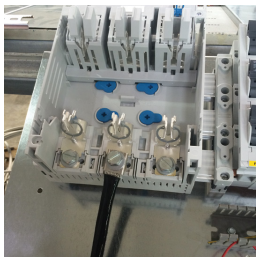
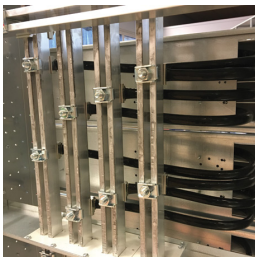
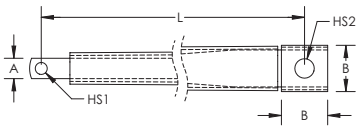
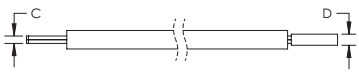
IBSHY Insulated Braided Conductor for Compact Circuit Breakers

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 mm² (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® certified for marine and offshore applications
- High working temperature
- RoHS compliant





Typical Application Current Rating: 160 A
Finish: Tinned
Material: Copper, Glass Fibre Reinforced Silicone
Flammability Rating: UL® 1441 VW-1
Max Working Voltage, IEC (Ui): 1,000 VAC, 1,500 VDC
Peak Short Circuit Current (Ipk): 15 kA
Wire Diameter: 0.15 mm
Working Temperature: -60 to 250 °C
Complies With: IEC® 60439.1, IEC® 61439.1

Part Number	Article Number	Cross Section	Length L	A	B	C	D	Hole Size 1 HS1	Hole Size 2 HS2
IBSHY32-230	558584	32 mm²	230 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-330	558586	32 mm²	330 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-365	558587	32 mm²	365 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-430	558588	32 mm²	430 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-500	558589	32 mm²	500 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-565	558591	32 mm²	565 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-630	558592	32 mm²	630 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-700	558593	32 mm²	700 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-765	558594	32 mm²	765 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm
IBSHY32-830	558595	32 mm²	830 mm	11 mm	25 mm	3 mm	5 mm	6.5 mm	10.5 mm

Maximum Ampacity Ratings															
Cross Section (mm²/ kcmil)	ΔT 30° C (A)	ΔT 35° C (A)	ΔT 40° C (A)	ΔT 45° C (A)	ΔT 50° C (A)	ΔT 55° C (A)	ΔT 60° C (A)	ΔT 65° C (A)	ΔT 70° C (A)	ΔT 75° C (A)	ΔT 80° C (A)	ΔT 100° C (A)	ΔT 120° C (A)	2 Bar Current Coefficient	3 Bar Current 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 NG 125
Square D® PowerPact® (UL)	H-Frame
ABB® Tmax® (IEC)	T1 T2 XT1 XT2
ABB® Tmax® (UL)	T1 T2 XT1 XT2
GE® Record Plus® (IEC/UL)	FD 160
Siemens® Sentron® (IEC/UL)	VL160X 3VL1 VL160 3VL2
Moeller® xEnergy® (IEC)	NZM1
Cutler Hammer® Series G (UL)	EG Frame
Legrand® (IEC)	DPX 160 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 H-Frame
OEZ (IEC)	BC160N

ΔT = 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.