



## Tecumseh Sealed - Introduction

L'Unite Hermetique is 100% owned by Tecumseh.

Where applicable all L'Unite compressors come complete with full electrics and rotalock valves included in cost. FH - TFH - TAG & \*TAGD compressors come complete with crankcase heaters and oil level sight glasses. NB. A/C compressors may not have accessories attached.

### Terminology

LT (LBP)	Low Temperature - Evaporating Temp Range -40°C / -10°C
HT (HBP)	High Temperature - Evaporating Temp Range -15°C / +15°C
HT W (M/HBP)	High Temperature Wide Range - Evaporating Temp Range -25°C / +15°C
AC	Air Conditioning - Evaporating Temp Range -10°C / +10°C
S/F	Static Cooled/Fan Cooled
F	Fan Cooled
SOC	Static with oil cooler
CAP	Capillary Controlled
CAP/TEV	Capillary or Expansion Valve Controlled

For suitable compressor oils, please see Lubricants Section on page 180.

M	Mineral Oil
AB	Alkylbenzene Oil
P	Polyolester Oil

**Warranty:** See Warranty section at rear of catalogue for more details.



T/FH



FH



RK



CAJ



TAGD

\*Dual Compressor

## Nomenclature For Compressor And Condenser Titles



**EN 12900:** The compressors rating conditions for refrigeration. The standard defines the new capacity rating points for refrigeration in a way which is more useful to refrigeration engineers. In addition, they specify the tolerances which are applicable to the characteristics of each product.

## Tecumseh Europe Rating Conditions EN 12900

	Domestic Application	LBP	HBP / MHBP	AC
T° evaporating	-25°C	-35°C	-10°C	+5°C
T° condensing	+55°C	+40°C	+45°C	+50°C
T° return gas (=evaporator outlet)	+32°C	+20°C	+20°C	+10°C
Sub-cooling	0°K	0°K	0°K	0°K

**Note:** Visit [www.tecumseh-europe.com](http://www.tecumseh-europe.com) for additional product information.



### Tecumseh R404A Medium Temp Domestic-Commercial (220-240/1/50)

Column Key: D = Displacement, OC = Oil Charge, Control = Cap/TEV for all models listed.

Realcold Stock No.	Model	Nom. Hp	Appl.	Watts							H (mm)	Displ. (cm³)	OC (L)	Price \$ Excl. GST
				-15°C	-10°C	-5°C	0°C	+7.2°C	+10°C	+15°C				
<b>C7012-AE2</b>	AEZ4430Z	1/4	HT	343	431	532	644	818	889	1017	186	5.7	0.250	
<b>C7014-AE2</b>	AEZ4440Z	1/3	HTW	470	583	716	865	1105	1203	1383	199	7.6	0.350	
<b>C7016-AE2</b>	AE4450Z	3/7	HTW	504	652	823	1020	1358	1508	1806	212	9.40	0.350	
<b>C7020-AE2</b>	CAE9460Z	1/2	HTW	667	1052	1288	1689	1866	2215	2515	212	11.3	0.350	
<b>C7021</b>	CAE9470Z	1/2	HTW	803	1246	1520	1988	2605	2195	2605	215	13.3	0.350	
<b>C7030</b>	CAJ9510Z	1	HTW	1167	1796	2182	2838	3704	3129	3704	282	18.3	0.887	
<b>C7036</b>	CAJ4517Z	1.1/4	HT	1606	2058	2566	3138	4098	4520	5350	282	25.95	0.887	
<b>C7038</b>	CAJ4519Z	1.1/2	HT	2120	2664	3276	3967	5125	5633	6632	282	34.45	0.887	
<b>*C7040</b>	FH4524Z	2	HT	2299	3048	3889	4833	6388	7059	8359	354	43.5	1.480	
<b>*C7042</b>	FH4531Z	2.1/2	HT	3055	3968	4991	6143	8070	8916	10580	370	56.65	1.480	

### Tecumseh R404A Medium Temp Commercial (400/3/50)

Column Key: D = Displacement, OC = Oil Charge, Control = Cap/TEV for all models listed.

Realcold Stock No.	Model	Nom. Hp	Appl.	Watts							H (mm)	Displ. (cm³)	OC (L)	Price \$ Excl. GST
				-15°C	-10°C	-5°C	0°C	+7.2°C	+10°C	+15°C				
<b>*C7058</b>	TFH4540Z	3	HT	4043	5173	6437	7861	10245	11292	13349	370	74.25	1.480	
<b>*C7070P^</b>	TAG4553Z	4.1/2	HT	4633	6220	8062	10202	13895	15550	18845	381	100.7	1.96	
<b>*C7074P^</b>	TAG4561Z	5.0	HT	5389	7107	9082	11363	15282	17036	20527	381	112.5	1.96	
<b>*C7064P^</b>	TAGP4546Z	4.0	HT	4035	5457	7122	9061	12401	13892	16850	368	90.2	1.960	
<b>*C7082P^</b>	TAG4573Z	6.1/4	HT	7121	9156	11508	14224	18870	20938	25033	393	134.8	1.96	

\* Available both single and three phase - please state when ordering.

P^ Include an oil level sight glass and connections for oil and pressure equalising lines.

All above compressors use Polyolester oil.



### Electrics - Medium Temperature R404A

Realcold Stock No.	Compressor	Relay		Overload		Capacitor Start		Capacitor Run	
C7010	AEZ4425Z	C1043	MTRP0037-31	C1591	MRP63AMK-3240	C2000	50 uf/260V	n/a	
C7012	AEZ4430Z	C1045	MTRP0027-31	C1504	MRP56AMK-3240	C2000	50 uf/260V	n/a	
C7012-AE2	AE4430Z-FZ1A	C1225	RP4038	C1689	T14526-23	C2092	64-77uF / 330V	n/a	
C7013	AEZ4440Z	C1049	MTRP0030-31	C1672	MST58AMN-3240	C2038	100 uf/260V	n/a	
C7014	AEZ9440Z	C1153	3ARR3-T3AB3	C1535	MSP61AMK-3242	C2000	50 uf/260V	C2005	7.5 uf/400V
C7014-AE2	AE4440Z-FZ1A	C1226	RP4538	C1690	T1411-23	C2093	108-130uF / 330V	n/a	
C7015	AEZ4450Z	C1027	9660-A467-158	C1587	MRT28AMK-3240	C2000	50 uf/260V	n/a	
C7016	CAE9450Z	C1154	RVA4L3D	C1670	MST36AMHD-3242	C2000	50 uf/260V	C2005	7.5 uf/400V
C7016-AE2	AE4450Z-FZ1A	C1227	RP4938	C1691	T1419-23	C2089	88-108uF / 250V	n/a	
C7020	CAE9460Z	C1155	3ARR3-U10AA3	C1578	MST28AMK-3242	C2000	50 uf/260V	C2005	7.5 uf/400V
C7020-AE2	AE4460Z-FZ1C	C1228	RP5418	C1692	T8107-23	C2092	64-77uF / 330V	n/a	
C7021	CAE9470Z	C1154	RVA4L3D	C1667	MST22APK-3242	C2010	64 uf/260V	C2050	15 uf/400V
C7022	CAJ9480Z	C1210	3ARR3-U10AU3	C1581	MRT24ALK-3242	C2037	88 uf/330V	C2050	15 uf/400V
C7030	CAJ9510Z	n/a		C1675	MST00ALKD-3241	C2039	100 uf/330V	C2050	15 uf/400V
C7032	CAJ9513Z	C1148	3ARR3T6AY3	C1651	MST18AIW-3242	C2030	88 uf/260V	C2050	15 uf/400V
C7036	CAJ4517Z	C1125	3ARR3 T6AV3	C1680	MST16AGZ-3242	C2039	100 uf/330V	C2061	17.5 uf/400V
C7038	CAJ4519Z	C1190	3ARR3 W10AS3	C1685	CST00AHSF-3038	C2038	100 uf/260V	C2088	35 uf/400V
C7039	FH4522Z	C1126	RVA4I3R	Internal		C2042	125 uf/330V	C2085	30 uf/400V
C7040	FH4524Z	C1148	3ARR3T6AY3	Internal		C2039	100 uf/330V	C2085	30 uf/400V
C7042	FH4531Z	n/a		Internal		C2046	156 uf/330V	C2088	35 uf/400V

### Electrics - Low Temperature R404A

Realcold Stock No.	Compressor	Relay		Overload		Capacitor Start		Capacitor Run	
C0532	AEZ2415Z	C1053	MTRP49-31	C1504	MRP56AMK-3240	C2000	50 uf/260V	n/a	
C0532-AE2	AE2415Z-FZ1A	C1230	RP4018	C1694	T4111-23	C2091	72-88uF / 330V	n/a	
C0545	CAE2417Z	C1156	3ARR3-U3AU3	C1504	MRP56AMK-3240	C2000	50 uf/260V	C2005	7.5 uf/400V
C0551	CAE2420Z	C1049	MTRP0030-31	C1578	MST28AMK-3242	C2010	64 uf/260V	n/a	
C0554	CAE2424Z	C1156	3ARR3-U3AU3	C1578	MST28AMK-3242	C2010	64 uf/260V	C2050	15 uf/400V
C0555	CAJ2428Z	C1150	3ARR18A-101B	C1630	MRT16APK-3242	C2037	88 uf/330V	n/a	
C0573	CAJ2432Z	C1157	3ARR3-U10AD3	C1580	MRT20ALKD-3242	C2037	88 uf/330V	C2050	15 uf/400V
C0580	CAJ2446Z	C1140	3ARR3-U10AB3	C1580	MRT20ALKD-3242	C2037	88 uf/330V	C2050	15 uf/400V
C0592	CAJ2464Z	C1155	3ARR3-U10AA3	C1583	MRT00AJZ-3241	C2037	88 uf/330V	C2060	20 uf/400V
C0599	FH2480Z	C1128	RVA4Q3D	Internal		C2046	156 uf/330V	C2070	25 uf/400V



### Electrics - Medium / High Temperature R22

Realcold Stock No.	Compressor	Relay		Overload		Capacitor Start		Capacitor Run	
<b>C0320</b>	AEZ4425E	C1043	MTRP0037-31	C1591	MRP63AMK-3240	C2000	50 uf/260V	n/a	
<b>C0325</b>	AEZ4430E	C1080	9660-B467-138	C1504	MRP56AMK-3240	C2000	50 uf/260V	n/a	
<b>C0333</b>	AEZ4440E	C1049	MTRP0030-31	C1672	MST58AMN-3240	C2038	100 uf/260V	n/a	
<b>C0335</b>	AEZ9440T	C1153	3ARR3-T3AB3	C1535	MSP61AMK-3242	C2010	64 uf/260V	C2005	7.5 uf/400V
<b>C0339</b>	CAE4450E	C1049	MTRP0030-31	C1578	MST28AMK-3242	C2000	50 uf/260V	n/a	
<b>C0340</b>	CAE9450T	C1154	RVA4L3D	C1545	MRT36AMHD-3242	C2000	50 uf/260V	C2005	7.5 uf/400V
<b>C0351</b>	CAE9460T	C1154	RVA4L3D	C1578	MST28AMK-3242	C2000	50 uf/260V	C2005	7.5 uf/400V
<b>C0360</b>	CAJ9480T	C1140	3ARR3-U10AB3	C1581	MRT24ALK-3242	C2039	100 uf/330V	C2050	15 uf/400V
<b>C0375</b>	CAJ9510T	C1140	3ARR3-U10AB3	C1580	MRT20ALKD-3242	C2039	100 uf/330V	C2050	15 uf/400V
<b>C0390</b>	CAJ9513T	C1155	3ARR3-U10AA3	C1585	MRT00AJK-3241	C2037	88 uf/330V	C2050	15 uf/400V
<b>C0392</b>	CAJ4517E	C1141	3ARR3K6AV3	C1620	MST00AHKE-3241	C2039	100 uf/330V	C2060	20 uf/400V
<b>C0393</b>	FH4522F	C1126	RVA4I3R	Internal		C2042	125 uf/330V	C2085	30 uf/400V
<b>C0394</b>	CAH4524T	C1148	3ARR3T6AY3	Internal		C2042	125 uf/330V	C2085	30 uf/400V
<b>C0395</b>	FH4524F	C1126	RVA4I3R	Internal		C2039	100 uf/330V	C2085	30 uf/400V
<b>C0396</b>	CAH4531E	C1141	3ARR3K6AV3	Internal		C2046	156 uf/330V	C2088	35 uf/400V
<b>C0397</b>	FH4531F	C1125	3ARR3 T6AV3	Internal		C2046	156 uf/330V	C2088	35 uf/400V

### Electrics - Options R22 (c/w start kit)

Realcold Stock No.	Compressor	Relay		Overload		Capacitor Start		Capacitor Run	
<b>C0110</b>	AJ5510F	C1190	3ARR3 W10AS3	C1640	MST 18AKN-3242	C2080	21 uf/330 V	C2050	15 uf/400V
<b>C0111</b>	AJ5512E	C1190	3ARR3 W10AS3	C1650	MRT 18AJN-3242	C2080	21 uf/330 V	C2050	15 uf/400V
<b>C0123</b>	AJ5513E	C1195	3ARR3K4AA3	C1651	MST18AIW-3242	C2080	21 uf/330 V	C2060	20 uf/400V
<b>C0124</b>	AJ5515E	C1200	3ARR3K6AV3	C1662	MRT 16AGZ-3242	C2080	21 uf/330 V	C2060	20 uf/400V
<b>C0126</b>	AJ5518E	C1190	3ARR3 W10AS3	C1663	CST16AHSF-3054	C2080	21 uf/330 V	C2070	25 uf/400V
<b>C0127</b>	AJ5519E	C1190	3ARR3 W10AS3	C1665	CST 00AHPH-3038	C2080	21 uf/330 V	C2070	25 uf/400V
<b>C0128</b>	AH5524E	C1025	3ARR3U3P2	Internal		C2030	88 uf/260V	C2088	35 uf/400V



## Copeland Scroll™ Compressors - Introduction

Copeland Scroll™ Compressors are manufactured by Emerson Climate Technologies.

With its European Headquarters based in Germany and manufacturing plants all around Europe, Emerson Climate Technologies is the world's largest provider of HVAC/R solutions, delivering simple answers for commercial, industrial, and residential applications.

### Standard Copeland Scroll™ Compressor unit includes:

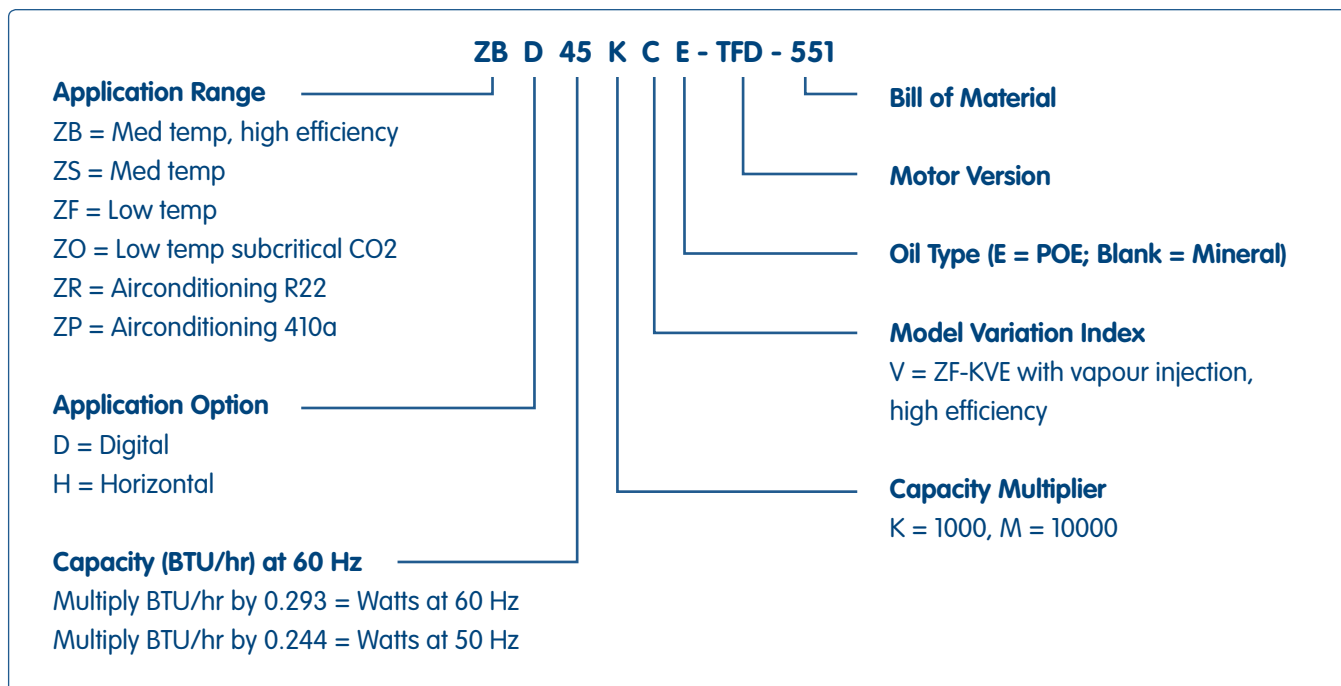
- Compressor filled with ester oil
- Rotolock / Sweat connections
- Oil sight glass
- Schraeder connection for oil fill or drain
- Rubber mountings
- E-protection module on all compressors from 7.5 to 15hp



### Features & Benefits

- Designed to meet the specific needs in refrigeration (medium and low temperature applications).
- Wide range of operations (2 to 15hp for all R404A, R134S and R22 applications).
- High efficiencies all year round (continuous scroll flank contact maintained by centrifugal force minimizing gas leakage, maximising efficiency).
- Capacity control (modulation range is continuous from 10 to 100%).
- Compactness (Small footprint with reduced weight by up to 50% compared to standard semi-hermetic compressors).
- Robustness and reliability (Stringent qualification tests ensure maximum reliability, Teflon coated bearings, fewer parts).
- Compressor protection (All 2 to 6HP compressors are supplied with internal thermal protectors and all 7.5hp to 15hp models feature an electronic module).
- Smooth operation (Designed with a discharge check valve).
- Asercom certified performance data (Compressor delivers performance defined and published by the manufacturer via simulative data testing performed by experts and regular measurement at independent bodies).

### Model Designation





### Copeland Scroll™ - R22 Medium Temp Air Conditioning (220-240/1/50)

Column Key: FIG = Picture #, D = Displacement, W = Weight for all models listed

Realcold Stock No.	Model	Fig.	Nom. Hp	Capacity (w) @ 45° Condensing Temp						Displ. (m³/hr)	Weight (Kg)	Price \$ Excl. GST
				R22								
				-15°C	-10°C	-5°C	0°C	+5°C	+7.2°C			
CS0044	ZR28K3E-PFJ	Fig 2	2.5	2880	3660	4530	5530	6650	7290	6.80	27	
CS0047	ZR36K3E-PFJ	Fig 2	3.0	3550	4430	5460	6620	7940	8690	8.60	29	
CS0049A	ZR42K3E-PFJ	Fig 2	3.5	4190	5220	6410	7790	9370	10270	9.90	30	
CS0050	ZR47K3E-PFJ	Fig 3	4.0	5030	6320	7790	9470	11370	12435	11.0	31	
CS0054	ZR68KCE-PFJ	Fig 3	5.5	6720	8020	10210	12750	14160	15970	6.1	40	

### Copeland Scroll™ - R22 Medium Temp Air Conditioning (380-420/3/50)

Column Key: FIG = Picture #, D = Displacement, W = Weight for all models listed

Realcold Stock No.	Model	Fig.	Nom. Hp	Capacity (w) @ 45° Condensing Temp						Displ. (m³/hr)	Weight (Kg)	Price \$ Excl. GST
				R22								
				-15°C	-10°C	-5°C	0°C	+5°C	+7.2°C			
CS0052	ZR61KCE-TFD	Fig 3	5.0	5800	7420	9330	11500	13900	15200	14.4	36	
CS0060	ZR68KCE-TFD	Fig 3	5.5	6720	8020	10210	12750	14160	15970	16.2	39	
CS0062	ZR72KCE-TFD	Fig 3	6.0	7720	9610	11750	14160	16890	18425	17.06	39	
CS0064	ZR81KCE-TFD	Fig 3	6.5	84100	10530	13040	15890	19060	20775	18.75	39	
CS0065	ZR94KCE-TFD	Fig 4	8.0	9130	11480	14060	17000	20410	22395	22.12	57	
CS0067	ZR108KCE-TFD	Fig 4	9.0	11200	14080	17320	20970	25130	27505	24.87	60	
CS0069	ZR125KCE-TFD	Fig 4	10.0	12980	16320	20070	24300	29130	31880	29.08	61	
CS0071	ZR144KCE-TFD	Fig 4	12.0	14770	19020	23680	28890	34780	37630	33.20	61	

### R410A Medium Temp Air Conditioning (380-420/3/50)

Realcold Stock No.	Model	Fig	Nom. Hp	Capacity (w) @ 45° Condensing Temp						Displ. (m³/hr)	Weight (Kg)	Price \$ Excl. GST
				R404A								
				-15°C	-10°C	-5°C	0°C	+5°C	+7.2°C			
CS0220	ZP235KCE-TWD-522	Fig 5	20.0	25100	31300	38400	46600	53350	60100	36.30	140	
CS0230	ZP385KCE-TWD-522	Fig 5	30.0	41600	51400	62800	76000	86850	97700	66.70	176	

\* A full range of R410A Scroll Compressors is available on indent





### Medium Temperature Refrigeration R404A (380-420/1/50)

Realcold Stock No.	Model	Fig	Nom. Hp	Capacity (w) @ 45° Condensing Temp							Displ. (m³/hr)	Price \$ Excl. GST
				R404A								
				-25°C	-20°C	-15°C	-10°C	-5°C	0°C	+7.2°C		
CS0118	ZB30KCE-TFD	Fig 9	4.0	3.19	4.07	5.12	6.37	7.84	9.56	13.85	11.68	
CS0120	ZB38KCE-TFD	Fig 9	5.0	4.01	5.09	6.38	7.91	9.72	11.85	15.40	14.37	
CS0122	ZB45KCE-TFD	Fig 9	6.0	4.73	6.00	7.51	9.31	11.45	13.90	18.05	17.06	
CS0126	ZB58KQE-TFD	Fig 10	8.0	5.25	7.42	9.75	12.35	15.25	18.60	24.10	22.12	
CS0130	ZB76KQE-TFD	Fig 11	10.0	8.12	10.55	13.35	16.55	20.30	24.70	31.90	28.82	
CS0136	ZB92KCE-TWD	Fig 1	13.0	9.00	12.30	16.00	20.10	24.90	30.30	39.10	35.55	
CS0138	ZB11MCE-TWD	Fig 1	15.0	12.45	15.50	19.15	23.40	28.40	34.20	43.50	42.76	

**Note:** Duty ratings based on 45°C condensing temp & 2K sub-cooling.

### Low Temperature Refrigeration R404A (380-420/3/50)

Realcold Stock No.	Model	Fig	Nom. Hp	Capacity (w) @ 45° Condensing Temp							Displ. (m³/hr)	Price \$ Excl. GST
				R404A								
				-25°C	-20°C	-15°C	-10°C	-5°C	0°C	+7.2°C		
CS0017	ZF18K4E-TFD	Fig 6	6.0	5.14	6.39	7.89	9.66	11.75	14.15	18.25	17.06	
CS0024	ZF33K4E-TWD	Fig 7	10.0	8.75	10.90	13.45	16.50	20.10	24.30	31.30	28.78	
CS0028	ZF40K4E-TWD	Fig 8	13.0	10.85	13.45	16.55	20.20	24.60	29.70	38.30	35.55	
CS0032	ZF48K4E-TWD	Fig 8	15.0	13.10	16.35	20.20	24.80	30.10	36.20	46.30	42.76	

**Note:** Duty ratings based on 45°C condensing temp & 2K sub-cooling.

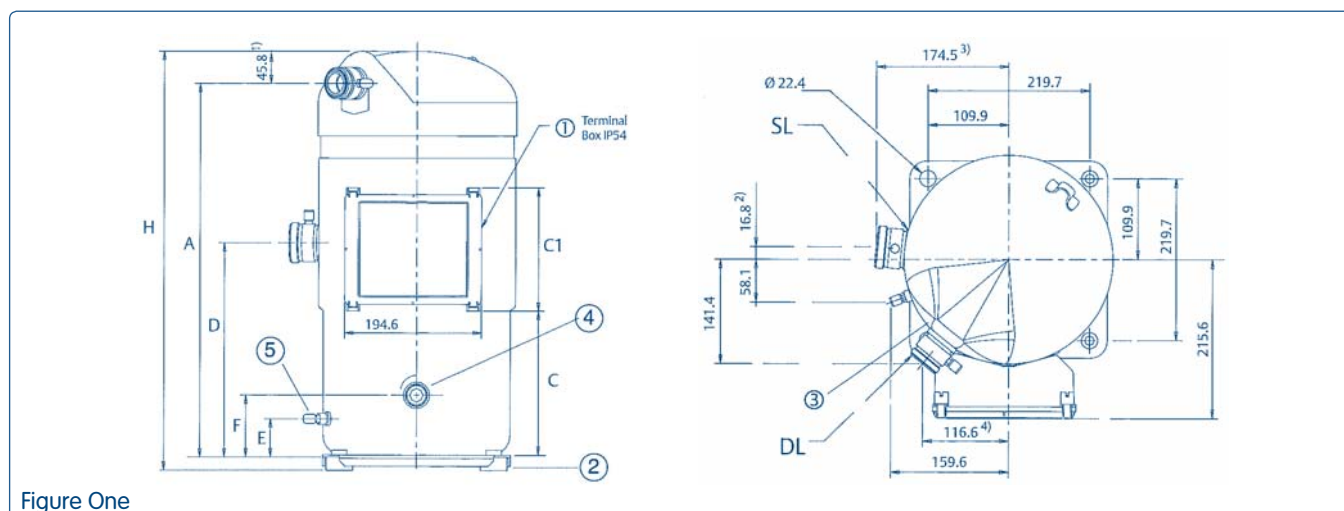


Figure One

### Figure One Dimensions

Model	A +/-3 (mm)	C (mm)	C1 (mm)	D (mm)	E (mm)	F (mm)	H (mm)
ZB92KCE	492	209	176	306	55	88	551
ZB11MCE	533	209	176	306	55	88	596

**Note:** Specified compressor heights are indicative of series dimensions. Certain model heights vary from specification. Please consult Realcold if the compressor height is crucial.



**Air Conditioning**

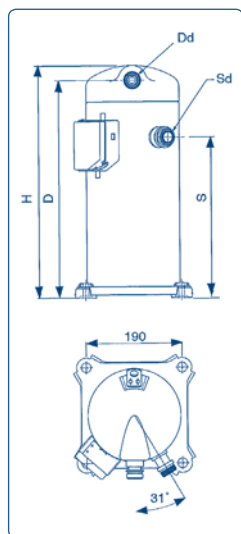


Figure Two

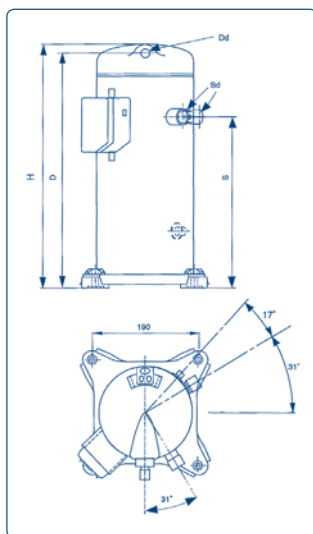


Figure Three

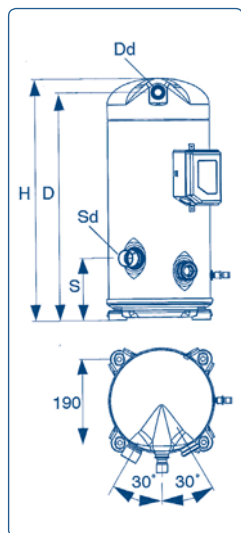


Figure Four

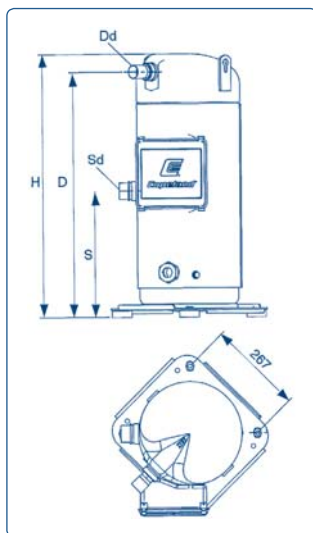


Figure Five

**Figure Two Dimensions**

Model	H (mm)	D (mm)	S (mm)
ZR28K3E	383	357	264
ZR36K3E	406	380	283.5
ZR42K3E	419	393.8	296.3

**Figure Three Dimensions**

Model	H (mm)	D (mm)	S (mm)
ZR47K3E	436		
ZR61KCE	476	429	316
ZR68KCE	476	429	316
ZR72KCE	476	429	316
ZR81KCE	462	433	316

**Figure Four Dimensions**

Model	H (mm)	D (mm)	S (mm)
ZR94KCE	495	463	113
ZR108KCE	552	520	141
ZR125KCE	552	520	141
ZR144KCE	552	520	141

**Figure Five Dimensions**

Model	H (mm)	D (mm)	S (mm)
ZP235KCE	713	685	352
ZP385KCE	716	678	394

Specified compressor heights are indicative of series dimensions. Certain model heights vary from specification. Please consult Realcold if the compressor height is crucial.





Refrigeration

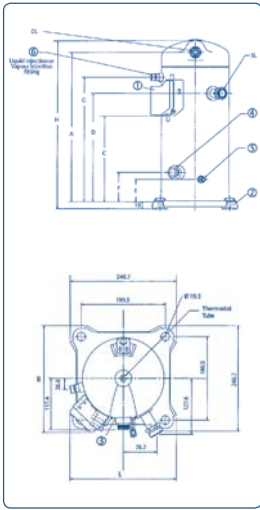


Figure Six

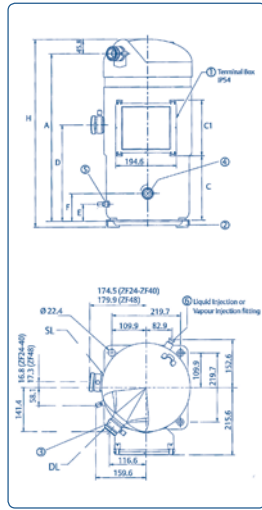


Figure Seven

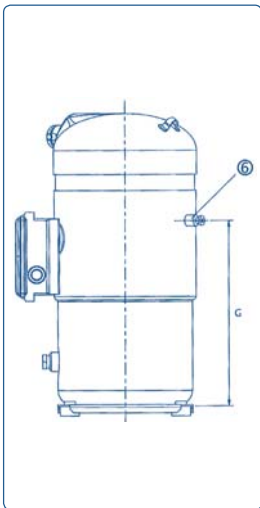


Figure Eight

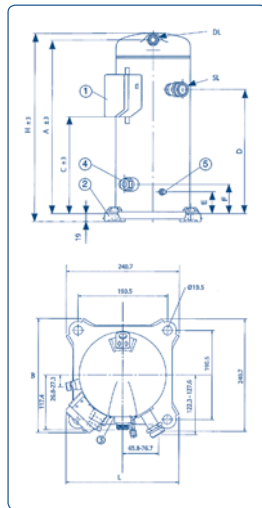


Figure Nine

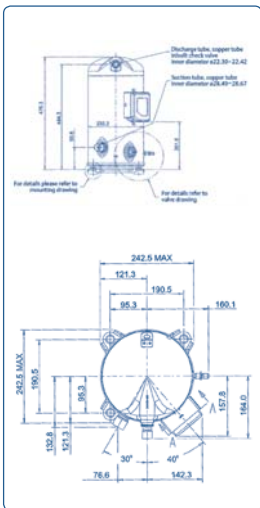


Figure Ten

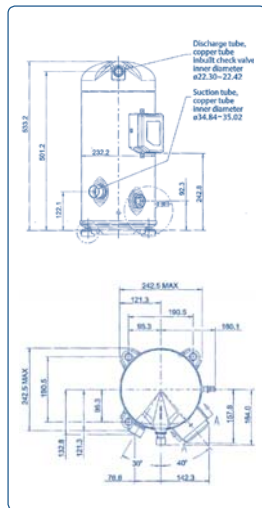


Figure Eleven

Figure Six Dimensions

Model	A +/-3 (mm)	C +/-3 (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
ZF18K4E	410	233	297	48	81	341	489

Figure Seven Dimensions

Model	A +/-3 (mm)	C (mm)	C1 (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
ZF24K4E	496	209	176	306	55	88	359	561
ZF33K4E	496	209	176	306	55	88	359	561

Figure Eight Dimensions

Model	A +/-3 (mm)	C (mm)	C1 (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
ZF40K4E	504	209	176	306	55	88	366	569
ZF48K4E	533	209	176	306	55	88	366	598

Figure Nine Dimensions

Model	A +/-3 (mm)	C (mm)	C1 (mm)	D (mm)	E (mm)	F (mm)	H (mm)
ZB30KCE	410	233	—	297	48	81	457
ZB38KCE	410	233	—	297	48	81	457
ZB45KCE	410	233	—	297	48	81	457

Figure Ten Dimensions

Model	H (mm)	W (mm)	L (mm)
ZB58KQE	477	284.2	263.6

Figure Eleven Dimensions

Model	H (mm)	W (mm)	L (mm)
ZB76KQE	546.1	284.2	263.6

Specified compressor heights are indicative of series dimensions. Certain model heights vary from specification. Please consult Realcold if the compressor height is crucial.