

Emerson Copeland Scroll Compressor Series

Applications	Product Series
Air Conditioning	ZR Series (R22/R407C/R134a)
Air Conditioning	ZP Series (R410A)
Heat Pump Water Heating	ZW Series (R22/R407C/R134a)
Refrigeration	ZB Series (R22/R404A/R507/R134a)



• Features for Emerson Copeland Scroll Compressor

1. Wide scroll line-up

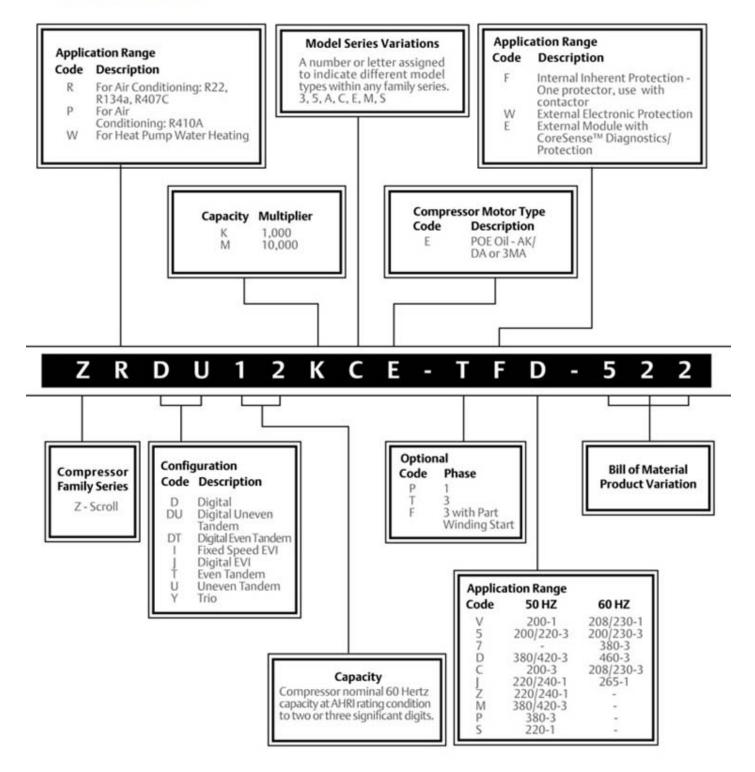
2. Low oil circulation rate

- 3. Low sound and vibration level
- 4. High efficiency for saving energy consumption
- 5. Place of Origin: China (Mainland)
- 6. Refrigerant: R22/R410A/R407C/R134a/R404A/R507
- 7. Certification: TUV, CCC, UL, VDE, CE, CRAA, TIS, KC, CB, INMETRO
 - Emerson Copeland Scroll Compressor Model Nomenclatures



Nomenclature

ZR/ZP/ZW Series



You can Download Emerson Copeland Scroll Compressor Catalog to get the all models list.

• 4.8HP emerson copeland scroll compressor ZR57KE-TFD(TFM/TFP) Specifications

Technical Data (ZR Series)

R22

220-240V; 50Hz, 1 Phase

	-	Nominal	Cap	acity	Input	Current	COP	EER	Displacement	OII	Net	LRA	Sound
Model		HP	(W)	(Btu/h)	Power (W)	(A)	(W/W)	(Btu/Wh)	(cc/ Rev.)	Quantity (I)	Weight (kg)	(A)	Power (dBA)
ZR22K3	PFJ	1.8	5,350	18,200	1,730	8.0	3.08	10.5	30.7	1.12	25.9	47.0	65.0
ZR24K3	PFJ	2.0	5,900	20,200	1,920	9.2	3.08	10.5	34.0	1.12	25.0	58.0	65.0
ZR26K3	PFJ	2.2	6,350	21,700	2,010	9.5	3.17	10.8	36.1	1.12	27.2	60.0	65.0
ZR28KM	PFZ	2.3	6,750	23,000	2,020	9.2	3.34	11.4	37.2	0.77	19.4	52.9	63.0
ZR30KM	PFZ	2.5	7,350	25,000	2,190	10.1	3.34	11.4	40.5	0.77	19.3	52.9	63.0
ZR30KS	PFZ	2.5	7,350	25,000	2,230	10.2	3.28	11.2	41.0	0.74	22.1	60.0	68.0
ZR32KS	PFZ	2.7	7,900	27,000	2,410	10.9	3.28	11.2	44.3	0.74	22.1	66.0	68.0
ZR34K3	PFJ	2.8	8,250	28,100	2,550	12.1	3.22	11.0	46.2	1.24	28.6	76.0	68.0
ZR36K3	PFJ	3.0	8,850	30,200	2,720	13.1	3.25	11.1	49.5	1.24	29.5	82.0	68.0
ZR40K3	PFJ	3.3	9,750	33,300	3,000	14.7	3.25	11.1	54.2	1.24	27.9	100.0	68.0
ZR42K3	PFJ	3.5	10,250	35,000	3,150	15.2	3.25	11.1	57.2	1.24	30.4	97.0	68.0
ZR45K3	PFJ	3.8	11,200	38,200	3,380	16.4	3.31	11.3	61.1	1.24	32.2	114.0	68.0
ZR47K3	PFJ	3.9	11,550	39,400	3,460	16.8	3.34	11.4	63.3	1.24	31.3	114.0	68.0
ZR48K3	PFJ	4.0	11,850	40,500	3,630	17.6	3.28	11.2	65.5	1.24	31.3	114.0	68.0
ZR61KC	PFZ	5.1	14,950	51,000	4,550	21.7	3.28	11.2	82.6	1.66	42.6	150.0	71.0
ZR68KC	PFJ	5.7	16,700	57,000	5,130	24.5	3.25	11.1	93.0	1.83	40,4	150.0	72.0

208-230V; 60Hz, 1 Phase

Model	Nominal		Cap	acitý	Input	Current	COP	EER	Displacement	OII	Net	LRA	Sound
Mod	el	HP	(W)	(Btu/h)	Power (W)	(A)	(W/W)	(Btu/Wh)	(cc/ Rev.)	Quantity (I)	Weight (kg)	(A)	(dBA)
ZR18K5	PFV	1.5	5,300	18,000	1,705	7.8	3.09	10.6	25.2	0.74	22.2	55.0	68.0
ZR22K3	PFV	1.8	6,550	22,400	2,090	9.0	3.14	10.7	30.7	1.12	25.9	56.0	68.0
ZR24K3	PFV	2.0	7,200	24,500	2,230	10.3	3.22	11.0	34.0	1.12	26.3	61.0	68.0
ZR26K3	PFV	2.2	7,800	26,600	2,440	11.1	3.19	10.9	36.1	1.12	26.8	67.0	68.0
ZR28KM	PFV	2.3	8,250	28,100	2,450	10.9	3.34	11.4	37.2	0.77	19.4	61.5	66.0
ZR28KC	PFV	2.3	8,500	29,000	2,620	12.0	3.22	11.0	39.3	1.12	26.7	73.0	68.0
ZR30K3	PFV	2.5	9,100	31,100	2,800	12.6	3.25	11.1	42.0	1.24	28.1	73.0	68.0
ZR32K3	PFV	2.7	9,550	32,600	2,960	13.6	3.22	11.0	43.4	1.24	28.7	83.0	71.0
ZR34K3	PFV	2.8	10,100	34,400	3,060	14.1	3.28	11.2	46.2	1.24	28.5	88.0	71.0
ZR36K3	PFV	3.0	10,800	36,900	3,290	14.9	3.28	11.2	49.5	1.24	29.0	95.0	71.0
ZR40K3	PFV	3.3	11,900	40,600	3,630	16.8	3.28	11.2	54.2	1.24	29.7	104.0	71.0
ZR42K3	PFV	3.5	12,550	42,800	3,790	17.2	3.31	11.3	57.2	1.24	30.4	109.0	71.0
ZR47K3	PFV	3.9	14,150	48,200	4,190	18.2	3.37	11.5	63.3	1.24	31.3	137.0	71.0
ZR48K3	PFV	4.0	14,600	49,800	4,330	19.5	3.37	11.5	65.6	1.24	32.2	137.0	71.0
ZR54K3	PFV	4.5	16,100	55,000	4,830	21.4	3.34	11.4	73.2	1.66	43.1	148.0	74.0
ZR57K3	PFV	4.8	17,000	58,000	5,040	23.6	3.37	11.5	77.2	1.66	40.8	148.0	74.0
ZR61K3	PFV	5.1	18,200	62,000	5,450	24.8	3.34	11.4	82.6	1.66	40.8	148.0	74.0
ZR68KC	PFV	5.7	20,400	69,500	6,200	28.0	3.28	11.2	93.0	1.77	40.4	176.0	74.0

380-420V; 50Hz, 3 Phase

-		Nominal	Cap	acity	Input	Gurrent	COP	EER	Displacement	OII	Net	LRA	Sound
Mod	iei	HP	(W)	(Btu/h)	Power (W)	(A)	(W/W)	(Btu/Wh)	(cc/ Rev.)	Quantity (I)	Weight (kg)	(A)	(dBA)
ZR22K3	TFD	1.8	5,350	18,200	1,770	3.2	3.02	10.3	30.7	1.12	24.5	24.0	65.0
ZR24K3	TFD	2.0	5,900	20,200	1,920	3.5	3.08	10.5	34.0	1.12	25.0	26.0	65.0
ZR26K3	TFD	2.2	6,350	21,700	2,010	3.8	3.17	10.8	36.1	1.12	26.8	26.0	65.0
ZR28K3	TFD	2.3	6,900	23,600	2,150	4.0	3.22	11.0	39.3	1.12	25.4	32.0	65.0
ZR30K3	TFD	2.5	7,400	25,200	2,290	4.2	3.22	11.0	42.0	1.24	25.9	32.0	65.0
ZR32K3	TFD	2.7	7,750	26,500	2,430	4.4	3.19	10.9	43.4	1.24	26.3	35.0	68.0
ZR34K3	TFD	2.8	8,250	28,100	2,500	4.6	3.28	11.2	46.2	1.24	26.9	40.0	68.0
ZR36K3	TFD	3.0	8,850	30,200	2,700	4.8	3.28	11.2	49.5	1.24	27.2	40.0	68.0
ZR40K3	TFD	3.3	9,750	33,300	2,970	5.3	3.28	11.2	54.2	1.24	28.1	46.0	68.0
ZR42K3	TFD	3.5	10,250	35,000	3,110	5.5	3.31	11.3	57.2	1.24	28.2	46.0	68.0
ZR44K5	TFD	3.7	10,600	36,100	3,280	5.4	3.22	11.0	58.4	1.24	28.9	41.0	70.0
ZR45KC	TFD	3.8	11,100	37,900	3,320	6.1	3.34	11.4	61.1	1.36	28.1	48.0	68.0
ZR47KC	TFD	3.9	11,550	39,400	3,430	6.3	3.37	11.5	64.2	1.36	28.1	48.0	68.0
ZR48KC	TFD	4.0	11,850	40,500	3,600	6.1	3.28	11.2	65.5	1.36	28.1	50.0	68.0
ZR54KE	TFD TFM TFP	4.5	13,200	45,000	3,920	7.4	3.37	11.5	73.1	1.36	29.9	71.3	69.0
ZR54KS	TFD	4.5	13,200	45,000	3,920	7.1	3.37	11.5	73.1	1.24	29.9	56.0	69.0
ZR57KE	TFD TFM TFP	4.8	13,900	47,500	4,130	7.8	3.37	11.5	77.2	1.36	28.6	71.3	69.0
ZR57KS	TFD	4.8	14,050	48,000	4,170	7.5	3.37	11.5	77.2	1.24	30.0	56.0	69.0
ZR61KE	TFD TFM TFP	5.1	14,950	51,000	4,470	8.3	3.34	11.4	82.6	1.36	29.9	58.0	69.0
ZR61KS	TFD	5.1	14,950	51,000	4,430	7.9	3.37	11.5	82.6	1.24	29.9	59.0	69.0
ZR68KC	TFD	5.7	16,900	57,500	4,960	8.6	3.40	11.6	93.0	1.77	39.0	74.0	72.0
ZR72KC	TFD	6.0	17,700	60,500	5,200	8.9	3.43	11.7	98.1	1.77	38.6	74.0	72.0
ZR81KC	TFD	6.8	19,900	68,000	5,810	10.5	3.43	11.7	107.8	1.77	39.0	101.0	72.0
ZR84KC	TFD	7.0	20,800	71,000	6,000	11.4	3.46	11.8	113.6	2.51	57.2	100.0	74.0
ZR94KC	TFD	7.8	23,300	79,500	6,750	12.5	3.46	11.8	127.2	2.51	57.2	95.0	73.0
ZR108KC	TFD	9.0	26,400	90,000	7,550	13.7	3.52	12.0	142.9	3.25	59.9	111.0	74.0
ZR125KC	TFD	10.4	31,000	106,000	9,000	15.8	3.46	11.8	167.2	3.25	61.2	118.0	75.0
ZR144KC	TFD	12.0	35,000	120,000	10,100	17.6	3.49	11.9	190.9	3.25	61.2	118.0	76.0
ZR160KC	TFD TWD	13.3	38,000	130,000	11,300	20.3	3.37	11.5	209.1	3.25	64.9	140.0	79.0
ZR190KC	TWD	15.8	45,500	155,000	13,600	25.6	3.34	11.4	249.2	3.25	66.2	174.0 173.0	82.0
ZR250KC		20.8	60,000	204,000	17,700	29.6	3.37	11.5	325.2	4.67	139.3	225.0	83.0
ZR310KC		25.8	74,000	253,000	22,000	37,9	3.37	11.5	410.6	6.80	160.1	272.0	85.0
ZR380KC	TWD	31.7	92,500	315,000	26,500	45.1	3.49	11.9	502.7	6.30	176.9	310.0	88.0

Note: All Values As Per AHRI Standards : Evaporating Temp. : 7.2°C , Condensing Temp. : 54.4°C , Subcooling : 8.3K , Superheat : 11.1K , Ambient Temp. : 35°C

Technical Data (ZR Series)

R22

460V / 200-230V / 380V ; 60 Hz , 3 Phase

Madal	Nominal	Capacity		Input	Current	COP	EER	Displacement	Oil	Not	LRA	Sound Power	
Model	HP	(W)	(Btu/h)	(W)	(A)	(W/W)	(Btu/Wh)	Displacement (cc/ Rev.)	(I)	(kg)	(A)	(dBA)	

ZR22K3	TFD TF5	1.8	6,500	22,100	2,090 2,080	3.2 6.0	3.11 3.14	10.6	30.7	1.12	24.5	22.4 45.0	68.0
ZR24K3	TFD TF5	2.0	7,250	24,800	2,310	3.5 7.0	3.14	10.7	34.0	1.12	25.0	27.0 55.0	68.0
2R26K3	TFD TF5	2.2	7,700 7,750	26,200 26,500	2,430 2,450	3.8 7.0	3.17	10.8	36.1	1.12	26.8	27.0 55.0	68.0
2R28K3	TFD TF5	2.3	8,450	28,900	2,630	4.0 7.9	3.22	11.0	39.3	1.12	25.4	31.0 63.0	68.0
R30K3	TFD TF5	2.5	9,100	31,100	2,830	4.2 8.3	3.22	11.0	42.0	1.24	25.9	31.0 63.0	68.0
ZR32K3	TFD TF5	2.7	9,550	32,600	2,910	4.4 8.7	3.28	11.2	43.4	1.24	26.3	35.0 77.0	71.0
ZR34K3	TFD TF5 TF7	2.8	9,950	34,000	2,970 2,970 3,200	4.6 9.1 5.4	3.34 3.34 3.11	11.4 11.4 10.6	46.2	1.24	26.9 26.9 31.3	39.0 77.0 39.0	71.0
ZR36K3	TFD TF5	3.0	10,800	36,900	3,250	4.9 9.7	3.31	11.3	49.5	1.24	27.2 27.3	39.0 77.0	71.0
ZR40K3	TFD TF5	3.3	11,900	40,600	3,560	5.4 10.7	3.34	11.4	54.2	1.24	28.1 27.9	44.0 88.0	71.0
ZR42K5	TFD TF5	3.5	12,350	42,200	3,750	5.7 11.3	3.30	11.3	56.5	1.24	27.6 27.7	48.0 93.0	73.0
ZR45KC	TFD TF5	3.8	13,500	46,000	4,000	6.1 12.1	3.37	11.5	61.1	1.36	28.1	46.0 91.0	71.0
ZR47KC	TFD TF5 TF7	3.9	13,900	47,500	4,130	6.1 12.2 7.4	3.37	11.5	64.2 64.2 63.4	1.36	28.1	46.0 91.0 54.0	71.0
ZR48KC	TFD TF5 TF7	4.0	14,400	49,100	4,270	6.3 12.6 7.6	3.37	11.5	65.5	1.36	28.1	50.0 91.0 54.0	71.0
ZR54KE	TFD TF5	4.5	16,100 16,900	55,000 57,500	4,780 4,960	7.6 15.30	3.37	11.5	73.1	1.36	29.9	74.8 137.0	72.0
R54KS	TFD TF5 TF7	4.5	16,000	54,500	4,670 4,670 4,700	7.2 14.3 8.3	3.40	11.6	73.1	1.24	29.9	59.0 125.0 65.0	72.0
ZR54K5	TFD TF5 TF7	4.5	15,700	53,500	4,740 4,740 4,730	6.8 13.6 7.9	3.31	11.3	72.0	1.24	31.0	52.0 114.0 65.0	73.0
ZR57KE	TFD	4.8	17,100	58,400	5,040	8.0	3.40	11.6	77.2	1.36	28.6	74.8	72.0
R57KS	TFD TF5 TF7	4.8	17,100	58,500	5,050 5,050 5,100	7.5 15.0 8.9	3.40 3.40 3.37	11.6 11.6 11.5	77.2	1.24	29.9	59.0 125.0 65.0	72.0
ZR61KE	TFD	5.1	18,300	62,500	5,390	8.4	3.40	11.6	82.6	1.36	29.9	74.8	69.0
R61KS	TFD TF5 TF7	5.1	18,200	62,000	5,350	7.9 15.8 9.2	3.40	11.6	82.6	1.24	29.9	56.0 125.0 65.0	72.0
ZR68KC	TFD TF5 TF7	5.7	20,500	70,000	5,950	8.8 17.5 10.1	3.46	11.8	93.0	1,77	39.0	75.0 156.0 70.0	75.0
ZR72KC	TFD TF5 TF7	6.0	21,500	73,500	6.250	9.1 18.2 10.5	3.43	11.7	98.1	1.77	38.6	75.0 156.0 70.0	75.0
R81KC	TFD TF5 TF7	6.8	24,000	82,000	6,950	11.0 20.8 11.8	3.46	11.8	107.8	1.77	39.0	100.0 164.0 100.0	75.0
ZR84KC	TFD TF5 TF7	7.0	25,100	85,500	7,300	11.4 22.8 13.8	3.46	11.8	113.6	2.51	57.2	100.0 196.0 135.0	78.0
R94KC	TFD TF5 TF7 TFD	7.8	28,300	96,500	8,200	12.8 24.9 15.1	3.46	11.8	127.2	2.51	57.2 56.7 57.2 59.9	95.0 195.0 123.0 114.0	78.0
R108KC	and the second s	9,0	32,000	109,000	9,200	14.1 28.2 17.1 16.3	3.49	11.9	142.9	3.25	59.9 59.9 60.3	225.0 140.0 125.0	80.0
ZR125KC		10.4	37,500	128,000	10,900	32.6 19.7 18.2	3.43	11.7	167.2	3.25	61.2	239.0 145.0 125.0	80.0
ZR144KC	TF5 TF7	12.0	43,000	146,000	12,300	38.3 22.5	3.46	11.8	190.9	3.25	61.2	245.0 145.0	80.0
ZR160KC	TFD TF7	13.3	47,000 45,500	160,000 155,000	13,900	20.8 24.2	3.37 3.28	11.5 11.2	209.1	3.25	64.9	150.0 138.0	83.0
ZR160KC	TWD TW5 TW7	13.3	47,000	160,000	13,900	20.8 43.2 24.2	3.37	11.5	209.1	3,25	64.9 66.2 64.9	150.0 300.0 139.0	83.0

Continuation 460V / 200-230V / 380V ; 60 Hz , 3 Phase

Model	Nominal HP	Capacity		Input	Current	COP	EER	Displacement	Oil	Net Weight	LRA	Sound Power
Model		(W)	(Btu/h)	Power (W)	(A)	(W/W)	(Btu/Wh)	(cc/ Rev.)	Quantity (I)	(kg)	(A)	(dBA)
ZR190KC TFD	15.8	55,500	190,000	16,800	26.5	3.34	11.4	249.2	3.25	66.2	179.0	83.0
ZR190KC TW5 TW7	15.8	55,500	190,000	16,800	26.5 53.2 32.0	3.34	11.4	249.2	3.25	66.2	173.0 340.0 196.0	83.0
ZR250KC TWC TW7	20.8	73,500	250,000	21,700	30.5 66.6 36.9	3.37	11.5	325.2 325.2 318.1	4.67	139.3 138.8 139.3	225.0 505.0 280.0	88.0
ZR310KC TWC TW7	25.8	89,500	306,000	27,100	38.8 81.6 47.0	3.31	11.3	410.6	6.80	160.1	272.0 605.0 353.0	90.0
ZR380KC TWC TW7	31.7	111,000	379,000	32,700	47.1 94.2 57.0	3.40	11.6	502.7	6.30	176.9	310.0 599.0 358.0	92.0

Note: All Values As Per AHRI Standards : Evaporating Temp. : 7.2°C , Condensing Temp. : 54.4°C , Subcooling : 8.3K , Superheat : 11.1K , Ambient Temp. : 35°C

