



Heat Transfer Products Group, LLC
 A Division of Rheem
 Manufacturing
 201 Thomas French Drive
 Scottsboro, Alabama 35769

Date: 19 December 2024

SUBJECT: Wind Load Analysis of HTPG “15 TO 100 HP, QV Series” Air Cooled Condensing Unit Models

The following wind load analysis applies to all 15 TO 100 HP HTPG “QV Series” Air Cooled Condensing Units using the following model nomenclature:

R	F	D	T	03	M	4S	E	A
1	2	3	4	5	6	7	8	9

The listing below are the positions for the new model with a brief explanation.

- 1 **Branding:** R Russell W Witt K Kramer C ColdZone H HTPG ? Other brands may use single letter code or asterisk “**”
- 2 **Condenser and Control Type:** B No flooded condenser control (Indoor or Warm Climate Outdoor) F Flooded Condenser Control (Outdoor)
- 3 **Compressor Type:** C Carlyle B Bitzer D Copeland Discus S Semi-Hermetic O Scroll
- 4 **Compressor Configuration:** V Single Compressor D Dual Compressor P Parallel Piping
- 5 **Nominal Size:** XX Two numbers roughly equal to compressor horsepower
- 6 **Temperature Range:** L Low M Medium E Extended Medium D Medium Temp Electric Defrost
- 7 **Refrigerant Type:** 44 R404A 48 R448A or R449A 4S compressor is rated for all refrigerants.
4A A2L Refrigerants R454A/R454B/R454C/R455A/R328
- 8 **Voltage/Phase/Frequency Code:** C 230/1/60 D 208-230/1/60 E 208-230/3/60 G 460/3/60 V 208/3/60 W 230/3/60 Q 575/3/60
- 9 **Revision Code:** Starting with Letter A

The wind load analysis has determined both single and dual series NEW “QV Series” air cooled condensing units are in accordance with ASCE/SEI 7-22 Florida Building Code Eighth Edition (2023) for the following location:

Installation location: Miami – Dade County, Florida

Installation Height: 60 feet

Roof Mounting Requirement

Compressor Width	Fan Quantity	Number of Attachment Points	Max. Force at Each Attachment Point		Max Unit, Hurricane Net Overturning Moment (lbs.ft.)
			Hurricane Tension, Net Uplift Load (lbs.)	Hurricane Shear, Horizontal Load (lbs.)	
Single	2	8	1,716	834	21,186
Single	3	10	1,901	942	29,297
Dual	4	8	1,478	852	39,028
Dual	6	10	1,595	953	52,459

Note: Using a roof curb to install these condensing units requires a metal mounting surface with stand details to be provided by the selected mechanical contractor at the job site.

