| Output conductor range | 350kcmil-6AWG | 350kcmil-6AWG | 350kcmil-6AWG | 350kcmil-6AWG | 350kcmil-6AWG | 350kcmil-6AWG |
| Max fuse size†† | 25A†† | 20A | 20A | 25A | 20A | 20A |
| Max rated current (DC continuous) | 310A | 400A | 400A | 310A | 400A | 400A |
| Steel enclosure dimensions (in), weight | 16x12x6, 30 lbs | 16x16x6, 36 lbs | 20x20x6, 46 lbs | 16x12x6, 30 lbs | 16x16x6, 36 lbs | 20x20x6, 46 lbs |
| Fiberglass enclosure dim. (in), weight | 16x14x7, 18 lbs | 20x16x8, 22 lbs | 24x20x8, 35lbs | 16x14x7, 18 lbs | 20x16x8, 22 lbs | 24x20x8, 35lbs |

Part Number System Standard Combiner Box Part Number System†

Example: BCBSK-12-10F S06 R

| | | | |
|--------------------------------------|-------------------------------|----------------------------------|------------------------------|
| Series Prefix | BCBS – Standard Combiner Box | Blank - for 600Vdc systems | K - for 1000Vdc systems |
| Number of Poles | 04 08 12 16 20 24 | | |
| 600Vdc Fuses (Amps)†† | 00 – No Fuses Included | 01 02 03 04 | |
| 1000Vdc Fuses (Amps) | 01 02 03 04 05 06 08 10 12 15 | | (see Max fuse size in table) |
| Enclosure | R – NEMA 3/3R | 4 – NEMA 4 (Powder Coated Steel) | F – NEMA 4X (Fiberglass) |
| Surge Protective Device (SPD) | S06 - 600Vdc | S10 - 1000Vdc | |
| SPD Remote Contact Signaling | R - With remote signaling | Blank - no remote contact | |

Typical Layout



Standard BCBS Series
4 to 24 Circuits
BCBS-12-00F Pictured

* See Data Sheet 2053 for details.

** Please verify stocked configurations with your Cooper Bussmann sales representative.

** Certain specifications may be modified to meet requirements, please consult factory.

*** See Data Sheet 2038 (DCM) or 2020 (KLM) for details.

† See Data Sheet 720110 for details.

†† 12 Circuit inputs are limited to 20A fuses.

‡ Total system ampacity (poles x fuse amp rating) may not exceed 400 amps.

‡‡ When fuses are specified, 600Vdc midget fuses are installed in holders.

BCBD Series with Integrated Disconnect

Features

- ETL Listed to UL1741 Standard
- cETL Certified to CSA Standard C22.2 No. 29
- 28, 55, 75, 150 and 245A Integrated disconnect switches
- 4 to 24 Input circuits
- Continuous duty rated at 600Vdc
- 600Vdc Midget fuses* for overcurrent protection
- Finger-safe Cooper Bussmann modular fuse holders**
- Configured for both positive and negative grounded arrays
- Single or dual 90°C output terminals
- Negative input terminal blocks
- Steel or fiberglass NEMA 3R, 4 or 4X enclosures with seamless door gaskets
- Operating temperature -40°C to 50°C
- Common configurations in stock for fast shipment***



BCBD Series Integrated Disconnect Box

| Disconnect Rating (Amps) | Specifications† | | | | |
|--|-----------------|-----------------|-----------------|--|------------------|
| | 28A | 55A | 75A | 150A | 245A |
| Number of input circuits | 4 | 4 | 4 to 12 | 4 to 24 | 4 to 24 |
| Input conductor range | 4-14AWG | 4-14AWG | 4-14AWG | 4-14AWG | 4-14AWG |
| Number of output conductors | 1 or 2 | 1 or 2 | 1 or 2 | 1 or 2 | 1 or 2 |
| Output conductor range | 2/0-14AWG | 2/0-14AWG | 350kcmil-6AWG | 350kcmil-6AWG | 350kcmil to 6AWG |
| Max fuse size | 30A | 30A | 30A | 6A to 30A†† | 10A to 30A†† |
| Steel enclosure dimensions (in), weight | 12x10x6, 15 lbs | 12x10x6, 15 lbs | 20x20x6, 42 lbs | 20x20x6, 50 lbs, or 20x24x6, 50 lbs | 24x24x6, 55 lbs |
| Fiberglass enclosure dimensions (in), weight | 14x12x6, 12 lbs | 14x12x7, 12 lbs | 20x16x8, 28 lbs | 24x20x18, 35 lbs, or 24x24x10, 35 lbs | 24x24x8, 40 lbs |

Part Number System Combiner Box with Disconnect Part Number System†

Example: BCBD150-12-10F = B C B D 1 5 0 - 1 2 - 1 0 F S 0 6 R

| | | |
|--------------------------------------|---|-------|
| Series Prefix | BCBD – Combiner Box w/ Disconnect | _____ |
| Disconnect Ampacity | 28 55 75 150 245 | _____ |
| Number of Poles | 04 08 12 16 20 24 | _____ |
| Fuses (Amps)†† | 00 – No Fuses Included 01 02 03 04 | _____ |
| | 05 06 08 09 10 12 15 20 25 (see Max fuse size in table) | _____ |
| Enclosure | R – NEMA 3/3R | _____ |
| | 4 – NEMA 4 (Powder Coated Steel) | _____ |
| | F – NEMA 4X (Fiberglass) | _____ |
| Surge Protective Device (SPD) | S06 - 600Vdc | _____ |
| | S10 - 1000Vdc | _____ |
| SPD Remote Contact Signaling | R - With remote signaling | _____ |
| | Blank - no remote contact | _____ |

Typical Layout



Integral Disconnect on BCBD Series
4 to 24 Circuits
BCBD245-24-00R Pictured

* See Data Sheet 2038 (DCM) or 2020 (KLM) for details.

** See Data Sheet 2053 for details.

*** Please verify stocked configurations with your Cooper Bussmann sales representative.

† Certain specifications may be modified to meet requirements, please consult factory.

†† Depends on the number of input strings:

- BCBD150 (ckt/max A): 4/30A, 8/15A, 12/12A, 16/8A, 20/6A, 24/6A

- BCBD245 (ckt/max A): 4/30A, 8/30A, 12/20A, 16/12A, 20/12A, 24/10A

‡ Total system ampacity (poles x fuse amp rating) may not exceed ampacity of selected disconnect switch.

‡‡ When fuses are specified, 600Vdc midget fuses are installed in holders.

Recombiner (Array Combiner) Boxes

Features

- ETL Listed to UL1741 Standard
- cETL Certified to CSA Standard C22.2 No. 29
- 4 to 12 Input circuits
- Continuous duty rated at 600Vdc
- 600Vdc PVS-R Fuses* for overcurrent protection
- 100A and 200A Fuse case sizes
- 70A – 200A Fuse ampacity configurations
- Steel or fiberglass NEMA 3R, 4 or 4X rated enclosures with seamless door gaskets
- Operating temperature -40°C to 50°C



| Fuse Case Size | Specifications** | | | | | |
|-----------------------------------|------------------|-----------------|------------------|-----------------|------------------|------------------|
| | 100 | | | 200 | | |
| Number of input circuits | 4 | 8 | 12 | 4 | 8 | 12 |
| Number of output conductors | 2 | 4 | 4 | 2 | 4 | 4 |
| Input conductor range | 6-2/0AWG | 6-2/0AWG | 6-2/0AWG | 6-4/0AWG | 6-4/0AWG | 6-4/0AWG |
| Output conductor range | 4-500kcmil | 4-500kcmil | 4-500kcmil | 4-500kcmil | 4-500kcmil | 4-500kcmil |
| Max fuse rating | up to 100A | up to 100A | up to 100A | up to 200A | up to 200A | up to 200A |
| Max rated current (DC continuous) | 760A | 1520A | 1520A | 760A | 1520A | 1520A |
| Enclosure dimensions (in), weight | 24x24x6, 34 lbs | 36x36x8, 94 lbs | 42x36x8, 110 lbs | 36x36x8, 94 lbs | 48x36x8, 135 lbs | 60x36x8, 160 lbs |

Recombiner Box Part Number System

Example: BCBR100-08-125R-S06R = B C B R 1 0 0 - 0 8 - 1 2 5 R S 0 6 R

| | |
|--------------------------------------|--|
| Series Prefix | BCBR – Recombiner Box |
| Fuse Case Size | 100 200 |
| Number of Circuits | 04 08 12 |
| Fuses (Amps)*** | 000 – No Fuses Included |
| | 070 080 090 100 (100 amp fuse case size) |
| | 125 150 175 200 (200 amp fuse case size) |
| Enclosure | R – NEMA 3/3R |
| | 4 – NEMA 4 (Powder Coated Steel) |
| | F – NEMA 4X (Fiberglass) |
| Surge Protective Device (SPD) | S06 - 600Vdc |
| SPD Remote Contact Signaling | R - With remote signaling |
| | Blank - no remote contact |

* See Data Sheet 4203 for details.

** Certain specifications may be modified to meet requirements, please consult factory.

*** Fuse ampacity must coincide with fuse case size specified e.g., 100A or 200A.

Integrated Surge Protective Device*

Features

- Only true UL 1449 3rd Edition (Type 2)**
- IEC 61643-11 Type 2, IEC 61643-1 Class II
- Available in standard and disconnect combiner boxes***
- UL 94V0 Thermoplastic material
- IP20 Finger-safe
- 600Vdc, 1000Vdc, 1200Vdc configurations
- *easyID*TM Visual status indication
- Available with remote contact signaling
- Operating temperature -40°C to 80°C
- Five year warranty†



BSPH _____ YPV(R)

*easyID*TM
Visual Status Indication



Remote Signal
Contact Available



| Specifications | | | |
|-----------------------------------|-------------------------------------|---------------|---------|
| Max Continuous Operating Voltage | 600Vdc | 1000Vdc | 1200Vdc |
| Total Discharge Current | 40kA | 40kA | 30kA |
| Voltage Protection Level | <2.5kV | <4.0kV | <4.5kV |
| Voltage Protection Level at 5kA | <2.0 kV | <3.5kV | <4.0kV |
| Integrated Fuse Breaking Capacity | 30kA | 30kA | 30kA |
| Nominal Discharge Current | 12.5kA | 12.5kA | 12.5kA |
| Max Discharge Current | 25kA | 25kA | 25kA |
| Response time | <25ns | <25ns | <25ns |
| Min Conductor Ratings | | 60/75°C 14AWG | |
| Max Conductor Ratings | 60/75°C 2AWG Stranded 4AWG Flexible | | |

Dimensions - mm



Shown with optional remote contact signaling

Module Circuit Diagrams



BSPH _____ YPV(R)

Shown with optional remote contact signaling

* See Data Sheet 2055 for additional details.

** Does not apply to 1200Vdc unit.

*** Surge module may increase the enclosure size requirement, please see factory for specific sizes.

† See Cooper Bussmann SPD Limited Warranty Statement (3A1502) for details at www.cooperbussmann.com/surge.

Current Monitoring Device

Features

- Available in standard and disconnect combiner boxes*
- Uses Obvius Solar Current Monitor (SCM) unit
- Unique “Mesh” technology optimizes routing communications with no configuration
- Twisted pair output or wireless communication
- 8 or 16 Input circuit monitoring units
- Monitors 4 to 24 input circuits



| Specifications | |
|------------------------|---|
| Processor | 60MHz Arm7 embedded CPU processor |
| LEDs | 3 x RF, 2 x RS 485, 2 x pulse, alive, alarm |
| Protocol | Modbus RTU |
| Address Setting | Modbus address may be set from 1 to 247 via DIP switch |
| Inputs | <ul style="list-style-type: none"> - 2 pulse inputs, dry contact - Monitor consumption/rate/min/max - Pulse rate/width user selectable to 10Hz, 50Hz, 100Hz, or 250Hz. - Pulse rate option: 10Hz, minimum pulse width 50ms - Pulse rate option: 50Hz, minimum pulse width 10ms - Pulse rate option: 100Hz, minimum pulse width 5ms - Pulse rate option: 250Hz, minimum pulse width 2ms - Contact closure threshold 100W to 2.5kW user selectable - Pulse count values are stored in non-volatile memory. |
| Communications | 1 RS-485 (+, -, S), 9600/19200 baud, N, 8, 1, two wire. Supports up to 32 external devices per ModHopper (expandable) |
| RF | Frequency Hopping, ISM band, -SN Option: 400MHz Receive Only (Sensor Network) |
| Environmental | North America: Temperature 0° – 50°C, 0 – 95% humidity, non-condensing. Pollution degree 2, altitude up to 2000M |
| EMC | FCC CFR 47 Part 15, Class A |
| Size | 6.5x4.5x2" (260x64x45mm) |
| Weight | 1.25lbs (0.67 kg) |
| Power Input | 9-30Vdc, 200mA |

*Monitoring module may increase the enclosure size requirement, please consult factory for specific sizes.

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.