

**NO:** ECT1TH1120  
**DATE:** 2019/12/12  
**TO:** All Refrigeration Customers  
**FROM:** Emerson Commercial & Residential Solutions – Asia & MEA  
**SUBJECT:** ZF/ZFI Low Temperature Scroll Product Line Extension & Large Refrigeration Scroll Production  
**EFFECTIVE DATE:** Immediate

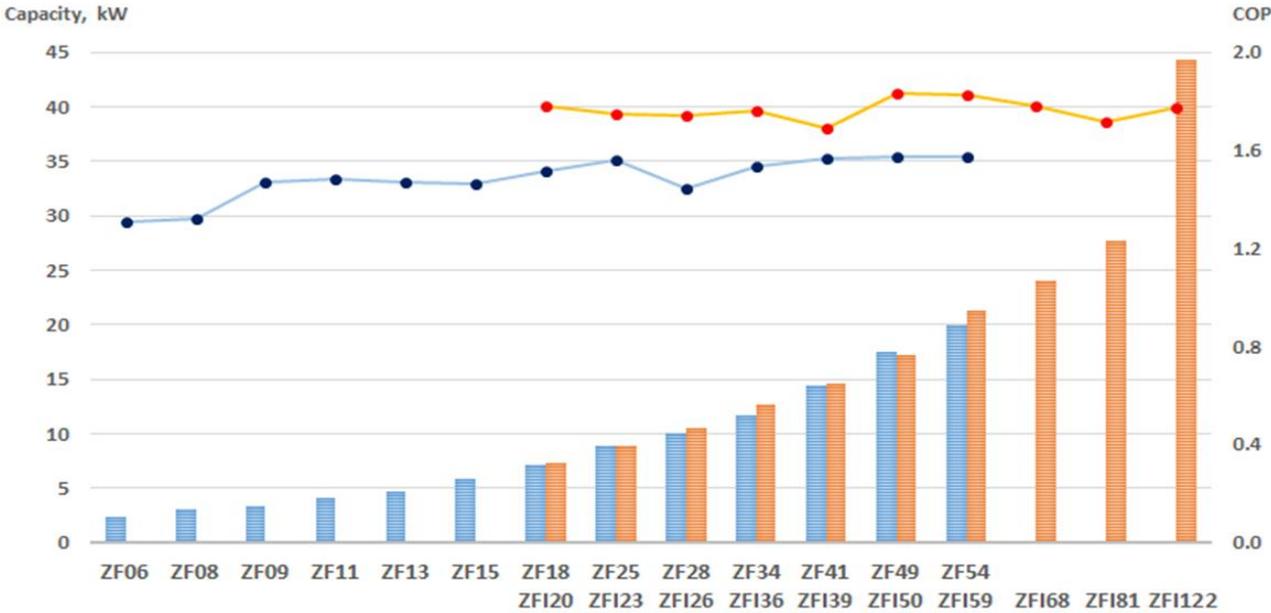
The Copeland Scroll™ ZF/ZFI compressor represents the latest generation in scroll compliant technology for the refrigeration industry. Optimized for low temperature applications, the ZF/ZFI compressors also offers exceptional performance in medium temperature applications. ZF compressors are designed to operate with liquid injection to control discharge temperatures while ZFI compressors are intended for operation with a subcooler and vapor injection.

As we continue to expand our ZF/ZFI low temperature scroll product portfolio, Emerson is pleased to announce the launch of the following:

- For the lower horsepower range, 2~4HP, ZF liquid injection scrolls (ZF06~ZF11) to be produced in the Thailand plant
- The large horsepower range expands to 30HP, includes 17HP liquid injection scroll (ZF54), 20HP vapor injection scroll (ZFI81) and 30HP vapor injection scroll (ZFI122)



**ZF/ZFI Product Line-up - 60Hz**



Notes: Based on low temperature cold room conditions: -25°C evaporating, 45°C condensing and 20°C return gas temperature.

**Features & Benefits**

- Copeland Scroll axial and radial compliance for superior reliability and efficiency
- Wide operating envelope, minimum evaporating temperature to -40°C
- Qualified for multiple refrigerants including R404A, R22, R407A/C/F, R448A/R449A
- Low vibration, reducing refrigerant leaks in the system
- Compact design and lightweight, 20%~50% weight reduction compared to equivalent semi-hermetic compressors
- ZF liquid Injection with DTC valve for simple and reliable solution
- ZFI vapor injection for the most efficient and best life cycle cost solution

**ZF Liquid Injection Scroll**  
(ZF06-ZF54)



**DTC Valve Kits**  
(Customer selectable)



510-0875-01 or 510-0875-02 for ZF06-ZF28  
510-0875-00 for ZF34-ZF54

**ZFI Vapor Injection Scroll**  
(ZF120-ZF1122)



**Vapor Injection Control Kits**  
(Customer selectable)



Emerson could offer EVI control kits including controller, EXV, sensors and plate heat exchanger,  
Please contact Emerson sales or Application engineer for details

### Available Models in Thailand and Suzhou Plants

Motor	ZF Liquid Injection Models			
	Rotalock	Stub Tube	Manufacturing Plant	Status
TFD	ZF06KQE-TFD-551	ZF06KQE-TFD-550	Thailand	Active, New
	ZF08KQE-TFD-551	ZF08KQE-TFD-550	Thailand	Active, New
	ZF09KQE-TFD-551	ZF09KQE-TFD-550	Thailand	Active, New
	ZF11KQE-TFD-551	ZF11KQE-TFD-550	Thailand	Active, New
	ZF13KQE-TFD-551	ZF13KQE-TFD-550	Thailand	Active
	ZF15KQE-TFD-551	ZF15KQE-TFD-550	Thailand	Active
	ZF18KQE-TFD-551	ZF18KQE-TFD-550	Thailand	Active
	ZF25KQE-TFD-551	ZF25KQE-TFD-550	Thailand	Active
	ZF28KQE-TFD-551	ZF28KQE-TFD-550	Thailand	Active
	ZF34KQE-TFD-564	ZF34KQE-TFD-554	Thailand	Active
	ZF41KQE-TFD-564	ZF41KQE-TFD-554	Thailand	Active
	ZF49KQE-TFD-564	ZF49KQE-TFD-554	Thailand	Active
ZF54KQE-TFD-564	ZF54KQE-TFD-554	Thailand	Active, New	
TF5/ TFC	ZF06KQE-TF5-551	ZF06KQE-TF5-550	Thailand	Active, New
	ZF08KQE-TF5-551	ZF08KQE-TF5-550	Thailand	Active, New
	ZF09KQE-TF5-551	ZF09KQE-TF5-550	Thailand	Active, New
	ZF11KQE-TF5-551	ZF11KQE-TF5-550	Thailand	Active, New
	ZF13KQE-TFC-551	ZF13KQE-TFC-550	Thailand	Active
	ZF13KQE-TFC-551	ZF13KQE-TFC-550	Thailand	Active
	ZF15KQE-TFC-551	ZF15KQE-TFC-550	Thailand	Active
	ZF18KQE-TFC-551	ZF18KQE-TFC-550	Thailand	Active
	ZF25KQE-TFC-551	ZF25KQE-TFC-550	Thailand	Active
	ZF28KQE-TFC-591	ZF28KQE-TFC-580	Thailand	Active
	ZF34KQE-TFC-564 / 567	ZF34KQE-TFC-554	Thailand	Active
	ZF41KQE-TFC-564 / 567	ZF41KQE-TFC-554	Thailand	Active
ZF49KQE-TFC-564 / 567	ZF49KQE-TFC-554	Thailand	Active	
ZF54KQE-TFC-564 / 567	ZF54KQE-TFC-554	Thailand	Active, New	
TF7	ZF13KQE-TF7-551	ZF13KQE-TF7-550	Thailand	Active
	ZF15KQE-TF7-551	ZF15KQE-TF7-550	Thailand	Active
	ZF18KQE-TF7-551	ZF18KQE-TF7-550	Thailand	Active
	ZF25KQE-TF7-551	ZF25KQE-TF7-550	Thailand	Active
	ZF28KQE-TF7-551	ZF28KQE-TF7-550	Thailand	Active
	ZF34KQE-TF7-564 / 567	ZF34KQE-TF7-554	Thailand	Active
	ZF41KQE-TF7-564 / 567	ZF41KQE-TF7-554	Thailand	Active
	ZF49KQE-TF7-564 / 567	ZF49KQE-TF7-554	Thailand	Active
ZF54KQE-TF7-564 / 567	ZF54KQE-TF7-554	Thailand	Active, New	
PFV	ZF06KQE-PFV-551	ZF06KQE-PFV-550	Thailand	Active in Mar 2020
	ZF08KQE-PFV-551	ZF08KQE-PFV-550	Thailand	Active in Mar 2020
	ZF09KQE-PFV-551	ZF09KQE-PFV-550	Thailand	Active in Mar 2020
	ZF11KQE-PFV-551	ZF11KQE-PFV-550	Thailand	Active in Mar 2020
	ZF13KQE-PFV-551	ZF13KQE-PFV-550	Thailand	TBD
	ZF15KQE-PFV-551	ZF15KQE-PFV-550	Thailand	TBD

Notes : Please select the right BOMs when ZF34-54 models are used in Rack application (BOM554/564 for OMB and 567 for OM3)

Motor	ZFI Vapor Injection Models			
	Rotalock	Stub Tube	Manufacturing Plant	Status
TFD/ TED	ZFI20KQE-TFD-552	ZFI20KQE-TFD-550	Thailand	Active
	ZFI23KQE-TFD-552	ZFI23KQE-TFD-550	Thailand	Active, New
	ZFI26KQE-TFD-552	ZFI26KQE-TFD-550	Thailand	Active
	ZFI36KQE-TFD-552	ZFI36KQE-TFD-550	Thailand	Active
	ZFI39KQE-TFD-552	ZFI39KQE-TFD-550	Thailand	Active
	ZFI50KQE-TFD-564 / 567	ZFI50KQE-TFD-554	Thailand	Active
	ZFI59KQE-TFD-564 / 567	ZFI59KQE-TFD-554	Thailand	Active
	ZFI68KQE-TFD-564 / 567	ZFI68KQE-TFD-554	Thailand	Active
	ZFI81KQE-TFD-564 / 567	ZFI81KQE-TFD-554	Thailand	Active, New
ZFI122KQE-TED-523	ZFI122KQE-TED-522	Suzhou, China	Active, New	
TFC/ TEC	ZFI20KQE-TFC-552	ZFI20KQE-TFC-550	Thailand	Active
	ZFI23KQE-TFC-552	ZFI23KQE-TFC-550	Thailand	Active, New
	ZFI26KQE-TFC-552	ZFI26KQE-TFC-550	Thailand	Active
	ZFI36KQE-TFC-552	ZFI36KQE-TFC-550	Thailand	Active
	ZFI39KQE-TFC-592	ZFI39KQE-TFC-580	Thailand	Active
	ZFI50KQE-TFC-564 / 567	ZFI50KQE-TFC-554	Thailand	Active
	ZFI59KQE-TFC-564 / 567	ZFI59KQE-TFC-554	Thailand	Active
	ZFI68KQE-TFC-564 / 567	ZFI68KQE-TFC-554	Thailand	Active
	ZFI81KQE-TFC-564 / 567	ZFI81KQE-TFC-554	Thailand	Active, New
ZFI122KQE-TEC-523	ZFI122KQE-TEC-522	Suzhou, China	Active, New	
TF7/ TE7	ZFI20KQE-TF7-552	ZFI20KQE-TF7-550	Thailand	Active
	ZFI23KQE-TF7-552	ZFI23KQE-TF7-550	Thailand	TBD
	ZFI26KQE-TF7-552	ZFI26KQE-TF7-550	Thailand	Active
	ZFI36KQE-TF7-552	ZFI36KQE-TF7-550	Thailand	Active
	ZFI39KQE-TF7-552	ZFI39KQE-TF7-550	Thailand	Active
	ZFI50KQE-TF7-564 / 567	ZFI50KQE-TF7-554	Thailand	Active
	ZFI59KQE-TF7-564 / 567	ZFI59KQE-TF7-554	Thailand	Active
	ZFI68KQE-TF7-564 / 567	ZFI68KQE-TF7-554	Thailand	Active
	ZFI81KQE-TF7-564 / 567	ZFI81KQE-TF7-554	Thailand	Active, New
ZFI122KQE-TE7-523	ZFI122KQE-TE7-522	Suzhou, China	Active, New	

Notes : Please select the right BOMs when ZFI50-81 models are used in Rack application (BOM554/564 for OMB and 567 for OM3)

TFD/TED: 380-420V-3ph-50Hz; 460V-3ph-60Hz

TF7/TE7: 380V-3ph-60Hz

TFC/TEC: 200V-3ph-50Hz; 208-230V-3ph-60Hz

TF5: 200-220V-3ph-50Hz; 200-230V-3ph-60Hz

PFV: 200V-1ph-50Hz; 208-230V-1ph-60Hz

For more information, please contact your local Emerson Applications Engineer or Sales Representative.

Visit the Emerson website to view the latest the product catalogues and selection software:

<https://climate.emerson.com/en-sg/products/refrigeration/scroll-compressors>