

# Copeland Scroll™ and Copeland Discus™ digital upgrade parts



**COPELAND™**

  
**EMERSON™**

## Copeland Discus™ digital upgrade parts

Standard Model Number	Digital Model Number	Digital Conversion Kit CoreSense Protection BOM (C##)	Digital Conversion Kit CoreSense Diagnostics BOM (A##)	Digital Coil Kit <sup>1</sup>	Unloader Head Kit <sup>3</sup>	Digital Controller <sup>1</sup> (Master Controller Required)	Digital Controller <sup>1 2</sup> (Master Controller Not Required)
<b>3D Low Temperature</b>							
3D**F28K* -###	3DADF28K# -###	980-3000-01	980-3000-11	923-0084-01 (120v) 923-0084-02 (240v)	N/A	943-0086-00	998-0189-00
3D**F33K* -###	3DBDF33K* -###						
3D**F40K* -###	3DFDF40K* -###						
3D**F46K* -###	3DSDF46K* -###						
<b>3D Optimized Medium Temperature Models</b>							
3D**S11M* -###	3DFDS11M* -###	980-3000-00	980-3000-10	923-0084-01 (120v) 923-0084-02 (240v)	N/A	943-0086-00	998-0189-00
3D**S12M* -###	3SDS12M* -###						
<b>3D Dual Medium &amp; High Temperature Models</b>							
3D**R10M* -###	3DADR10M* -###	980-3000-00	980-3000-10	923-0084-01 (120v) 923-0084-02 (240v)	N/A	943-0086-00	998-0189-00
3D**R12M* -###	3DBDR12M* -###						
3D**R15M* -###	3DFDR15M* -###						
3D**R17M* -###	3DSDR17M* -###						
<b>4D Low Temperature Models (Discus II) Aftermarket Only</b>							
4D**F47K* -###	4DADF47K* -###	980-6000-01	980-6000-11	923-0084-01 (120v) 923-0084-02 (240v)	N/A	943-0088-00	998-0189-00
4D**F63K* -###	4DHDF63K* -###						
4D**F76K* -###	4DJDF76K* -###						
<b>4D Low Temperature Models (Discus III) OEM Only</b>							
4D**NF54K* -###	4DBXF54K* -###	980-5000-01	980-5000-13	923-0084-01 (120v) 923-0084-02 (240v)	N/A	943-0088-00	998-0189-00
4D**NF63K* -###	4DHXF63K* -###						
4D**NF76K* -###	4DJXF76K* -###						
<b>4D Optimized Medium Temperature Models (Discus II) Aftermarket Only</b>							
4D**S13M* -###	4DADR18M* -###	980-6000-00	980-6000-10	923-0084-01 (120v) 923-0084-02 (240v)	N/A	943-0088-00	998-0189-00
4D**S16M* -###	4DHDS16M* -###						
<b>4D Optimized Medium Temperature Models (Discus III) OEM Only</b>							
4D**NR16M* -###	4DHXR16M* -###	980-5000-00	980-5000-12	923-0084-01 (120v) 923-0084-02 (240v)	N/A	943-0088-00	998-0189-00
4D**NR19M* -###	4DJXR19M* -###						
<b>4D Dual Medium &amp; High Temperature Models (Discus II) Aftermarket Only</b>							
4D**R18M* -###	4DADR18M* -###	980-6000-00	980-6000-10	923-0084-01 (120v) 923-0084-02 (240v)	N/A	943-0088-00	998-0189-00
4D**R20M* -###	4DBDR20M* -###						
4D**R22M* -###	4DHDR22M* -###						
4D**R28M* -###	4DJDR28M* -###						
<b>4D Dual Medium &amp; High Temperature Models (Discus III) OEM Only</b>							
4D**NR20M* -###	4DBXR20M* -###	980-5000-00	980-5000-12	923-0084-01 (120v) 923-0084-02 (240v)	N/A	943-0088-00	998-0189-00
4D**NR22M* -###	4DHXR22M* -###						
4D**NR28M* -###	4DJXR28M* -###						
<b>6D Low Temperature Models (Discus II) Aftermarket Only</b>							
6D**F93K* -###	6DKDF93K* -###	N/A	980-6000-11	923-0084-01 (120v) 923-0084-02 (240v)	998-2119-36 (120v) 998-2119-37 (240v) 998-2119-38 (440v)	943-0194-00	998-0189-00
6D**F11M* -###	6DRDF11M* -###						
<b>6D Low Temperature Models (Discus III) OEM Only</b>							
6D**NF93K* -###	6DKXF93K* -###	980-5000-03	980-5000-13	923-0084-01 (120v) 923-0084-02 (240v)	998-3119-28 (120v) 998-3119-29 (240v) 998-3119-30 (440v)	943-0194-00	998-0189-00
6D**NF11M* -###	6DRXF11M* -###						
6D**NF13M* -###	6DVXF13M* -###						
6D**NF13M* -###	6DVXF13M* -###	980-5000-05	980-5000-11		998-3119-36 (120v) 998-3119-37 (240v) 998-3119-38 (440v)		

6D Dual Medium & High Temperature Models (Discus II) Aftermarket Only							
6D**R35M*-###	6DKDR35M*-###	N/A	980-6000-10	923-0084-01 (120v)	998-2119-32 (120v)	943-0194-00	998-0189-00
6D**R37M*-###	6DMDR37M*-###			923-0084-02 (240v)	998-2119-33 (240v)		
6D**R40M*-###	6DRDR40M*-###				998-2119-34 (440v)		
6D Dual Medium & High Temperature Models (Discus III) OEM Only							
6D*NR35M* -###	6DKXR35M* -###	980-5000-02	980-5000-12	923-0084-01 (120v)	998-3119-23 (120v)	943-0194-00	998-0189-00
6D*NR37M* -###	6DMXR37M* -###			923-0084-02 (240v)	998-3119-24 (240v)		
6D*NR40M* -###	6DRXR40M* -###				998-3119-25 (440v)		
6D*NR49M* -###	6DVXR49M* -###	980-5000-04	980-5000-10	923-0084-01 (120v)	998-2119-32 (120v)		
				923-0084-02 (240v)	998-2119-33 (240v)		
					998-2119-34 (440v)		
6D Optimized Medium Temperature Models (Discus III) OEM Only							
6D*NR28M* -###	6DSXR28M* -###	980-5000-02	980-5000-12	923-0084-01 (120v)	998-3119-23 (120v)	943-0194-00	998-0189-00
				923-0084-02 (240v)	998-3119-24 (240v)		
					998-3119-25 (440v)		

\* Model and/or oil variations.

### Voltage variations

- ① Required when upgrading compressor only. Not required when using a digital conversion kit, coils and controller are already included. Not for use on CoreSense™ Diagnostics.
- ② Controller intended for use on systems without master controllers. Will not work on parallel applications with three or more compressors. Controller requires a 24 volt power supply not included. Refer to AE8-1386 Application Guidelines for the Emerson Closed Loop Digital Controller (XC643) for more information.
- ③ A 6D digital conversion kit alone will only provide 66% to 100% capacity reduction. A unloader kit in combination with a digital conversion kit is required on 6D models for 33% to 100% capacity reduction.

## Copeland Scroll™ digital upgrade parts

Standard Model Number	Digital Model Number	Tubing & Valve Kit	Coil Kit	Thermistor Kit ① ③	Digital Controller (Master Controller Required)	Digital Controller ① (Master Controller Not Required)
Medium & High Temperature Models						
ZB21KC* -###	ZBD21KC* -###	998-0066-09 (Rotolock) 998-0073-00 (Braze)	923-0058-00 (24v)	N/A	943-0086-00	998-0189-00
ZB30KC* -###	ZBD30KC* -###		923-0058-08 (120v)			
ZB38KC* -###	ZBD38KC* -###		923-0058-09 (240v)			
ZB45KC* -###	ZBD45KC* -###	N/A	998-0060-03 (24v) 998-0060-04 (120v) 998-0060-09 (240v)	985-0199-00 (1/2" DLT)	998-0341-00 ④	
ZB57KC* -###	ZBD58KC* -###			985-0200-00 (7/8" DLT)		
ZB76KC* -###	ZBD76KC* -###					
ZB76K5* -###	ZBD76K5* -###					
ZB114K5* -###	ZBD114K5* -###					
Low Temperature Models						
ZF13K4* -###	ZFD13KV* -###	998-0066-09 (Rotolock) 998-0073-00 (Braze)	998-0060-03 (24v)	N/A	943-0086-00	998-0189-00
ZF18K4* -###	ZFD18KV* -###		998-0060-04 (120v)			
ZF25K4* -###	ZFD25KV* -###		998-0060-09 (240v)			
ZF41K5* -###	ZFD41K5* -###	N/A	998-0060-03 (24v)	N/A	943-0086-00	998-0189-00
ZF54K5* -###	ZFD54K5* -###		998-0060-04 (120v) 998-0060-09 (240v)			

\* Model and/or oil variations.

### Voltage variations

- ① Required only when using digital controller kit 943-0086-00.
- ② Controller intended for use on systems without master controllers. Will not work on parallel applications with three or more compressors. Controller requires a 24 volt power supply not included. Refer to AE8-1386 Application Guidelines for the Emerson Closed Loop Digital Controller (XC643) for more information.
- ③ Select the correct thermistor kit for the discharge line size 1/2" or 3/4".
- ④ K5 Digital Scrolls have a built in Digital controller. Analog input wiring kit is NOT required when using an Emerson E2 master controller.

## About Emerson

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