Rawal Devices, Inc.

Variable Speed Performance on Fixed Stage Equipment

APR Control®

Continuous Capacity Modulation for Standard DX Equipment

A variable capacity enhancement for standard DX systems or heat pumps: the APR Control matches capacity to changing load conditions, extends runtime for dehumidification, and eliminates compressor short-cycling. No power. No wiring. No maintenance.

- Purely mechanical, pressure-activated; installs in hours on new or existing equipment
- Matches capacity to changing load; the compressor runs instead of restarting
- No impact on the unit's rated capacity during design day conditions
- Built-in evaporator freeze protection
- R-410A, R-454B, and R-32; packaged RTUs and splits; no tonnage limits
- Complimentary sizing & selection for every application by Rawal Devices Engineering
- Free technical & application support for every APR Control!

APR Control® - UL Certified

77%	~53%	100K+	30+ Yrs
Fewer Compressor Starts (Independent Field Study)	Space RH Held all Summer (Independent Field Study)	Valves Installed in the Field	In Business, Since the 1990s

Built for Part Load, Where Your HVAC Actually Runs

Standard DX equipment runs at part load roughly 90% of its operating hours, and your compressor is constantly cycling. The APR Control modulates the lead compressor continuously, so the unit matches the real load instead of overshooting it. The result is longer, gentler runs, steadier supply air, drier space conditions, and compressors that exceed expected lifespans.

How It Works

Three refrigerant connections. The pressure-activated Compression Ratio Reduction valve ***modulates refrigerant flow*** to match real-time load; the compressor runs instead of cycling.

Value Engineering, Solved

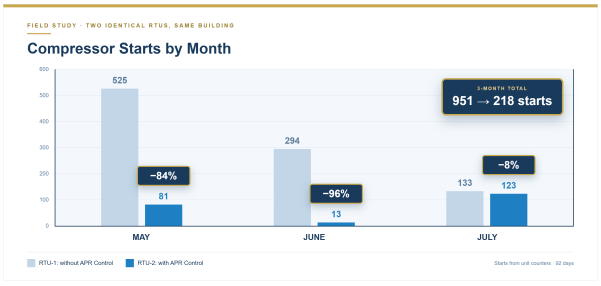
Keep in-stock standard equipment in the schedule; the APR Control adds modulating performance at a fraction of variable-speed cost, with a three-connection retrofit and no proprietary drives or boards.

Technical & Application Support at No Charge

Rawal Devices Engineering happily sizes every valve for oil entrainment and returning oil to the compressor under all normal operating conditions.

Field-Verified Performance

- 77% fewer compressor starts (951 vs 218), 3-month side-by-side field study
- 16% lower compressor power at part load (manufacturer testing)
- No impact on the unit's rated capacity during design day conditions (manufacturer testing)
- 40-60% supply-fan savings paired with a VFD, where properly applied



WHERE IT MATTERS MOST

Schools & Offices
Part-load comfort,
Protected budgets

Restaurants & Retail
No electrical retrofit,
Fewer emergency calls

Healthcare & Labs
Stable temp and humidity

RTUs, Splits & DX Chillers
If it cycles, APR fixes it

Improve system performance. Start modulating.

Free engineering consultation on every application | sales@rawal.com · 800-727-6447 · www.rawal.com