Copeland Discus Digital™ compressors
with CoreSense™ Technology

High efficiency

Copeland Discus Digital™ compressors with CoreSense™ technology offer digital modulation as the most precise method of capacity control to eliminate traditional compressor cycling modulation problems like uneven cooling and reduced compressor life.

No compression takes place during the modulation off cycle, which allows the motor to move the crankshaft and pistons without any thermodynamic work, thereby reducing power consumption. By controlling the time when actual compression is taking place, the capacity output of the compressor can be infinitely adjusted from 10-100%. This new approach to capacity control is more efficient and reliable than other modulation methods.

EMERSON™
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Advantages

Precise control of suction pressure and temperature

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

Reduced cycling of compressors

- Longer contactor life
- Longer compressor life

System efficiency improvement

- Up to 10% energy savings
- Eliminates over/under shooting of suction pressure set point
- 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	Refrigerant	Frequency	"Capacity (BTU/Hr)"	"Efficiency (EER)"	Amps
3D Low Temperature Models					Data @ -25º/105º	
3DA3F28K*- ###	3DADF28K*- ###	R-404A	60	27,800	5.2	8.9
3DB3F33K*- ###	3DBDF33K*- ###	R-404A	60	33,100	5.2	10.3
3DF3F40K*- ###	3DFDF40K*- ###	R-404A	60	40,200	5.3	12.3
3DS3F46K*- ###	3DSDF46K*- ###	R-404A	60	46,000	5.4	13.4
3D Optimized Medium Temperature Models					Data @ 20º/120º	
3DF4S11M*- ###	3DFDS11M*- ###	R-404A	60	105,000	7.6	20.3
3DS4S12M*- ###	3DSDS12M*- ###	R-404A	60	116,000	7.6	23.4
3D Dual Medium & High Temperature Models					Data @ 20º/120º	
3DA3R10M*- ###	3DADR10M*- ###	R-404A	60	71,000	7.8	14.2
3DB3R12M*- ###	3DBDR12M*- ###	R-404A	60	85,000	7.7	16.6
3DF3R15M*- ###	3DFDR15M*- ###	R-404A	60	105,000	7.6	21.2
3DS3R17M*- ###	3DSDR17M*- ###	R-404A	60	116,000	7.6	23.4
4D Low Temperature Models					Data @ -25º/105º	
4DA3F47K*-###	4DADF47K*-###	R-404A	60	47,200	5.2	15.2
4DH3F63K*-###	4DHDF63K*-###	R-404A	60	62,500	5.3	19.8
4DJ3F76K*-###	4DJDF76K*-###	R-404A	60	75,500	5.4	23.0
4D Optimized Medium Temperature Models					Data @ 20º/120º	
4DA3S13M*-###	4DADR18M*-###	R-404A	60	121,000	7.6	24.4
4DH3S16M*-###	4DHDS16M*-###	R-404A	60	159,000	7.3	31.3
4D Dual Medium & High Temperature Models					Data @ 20º/120º	
4DA3R18M*-###	4DADR18M*-###	R-404A	60	119,000	7.6	24.4
4DB3R20M*-###	4DBDR20M*-###	R-404A	60	145,000	7.6	29.3
4DH3R22M*-###	4DHDR22M*-###	R-404A	60	156,000	7.3	32.9
4DJ3R28M*-###	4DJDR28M*-###	R-404A	60	186,000	7.5	39.3
6D Low Temperature Models					Data @ -25º/105º	
6DH3F93K*-###	6DKDF93K*-###	R-404A	60	92,500	5.3	29.6
6DJ3F11M*-###	6DRDF11M*-###	R-404A	60	105,000	5.0	34.6
6D Dual Medium & High Temperature Models					Data @ 20º/120º	
6DH3R35M*-###	6DKDR35M*-###	R-404A	60	236,000	7.6	47.8
6DG3R37M*-###	6DMDR37M*-###	R-404A	60	257,000	7.5	53.1
6DJ3R40M*-###	6DRDR40M*-###	R-404A	60	278,000	7.3	57.6

Voltage Variations * Oil Variations

Modulation Range: 3D 10-100%
4D 50-100%
6D 33-100%

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