NON-CONDUCTIVE REFRIGERANT LINE BREAK

Rev. November 2026

The non-conductive refrigerant line break provides an electrical discontinuity in a metallic refrigerant line while maintaining safe operation of a high-pressure refrigerant system. The product is used for the installation of HVAC units where an electrical discontinuity is required on any metallic lines that pass through a security partition or wall. Usually, non-conductive breaks are only successfully installed on no/low pressure systems (like chilled water lines). The EKFox Gear non-conductive refrigerant line will successfully work on high-pressure and A2L refrigerant systems.

Applications

- Split air conditioning and heat pump systems
- Variable Refrigerant Flow (VRF) System
- Shielded enclosures
- ICD-705 compliant spaces
- High-security areas

Features and Benefits

- Compatible Refrigerants : R-410A, R-32, R-454B
- Compatible Oils : POE, PVE
- Compact size and easy installation
- 100% electrical isolation of components
- U.S. Patent No.: 11,435,108

Specifications

MODEL:	**NCB025025GSSCU**	**NCB038038GSSCU**	**NCB050038GSSCU**	**NCB063100GSSCU**
Copper Pipe Size	*1/4" OD	*3/8" OD	*1/2" OD	5/8" OD
Working Pressure range	Vacuum to 600 psig (41 bar)	Vacuum to 600 psig (41 bar)	Vacuum to 600 psig (41 bar)	Vacuum to 600 psig (41 bar)
Maximum Burst Pressure	3,000 psig (207 bar)	3,000 psig (207 bar)	3,000 psig (207 bar)	3,000 psig (207 bar)
MODEL:	**NCB075075GSSCU**	**NCB088075GSSCU**	**NCB113125GSSCU**	**NCB138125GSSCU**
Copper Pipe Size	*3/4" OD	*7/8" OD	1-1/8" OD	1-3/8" OD
Working Pressure range	Vacuum to 600 psig (41 bar)	Vacuum to 450 psig (31 bar)	Vacuum to 450 psig (31 bar)	Vacuum to 450 psig (31 bar)
Maximum Burst Pressure	2250 psig (155 bar)	2250 psig (155 bar)	2250 psig (155 bar)	2250 psig (155 bar)
MATERIALS				
G-10 Break Material	MIL-I-24768/2, UL 94HB			
316 Stainless Steel Adapter	ASTM A182/ASME SA182 and ASTM A314			
ACR Copper Tubing	ASTM B280			

***UL recognized component; File No: SA44812**

Installation Guidelines

- Installation must be carried out by the qualified installer.
- It is recommended to install the non-conductive breaks using no-braze methods, such as press-to-connect or push-to-connect refrigerant fittings.
- If brazing is required, do not shorten the length of copper tubing and take extra precaution to ensure excess heat does not compromise the integrity of the non-conductive assembly.
- During installation, protect non-conductive breaks from excessive mechanical forces (tensions, compression, bending, or twisting).
- The non-conductive breaks shall be installed indoors.