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Copeland Discus Digital™ Compressors

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High Efficiency Discus
Modulated Refrigeration Applications

Precise Control of Suction Pressure and Temperature

- Minimum food temperature fluctuation resulting in longer shelf life and less food shrink
- Better & consistent TXV operation

Reduced compressor cycling

- Longer contactor life
- Longer compressor life

System Efficiency Improvement

- Eliminates over/under shooting of suction pressure setpoint
- Potential to run system at higher suction pressure set point

Change in System Design

- No need for uneven paralleling for compressor staging
- Using common compressor selections simplifies replacement needs

Standard Model Number	Digital Model Number	HP	Ref	Freq (Hz)	Capacity (BTU/Hr)	Efficiency (EER)	Amps
Low Temperature Models					Data @ -25 ° F / 105 ° F		
3DA3F28K* -###	3DADF28K* -###	5.0	R-404A	60	27,800	5.2	8.9
3DB3F33K* -###	3DBDF33K* -###	5.5	R-404A	60	33,100	5.2	10.3
3DF3F40K* -###	3DFDF40K* -###	6.0	R-404A	60	40,200	5.3	12.3
3DS3F46K* -###	3DSDF46K* -###	7.0	R-404A	60	46,000	5.4	13.4
Optimized Medium Temperature Models					Data @ 20 ° F / 120 ° F		
3DF4S11M* -###	3DFDS11M* -###	10.0	R-404A	60	105,000	7.6	20.3
3DS4S12M* -###	3SDS12M* -###	10.0	R-404A	60	116,000	7.6	23.4
Dual Envelope Medium & High Temperature Models					Data @ 20 ° F / 120 ° F		
3DA3R10M* -###	3DADR10M* -###	6.5	R-404A	60	71,000	7.8	14.2
3DB3R21M* -###	3DBDR21M* -###	7.5	R-404A	60	85,000	7.7	16.6
3DF3R15M* -###	3DFDR15M* -###	10.0	R-404A	60	105,000	7.6	21.2
3DS3R17M* -###	3SDSR17M* -###	10.0	R-404A	60	116,000	7.6	23.4

* Oil variations ### Voltage variations



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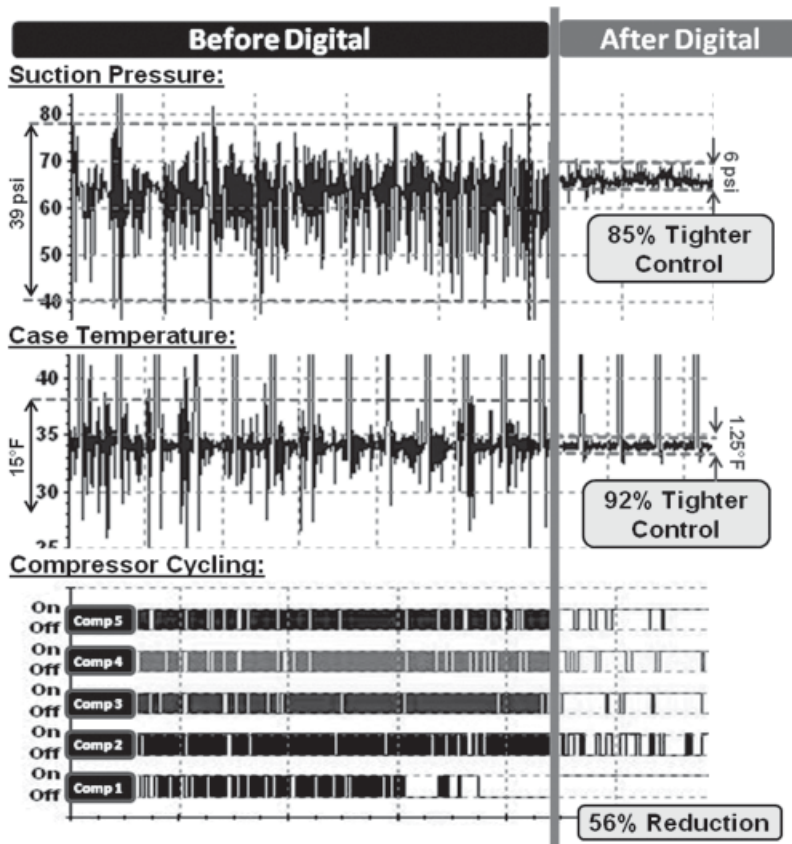
Copeland Discus Digital™ Compressors

The Digital Difference

Copeland Discus® compressors have long set the standard as the most trusted name for refrigeration, leading the industry in energy efficiency and reliability for decades. Now a new application of the patented Discus valve technology includes a unique modulation approach.

In refrigeration applications, product quality is maintained by precisely controlling the temperature while minimizing energy consumption. Traditional modulation approaches that require compressor cycling can lead to problems, including uneven cooling and reduced compressor life.

With continuous, infinite digital modulation from 10 to 100 percent, Copeland Discus Digital compressor provides the most precise method of capacity control, making it ideal for temperature sensitive applications. Introducing Copeland Discus Digital compressors into a refrigeration system allows the system to specifically match the capacity being generated to the required load, providing the opportunity for the system to operate more efficiently, resulting in optimum system performance and control. The capacity modulation found in this compressor also reduces the suction pressure and temperature variation of the refrigerated space and provides a dramatic decrease in compressor cycling rates, therefore improving compressor reliability.



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