Rawal APR Control Valve Selection Form

Please complete Rawal APR Control Selection Form for sizing confirmation and quote (**One form per unit**):

Contact Information

Name: _____ **Phone:** _____

Email: _____

Job Name/ Reference: _____

Unit Brand & Model #: _____ **Unit Tonnage:** _____

☐ **Packaged Unit** ☐ **Split System** **Unit #:** _____

Number of Compressors: _____ **Refrigerant Type:** _____

☐ **Manifolded** **or** ☐ **Separate Circuit Lead Compressor**

Tonnage Comp 1: _____ ☐ **Single Stage** ☐ **2 Stage** *(if applicable)*

Tonnage Comp 2: _____ ☐ **Single Stage** ☐ **2 Stage** *(if applicable)*

Suction Line Size OD: _____ **Liquid Line Size OD:** _____

Length of Suction Line: _____ *(required for Split Systems)*

Location of the CU compared to the AHU (circle one): ☐ **ABOVE** ☐ **BELOW** ☐ **SAME LEVEL**

Note any system/application information that may impact APR Control Valve Selection to include:

Constant Volume Air Flow/ VAV/ VVT/ Make Up Air or DOAS unit? _____

Additional Application Notes: _____

_____

Rawal Devices takes pride in sizing the APR Control conservatively for your system, to always ensure proper oil entrainment for your equipment.

Staging - Compressors that are manifold must be treated as a single, large compressor. APR Control is installed at the dual (or tripled) lines – where piping becomes a single circuit. The APR Control will act as a capacity modulator when one or more compressors start, changing capacities as each stage comes on-line, responding to changing load requirements.

Example, R-410A, 20-ton condensing unit, two compressors manifold together to a single circuit: APR Control must be selected based on smallest stage system (reduce capacity to 10 tons in this case). An installed APR-410-6 (6.5-ton capacity control) will act to modulate capacity from 20 tons down to 13.5 tons. When the second stage compressor turns off, the APR-410-6 will act to modulate capacity from 10 tons down to 3.5 tons. Because the volume of suction gas will not fall below 3.5 tons, this unit can operate with a suction riser of 1-3/8" OD. Oil entrainment will be satisfactory, maintaining compressor lubrication. Similar consideration must be given to systems with 2 independent circuits – treat first on/last off circuit as a single circuited system.

All information is required for proper sizing and selection of the APR Control