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Application Engineering Europe

COPELAND SCROLL™ COMPRESSORS BOM OVERVIEW

1 Scroll nomenclature

The scroll nomenclature, as given on the nameplate of the compressor, contains information such as compressor model family, application, capacity and other specifications. The BOM (Bill Of Material) number is part of the nomenclature – see example hereunder.

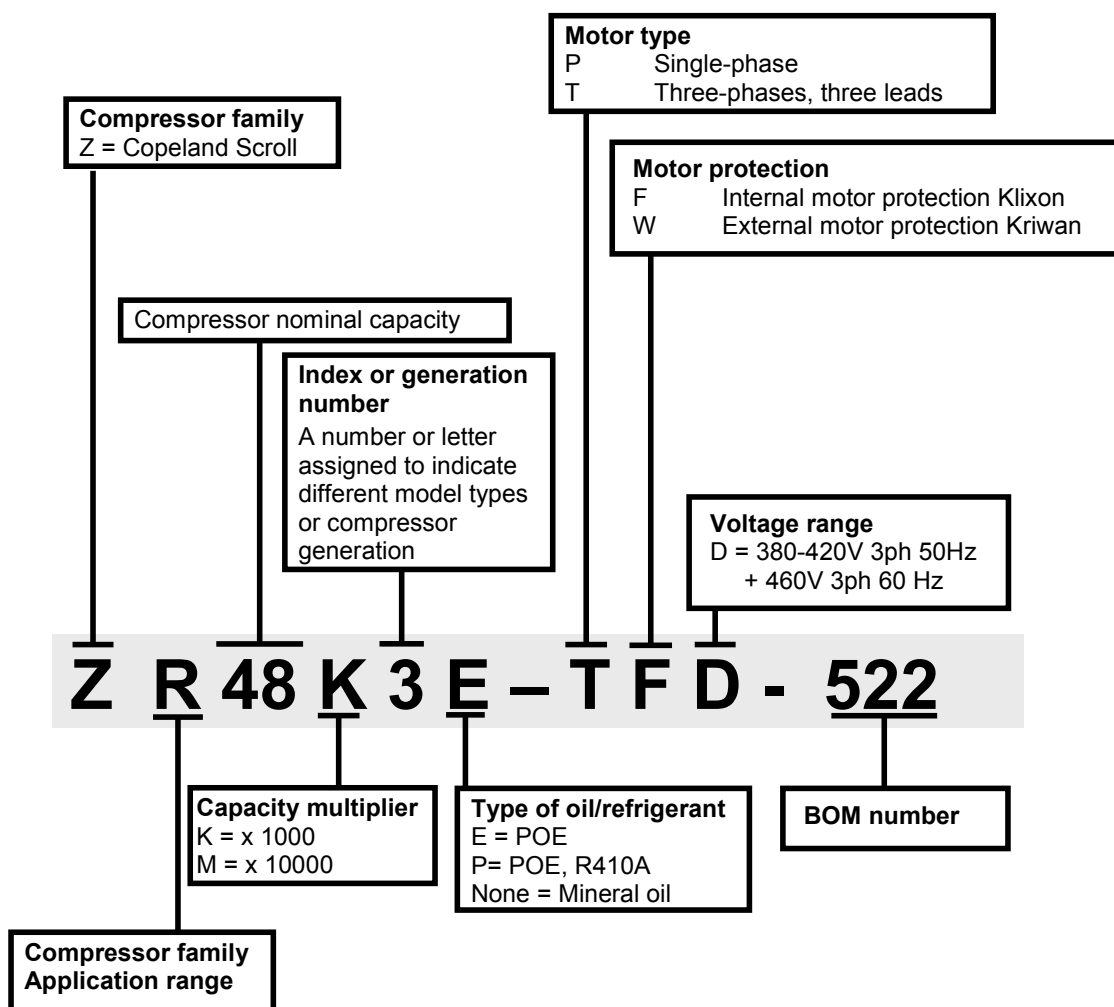


Figure 1: Example of nomenclature for a standard Scroll compressor, ZR range

2 BOM number

The BOM (Bill Of Material) number contains three digits and can be found at the end of the scroll compressor nomenclature. It gives indications on the compressor specifications in terms of compressor housing, variation and IP rating of the electrical box, or the characteristics of some accessories in the standard delivery. The BOM number gives no indication as to the compressor capacity values, such as cooling capacity, heating capacity or COP.

European standard BOM

A list of the most common European standard BOM numbers can be found in the overview tables hereafter. For more details about BOM versions, compressor standard delivery and possible accessories, please refer to the Emerson price list.

European special BOM (OEM)

Some special BOM numbers were created for specific OEM customer projects and/or compressor variations. In some instances the special BOM and the compressor specifications are identified as confidential and cannot be made public. For more information, please contact your local Application Engineering representative at Emerson.

Worldwide standard- and special BOM

Other sales regions such as the USA, Asia etc... might have their own BOM number specifications, which could be totally different from the European numbering. Special OEM BOM numbers can be confidential as well. For more information and possible transcode to European BOM equivalence, please contact your local Application Engineering representative at Emerson.

BOM explanation example:

ZR144 KCE TFD 455

BOM 455:

- compressor with brazing stub tubes
- including oil sight glass
- including Schröder oil service valve
- electronic box, IP21 rating
- internal motor protection Klixon
- without mounting parts

BOM	Compressor Model		Compressor Connections		Oil Sight Glass	Oil Service Schrader	Electrical Box IP Rating	Electrical Conn. Molded Plug IP Rating	Internal Motor Prot. Klixon	External Motor Prot. Kriwan	Mounting Parts		Others, Special Features
			Brazing	Rotalock							single oper.	parallel oper.	
522	ZR18	K4E	X				IP21		X		X		obsolete
622	ZR18	K5E	X					IP56	X		X		
522	ZR22-48	K3E	X				IP21		X		X		
522	ZR61-81	KCE/K3E	X				IP21		X		X		
523	ZR48-81	K3E/KCE		X			IP21		X			X	
422	ZR48-81	K3E/KCE	X				IP21		X		X		tandem ready extra connections
230	ZR22-81	K3E/KCE	X				IP21		X		?		US version, not available in Europe
455	ZR94-190	KCE TF*	X		X	X	IP21		X				
655	ZR94-190	KCE TF*	X		X	X		IP66	X				
522	ZR94-190	KCE TF*	X				IP21		X		?		US version, not available in EU
550	ZR94-190	KCE TF*	X		X	X	IP21		X		X		obsolete
425	ZR94-190	KCE TF*	X		X	X	IP21		X			X	obsolete
650	ZR94-190	KCE TF*	X		X	X		IP66	X		X		obsolete
455	ZR160-190	KCE TW*	X		X	X	IP54			24V AC			
456	ZR160-190	KCE TW*	X		X	X	IP54			230V AC			
961	ZR90-19	K3E M3E		X	X	X	IP54			230V AC	X		service compr. incl. adapt.kit rotal->braze + Kriwan 24V AC
522	ZR90-19	K3E M3E	X		X	X	IP54			230V AC	X		obsolete
551	ZR90-19	K3E M3E		X	X	X	IP54			230V AC	X		obsolete
568	ZR90-19	K3E M3E	X		X	X	IP54			24V AC	X		obsolete
561	ZR90-19	K3E M3E		X	X	X	IP54			24V AC	X		obsolete
572	ZR90-19	K3E M3E	X		X	X	IP54			230V AC	X		obsolete tandem ready extra conn. braze
570	ZR90-19	K3E M3E		X	X	X	IP54			230V AC	X		obsolete tandem ready extra conn. rotalock
542	ZR90-19	K3E M3E	X		X	X	IP54			24V AC	X		obsolete tandem ready extra conn. braze
540	ZR90-19	K3E M3E		X	X	X	IP54			24V AC	X		obsolete tandem ready extra conn. rotalock
591	ZR90-19	K3E M3E		X	X	X	IP54			24V DC	X		obsolete
522	ZR250-380	KCE	X		X	X	IP54			230V AC	X		
523	ZR250-380	KCE		X	X	X	IP54			230V AC	X		
524	ZR250-380	KCE	X		X	X	IP54			24V AC	X		
525	ZR250-380	KCE		X	X	X	IP54			24V AC	X		
422	ZRD48-81	KCE	X				IP21		X			X	tandem ready extra connections
522	ZRD42/94	KCE	X				IP21		X		X		
455	ZRD125	KCE	X		X	X	IP21		X				

BOM	Compressor Model		Compressor Connections		Oil Sight Glass	Oil Service Schrader	Electrical Box IP Rating	Electrical Conn. Molded Plug IP Rating	Internal Motor Prot. Klixon	External Motor Prot. Kriwan	Mounting Parts		Others, Special Features
			Brazing	Rotalock							single oper.	parallel oper.	
522	ZP24-61	K5E	X				IP21		X		X		
422	ZP24-61	K5E	X				IP21		X				
522	ZP24-54	KSE	X				IP21		X		X		obsolete
422	ZP36-54	KSE	X				IP21		X				obsolete tandem ready extra connections
522	ZP23-54	K3E	X				IP21		X		X		phase out in 2018
422	ZP41-54	K3E	X				IP21		X				phase out in 2018
522	ZP61-91	KCE	X				IP21		X		X		
422	ZP61-91	KCE	X				IP21		X				tandem ready extra connections
576	ZP61-91	K5E KCE	X				IP54		X		X		
476	ZP61-91	K5E KCE	X				IP54		X				
455	ZP90-182	KCE	X		X	X	IP21		X				
655	ZP90-182	KCE	X		X	X		IP66	X				
477	ZP90-182	KCE	X		X	X	IP54		X				
425	ZP90-182	KCE	X		X	X	IP21		X			X	obsolete
625	ZP90-182	KCE	X		X	X		IP66	X			X	obsolete
455	ZP154-182	KCE TW*	X		X	X	IP54			24V AC			
456	ZP154-182	KCE TW*	X		X	X	IP54			230V AC			
522	ZP180	KCE	X		X	X	IP54			230V AC	X		obsolete
922	ZP180	KCE	X		X	X	IP54			230V AC	X		service version
522	ZP235-725	KCE	X		X	X	IP54			230V AC	X		
524	ZP235-725	KCE	X		X	X	IP54			24V AC	X		
523	ZP235-385	KCE		X	X	X	IP54			230V AC	X		oem version
525	ZP235-385	KCE		X	X	X	IP54			24V AC	X		oem version
522	ZPD34-54	KSE	X				IP21		X		X		
522	ZPD61-91	KCE	X				IP21		X		X		
422	ZPD61-91	KCE	X				IP21		X			X	tandem ready extra connections
455	ZPD103-182	KCE	X		X	X	IP21		X				

BOM	Compressor Model		Compressor Connections		Oil Sight Glass	Oil Service Schrader	Electrical Box IP Rating	Electrical Conn. Molded Plug IP Rating	Internal Motor Prot. Klixon	External Motor Prot. Kriwan	Mounting Parts		Others, Special Features
			Brazing	Rotalock							single oper.	parallel oper.	
650	ZRH49-72	KJE	X					IP56	X		X		
651	ZBH30-45	KJE		X	X	X		IP56	X		X		
540	ZRH49-72	KJE	X				IP21		X		X		obsolete
541	ZBH30-45	KJE		X	X	X	IP21		X		X		obsolete
502	ZRH78-116	KTE	X				IP56		X		X		

BOM	Compressor Model		Compressor Connections		Oil Sight Glass	Oil Service Schrader	Electrical Box IP Rating	Electrical Conn. Molded Plug IP Rating	Internal Motor Prot. Klixon	External Motor Prot. Kriwan	Mounting Parts		Others, Special Features
			Brazing	Rotalock							single oper.	parallel oper.	
524	ZH04-19	K1P	X				IP21		X		X		
424	ZH04-19	K1P	X				IP21		X				tandem ready extra brazing connection
526	ZHI 05-23	K1P	X				IP21		X		X		EVI connection
426	ZHI 05-14	K1P	X				IP21		X				EVI and tandem ready brazing connection
476	ZHI 18-23	K1P	X				IP54		X				EVI and tandem ready brazing connection
477	ZHI 27-40	K1P	X		X		IP54		X				EVI connection
524	ZH12-45	K4E	X				IP21		X		X		
424	ZH12-45	K4E	X				IP21		X				tandem ready extra brazing connection
426	ZH06-18	KVE	X				IP21		X		X		EVI and tandem ready brazing connection
526	ZH06-18	KVE	X				IP21		X		X		EVI connection
524	ZH56-11	K4E M4E	X		X	X	IP54			230V AC	X		
526	ZH24-48	KVE	X		X	X	IP54			230V AC	X		EVI connection
455	ZH40-75	KCE	X		X	X	IP21		X				
522	ZH100-150	KCE	X		X	X	IP54			230V AC			
524	ZH04-16	KCU	X				IP65		X		X		e-box Atex
424	ZH04-16	KCU	X				IP65		X			X	e-box Atex

BOM	Compressor Model		Compressor Connections		Oil Sight Glass	Oil Service Schrader	Electrical Box IP Rating	Electrical Conn. Molded Plug IP Rating	Internal Motor Prot. Klixon	External Motor Prot. Kriwan	Mounting Parts		Others, Special Features
			Brazing	Rotalock							single oper.	parallel oper.	
524	ZS09-13	KAE	X				IP21		X		X		housing design 3 foot
618	ZS09-13	KAE	X					IP66	X		X		US Version housing design 4 foot
551	ZB15-45	KCE		X	X	X	IP21		X		X		
550	ZB15-45	KCE	X		X	X	IP21		X		X		oem version
551	ZS15-45	K4E		X	X	X	IP21		X		X		will go obsolete incl. discharge thermistor
591	ZB48-57	KCE		X	X	X	IP54		X		X		
551	ZB50-114	KCE TF*		X	X	X	IP21		X		X		incl. internal discharge temp prot. ASTP
651	ZB50-114	KCE		X	X	X		IP66	X		X		
551	ZB95-114	KCE TW*		X	X	X	IP54			230V AC	X		obsolete
567	ZB66-114	K5E		X	X	X	IP54		X				incl. discharge thermostat
551	ZB56-11	KCE MCE		X	X	X	IP54			230V AC	X		
551	ZS56-11	K4E M4E		X	X	X	IP54			230V AC	X		will go obsolete
523	ZB220	KCE		X	X	X	IP54			230V AC			
524	ZB12-49	KCU	X				IP65		X		X		e-box Atex
424	ZB12-49	KCU	X				IP65		X				e-box Atex
551	ZBD21-29	KCE		X	X	X	IP21		X		X		incl. discharge thermostat
551	ZBD30-45	KCE		X	X	X	IP21		X		X		
591	ZBD57	KCE		X	X	X	IP54		X		X		
551	ZBD58-76	KCE		X	X	X	IP54		X		X		obsolete incl. discharge thermostat
567	ZBD76-114	K5E		X	X	X	IP54		X		X		incl. discharge thermostat

BOM	Compressor Model		Compressor Connections		Oil Sight Glass	Oil Service Schrader	Electrical Box IP Rating	Electrical Conn. Molded Plug IP Rating	Internal Motor Prot. Klixon	External Motor Prot. Kriwan	Mounting Parts		Others, Special Features
			Brazing	Rotalock							single oper.	parallel oper.	
551	ZF06-18	K4E		X	X	X	IP21		X		X		connection for liquid injection incl. discharge thermostat
556	ZF06-18	K4E		X	X	X	IP21		X		X		connection for liquid injection incl. discharge thermostat incl. DTC valve
550	ZF06-18	K4E	X		X	X	IP21		X		X		oem version connection for liquid injection incl. discharge thermostat
265	ZF06-18	K4E		X	X	X	IP21		X		X		US version connection for liquid injection
555	ZF06-18	K4E	X		X	X	IP21		X		X		US version connection for liquid injection incl. DTC valve
551	ZF13-18	KVE		X	X	X	IP21		X		X		connection for vapour injection incl. discharge thermostat
550	ZF13-18	KVE	X		X	X	IP21		X		X		oem version connection for vapour injection incl. discharge thermostat
567	ZF25-54	K5E		X	X	X	IP54		X		X		connection for liquid or vapour injection incl. discharge thermostat
551	ZF24-48	K4E		X	X	X	IP54			230V AC	X		will go obsolete connection for liquid injection
551	ZF24-48	KVE		X	X	X	IP54			230V AC	X		will go obsolete connection for vapour injection
551	ZFD13-18	KVE		X	X	X	IP21		X		X		connection for vapour injection incl. discharge thermostat
552	ZFD13-18	KVE		X	X	X	IP21		X		X		US version connection for vapour injection braze
591	ZFD25	KVE		X	X	X	IP54		X				connection for vapour injection incl. discharge thermostat
567	ZFD41	K5E		X	X	X	IP54		X		X		connection for liquid or vapour injection incl. discharge thermostat

BOM	Compressor Model		Compressor Connections		Oil Sight Glass	Oil Service Schrader	Electrical Box IP Rating	Electrical Conn. Molded Plug IP Rating	Internal Motor Prot. Klixon	External Motor Prot. Kriwan	Mounting Parts		Others, Special Features
			Brazing	Rotalock							single oper.	parallel oper.	
551	ZO21	K5E		X	X	X	IP21		X		X		incl. discharge thermostat
269	ZO21	K5E		X	X	X	IP21		X		X		US version
551	ZO34-58	K3E		X	X	X	IP21		X		X		incl. discharge thermostat
269	ZO34-58	K3E		X	X	X	IP21		X		X		US version
551	ZO88-104	KCE		X	X	X	IP21		X		X		incl. discharge thermostat
269	ZO88-104	KCE		X	X	X	IP21		X		X		US version
551	ZOD34	K3E		X	X	X	IP21		X		X		incl. discharge thermostat
269	ZOD34	K3E		X	X	X	IP21		X		X		US version
522	ZOD104	KCE		X	X	X	IP21		X		X		incl. discharge thermostat
269	ZOD104	KCE		X	X	X	IP21		X		X		US version

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