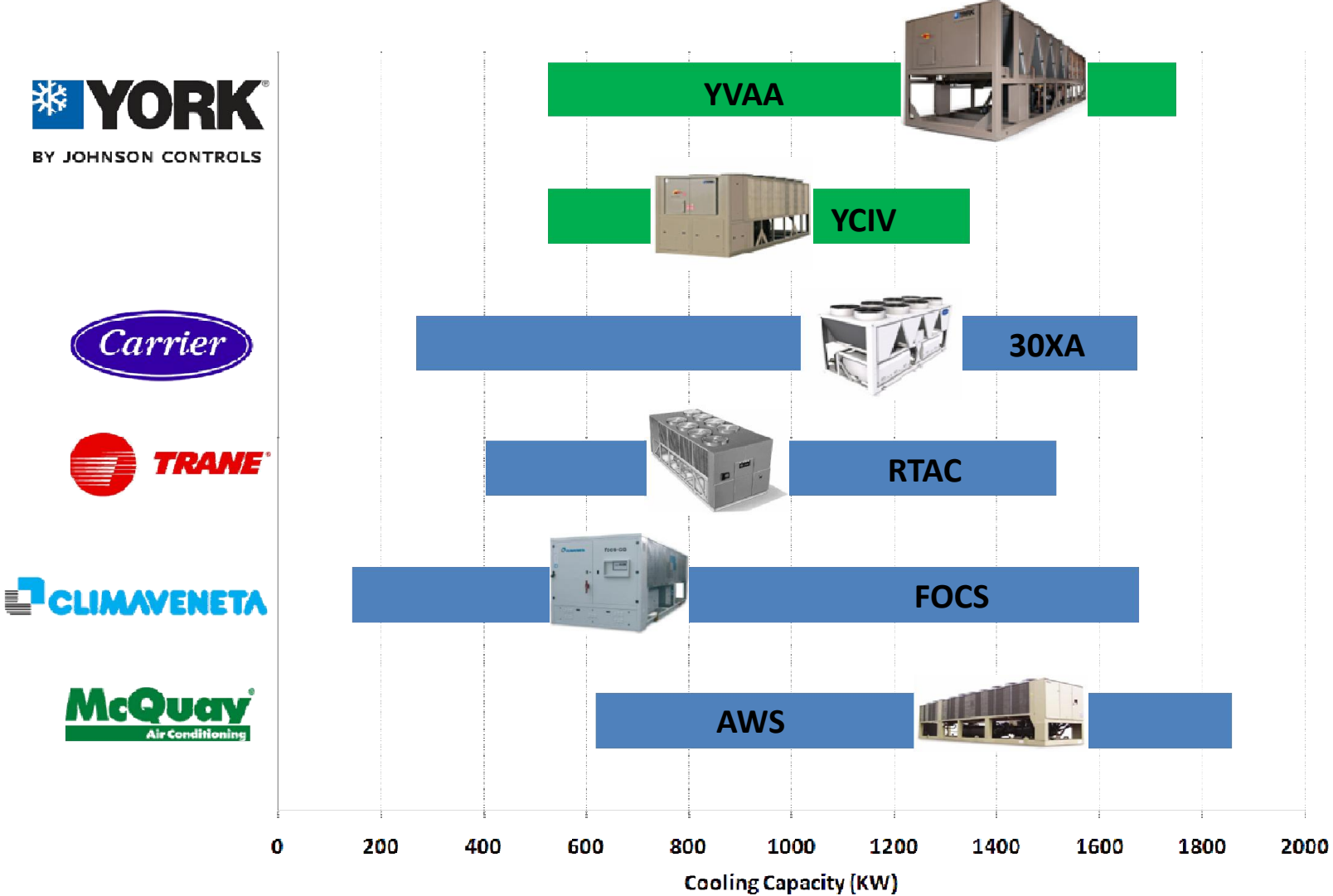



YVAA – YORK Variable Speed Air-Cooled Screw Chillers


Competitive Landscape

































YVAA – YORK Variable Speed Air-Cooled Screw Chillers

Competitive benchmarking - Components

Above Average 


Average 


Below Average 


Chiller Model	 YORK BY JOHNSON CONTROLS	 TRANE	 Carrier	 McQuay	 CLIMAVENETA
Components	YVAA	RTAC	30XA	AWS	FOCS
 Compressor	Screw, variable speed standard 	Screw, fixed speed 	Screw, fixed speed 	Screw, fixed speed 	Screw, fixed speed 
 Condenser Coils	Micro channel, all aluminum 	Traditional, copper tubes aluminum fins 	Micro channel (optional copper tubes aluminum fins) 	Traditional, copper tubes aluminum fins 	Traditional, copper tubes aluminum fins 
 Condenser Fans	Totally Enclosed, Air Over (TEAO) 	Standard: Open Drip Proof (ODP) Option: TEAO 	Totally Enclosed, Air Over (TEAO) 	Totally Enclosed, Air Over (TEAO) 	Totally Enclosed, Air Over (TEAO) 
 Evaporator	Falling film 	Falling film 	Fully flooded 	DX 	DX 






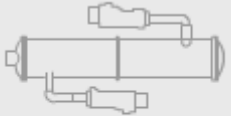

















YVAA – YORK Variable Speed Air-Cooled Screw Chillers

Competitive benchmarking - Components

Above Average 

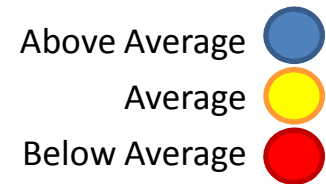
Average 












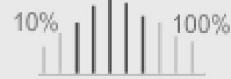











Below Average 

Chiller Model	 YORK BY JOHNSON CONTROLS	 TRANE	 Carrier	 McQuay	 CLIMAVENETA
Components	YVAA	RTAC	30XA	AWS	FOCS
 Compressors Per Circuit	1 compressor per circuit 	2 compressors for 1 circuit for models with 3 and 4 compressors 	1 compressor per circuit 	1 compressor per circuit 	1 compressor per circuit 
 Minimum % Load	10% 	15% 	15% 	2 compressors: 15% without VSD 20% with VSD 3 compressors: 8% without VSD 13% with VSD 	2 Compressors stepped 25% 3 compressors stepped 17% 4 Compressors stepped 13% 
 Refrigerant	R134a Low quantity 	R134a High quantity 	R134a Low quantity 	R134a Medium quantity 	R134a Medium quantity 

YVAA – YORK Variable Speed Air-Cooled Screw Chillers


Competitive benchmarking - Performance





Chiller Model	 YORK BY JOHNSON CONTROLS	 TRANE	 Carrier	 McQuay	 CLIMAVENETA
Performance	YVAA	RTAC	30XA	AWS	FOCS
 Full Load Efficiency	Tailor and tune 	Standard and High 	High 	Standard, High, and Premium 	Standard, High, and Premium 
 Part Load Efficiency	Tailor and tune 	Standard 	High 	Standard, High, and Premium 	Standard, High, 
 Sound	Low at full load Very low at part load 	Medium 	Low 	Very low 	Medium and Low 

YVAA – YORK Variable Speed Air-Cooled Screw Chillers



















Competitive benchmarking – Physical Attributes

Above Average 

Average 




Below Average 

















Chiller Model	 YORK <small>BY JOHNSON CONTROLS</small>	 TRANE	 Carrier	 McQuay <small>Air Conditioning</small>	 CLIMAVENETA
Physical Attributes	YVAA	RTAC	30XA	AWS	FOCS

 Unit Weight	Low 	Very high 	Low 	Medium 	Low 
 Footprint (unit length)	Small to medium 	Very small 	Medium 	Medium to large 	Medium 
 Ambient Range	Standard: 0F to 125F (-18C to 52C) 	Standard: 25F to 115F (-4C to 46C) Options: Low ambient of to 25F (-18C to -4C) High ambient 115F to 125F (46C to 52C) 	Standard: 0F to 115F (-18C to 46C) Options: High ambient 115F to 125F (46C to 52C) 	Standard: 35F to 100F (2C to 38C) Options: Low ambient 0F to 35F (-18C to 2C) High ambient 105F to 125F (40C to 52C) 	Standard: 0F to 115F (-18C to 46C) Low Ambient -15C High ambient 46C 

YVAA – YORK Variable Speed Air-Cooled Screw Chillers

Competitive benchmarking - Electrical

Above Average 
 Average 
 Below Average 

Chiller Model	 YORK BY JOHNSON CONTROLS YVAA	 TRANE RTAC	 Carrier 30XA	 McQuay AWS	 CLIMAVENETA FOCS
 Starter Type	Standard: VSD with no inrush current 	Standard: Across-the-line Option: Wye-delta 	Standard: Wye-delta Options: Across-the-line Non-fused disconnect 	Standard: Solid state Options: Wye-delta VSD 	Part Wind Options: Wye-delta VSD 
 Power	Standard: Single point power 	2 compressors: Standard: Single point power Option: Dual point power 3 or 4 compressors: Standard: Dual point power Option: Single point power 	Up to 350 tons (1200 KW): Single point power Higher than 350 tons (1200 KW): Dual point power 	Standard: Multi-point power with 1 disconnect switch per circuit (2 point for 2 compressors, 3 point for 3 compressors) No compressor breakers Option: Single point power 	2 compressor single point 3 & 4 Compressor dual point 