

**IBSB/IBSBR Insulated Braided Conductor for Circuit Breakers - IBSBR240-830 (558545MTO)**



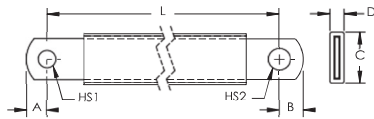
IBSB/IBSBR is the ideal ready-to-install flexible wire replacement solution that is specifically designed for connections to all molded case circuit breakers, including the most compact breakers on the market. It connects to the front access terminals of the breakers without any additional accessories, such as angular connectors, spreaders, ring terminal connectors or extenders. IBSB/IBSBR is available in cross section of 25 to 240 mm<sup>2</sup> (49.34 to 273.65 kcmil), lengths from 230 to 1,030 mm (9.06" to 40.55"), and 80 to 350 A tinned and 400 to 630 A bare (red) copper.

Manufactured in an ISO 9001 certified proprietary automated facility, IBSB/IBSBR is formed by weaving high-quality electrolytic copper wire to form a durable low voltage connector with maximum flexibility that allows for more compact power connections to circuit breakers. The IBSB/IBSBR allows users to reduce the total size and weight of the installation, improving both design flexibility and assembly aesthetics.

The IBSB/IBSBR features integral pre-punched palms that are ready to connect out of the box. There are no lugs to purchase or install, making connections simpler and faster and eliminating faulty connections due to vibration or fatigue. The insulation is a high-resistance self-extinguishing PVC.

IBSB/IBSBR is compatible with all major brand molded case circuit breakers. Contact your ERIFLEX representative to determine the correct size for your application.

- Suitable for all main molded case circuit breakers
- Resistant to vibration, improving reliability and performance
- Improves assembly flexibility and aesthetics
- Quick and easy installation
- No additional cutting, stripping, crimping and punching needed
- Integral palm without lugs or terminals reduces material and assembly weight
- Small wire diameter provides maximum flexibility
- RoHS compliant



|                                    |                             |
|------------------------------------|-----------------------------|
| Part Number                        | IBSBR240-830                |
| Article Number                     | 558545                      |
| Typical Application Current Rating | 630 A                       |
| Finish                             | Bare                        |
| Material                           | Copper<br>Polyvinylchloride |
| Dielectric Strength                | 20 kV/mm                    |
| Flammability Rating                | UL® 94V-0                   |
| Max Working Voltage, IEC/UL 758    | 1,000 VAC                   |

|                             |  |
|-----------------------------|--|
| Part Number                 | IBSBR240-830   |
|                             | 1,500 VDC  |
| Max Working Voltage, UL 67  | 600 VAC/DC   |
| Working Temperature         | 105 °C Max   |
| Operating Temperature       | -50 to 105 °C  |
| Wire Diameter               | 0.15 mm  |
| Complies With               | IEC® 60439.1<br>IEC® 61439.1<br>IEC® 61439.1 Class II  |
| Cross Section               | 240 mm <sup>2</sup>  |
| Conductor Width             | 32 mm  |
| Conductor Thickness         | 9.2 mm   |
| Length (L)                  | 830 mm   |
| A                           | 12 mm  |
| B                           | 14 mm  |
| C                           | 39 mm  |
| D                           | 18.5 mm  |
| Hole Size 1 (HS1)           | 10.5 mm  |
| Hole Size 2 (HS2)           | 12.5 mm  |
| Unit Weight                 | 2.16 kg  |
| Certifications              | ABS 13-HS1070074-PDA<br>Bureau Veritas 41939 BV<br>CE<br>CSA 90005<br>cURus<br>EAC0234251 (Russian Federation)<br>IEC61439-1 Class II IBS-IBSB-IBSBR<br>IEC 61439-1 IBS-IBSB-IBSBR<br>RoHS |
| Standard Packaging Quantity | 2 pc   |
| UPC                         | 78285679614  |
| EAN-13                      | 3479775585451  |

| Maximum Ampacity Ratings               |              |              |              |              |              |              |              |                           |                           |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------------------|---------------------------|
| Cross Section (mm <sup>2</sup> /kcmil) | ΔT 30° C (A) | ΔT 40° C (A) | ΔT 45° C (A) | ΔT 50° C (A) | ΔT 55° C (A) | ΔT 60° C (A) | ΔT 70° C (A) | 2 Bar Current Coefficient | 3 Bar Current Coefficient |
| 25/49.34                               | 116          | 134          | 142          | 150          | 157          | 164          | 177          | 1.6                       | 2                         |
| 50/98.68                               | 213          | 246          | 260          | 274          | 288          | 301          | 325          | 1.6                       | 2                         |
| 70/138.15                              | 226          | 261          | 277          | 291          | 306          | 319          | 345          | 1.6                       | 2                         |
| 100/197.35                             | 298          | 344          | 365          | 385          | 404          | 422          | 456          | 1.6                       | 2                         |
| 120/236.82                             | 363          | 419          | 444          | 468          | 491          | 513          | 554          | 1.6                       | 2                         |
| 185/365.1                              | 416          | 480          | 509          | 537          | 563          | 588          | 635          | 1.6                       | 2                         |
| 240/473.65                             | 556          | 642          | 681          | 718          | 753          | 786          | 849          | 1.6                       | 2                         |

| Circuit Breaker Compatibility      |                 |                  |         |          |           |           |           |
|------------------------------------|-----------------|------------------|---------|----------|-----------|-----------|-----------|
| Circuit Breaker Current Rating     | 125/160 A       | 250 A            | 300 A   | 350 A    | 400 A     | 500 A     | 630 A     |
| Part Number                        | IBSB25x         | IBSB50x          | IBSB70x | IBSB100x | IBSBR120x | IBSBR185x | IBSBR240x |
| Schneider Electric® Compact® (IEC) | NSA NG 125      | NSX 250          | NSX 400 | NSX 400  | NSX 400   | NSX 630   | NSX 630   |
| Square D® PowerPact® (UL)          | H-Frame         | J-Frame          | L-Frame | L-Frame  | L-Frame   | -         | -         |
| ABB® Tmax® (IEC)                   | T1<br>T2<br>XT1 | T3<br>XT3<br>XT4 | T4      | T4       | T5        | T5        | T5        |

| Circuit Breaker Compatibility  |                                 |                     |               |               |               |           |           |
|--------------------------------|---------------------------------|---------------------|---------------|---------------|---------------|-----------|-----------|
| Circuit Breaker Current Rating | 125/160 A                       | 250 A               | 300 A         | 350 A         | 400 A         | 500 A     | 630 A     |
| Part Number                    | IBSB25x<br>XT2                  | IBSB50x             | IBSB70x       | IBSB100x      | IBSBR120x     | IBSBR185x | IBSBR240x |
| ABB® Tmax® (UL)                | T1<br>T2                        | T4                  | T5            | T5            | T5            | -         | -         |
| GE® Record Plus® (IEC/UL)      | FD 160                          | FE 250              | FG 400        | FG 400        | FG 400        | FG 630    | FG 630    |
| Siemens® Sentron® (IEC/UL)     | VL160X<br>3VL1<br>VL160<br>3VL2 | VL250<br>3VL3       | VL400<br>3VL4 | VL400<br>3VL4 | VL400<br>3VL4 | -         | -         |
| Moeller® xEnergy® (IEC)        | NZM1                            | NZM2                | NZM3          | NZM3          | NZM3          | NZM3      | NZM3      |
| Cutler Hammer® Series G (UL)   | EG Frame                        | JG Frame            | LG Frame      | LG Frame      | LG Frame      | LG Frame  | LG Frame  |
| Legrand® (IEC)                 | DPX 160<br>DPX3 160             | DPX 250<br>DPX3 250 | DPX 630       | DPX 630       | DPX 630       | DPX 630   | DPX 630   |
| Hager® (IEC)                   | h3 160                          | h3 250              | h3 630        | h3 630        | -             | -         | -         |

$\Delta T$  = Temperature of conductors - Internal temperature of panel.

This table indicates the temperature rise produced by chosen current in the given section. This calculation does not take into account the heat dissipation from the switch gear.

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