

NO: 10-15
DATE: 17/02/2015
TO: All Customers
FROM: Emerson Climate Technologies Europe
SUBJECT: Improved Standstill Pressure for Scroll CO₂ Subcritical Compressors

Emerson Climate Technologies is announcing the improvement of stand still pressures for Scroll CO₂ subcritical compressors for low temperature refrigeration applications.

The standstill pressures for ZO scroll compressors are increased from 45 bar to 52 bar on the discharge side and from 28 bar to 30 bar on the suction side as previously announced. Scroll Digital (ZOD) compressors remain at previous pressure rating and an application design solution is being worked on.

This implementation for ZO scroll compressors has taken place in our production in Dec 2014 with the compressor serial number starting with the letters 14L. The improved pressures allow improved system resilience and sustainable system performance.

Product Range:

The full range of Copeland Scroll™ ZO is outlined below:

Model	Ident	HP	Displacement m ³ /h	Cooling Capacity (kW)	COP	Net Weight Kg	Power Supply	Rated Pressures	
								Low Side PS	High Side PS
ZO21K5E-TFDN-551	8854405	1,5	2,6	4,8	3,6	22	400/3/50 (TFD)	30 bar	52 bar
ZO34K3E-TFDN-551	8830718	2,0	4,1	7,2	3,6	30			
ZO45K3E-TFDN-551	8831266	2,5	5,4	10,2	3,8	31			
ZO58K3E-TFDN-551	8831277	3,5	6,9	13	3,9	33			
ZO88KCE-TFDN-551	8849830	5,5	10,1	19,5	3,9	40			
ZO104KCE-TFDN-551	8837388	6,0	11,7	22,7	4,0	40	400/3/50 (TFD)	30 bar	45 bar
ZOD34K3E-TFDN-551	8850721	2,0	4,1	7,2	3,7	30			
ZOD104KCE-TFDN-551	8847287	6,0	11,7	22,1	3,8	41			

Cooling capacity at EN12900 -35°C/-5°C, 10K Superheat

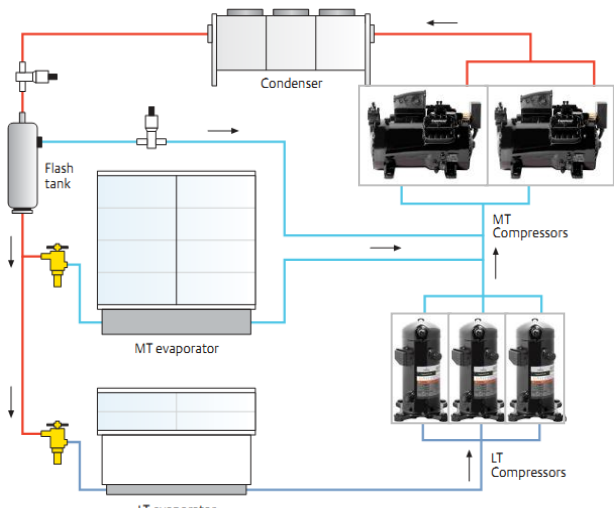
Key Benefits:

These compressors provide system manufacturers and end users the following benefits:

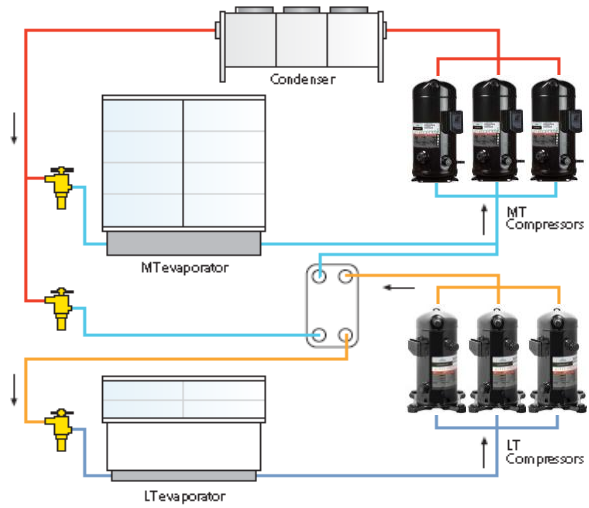
- Reduced investment costs to minimize cost premium to standard HFC systems
- Compactness, more than half of the weight of an equivalent semi-hermetic compressor allowing easy installation and machine room space optimization
- Resistant to liquid slugging, high bearing durability
- Low oil throw and optimized lubrication
- Optional sound shell (-12dba) for noise sensitive applications
- Digital models with continuous modulation from 10...100%, an excellent and affordable alternative to inverter solutions

Main Applications:

Copeland Scroll ZO (D) is a perfect fit for booster packs used in convenience stores and applications where compactness, less weight and capital cost is key. It also represents an excellent opportunity for the low temperature side of cascade or hybrid systems using R134a, R407A/F, R448A, R449A and R450A in medium temperature.



Booster System with Stream / Scroll Solution



Cascade System with Scroll / Scroll Solution

For any additional information, please contact Venu Kandi or your Application Engineering representative.

