

R-410a FAST SELECTION TABLE for R-410A (1 through 20 ton)
APR Control - Model # Application Recommendations

System (or Circuit) Tonnage	Package or Split System	Maximum Suction Riser	Capacity Modulation Percentage	Recommended APR Control Model Number	APR tons Capacity Control
1.5 tons	No APR Control for R-410A is applicable on 1.5 ton or smaller capacity systems at this time				
2.0 tons	package split	N/A	75%	APR-410-1	1.5 tons
		5/8" OD	75%	APR-410-1	1.5 tons
2.5 tons	package split	N/A	60%	APR-410-1	1.5 tons
		7/8" OD	60%	APR-410-1	1.5 tons
3.0 tons	package split	N/A	50%	APR-410-1	1.5 tons
		7/8" OD	50%	APR-410-1	1.5 tons
3.5 tons	package split split	N/A	72%	APR-410-2	2.5 tons
		7/8" OD	72%	APR-410-2	2.5 tons
		1-1/8" OD	43%	APR-410-1	1.5 tons
4.0 tons	package split split	N/A	63%	APR-410-2	2.5 tons
		7/8" OD	63%	APR-410-2	2.5 tons
		1-1/8" OD	38%	APR-410-1	1.5 tons

Capacity Control / Fast Selection Chart continued on next page.

APR Control recommendation is based on best performance, as well as, suction line size in split systems.

Staging - Compressors that are manifolded must be treated as one single large compressor, with APR Control installed at the dual (or tripled) lines – where piping becomes a single circuit. The APR Control will act as 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 with two compressors manifolded together to a single circuit. APR Control must be selected based on smallest stage system will reduce capacity to – 10 tons in this case. An installed APR-410-6 (6.5 tons capacity control) will act to modulate capacity from 20 tons down to 13.5 tons, and 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 quantity of suction gas will not fall below 3.5 tons, this unit will have no problems operating 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.

APR Control FAST SELECTION TABLE for R-410A 1 through 20 ton
APR Control - Model # Application Recommendations

<u>System</u> <u>(or Circuit)</u> <u>Tonnage</u>	<u>Package or</u> <u>Split</u> <u>System</u>	<u>Maximum</u> <u>Suction</u> <u>Riser</u>	<u>Capacity</u> <u>Modulation</u> <u>Percentage</u>	<u>Recommended</u> <u>APR Control</u> <u>Model Number</u>	<u>APR tons</u> <u>Capacity</u> <u>Control</u>
5.0 tons	package	N/A	70%	APR-410-3	3.5 tons
	split	7/8" OD	70%	APR-410-3	3.5 tons
	split	1-1/8" OD	50%	APR-410-2	2.5 tons
6.0 tons	package	N/A	58%	APR-410-3	3.5 tons
	split	1-1/8 " OD	58%	APR-410-3	3.5 tons
7.5 tons	package	N/A	47%	APR-410-3	3.5 tons
	split	1-1/8" OD	47%	APR-410-3	3.5 tons
	split	1-3/8" OD	47%	APR-410-3	3.5 tons
8.5 tons	package	N/A	42%	APR-410-3	3.5 tons
	split	1-1/8" OD	76%	APR-410-6	6.5 tons
	split	1-5/8" OD	42%	APR-410-3	3.5 tons
10 tons	package	N/A	65%	APR-410-6	6.5 tons
	split	1-1/8" OD	65%	APR-410-6	6.5 tons
	split	1-3/8" OD	65%	APR-410-6	6.5 tons
	split	1-5/8" OD	35%	APR-410-3	3.5 tons
12.5 tons	package	N/A	80%	APR-410-10	10.0 tons
	split	1-1/8" OD	80%	APR-410-10	10.0 tons
	split	1-5/8" OD	52%	APR-410-6	6.5 tons
15 tons	package	N/A	67%	APR-410-10	10.0 tons
	split	1-3/8" OD	67%	APR-410-10	10.0 tons
	split	1-5/8" OD	47%	APR-410-10	10.0 tons
20 tons	package	N/A	50%	APR-410-10	10.0 tons
	split	2-1/8" OD	50%	APR-410-10	10.0 tons