MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2026-622
Item to be Scouted	BABA: VRF (Variable Refrigerant Flow) Systems
Days to be scouted	15
Response Due By	11/25/2026
Description	VRF System domestic availability report indicating whether or not VRF systems are capable of being BABA compliant.

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	The manufacturing of Variable Refrigerant Flow (VRF) systems involves a combination of precision metalworking, chemical processing, and electronic assembly. Key processes include stamping and bending for chassis and casing fabrication, followed by brazing and soldering to create leak-proof copper refrigerant piping networks. Heat exchanger fabrication utilizes fin-pressing and tube-expansion to optimize thermal transfer in evaporators and condensers. The core of the system, the inverter-driven compressor, is integrated alongside PCB assembly (SMT) for the sophisticated control boards that regulate refrigerant flow. The process concludes with vacuum dehydration, refrigerant charging, and rigorous pressure testing to ensure hermetic sealing and operational efficiency.

Provide dimensions / size / tolerances / performance specifications for the item	Typical HVAC specifications for VRF System.
	
	System to include:
	- Category: Manufactured Product
	- Quantity: 1 Variable Refrigerant Flow (VRF) HVAC System
	- PSC: 4130 - Refrigeration and Air Conditioning Components
	- NAICS: 333415 - Air-Conditioning and Warm Air Heating Equipment Manufacturing.
	- Technical Specificaitons:
	  - Indoor ceiling-mounted units: varying sizes from 6,000 BTU to 30,000 BTU nominal cooling capacity.
	  - Outdoor heat recovery unit: 192,000 BTU nominal cooling capacity.

List required materials needed to make the product, including materials of product components	VRF systems are constructed from high-performance materials engineered for thermal efficiency and durability. They rely on C12200 copper for refrigerant tubing and 3003-alloy aluminum for cooling fins, all housed within zinc-coated galvanized steel chassis for corrosion resistance. The control systems utilize IGBT semiconductors and FR-4 glass epoxy PCBs to drive neodymium permanent magnet motors in the compressors. For housing and insulation, ABS plastics, polycarbonate, and EPDM rubber seals are used alongside polyurethane foam for sound dampening. Finally, the system is sealed with silver-phosphorus brazing alloys and charged with R-410A or R-32 refrigerant and POE synthetic oil.
Are there applicable certification requirements?	Yes
Certification(s) required	UL
Are there applicable regulations?	No
Are there any other stndards, requirements, etc.?	No
Additional Technical Comments	

Section 4: Business Information

Estimated potential business volume	1
Estimated target price / unit cost information (if unavailable explain)	Best available, as this is related to BABA, acceptable pricing is to be determined in negotiation.
When is it needed by?	Immediate
Describe packaging requirements	Best available. Delivered undamaged. Specifics discussed in negotiation.
Where will this item be shipped?	Kansas

Additional Comments

Is there other information you would like to include?	