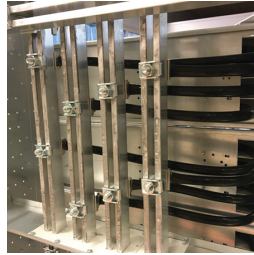
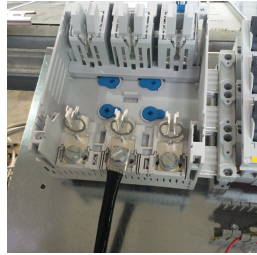
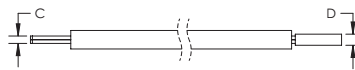
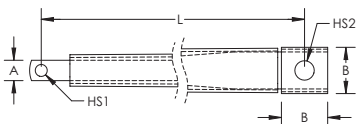


## IBSHY Insulated Braided Conductor for Compact Circuit Breakers – IBSHY32-700 (558593)



IBSHY is the ideal ready-to-install flexible wire replacement solution that is specifically designed for connections from compact molded case circuit breakers with typical current rating of 125/160 A to copper busbar. The IBSHY connects to the front access terminals of the breakers without any additional accessories, such as angular connectors, spreaders, ring terminal connectors or extenders. IBSHY is available in cross section of 32 mm<sup>2</sup> (63.15 kcmil), lengths from 230 to 830 mm (9.1" to 32.7"). Manufactured in an ISO 9001 certified proprietary automated facility, IBSHY 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 IBSHY allows users to reduce the total size and weight of the installation, improving both design flexibility and assembly aesthetics. The IBSHY features integral pre-punched palms at one end with a pre-punched crimped tube at the other end both of which 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. These specific shapes give users the advantage to have the possibility to link a compact circuit breaker, or other apparatus, using connection by cage or bolt to a copper busbar with a larger bolt. The insulation is a high-resistance, self-extinguishing, and halogen free glass fiber reinforced silicone providing possible high working temperature. IBSHY is compatible with all major brand compact molded case circuit breakers with 125/160 A nominal current. Contact your nVent ERIFLEX representative to determine the correct size for your application.

- Suitable for all main 125/160 A electrical devices and specifically 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
- Small wire diameter provides maximum flexibility
- Halogen free solution for applications requiring a low smoke solution
- Conforms to NF EN 45545 obtaining an HL2 classification for chapters R22 and R23
- DNV GL<sup>®</sup> certified for marine and offshore applications
- High working temperature
- RoHS compliant



|                                    |   |
|------------------------------------|---|
| Part Number                        | IBSHY32-700                               |
| Article Number                     | 558593                                    |
| Typical Application Current Rating | 160 A                                     |
| Finish                             | Tinned                                    |
| Material                           | Copper<br>Glass Fibre Reinforced Silicone |
| Flammability Rating                | UL <sup>®</sup> 1441 VW-1                 |

|                                  |  |
|----------------------------------|--|
| Part Number                      | IBSHY32-700                              |
| Max Working Voltage, IEC (Ui)    | 1,000 VAC<br>1,500 VDC                   |
| Peak Short Circuit Current (Ipk) | 15 kA                                    |
| Wire Diameter                    | 0.006"                                   |
| Working Temperature              | -76 to 482 °F                            |
| Complies With                    | IEC® 60439.1<br>IEC® 61439.1             |
| Cross Section                    | 63.15 kcmil                              |
| Length [L]                       | 27.6"                                    |
| A                                | 0.43"                                    |
| B                                | 0.98"                                    |
| C                                | 0.12"                                    |
| D                                | 0.2"                                     |
| Hole Size 1 (HS1)                | 0.26"                                    |
| Hole Size 2 (HS2)                | 0.41"                                    |
| Unit Weight                      | 0.45 lb                                  |
| Certifications                   | CE<br>DNV GL IBSHY32, TAE00003B7<br>RoHS |
| Standard Packaging Quantity      | 12 pc                                    |
| UPC                              | 78285691996                              |
| EAN-13                           | 0782856919964                            |

| Maximum Ampacity Ratings                      |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                     |                     |                                 |                                 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------------|---------------------|---------------------------------|---------------------------------|
| Cross Section<br>(mm <sup>2</sup> /<br>kcmil) | ΔT 30° C<br>(A) | ΔT 35° C<br>(A) | ΔT 40° C<br>(A) | ΔT 45° C<br>(A) | ΔT 50° C<br>(A) | ΔT 55° C<br>(A) | ΔT 60° C<br>(A) | ΔT 65° C<br>(A) | ΔT 70° C<br>(A) | ΔT 75° C<br>(A) | ΔT 80° C<br>(A) | ΔT<br>100° C<br>(A) | ΔT<br>120° C<br>(A) | 2 Bar<br>Current<br>Coefficient | 3 Bar<br>Current<br>Coefficient |
| 32/63.15                                      | 142             | 153             | 164             | 174             | 184             | 193             | 201             | 209             | 217             | 225             | 235             | 263                 | 290                 | 1.6                             | 2                               |

| Circuit Breaker Compatibility      |                                 |
|------------------------------------|---------------------------------|
| Circuit Breaker Current Rating     | 125/160 A                       |
| Part Number                        | IBSHY32x                        |
| Schneider Electric® Compact® (IEC) | NSA<br>NG 125                   |
| Square D® PowerPact® (UL)          | H-Frame                         |
| ABB® Tmax® (IEC)                   | T1<br>T2<br>XT1<br>XT2          |
| ABB® Tmax® (UL)                    | T1<br>T2<br>XT1<br>XT2          |
| GE® Record Plus® (IEC/UL)          | FD 160                          |
| Siemens® Sentron® (IEC/UL)         | VL160X<br>3VL1<br>VL160<br>3VL2 |
| Moeller® xEnergy® (IEC)            | NZM1                            |
| Cutler Hammer® Series G (UL)       | EG Frame                        |
| Legrand® (IEC)                     | DPX 160<br>DPX3 160             |

| Circuit Breaker Compatibility  |                    |
|--------------------------------|--------------------|
| Circuit Breaker Current Rating | 125/160 A          |
| Part Number                    | IBSHY32x           |
| Hager® (IEC)                   | h3 160             |
| Rockwell/Allen Bradley (UL)    | G-Frame<br>H-Frame |
| OEZ (IEC)                      | BC160N             |

$\Delta T$  = 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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