Semi Hermetic Compressors

The new BITZER ECOLINE series offers highly efficient all-purpose compressors which meet the challenging demands of modern refrigeration systems

The ECOLINE series has now been extended to all models and the optimisation package has been developed further for universal use with different refrigerants – at the same time extending the operating ranges.

The refrigerants include: R134a, R404A, R407A, R407C, R407F, R507A, R22, R290 and R1270.

The compressors are already designed for operation with "Low-GWP" HFO refrigerants and HFO-/HFC blends.

The coefficient of performance (COP) of the new ECOLINE models has been improved by an average of 6% up to a maximum of 12% compared with preceding series.

This is not achieved with a single component, but by optimising the valve plates, reducing flow losses and discharge gas pulsation as well as specially adapted highly efficient motors with broad band characteristics.

Each ECOLINE is compatible with its predecessor compressor.
These predecessor compressors can be substituted without the need for modifying the system.

Whereas many of the major internal components have been redesigned, the outer shape has remained virtually unchanged: the same outer dimensions, unchanged mounting points, valve and sensor positions, connections for oil and gas equalisation, as well as for oil level regulators.

Motor version 2 covers the classic refrigeration applications – medium and low temperature refrigeration – with one single product. In many cases it can thus replace a predecessor compressor with motor version 1.

For supermarket applications with R134a, a version with specially adapted motor is available for the ECOLINE models CE4, BE5 and BE6 – motor version 3 – in addition to motor version 2.

Motor version 3 has been specially designed for the pressure levels of R134a and focuses on applications in the medium temperature refrigeration range in modern systems.

For compressors with motor version 3, the standard motor can be operated with a frequency inverter up to 70 Hz (for mains voltage 400V/3/50Hz).

❑ **Extended application range**
- R134a up to tc = 85°C
- R404A and R507A up to tc = 62°C

❑ **Energy efficient**

high cooling capacity and minimum energy requirement:
- highly efficient working valves
- minimum clearance volume
- efficient, large-volume motor
- reduced flow losses at low condensing temperatures

❑ **Wear resistant drive gear**
- surface hardened eccentric shaft and crankshaft
- low friction bearings and aluminium pistons
- hard chrome plated piston rings

❑ **Quiet with low vibration**
- optimized mass balance
- low discharge gas pulsations due to special cylinder Head design

❑ **Minimum space requirement**
- very compact design

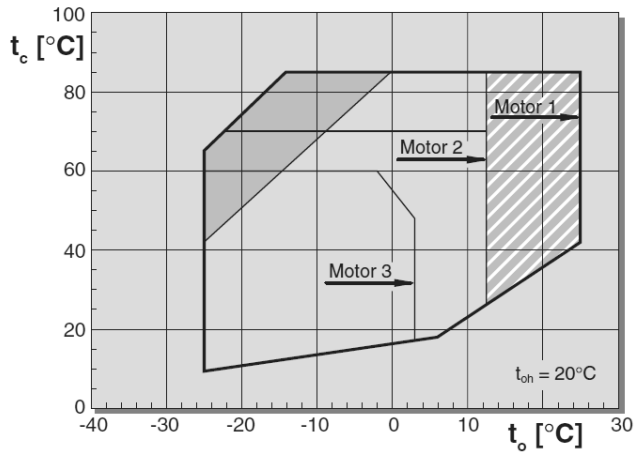
❑ **Robust**
- solid valve plate design
- valves made of impact resistant spring steel
- wear resistant drive gear

❑ **Efficient capacity control**
- cylinder shut-off or VSD capacity control possible
- cylinder shut-off possible from 18 m3/h displacement (50 Hz) on
  – 4 cylinder compressor: 50%
  – 6 cylinder compressor: 66% / 33%
  – 8 cylinder compressor: 75% / 50%
- Fast cycling cylinder shut-off, e.g. 4 cylinder compressor on both cylinder heads: 100% to approx. 10%
- tandem compressors from 22,7 m3/h to 303 m3/h (50 Hz)
- approved parallel operation
- VSD capacity control from 25 to 70 Hz – subject to conditions

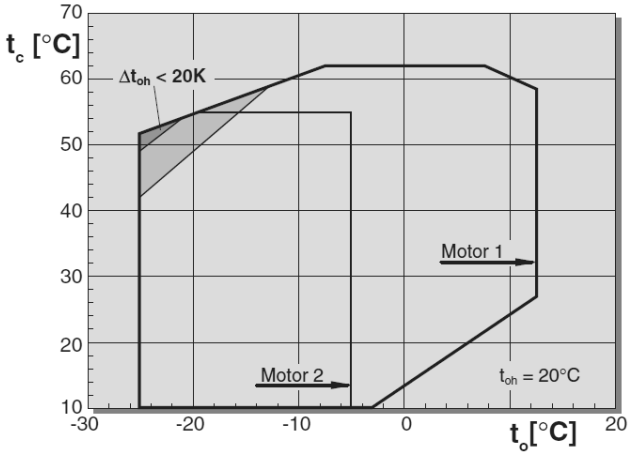
Compressor Application Limits

(relating to 20 ºC suction gas temperature)

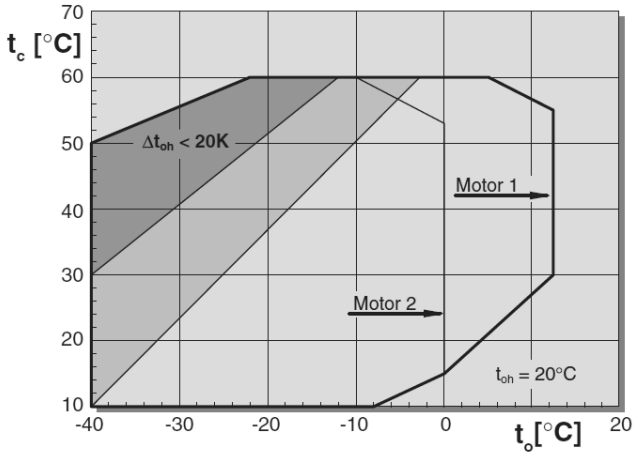
R134a ①, ②



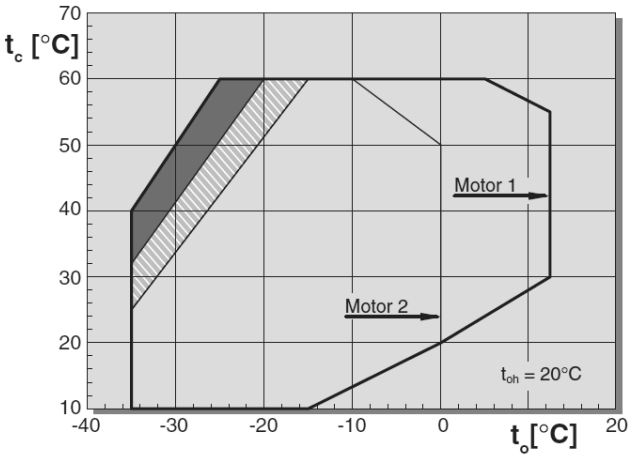
R407C ①, ②, ③



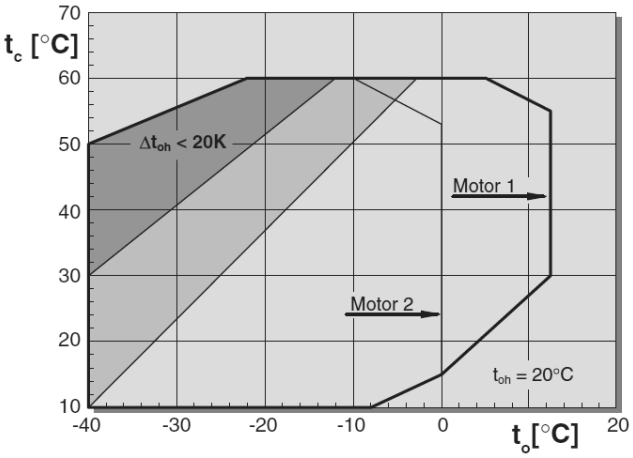
R407A 2KES-05Y .. 4CES-9Y ③



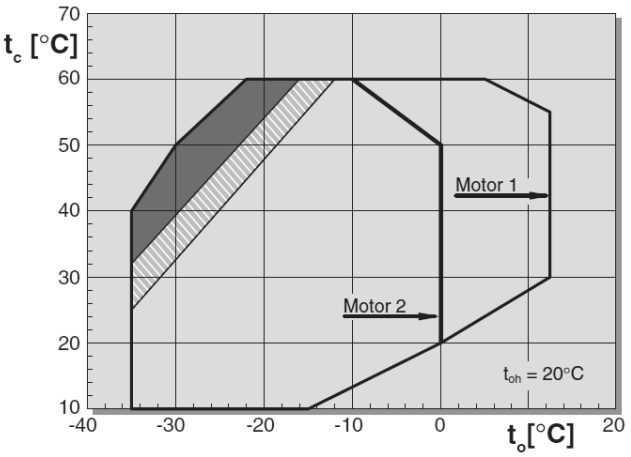
R407A 4VES-7Y .. 6FE-50Y ③, ④



R407F 2KES-05Y .. 4CES-9Y ③



R407F 4VES-7Y .. 6FE-50Y ③, ④



① 8GE-50Y .. 8FE-70Y:
minimum evaporating temperature -20°C

② For R134a and t_c >70°C oil BSE55 has to be used (instead of BSE32)

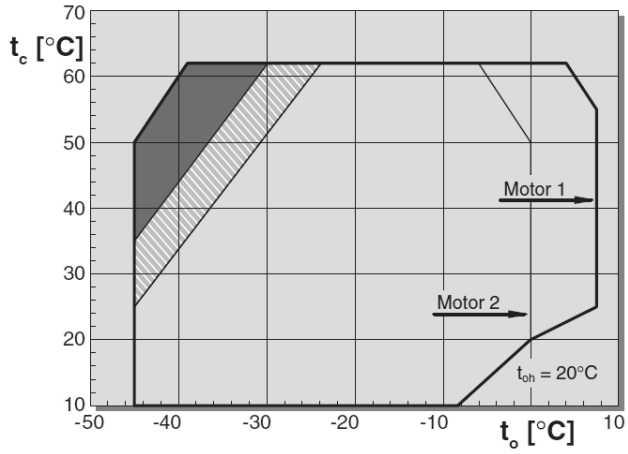
③ Evaporating and condensing temperatures are based on dew point conditions (saturated vapour)

④ Lower evaporating temperatures are possible with CIC® operation.
Selection upon request.

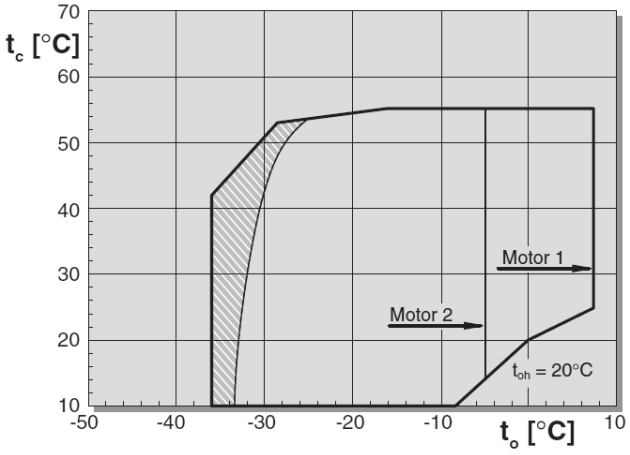
Compressor Application Limits – cont'd

(relating to 20 ºC suction gas temperature)

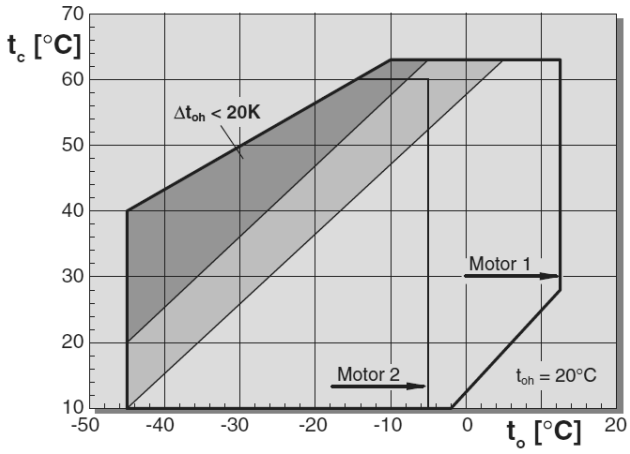
R404A ■ R507A 2KES-05Y .. 6FE-50Y

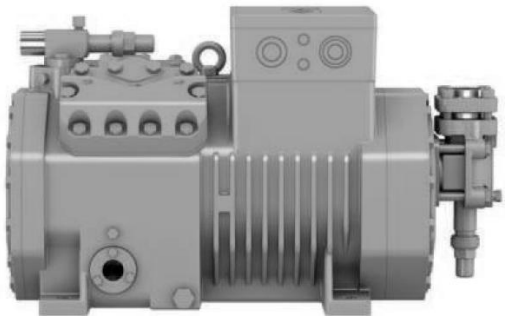


R404A ■ R507A 8GE-50Y .. 8FE-70Y ①



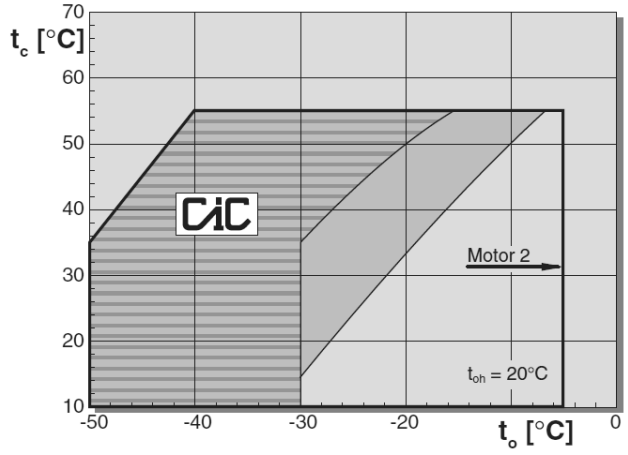
R22 2KES-05 .. 4CES-9



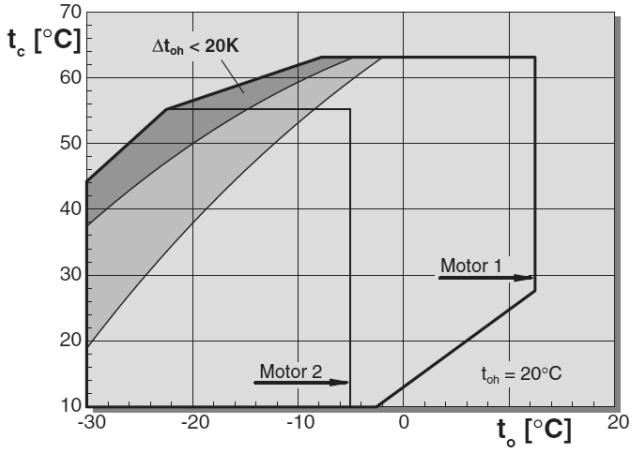


R22 4VES-7 .. 6FE-40

mit / with / avec CIC®



R22 4VES-7 .. 8FE-70 ①



t_o	Evaporating temperature (°C)
t_{oh}	Suction gas temperature (°C)
Δt_{oh}	Suction gas superheat (K)
t_c	Condensing temperature (°C)

- Additional cooling or max. 0°C suction gas temperature
- Additional cooling
- Additional cooling + limited suction gas temperature according to <20 K suction gas superheat
- Additional cooling or limited suction gas temperature according to <20 K suction gas superheat
- Suction gas superheat >10 K
- Additional fan + CIC®

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
2KES-05Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	40.0		2770	2250	1810	1420	1090	815	580
		P			0.68	0.64	0.59	0.55	0.50	0.45	0.39
		W	50.0		2420	1960	1570	1220	930	685	470
		P			0.78	0.72	0.67	0.61	0.55	0.49	0.41
		W	60.0		2090	1690	1350	1050	790	570	385
		P			0.87	0.81	0.74	0.67	0.60	0.51	0.42
2JES-07Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	40.0		3540	2880	2310	1820	1400	1040	740
		P			0.86	0.82	0.77	0.72	0.66	0.59	0.51
		W	50.0		3100	2510	2000	1570	1190	875	605
		P			0.98	0.93	0.87	0.80	0.72	0.64	0.53
		W	60.0		2690	2170	1730	1340	1020	735	495
		P			1.10	1.04	0.96	0.88	0.79	0.68	0.56
2HES-1Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	40.0		4650	3820	3100	2490	1960	1520	1140
		P			1.02	0.99	0.94	0.89	0.83	0.76	0.68
		W	50.0		4080	3330	2690	2150	1680	1280	940
		P			1.18	1.13	1.07	0.99	0.91	0.81	0.70
		W	60.0		3510	2850	2290	1810	1390	1040	740
		P			1.35	1.27	1.18	1.08	0.97	0.84	0.71
2HES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	60.0	4240	3490	2850	2290	1810	1390	1040	740
		P		1.39	1.33	1.25	1.17	1.08	0.97	0.86	0.73
		W	70.0	3560	2920	2370	1890	1480	1120	820	560
		P		1.57	1.48	1.38	1.27	1.15	1.02	0.87	0.71
		W	80.0	2850	2340	1890	1500	1160	860	610	
		P		1.75	1.63	1.51	1.37	1.22	1.05	0.88	
2GES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	40.0		5400	4450	3630	2930	2320	1810	1370
		P			1.19	1.15	1.11	1.05	0.98	0.90	0.81
		W	50.0		4760	3910	3180	2550	2010	1540	1150
		P			1.38	1.32	1.24	1.16	1.06	0.95	0.84
		W	60.0		4120	3370	2730	2170	1690	1280	935
		P			1.56	1.47	1.36	1.25	1.12	0.99	0.84
2FES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	40.0		6850	5640	4590	3690	2920	2270	1720
		P			1.43	1.38	1.32	1.24	1.15	1.04	0.92
		W	50.0		5880	4820	3910	3130	2450	1880	1400
		P			1.69	1.60	1.49	1.38	1.25	1.11	0.96
		W	60.0		4960	4060	3270	2600	2020	1530	1110
		P			1.90	1.78	1.64	1.49	1.33	1.15	0.97
2FES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	60.0	6000	4960	4060	3280	2610	2030	1540	1120
		P		2.12	1.99	1.86	1.72	1.57	1.41	1.24	1.06
		W	70.0	4970	4110	3350	2690	2130	1640	1230	875
		P		2.35	2.20	2.03	1.85	1.66	1.47	1.27	1.06
		W	80.0	3960	3270	2660	2130	1670	1280	940	
		P		2.58	2.39	2.18	1.96	1.74	1.51	1.27	

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
2EES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	40.0		8600	7040	5700	4560	3580	2760	2070
		P			1.78	1.70	1.60	1.48	1.34	1.20	1.04
		W	50.0		7440	6070	4900	3890	3040	2320	1710
		P			2.09	1.95	1.79	1.62	1.44	1.25	1.07
		W	60.0		6290	5110	4100	3230	2500	1880	1350
		P			2.34	2.14	1.93	1.71	1.48	1.27	1.06
2EES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	60.0	7650	6290	5110	4100	3230	2500	1880	1350
		P		2.51	2.33	2.14	1.94	1.73	1.51	1.30	1.10
		W	70.0	6260	5120	4140	3290	2560	1950	1420	990
		P		2.74	2.50	2.26	2.01	1.76	1.51	1.27	1.04
		W	80.0	4840	3940	3150	2470	1890	1390	975	
		P		2.89	2.60	2.31	2.02	1.73	1.45	1.19	
2DES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	40.0		10420	8390	6800	5450	4300	3320	2510
		P			2.15	2.06	1.93	1.79	1.62	1.45	1.27
		W	50.0		8870	7260	5870	4680	3670	2810	2090
		P			2.54	2.37	2.17	1.97	1.75	1.53	1.31
		W	60.0		7530	6130	4940	3910	3040	2300	1680
		P			2.86	2.61	2.35	2.09	1.82	1.56	1.32
2DES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	60.0	9140	7530	6130	4940	3910	3040	2300	1680
		P		3.01	2.80	2.57	2.32	2.07	1.82	1.57	1.33
		W	70.0	7510	6160	4990	3990	3130	2390	1770	1250
		P		3.31	3.06	2.73	2.43	2.13	1.84	1.55	1.29
		W	80.0	5830	4760	3820	3020	2320	1730	1230	
		P		3.52	3.17	2.82	2.46	2.12	1.79	1.47	
2CES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	40.0		12530	10290	8370	6720	5320	4140	3150
		P			2.60	2.50	2.36	2.19	1.99	1.79	1.58
		W	50.0		10900	8940	7250	5810	4580	3540	2670
		P			3.08	2.88	2.66	2.42	2.17	1.91	1.66
		W	60.0		9290	7600	6150	4900	3840	2940	2180
		P			3.49	3.20	2.90	2.59	2.28	1.98	1.69
2CES-4Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	60.0	11250	9290	7600	6150	4900	3840	2940	2180
		P		3.69	3.44	3.17	2.88	2.58	2.28	1.99	1.70
		W	70.0	9290	7650	6240	5010	3960	3060	2310	1670
		P		4.08	3.74	3.40	3.04	2.69	2.34	2.00	1.69
		W	80.0	7250	5950	4820	3830	2980	2260	1650	
		P		4.37	3.96	3.54	3.12	2.72	2.33	1.96	
4FES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	40.0		13590	11040	8880	7060	5520	4240	3190
		P			2.78	2.65	2.48	2.28	2.06	1.83	1.60
		W	50.0		11650	9440	7560	5970	4630	3510	2590
		P			3.24	3.01	2.75	2.48	2.19	1.90	1.62
		W	60.0		9730	7840	6240	4880	3730	2780	1990
		P			3.60	3.28	2.94	2.60	2.25	1.90	1.57

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
4FES-5Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	60.0	11910	9730	7850	6250	4890	3740	2790	2000
		P		3.83	3.55	3.25	2.93	2.60	2.26	1.92	1.60
		W	70.0	9620	7820	6270	4950	3820	2860	2070	1410
		P		4.15	3.79	3.41	3.01	2.62	2.22	1.83	1.47
		W	80.0	7340	5930	4720	3660	2760	2000	1360	
		P		4.35	3.91	3.45	2.99	2.53	2.08	1.65	
4EES-4Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	40.0		17030	14000	11410	9190	7320	5730	4410
		P			3.52	3.36	3.16	2.93	2.67	2.40	2.12
		W	50.0		14760	12110	9830	7890	6240	4850	3690
		P			4.18	3.90	3.59	3.26	2.91	2.56	2.22
		W	60.0		12500	10230	8280	6610	5190	3980	2980
		P			4.75	4.35	3.93	3.51	3.08	2.67	2.27
4EES-6Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	60.0	15130	12500	10230	8280	6610	5190	3980	2980
		P		5.02	4.67	4.30	3.90	3.50	3.09	2.69	2.31
		W	70.0	12450	10270	8380	6750	5340	4150	3130	2280
		P		5.57	5.11	4.63	4.15	3.66	3.19	2.73	2.30
		W	80.0	9760	8040	6540	5230	4100	3130	2300	
		P		6.02	5.45	4.88	4.31	3.75	3.21	2.70	
4DES-5Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	40.0		20500	16690	13470	10750	8460	6550	4980
		P			4.16	3.96	3.71	3.42	3.11	2.77	2.43
		W	50.0		17650	14360	11550	9180	7180	5510	4130
		P			4.88	4.54	4.17	3.77	3.35	2.93	2.51
		W	60.0		14830	12030	9630	7600	5890	4450	3270
		P			5.47	5.00	4.50	4.00	3.49	2.99	2.51
4DES-7Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	60.0	18090	14830	12030	9640	7610	5890	4460	3280
		P		5.79	5.38	4.94	4.47	3.98	3.49	3.01	2.54
		W	70.0	14720	12040	9730	7740	6050	4610	3410	2420
		P		6.34	5.80	5.24	4.66	4.08	3.51	2.96	2.43
		W	80.0	11350	9250	7420	5850	4490	3340	2370	
		P		6.72	6.07	5.40	4.72	4.05	3.40	2.78	
4CES-6Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	40.0		25050	20450	16560	13260	10490	8170	6250
		P			5.05	4.82	4.54	4.20	3.83	3.44	3.04
		W	50.0		21700	17690	14290	11400	8970	6950	5270
		P			5.94	5.55	5.12	4.65	4.16	3.67	3.19
		W	60.0		18320	14920	12010	9540	7450	5710	4260
		P			6.69	6.14	5.57	4.98	4.38	3.80	3.24
4CES-9Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	60.0	22300	18320	14920	12010	9540	7450	5710	4260
		P		7.20	6.69	6.14	5.57	4.98	4.38	3.80	3.24
		W	70.0	18240	14980	12160	9750	7680	5930	4470	3250
		P		7.95	7.29	6.59	5.88	5.18	4.49	3.82	3.19
		W	80.0	14170	11620	9390	7470	5820	4410	3220	
		P		8.53	7.71	6.88	6.05	5.24	4.45	3.71	

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
4VES-7Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	40.0		26950	22000	17720	14090	11020	8440	6290
		P			5.15	4.97	4.68	4.29	3.85	3.38	2.90
		W	50.0		22950	18680	15000	11850	9160	6880	4960
		P			6.04	5.65	5.17	4.64	4.09	3.53	3.01
		W	60.0		19060	15480	12380	9690	7380	5400	3700
		P			6.77	6.18	5.54	4.88	4.22	3.57	2.97
4VES-10Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	60.0	23300	19010	15330	12200	9550	7340	5500	3990
		P		7.07	6.60	6.06	5.47	4.83	4.19	3.56	2.95
		W	70.0	18940	15360	12300	9700	7510	5670	4160	2930
		P		7.75	7.11	6.42	5.70	4.96	4.24	3.55	2.92
		W	80.0	14450	11620	9200	7150	5420	3980	2810	
		P		8.26	7.47	6.65	5.82	5.00	4.22	3.50	
4TES-9Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	40.0		32350	26450	21400	17080	13420	10340	7760
		P			6.20	5.98	5.64	5.19	4.68	4.13	3.56
		W	50.0		27700	22600	18210	14450	11240	8510	6210
		P			7.29	6.82	6.27	5.65	5.00	4.35	3.72
		W	60.0		23100	18840	15140	11930	9160	6780	4740
		P			8.20	7.51	6.77	5.99	5.21	4.45	3.74
4TES-12Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	60.0	28200	23050	18660	14920	11760	9100	6900	5090
		P		8.80	8.20	7.51	6.77	5.99	5.21	4.45	3.74
		W	70.0	23000	18750	15090	11980	9360	7160	5350	3870
		P		9.79	8.98	8.10	7.18	6.23	5.29	4.39	3.55
		W	80.0	17690	14320	11420	8960	6890	5160	3750	
		P		10.65	9.69	864	7.53	6.39	5.25	4.14	
4PES-12Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	40.0		37450	30500	24500	19450	15170	11570	8570
		P			7.03	6.75	6.34	5.82	5.23	4.59	3.94
		W	50.0		31800	25800	20700	16280	12530	9360	6700
		P			8.18	7.63	6.98	6.26	5.50	4.73	3.96
		W	60.0		26300	21300	16970	13240	10020	7260	4910
		P			9.10	8.29	7.43	6.52	5.60	4.68	3.79
4PES-15Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	60.0	32250	26250	21100	16740	13050	9960	7400	5310
		P		9.88	9.20	8.40	7.53	6.62	5.70	4.80	3.96
		W	70.0	26100	21100	16830	13210	10160	7610	5520	3810
		P		10.81	9.85	8.83	7.76	6.69	5.64	4.66	3.76
		W	80.0	19800	15860	12490	9630	7230	5240	3620	
		P		11.40	10.20	8.97	7.74	6.53	5.38	4.34	
4NES-14Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	40.0		43850	35800	28900	23000	18050	13860	10370
		P			8.33	7.99	7.51	6.92	6.24	5.51	4.76
		W	50.0		37400	30500	24500	19410	15050	11350	8240
		P			9.72	9.08	8.33	7.50	6.62	5.71	4.82
		W	60.0		31150	25350	20300	15960	12200	8970	6210
		P			10.89	9.96	8.94	7.88	6.80	5.73	4.69

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
4NES-20Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	60.0	38400	31450	25450	20400	16070	12460	9450	6980
		P		11.84	11.05	10.13	9.13	8.08	7.02	6.00	5.04
		W	70.0	31400	25600	20600	16390	12810	9820	7350	5330
		P		13.03	11.92	10.73	9.49	8.25	7.04	5.91	4.88
		W	80.0	24150	19570	15630	12280	9450	7100	5170	
		P		13.84	12.43	10.99	9.54	8.13	6.79	5.57	
4JE-15Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	40.0		48650	40050	32650	26300	20850	16230	12330
		P			9.30	8.98	8.52	7.94	7.28	6.56	5.81
		W	50.0		42250	34700	28200	22600	17800	13720	10260
		P			10.94	10.34	9.62	8.80	7.93	7.03	6.13
		W	60.0		35950	29400	23800	18920	14750	11200	8180
		P			12.35	11.47	10.50	9.47	8.39	7.30	6.23
4JE-22Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	60.0	42750	35250	28700	23100	18280	14150	10630	7670
		P		12.90	12.14	11.25	10.25	9.18	8.06	6.93	5.80
		W	70.0	35050	28750	23300	18550	14470	10970	7990	5480
		P		14.25	13.18	12.00	10.74	9.42	8.08	6.74	5.43
		W	80.0	27150	22100	17710	13890	10580	7740	5320	
		P		15.18	13.81	12.34	10.80	9.24	7.66	6.11	
4HE-18Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	40.0		57400	47250	38550	31100	24750	19390	14870
		P			11.20	10.74	10.12	9.38	8.56	7.68	6.77
		W	50.0		49800	40950	33300	26800	21250	16530	12570
		P			13.12	12.33	11.42	10.41	9.34	8.25	7.16
		W	60.0		42200	34600	28100	22500	17690	13630	10220
		P			14.77	13.67	12.47	11.21	9.91	8.61	7.35
4HE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	60.0	50700	41900	34300	27700	22050	17170	13030	9250
		P		15.31	14.39	13.35	12.20	10.98	9.71	8.41	7.11
		W	70.0	41600	34350	28000	22500	17680	13550	10000	6980
		P		16.96	15.71	14.36	12.93	11.44	9.91	8.37	6.82
		W	80.0	32500	26700	21650	17200	13290	9890	6930	
		P		18.29	16.71	15.06	13.34	11.57	9.77	7.95	
4GE-23Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	40.0		65100	53500	43600	35150	27900	21800	16640
		P			13.25	12.56	11.73	10.77	9.73	8.63	7.50
		W	50.0		56200	46000	37250	29800	23450	18110	13640
		P			15.37	14.31	13.13	11.86	10.52	9.16	7.81
		W	60.0		47000	38250	30750	24400	18980	14450	10690
		P			17.11	15.70	14.20	12.63	11.03	9.43	7.86
4GE-30Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	60.0	59100	48900	40100	32450	25850	20200	15350	11250
		P		17.91	16.76	15.49	14.13	12.70	11.21	9.68	8.14
		W	70.0	48500	40150	32800	26450	20900	16070	11910	8320
		P		19.88	18.33	16.70	15.00	13.25	11.46	9.65	7.83
		W	80.0	37800	31250	25500	20400	15880	11910	8690	
		P		21.63	19.66	17.65	15.61	13.53	11.42	9.31	

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
4FE-28Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	40.0		79200	65200	53300	43100	34450	27200	21100
		P			16.66	15.80	14.74	13.54	12.23	10.88	9.53
		W	50.0		69300	57000	46500	37550	29900	23500	18130
		P			19.43	18.07	16.56	14.95	13.29	11.63	10.01
		W	60.0		59300	48750	39700	31900	25300	19760	15110
		P			21.81	19.99	18.06	16.08	14.09	12.15	10.31
4FE-35Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	60.0	70300	58100	47600	38550	30800	24200	18670	14040
		P		22.82	21.16	19.35	17.44	15.47	13.49	11.56	9.72
		W	70.0	58000	47850	39100	31500	25000	19480	14800	10880
		P		25.10	22.97	20.73	18.44	16.14	13.87	11.70	9.66
		W	80.0	45500	37500	30500	24450	19210	14740	10940	
		P		26.89	24.33	21.70	19.06	16.46	13.94	11.56	
6JE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	40.0		72500	59400	48200	38650	30550	23700	18020
		P			14.27	13.64	12.81	11.82	10.70	9.50	8.24
		W	50.0		62700	51200	4140	33000	25850	19840	14830
		P			16.66	15.56	14.30	12.92	11.45	9.94	8.42
		W	60.0		52800	42950	34500	27300	21150	15990	11680
		P			18.57	17.03	15.37	13.63	11.84	10.04	8.28
6JE-33Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	60.0	65500	53800	43600	34900	27500	21200	15960	11590
		P		19.68	18.38	16.91	15.30	13.61	11.87	10.13	8.42
		W	70.0	53700	43850	35300	28000	21800	16550	12160	8520
		P		21.80	19.99	18.06	16.04	13.99	11.94	9.94	8.02
		W	80.0	41700	33900	27100	21300	16310	12120	8630	
		P		23.44	21.14	18.78	16.38	13.99	11.65	9.41	
6HE-28Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	40.0		85100	69800	56800	45700	36300	28350	21700
		P			16.80	16.08	15.12	13.98	12.70	11.31	9.87
		W	50.0		73800	60500	49050	39300	31000	24000	18130
		P			19.76	18.48	17.02	15.42	13.72	11.98	10.23
		W	60.0		62500	51100	41200	32800	25650	19630	14590
		P			22.21	20.41	18.47	16.44	14.37	12.31	10.29
6HE-35Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	60.0	75400	62000	50400	40500	32050	24850	18790	13740
		P		23.32	21.73	19.95	18.02	15.99	13.92	11.86	9.86
		W	70.0	61800	50600	41000	32650	25550	19530	14470	10260
		P		25.79	23.62	21.31	18.92	16.49	14.07	11.72	9.47
		W	80.0	48050	39200	31500	24900	19220	14430	10410	
		P		27.69	24.96	22.16	19.33	16.53	13.80	11.18	
6GE-34Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	40.0		97100	79900	65100	52500	41800	32800	25300
		P			20.01	18.97	17.72	16.32	14.78	13.16	11.50
		W	50.0		84100	69100	56200	45200	35850	27950	21350
		P			23.32	21.71	19.93	18.04	16.05	14.03	12.01
		W	60.0		71100	58300	47400	38000	29950	23150	17410
		P			25.98	23.86	21.60	19.26	16.88	14.50	12.18

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 & 6 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R134A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R134A

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)							
				Condensing Temperature ºC							
				Evaporating Temperature ºC							
				+15	+10	+5	0	-5	-10	-15	-20
6GE-40Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	60.0	87300	72200	59100	47900	38300	30100	23150	17340
		P		27.61	25.84	23.85	21.69	19.42	17.11	14.80	12.56
		W	70.0	72100	59500	48600	39200	31100	24200	18420	13550
		P		30.50	28.15	25.63	23.00	20.32	17.64	15.03	12.54
		W	80.0	56400	46500	37850	30400	23950	18480	13860	
		P		32.80	29.91	26.90	23.84	20.78	17.78	14.90	
6FE-44Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	40.0		116700	96100	78400	63300	50600	39800	30800
		P			24.10	22.92	21.50	19.88	18.12	16.25	14.32
		W	50.0		101300	83300	67900	54700	43500	34050	26100
		P			27.97	26.15	24.13	21.97	19.69	17.36	15.02
		W	60.0		85800	70600	57400	46150	36550	28350	21500
		P			31.11	28.72	26.17	23.50	20.77	18.04	15.35
6FE-50Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	60.0	101500	83900	6880	55700	44500	34900	26800	19980
		P		32.26	30.19	27.90	25.45	22.88	20.24	17.58	14.95
		W	70.0	82500	68300	55900	45100	35800	27850	21050	15300
		P		34.83	32.27	29.50	26.60	23.60	20.57	17.57	14.64
		W	80.0	63400	52400	42800	34350	27000	20700	15200	
		P		36.60	33.60	30.41	27.09	23.71	20.33	17.03	
8GE-60Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series CE8 Motor Type 1	**W**	60.0	118600	98000	80100	64600	51200	39650	29750	21350
		P		40.67	37.80	34.46	30.85	27.19	23.69	20.56	18.00
		W	70.0	97800	80600	65600	52500	41150	31350	22900	15680
		P		44.40	40.61	36.47	32.21	28.12	24.43	21.41	19.31
		W	80.0	76600	63000	51000	40500	31300	23350	16450	
		P		47.52	42.94	38.13	33.42	29..13	25.57	23.06	
8FE-70Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series CE8 Motor Type 1	**W**	60.0	138100	114400	93800	75800	60300	46800	35150	25100
		P		47.40	44.28	40.52	36.37	32.10	27.97	24.23	21.15
		W	70.0	113300	93600	76400	61300	48200	36700	26750	18090
		P		51.51	47.34	42.64	37.75	32.97	28.62	25.02	22.48
		W	80.0	88200	72700	59000	46850	36200	26850	18650	
		P		54.59	49.50	44.07	38.68	33.71	29.55	26.57	

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 6 cylinder models supplied with one cylinder head prepared for capacity control (8 cylinder models 2x heads prepared)

BITZER ECOLINE COMPRESSORS

R134A Semi Hermetic Compressors
Specialised - Motor Option 3

(Optimised for R134A medium temp applications with enhanced application limits)

Capacities R134A

Airefrig Part Number			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)				
			Condensing Temperature ºC				
			Evaporating Temperature ºC				
			0	-5	-10	-15	-20
4VES-6Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	**W**	30.0	20400	16310	12850	9950	7550
	P		4.03	3.83	3.52	3.15	2.73
	W	40.0	17720	14090	11020	8440	6290
	P		4.68	4.29	3.85	3.38	2.90
	W	50.0	15000	11850	9160	6880	4960
	P		5.17	4.64	4.08	3.53	3.01
4TES-8Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	**W**	30.0	24500	19660	15550	12100	9230
	P		4.83	4.59	4.24	3.82	3.34
	W	40.0	21400	17080	13420	10340	7760
	P		5.64	5.19	4.68	4.13	3.56
	W	50.0	18210	14450	11240	8510	6210
	P		6.27	5.65	5.00	4.35	3.72
4PES-10Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	**W**	30.0	28300	22600	17750	13710	10360
	P		5.49	5.20	4.79	4.31	3.77
	W	40.0	24500	19450	15170	11570	8570
	P		6.34	5.82	5.23	4.59	3.94
	W	50.0	20700	16280	12530	9360	6700
	P		6.98	6.26	5.50	4.73	3.96
4NES-12Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	**W**	30.0	33250	26600	21000	16330	12430
	P		6.48	6.14	5.68	5.14	4.55
	W	40.0	28950	23100	18100	13910	10420
	P		7.52	6.93	6.26	5.53	4.78
	W	50.0	24600	19470	15110	11410	8290
	P		8.35	7.53	6.64	5.74	4.85
4JE-13Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	37300	30200	24100	18920	14560
	P		7.36	7.01	6.54	5.98	5.36
	W	40.0	32800	26400	21000	16370	12470
	P		8.66	8.06	7.36	6.60	5.81
	W	50.0	28350	22750	17950	13880	10430
	P		9.82	8.97	8.05	7.09	6.13
4HE-15Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	43800	35450	28350	22300	17220
	P		8.68	8.21	7.63	6.95	6.23
	W	40.0	38550	31100	24750	19390	14870
	P		10.22	9.46	8.61	7.71	6.78
	W	50.0	33300	26800	21250	16530	12570
	P		11.56	10.52	9.42	8.29	7.18

Airefrig Part Number			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)				
			Condensing Temperature ºC				
			Evaporating Temperature ºC				
			0	-5	-10	-15	-20
4GE-20Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	50500	41050	32900	26000	20200
	P		10.31	9.70	8.97	8.15	7.27
	W	40.0	44850	36350	29100	22900	17720
	P		12.14	11.19	10.15	9.05	7.92
	W	50.0	38700	31200	24800	19400	14870
	P		13.69	12.42	11.09	9.73	8.38
4FE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	60000	48550	38900	30800	24000
	P		12.71	11.93	11.01	9.99	8.92
	W	40.0	53300	43100	34450	27200	21100
	P		14.91	13.67	12.34	10.96	9.59
	W	50.0	46500	37550	29900	23500	18130
	P		16.79	15.13	13.43	11.72	10.08
6JE-22Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	55500	44700	35600	27900	21500
	P		10.87	10.39	9.70	8.86	7.90
	W	40.0	48820	39200	31000	24050	18280
	P		12.88	11.93	10.84	9.63	8.37
	W	50.0	42100	33500	26250	20150	15050
	P		14.51	13.13	11.65	10.11	8.58
6HE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Terminal Box IP65	**W**	30.0	64500	52000	41500	32650	25250
	P		12.91	12.25	11.40	10.39	9.28
	W	40.0	56800	45700	36300	28350	21700
	P		15.30	14.13	12.81	11.40	9.93
	W	50.0	49050	39300	31000	24000	18130
	P		17.27	15.61	13.87	12.08	10.29
6GE-30Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	74900	60700	48700	38600	30150
	P		15.21	14.37	13.37	12.23	11.01
	W	40.0	66300	53700	43000	33950	26400
	P		18.07	16.70	15.20	13.62	11.99
	W	50.0	57600	46600	37200	29250	22600
	P		20.47	18.61	16.67	14.69	12.71
6FE-40Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	**W**	30.0	88800	71800	57500	45450	35400
	P		18.27	17.27	16.08	14.73	13.27
	W	40.0	78400	63300	50600	39800	30800
	P		21.50	19.88	18.12	16.25	14.32
	W	50.0	67900	54700	43500	34050	26100
	P		24.13	21.97	19.69	17.36	15.02

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling.

Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
2KES-05Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	30	4290	3570	2940	2390	1920	1510	1160	865	610	395
		P		0,81	0,80	0.78	0.75	0.72	0.68	0.63	0.57	0.50	0.42
		W	40	3520	2920	2390	1940	1540	1200	900	650	435	255
		P		0.96	0.93	0.89	0.84	0.79	0.72	0.65	0.57	0.47	0.36
		W	50	2810	2320	1890	1520	1190	910	670	460	285	140
		P		1.11	1.05	0.99	0.92	0.84	0.76	0.66	0.55	0.43	0.30
2JES-07Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	30	5670	4730	3920	3210	2600	2070	1620	1230	900	625
		P		1.08	1.07	1.05	1.02	0.97	0.91	0.84	0.76	0.66	0.56
		W	40	4740	3950	3250	2650	2130	1680	1290	960	675	440
		P		1.31	1.27	1.21	1.14	1.06	0.98	0.87	0.76	0.64	0.51
		W	50	3850	3190	2620	2120	1680	1300	980	700	465	265
		P		1.53	1.45	1.36	1.26	1.14	1.02	0.89	0.75	0.60	0.44
2HES-1Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	30		5920	4910	4040	3280	2630	2070	1590	1180	840
		P			1.45	1.38	1.31	1.23	1.14	1.04	0.93	0.82	0.69
		W	40		4950	4090	3340	2690	2130	1650	1240	890	595
		P			1.7	1.59	1.47	1.35	1.21	1.08	0.94	0.79	0.64
		W	50		4000	3290	2670	2130	1660	1250	905	615	365
		P			1.92	1.76	1.6	1.43	1.26	1.09	0.91	0.73	0.55
2HES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	30	7200	6020	5000	4110	3340	2680	2110	1620	1210	855
		P		1.42	1.4	1.37	1.32	1.25	1.16	1.06	0.95	0.83	0.7
		W	40	6060	5060	4190	3420	2760	2190	1700	1270	910	610
		P		1.7	1.64	1.56	1.47	1.36	1.23	1.1	0.96	0.8	0.64
		W	50	4940	4110	3380	2740	2190	1700	1290	935	630	375
		P		1.96	1.85	1.73	1.59	1.44	1.28	1.11	0.93	0.75	0.56
2GES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	30	8230	6890	5730	4720	3850	3090	2450	1890	1420	1030
		P		1.67	1.65	1.6	1.53	1.45	1.34	1.23	1.1	0.96	0.81
		W	40	6910	5780	4790	3930	3190	2540	1990	1520	1110	775
		P		2	1.93	1.83	1.72	1.59	1.45	1.3	1.13	0.96	0.79
		W	50	5650	4710	3890	3180	2560	2020	1560	1160	825	540
		P		2.33	2.2	2.05	1.9	1.72	1.54	1.35	1.16	0.96	0.76
2FES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 2	**W**	30		8690	7220	5940	4830	3870	3050	2350	1750	1250
		P			2.02	1.98	1.91	1.8	1.67	1.51	1.35	1.17	0.98
		W	40		7190	5960	4880	3950	3150	2450	1860	1360	930
		P			2.37	2.27	2.13	1.97	1.79	1.6	1.39	1.18	0.97
		W	50		5770	4770	3900	3140	2480	1910	1420	1000	650
		P			2.72	2.55	2.36	2.15	1.92	1.68	1.44	1.2	0.97
2FES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE1 Motor Type 1	**W**	30	10320	8640	7170	5900	4800	3850	3030	2330	1740	1250
		P		2.03	2	1.95	1.86	1.76	1.63	1.49	1.34	1.17	1
		W	40	8560	7160	5930	4860	3940	3130	2440	1850	1350	930
		P		2.46	2.37	2.25	2.1	1.94	1.77	1.58	1.38	1.17	0.96
		W	50	6890	5760	4760	3890	3130	2470	1900	1410	995	645
		P		2.88	2.72	2.53	2.33	2.11	1.88	1.64	1.4	1.15	0.91

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
2EES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	30		10920	9070	7470	6080	4890	3860	2980	2230	1600
		P			2.37	2.28	2.16	2.01	1.85	1.67	1.47	1.27	1.07
		W	40		9250	7670	6300	5100	4070	3180	2420	1770	1220
		P			2.81	2.64	2.45	2.23	2.01	1.77	1.53	1.28	1.04
		W	50		7490	6180	5040	4050	3190	2450	1820	1280	830
		P			3.16	2.91	2.65	2.37	2.09	1.8	1.51	1.23	0.95
2EES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	30	13040	10920	9070	7470	6080	4890	3860	2980	2230	1600
		P		2.4	2.36	2.27	2.16	2.02	1.87	1.69	1.5	1.31	1.11
		W	40	11070	9250	7670	6300	5100	4070	3180	2420	1770	1220
		P		2.89	2.76	2.61	2.43	2.23	2.02	1.79	1.55	1.32	1.08
		W	50	8980	7490	6180	5040	4050	3190	2450	1820	1280	830
		P		3.27	3.08	2.86	2.62	2.36	2.09	1.82	1.54	1.26	0.99
2DES-2Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	30		12990	10810	8910	7270	5860	4640	3590	2710	1960
		P			2.87	2.76	2.62	2.45	2.25	2.03	1.8	1.55	1.31
		W	40		11040	9170	7540	6120	4900	3850	2940	2180	1530
		P			3.42	3.22	2.98	2.73	2.46	2.17	1.88	1.59	1.3
		W	50		8960	7420	6070	4890	3870	2990	2240	1600	1070
		P			3.87	3.57	3.25	2.92	2.58	2.23	1.88	1.55	1.22
2DES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	30	15500	12990	10810	8910	7270	5860	4640	3590	2710	1960
		P		2.87	2.81	2.71	2.58	2.41	2.22	2.01	1.79	1.56	1.33
		W	40	13180	11040	9170	7540	6120	4900	3850	2940	2180	1530
		P		3.47	3.32	3.13	2.92	2.68	2.42	2.15	1.87	1.59	1.31
		W	50	10720	8960	7420	6070	4890	3870	2990	2240	1600	1070
		P		3.97	3.73	3.46	3.17	2.86	2.53	2.21	1.88	1.55	1.24
2CES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 2	**W**	30		15890	13250	10950	8960	7250	5770	4500	3420	2500
		P			3.47	3.35	3.19	2.98	2.75	2.5	2.23	1.94	1.66
		W	40		13550	11280	9310	7590	6110	4830	3730	2790	2000
		P			4.15	3.92	3.65	3.35	3.03	2.7	2.36	2.02	1.69
		W	50		11060	9180	7540	6120	4880	3810	2890	2110	1450
		P			4.73	4.38	4.01	3.62	3.22	2.81	2.41	2.01	1.64
2CES-4Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE2 Motor Type 1	**W**	30	18920	15890	13250	10950	8960	7250	5770	4500	3420	2500
		P		3.49	3.42	3.31	3.15	2.96	2.74	2.49	2.23	1.95	1.68
		W	40	16150	13550	11280	9310	7590	6110	4830	3730	2790	2000
		P		4.24	4.06	3.84	3.59	3.31	3	2.68	2.35	2.02	1.7
		W	50	13190	11060	9180	7540	6120	4880	3810	2890	2110	1450
		P		4.86	4.58	4.27	3.92	3.56	3.18	2.79	2.4	2.02	1.65
4FES-3Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	30		17510	14460	11840	9610	7700	6100	4750	3640	2720
		P			3.71	3.61	3.45	3.25	3.01	2.74	2.44	2.14	1.84
		W	40		14840	12260	10040	8140	6520	5140	3990	3030	2250
		P			4.44	4.23	3.96	3.66	3.33	2.97	2.61	2.24	1.89
		W	50		12030	9940	8140	6580	5250	4120	3170	2380	1730
		P			5.03	4.71	4.35	3.96	3.54	3.11	2.68	2.26	1.85

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
4FES-5Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	30	21050	17510	14460	11840	9610	7710	6100	4750	3640	2720
		P		3.69	3.66	3.56	3.41	3.22	2.99	2.73	2.45	2.16	1.86
		W	40	17810	14830	12260	10040	8140	6510	5140	3990	3030	2240
		P		4.48	4.34	4.14	3.89	3.61	3.29	2.96	2.61	2.26	1.91
		W	50	14400	12010	9940	8130	6580	5250	4130	3180	2380	1730
		P		5.12	4.88	4.58	4.25	3.88	3.49	3.09	2.68	2.27	1.87
4EES-4Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	30		22100	18300	15010	12200	9790	7760	6050	4630	3460
		P			4.75	4.61	4.4	4.12	3.8	3.43	3.05	2.65	2.26
		W	40		18810	15550	12740	10330	8270	6520	5060	3830	2830
		P			5.71	5.42	5.06	4.65	4.2	3.73	3.25	2.77	2.31
		W	50		15360	12690	10380	8390	6690	5240	4020	3010	2170
		P			6.52	6.07	5.58	5.05	4.49	3.92	3.35	2.8	2.27
4EES-6Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	30	26400	22000	18160	14880	12060	9660	7630	5930	4510	3340
		P		4.7	4.65	4.51	4.3	4.04	3.72	3.38	3	2.62	2.23
		W	40	22400	18650	15390	12590	10180	8120	6380	4920	3700	2700
		P		5.72	5.52	5.24	4.9	4.51	4.08	3.63	3.17	2.71	2.25
		W	50	18240	15170	12510	10200	8220	6520	5080	3870	2870	2040
		P		6.57	6.22	5.81	5.35	4.85	4.32	3.78	3.23	2.69	2.18
4DES-5Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	30		26200	21750	17860	14540	11700	9280	7250	5550	4140
		P			5.64	5.47	5.22	4.89	4.51	4.08	3.63	3.16	2.7
		W	40		22400	18530	15190	12320	9870	7790	6030	4580	3370
		P			6.74	6.4	5.97	5.49	4.97	4.42	3.86	3.3	2.76
		W	50		18440	15220	12440	10040	8000	6260	4800	3600	2600
		P			7.69	7.17	6.59	5.96	5.31	4.65	3.99	3.35	2.74
4DES-7Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	30	31450	26250	21750	17870	14540	11700	9280	7250	5550	4140
		P		5.6	5.54	5.39	5.15	4.84	4.47	4.06	3.63	3.18	2.73
		W	40	26900	22400	18540	15190	12320	9870	7790	6040	4580	3370
		P		6.81	6.57	6.25	5.85	5.4	4.91	4.39	3.85	3.31	2.79
		W	50	22150	18430	15220	12440	10040	8000	6260	4810	3600	2600
		P		7.83	7.43	6.96	6.42	5.84	5.23	4.61	3.98	3.36	2.77
4CES-6Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 2	**W**	30		31750	26300	21650	17610	14160	11220	8730	6650	4930
		P			6.82	6.61	6.29	5.88	5.4	4.87	4.31	3.74	3.17
		W	40		27150	22400	18350	14850	11850	9310	7180	5400	3930
		P			8.1	7.66	7.14	6.54	5.9	5.22	4.54	3.86	3.21
		W	50		22500	18520	15080	12120	9610	7480	5690	4220	3010
		P			9.19	8.55	7.83	7.07	6.27	5.47	4.67	3.9	3.17
4CES-9Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - DOL Start - Mount Kit - Integrated varicool opt. - Terminal Box IP65	Comp Series CE3 Motor Type 1	**W**	30	38000	31750	26300	21650	17610	14160	11220	8730	6650	4930
		P		6.91	6.82	6.61	6.29	5.88	5.4	4.87	4.31	3.74	3.17
		W	40	32600	27150	22400	18350	14850	11850	9310	7180	5400	3930
		P		8.42	8.1	7.66	7.14	6.54	5.9	5.22	4.54	3.86	3.21
		W	50	27100	22500	18520	15080	12120	9610	7480	5690	4220	3010
		P		9.75	9.19	8.55	7.83	7.07	6.27	5.47	4.67	3.9	3.17

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
4VES-7Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	30		34100	28150	23000	18590	14820	11600	8890	6630	4750
		P			7.15	6.92	6.55	6.07	5.52	4.91	4.27	3.64	3.04
		W	40		28800	23650	19180	15360	12110	9350	7040	5130	3560
		P			8.58	8.04	7.39	6.68	5.91	5.13	4.35	3.6	2.91
		W	50		23550	19180	15430	12210	9480	7190	5280	3710	2440
		P			9.77	8.92	8.02	7.08	6.12	5.18	4.28	3.43	2.67
4VES-10Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	30	41050	34150	28150	23000	18590	14810	11600	8890	6630	4760
		P		6.97	6.92	6.71	6.38	5.94	5.42	4.85	4.25	3.65	3.07
		W	40	34800	28800	23650	19180	15350	12100	9350	7040	5140	3580
		P		8.54	8.2	7.72	7.15	6.5	5.79	5.06	4.33	3.62	2.95
		W	50	28600	23550	19180	15420	12200	9480	7190	5280	3720	2470
		P		9.84	9.22	8.5	7.7	6.86	5.98	5.11	4.26	3.45	2.73
4TES-9Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	30		40850	33800	27700	22450	17970	14150	10930	8230	6000
		P			8.6	8.32	7.89	7.34	6.69	5.98	5.24	4.5	3.79
		W	40		34700	28600	23300	18750	14870	11580	8820	6520	4630
		P			10.32	9.7	8.96	8.13	7.24	6.33	5.42	4.54	3.72
		W	50		28500	23300	18860	15040	11780	9030	6740	4840	3300
		P			11.75	10.8	9.77	8.69	7.58	6.49	5.42	4.43	3.52
4TES-12Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	30	49200	40950	33850	27700	22450	17930	14100	10870	8180	5950
		P		8.52	8.43	8.16	7.74	7.2	6.57	5.88	5.17	4.45	3.76
		W	40	41800	34700	28550	23200	18670	14780	11500	8750	6470	4600
		P		10.43	10	9.42	8.73	7.94	7.09	6.21	5.34	4.49	3.71
		W	50	34450	28500	23300	18810	14990	11730	9000	6720	4850	3330
		P		12.07	11.32	10.45	9.5	8.48	7.44	6.4	5.39	4.45	3.6
4PES-12Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	30		47250	38900	31750	25600	20350	15900	12160	9050	6500
		P			9.72	9.36	8.84	8.18	7.43	6.61	5.75	4.89	4.05
		W	40		40000	32800	26550	21200	16680	12860	9660	7020	4870
		P			11.51	10.78	9.93	8.97	7.95	6.9	5.84	4.81	3.83
		W	50		32550	26500	21250	16790	13010	9830	7200	5040	3300
		P			12.92	11.84	10.67	9.43	8.17	6.9	5.66	4.49	3.41
4PES-15Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 1	**W**	30	57000	47300	38950	31700	25550	20300	15800	12050	8930	6370
		P		9.9	9.72	9.35	8.82	8.15	7.39	6.56	5.69	4.83	4.0
		W	40	48200	39800	32600	26400	21050	16520	12710	9520	6890	4760
		P		11.96	11.4	10.67	9.82	8.87	7.86	6.82	5.78	4.77	3.83
		W	50	39450	32400	26350	21150	16680	12920	9760	7140	5000	3280
		P		13.69	12.78	11.73	10.58	9.38	8.14	6.91	5.71	4.58	3.55
4NES-14Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Part Wind Start - Terminal Box IP65	Comp Series CE4 Motor Type 2	**W**	30		55400	45700	37400	30250	24150	18980	14650	11050	8090
		P			11.59	11.15	10.54	9.78	8.91	7.97	6.98	5.98	5.0
		W	40		47200	38800	31550	25400	20100	15640	11910	8820	6290
		P			13.74	12.91	11.93	10.84	9.67	8.45	7.23	6.03	4.88
		W	50		38550	31550	25500	20350	15950	12240	9140	6580	4510
		P			15.46	14.25	12.93	11.53	10.08	8.61	7.17	5.79	4.49

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
4NES-20Y	Comp Series CE4	**W**	30	67000	55700	46000	37600	30400	24300	19080	14710	11080	8100
- Service Valves		**P**		11.68	11.45	11.0	10.38	9.62	8.76	7.83	6.86	5.9	4.99
- Crankcase Heater		**W**	40	56900	47200	38800	31550	25400	20100	15660	11940	8860	6350
- Protection Module		**P**		14.06	13.42	12.6	11.64	10.58	9.45	8.29	7.14	6.03	5.0
- Oil Sight Glass		**W**	50	46800	38700	31700	25650	20450	16070	12380	9310	6780	4740
- POE Oil	Motor Type 1	**P**		16.19	15.16	13.99	12.72	11.39	10.03	8.67	7.36	6.13	5.02
- Mount Kit													
- Part Wind Start													
- Terminal Box IP65													
4JE-15Y	Comp Series BE5	**W**	30		62400	51900	42850	34950	28200	22400	17440	13250	9730
- Service Valves		**P**			13.05	12.56	11.91	11.12	10.22	9.24	8.21	7.15	6.1
- Crankcase Heater		**W**	40		53400	44300	36400	29550	23650	18600	14300	10680	7650
- Protection Module		**P**			15.41	14.5	13.46	12.31	11.1	9.84	8.56	7.29	6.06
- Oil Sight Glass		**W**	50		44200	36500	29850	24050	19080	14810	11200	8160	5640
- POE Oil	Motor Type 2	**P**			17.4	16.1	14.69	13.22	11.71	10.18	8.67	7.21	5.82
- Mount Kit													
- Oil Press Switch													
- Part Wind Start													
- Terminal Box IP65													
4JE-22Y	Comp Series BE5	**W**	30	73700	61600	51100	42050	34200	27450	21650	16740	12580	9090
- Service Valves		**P**		13.02	12.72	12.23	11.57	10.79	9.89	8.91	7.88	6.83	5.77
- Crankcase Heater		**W**	40	63000	52500	43400	35500	28700	22800	17780	13520	9920	6930
- Protection Module		**P**		15.71	14.96	14.05	13.02	11.88	10.67	9.42	8.14	6.87	5.62
- Oil Sight Glass		**W**	50	51900	43200	35500	28850	23100	18150	13930	10350	7350	4860
- POE Oil	Motor Type 1	**P**		18	16.83	15.53	14.13	12.67	11.16	9.64	8.13	6.66	5.24
- Mount Kit													
- Oil Press Switch													
- Part Wind Start													
- Terminal Box IP65													
4HE-18Y	Comp Series BE5	**W**	30		72700	60500	50000	40900	33050	26300	20600	15750	11680
- Service Valves		**P**			15.66	15.02	14.2	13.22	12.12	10.94	9.71	8.45	7.21
- Crankcase Heater		**W**	40		62200	51700	42600	34700	27900	22050	17080	12890	9390
- Protection Module		**P**			18.5	17.36	16.08	14.69	13.23	11.72	10.2	8.71	7.28
- Oil Sight Glass		**W**	50		51400	42650	35000	28350	22600	17720	13570	10070	7160
- POE Oil	Motor Type 2	**P**			20.93	19.32	17.61	15.84	14.03	12.22	10.44	8.74	7.14
- Mount Kit													
- Oil Press Switch													
- Part Wind Start													
- Terminal Box IP65													
4HE-25Y	Comp Series BE5	**W**	30	86000	72100	59900	49400	40300	32500	25750	20050	15230	11180
- Service Valves		**P**		15.55	15.15	14.55	13.76	12.83	11.78	10.64	9.44	8.22	7
- Crankcase Heater		**W**	40	73600	61500	51000	41900	34000	27200	21400	16470	12310	8830
- Protection Module		**P**		18.63	17.74	16.68	15.47	14.16	12.76	11.32	9.85	8.4	6.99
- Oil Sight Glass		**W**	50	60700	50700	41900	34250	27600	21900	17040	12910	9440	6560
- POE Oil	Motor Type 1	**P**		21.22	19.88	18.41	16.82	15.15	13.44	11.71	10	8.34	6.76
- Mount Kit													
- Oil Press Switch													
- Part Wind Start													
- Terminal Box IP65													
4GE-23Y	Comp Series BE5	**W**	30		83800	69900	57800	47350	38350	30650	24100	18540	13880
- Service Valves		**P**			18.72	17.88	16.84	15.63	14.3	12.88	11.41	9.93	8.48
- Crankcase Heater		**W**	40		71800	59800	49350	40300	32550	25900	20200	15420	11430
- Protection Module		**P**			22.15	20.71	19.13	17.44	15.68	13.88	12.09	10.34	8.68
- Oil Sight Glass		**W**	50		59300	49300	40600	33050	26550	21000	16290	12320	9010
- POE Oil	Motor Type 2	**P**			25.11	23.12	21.03	18.88	16.72	14.58	12.5	10.52	8.68
- Mount Kit													
- Oil Press Switch													
- Part Wind Start													
- Terminal Box IP65													
4GE-30Y	Comp Series BE5	**W**	30	98700	82700	68800	56800	46350	37400	29700	23150	17640	13020
- Service Valves		**P**		18.19	17.66	16.9	15.94	14.83	13.6	12.27	10.88	9.47	8.06
- Crankcase Heater		**W**	40	84400	70600	58600	48200	39200	31400	24800	19160	14410	10450
- Protection Module		**P**		21.62	20.56	19.3	17.89	16.37	14.75	13.09	11.4	9.74	8.13
- Oil Sight Glass		**W**	50	69400	57900	48000	39300	31800	25350	19820	15140	11210	7950
- POE Oil	Motor Type 1	**P**		24.47	22.94	21.24	19.42	17.52	15.56	13.59	11.64	9.75	7.96
- Mount Kit													
- Oil Press Switch													
- Part Wind Start													
- Terminal Box IP65													

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
4FE-28Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 2	**W**	30		99400	83000	68800	56400	45800	36700	28950	22350	16830
		P			22.31	21.42	20.27	18.88	17.32	15.63	13.86	12.07	10.28
		W	40		85000	71000	58800	48200	39000	31100	24350	18590	13720
		P			26.16	24.66	22.93	21.01	18.96	16.82	14.65	12.49	10.38
		W	50		70100	58600	48500	39650	32000	25350	19630	14710	10520
		P			29.47	27.37	25.09	22.66	20.14	17.57	15.02	12.51	10.11
4FE-35Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE5 Motor Type 1	**W**	30	117900	99000	82600	68300	56000	45400	36300	28550	22000	16460
		P		22.43	21.87	21	19.85	18.49	16.95	15.28	13.53	11.76	10
		W	40	100500	84500	70500	58300	47700	38550	30650	23900	18160	13310
		P		26.81	25.61	24.13	22.42	20.53	18.51	16.4	14.25	12.12	10.04
		W	50	82600	69500	58000	47900	39100	31500	24850	19140	14240	10070
		P		30.62	28.79	26.73	24.48	22.09	19.6	17.07	14.55	12.08	9.7
6JE-25Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	30		92400	76900	63500	51900	41850	33250	25950	19790	14610
		P			19.14	18.51	17.59	16.43	15.09	13.6	12.02	10.39	8.77
		W	40		79400	65900	54100	43900	35150	27700	21300	15970	11510
		P			22.59	21.37	19.9	18.24	16.43	14.52	12.56	10.61	8.7
		W	50		66100	54600	44550	35900	28450	22100	16750	12260	8540
		P			25.49	23.72	21.74	19.6	17.36	15.06	12.75	10.48	8.31
6JE-33Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	30	108800	91000	75500	62100	50500	40500	32000	24700	18590	13450
		P		18.93	18.63	18	17.1	15.96	14.64	13.18	11.63	10.02	8.41
		W	40	93300	77800	64200	52500	42400	33650	26200	19910	14610	10200
		P		22.73	21.82	20.62	19.19	17.56	15.8	13.93	12	10.06	8.16
		W	50	77400	64300	52800	42800	34200	26800	20500	15210	10780	7130
		P		25.92	24.43	22.71	20.78	18.7	16.51	14.25	11.97	9.72	7.53
6HE-28Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	30		106700	88900	73400	60100	48600	38750	30350	23300	17320
		P			22.95	22.07	20.89	19.46	17.83	16.07	14.21	12.33	10.46
		W	40		91300	75900	62600	51000	41000	32450	25150	19020	13880
		P			27.01	25.45	23.65	21.64	19.49	17.25	14.97	12.71	10.51
		W	50		75700	62800	51500	41750	33300	26100	19970	14800	10490
		P			30.56	28.35	25.94	23.38	20.72	18.01	15.32	12.69	10.18
6HE-35Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	30	126200	105700	88000	72500	59200	47750	37900	29550	22500	16560
		P		22.85	22.36	21.53	20.42	19.06	17.52	15.84	14.06	12.25	10.44
		W	40	108000	90300	74900	61500	50000	40050	31500	24250	18140	13030
		P		27.31	26.15	24.71	23.02	21.14	19.12	16.99	14.81	12.63	10.49
		W	50	89300	74500	61600	50400	40650	32250	25100	18970	13840	9570
		P		31.19	29.42	27.39	25.16	22.78	20.28	17.72	15.14	12.59	10.11
6GE-34Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	30		122900	102700	85200	70000	57000	45750	36200	28100	21300
		P			27.68	26.5	25.02	23.29	21.37	19.33	17.21	15.07	12.98
		W	40		105200	87900	72900	59800	48550	38900	30600	23600	17660
		P			32.62	30.69	28.5	26.13	23.63	21.05	18.46	15.91	13.46
		W	50		87200	72800	60300	49400	39950	31800	24850	18920	13930
		P			37.24	34.53	31.64	28.61	25.52	22.4	19.33	16.35	13.54

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 4 & 6 cylinder models supplied with one cylinder head prepared for capacity control (standard feature)

BITZER ECOLINE COMPRESSORS

R404A (Motor Options 1 & 2) Semi Hermetic Compressors – cont'd

Capacities R404A (R507)

Airefrig Part Number	Comp & Motor Version			Refrigeration Capacity – **W**atts / Consumption – **P**ower (Kw)									
				Condensing Temperature ºC									
				Evaporating Temperature ºC									
				+5	0	-5	-10	-15	-20	-25	-30	-35	-40
6GE-40Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	30	143700	120400	100300	82800	67700	54700	43550	34050	26000	19280
		P		27.04	26.29	25.2	23.84	22.23	20.45	18.52	16.51	14.45	12.41
		W	40	122200	102400	85200	70200	57200	46000	36400	28200	21250	15410
		P		31.85	30.41	28.69	26.72	24.56	22.26	19.86	17.41	14.96	12.55
		W	50	100400	84100	69900	57400	46550	37200	29100	22200	16390	11490
		P		36.13	34.05	31.71	29.16	26.45	23.63	20.74	17.84	14.96	12.17
6FE-44Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 2	**W**	30		148100	123600	102400	84100	68300	54700	43100	33300	25050
		P			33.45	32.18	30.52	28.52	26.27	23.83	21.26	18.65	16.05
		W	40		126600	105700	87500	71800	58100	46350	36250	27700	20450
		P			38.97	36.82	34.34	31.59	28.63	25.55	22.4	19.26	16.19
		W	50		104400	87200	72200	59100	47650	37750	29250	21900	15660
		P			43.7	40.71	37.44	33.95	30.33	26.63	22.93	19.3	15.8
6FE-50Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series BE6 Motor Type 1	**W**	30	174500	146400	122000	100800	82500	66700	53200	41650	31900	23700
		P		33.41	32.59	31.3	29.63	27.63	25.38	22.93	20.37	17.74	15.14
		W	40	148500	124600	103800	85700	69900	56300	44600	34600	26100	18880
		P		39.56	37.8	35.65	33.16	30.41	27.46	24.38	21.23	18.08	15
		W	50	121700	102200	85100	70100	57100	45700	35850	27400	20150	13970
		P		44.8	42.15	39.16	35.9	32.43	28.82	25.13	21.42	17.77	14.24
8GE-60Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series CE8 Motor Type 1	**W**	30	205200	172300	143800	118900	97300	78500	62300	48350		
		P		42.3	41.33	39.63	37.31	34.48	31.28	27.82	24.22		
		W	40	173100	145400	121200	100000	81500	65400	51300	39150		
		P		50	47.66	44.69	41.23	37.39	33.32	29.15	25.01		
		W	50	140300	117900	98200	80900	65600	52200	40450	30100		
		P		55.79	52.38	48.43	44.06	39.41	34.6	29.75	24.99		
8FE-70Y - Service Valves - Crankcase Heater - Protection Module - Oil Sight Glass - POE Oil - Mount Kit - Oil Press Switch - Part Wind Start - Terminal Box IP65	Comp Series CE8 Motor Type 1	**W**	30	242800	204000	170100	140700	115100	93000	73800	57300		
		P		51.61	50.43	48.35	45.52	42.07	38.17	33.95	29.55		
		W	40	204900	172100	143500	118400	96500	77400	60800	46400		
		P		61	58.15	54.53	50.3	45.62	40.65	35.56	30.51		
		W	50	166100	139600	116300	95700	77700	61800	47900	35650		
		P		68.07	63.91	59.09	53.76	48.09	42.21	36.3	30.49		

Rating Conditions: 50Hz , 20 Deg Return Gas, no Sub-Cooling. Shaded areas require additional cooling &/or return vapour limitations.
Note: All 6 cylinder models supplied with one cylinder head prepared for capacity control (8 cylinder models 2x heads prepared)

BITZER COMPRESSORS

Reciprocating Semi Hermetic Compressors

CE1, CE2 & CE3 Octagon Series

Airefrig Part Number	Comp Series	Motor Version	Displ m³/Hr	No of cylinders	Capacity Control	Oil Charge dm³ (litres)	Weight (Kg)	Disch. Valve	Suct. Valve	Max Op Amps	C.C.H.	List Price Excl GST
2KES05Y	CE1	1	4.06	2	-	1.0	43.0	1/2	5/8	2.8	0 - 60 watt 230 volt PTC Self Regulating Crankcase Heater	$2,204.68
2JES07Y		1	5.21	2	-	1.0	43.0	1/2	5/8	3.7		$2,243.75
2HES1Y		2	6.51	2	-	1.0	44.0	1/2	5/8	3.8		$2,339.06
2HES2Y		1	6.51	2	-	1.0	45.0	1/2	5/8	4.5		$2,384.38
2GES2Y		1	7.58	2	-	1.0	45.0	1/2	5/8	5.0		$2,476.56
2FES2Y		2	9.54	2	-	1.0	45.0	1/2	5/8	5.3		$2,485.76
2FES3Y		1	9.54	2	-	1.0	47.0	1/2	5/8	6.1		$2,698.25
2EES2Y	CE2	2	11.4	2	-	1.5	68.0	5/8	7/8	6.0	0-120 watt 230 volt PTC Self Regulating Crankcase Heater	$3,362.50
2EES3Y		1	11.4	2	-	1.5	71.0	5/8	7/8	7.5		$3,754.69
2DES2Y		2	13.4	2	-	1.5	68.0	5/8	7/8	7.5		$3,623.44
2DES3Y		1	13.4	2	-	1.5	71.0	5/8	7/8	8.6		$3,801.57
2CES3Y		2	16.2	2	-	1.5	70.0	5/8	7/8	9.1		$3,898.44
2CES4Y		1	16.2	2	-	1.5	70.0	5/8	7/8	10.		$4,051.57
4FES3Y	CE3	2	18.1	4	50%	2.0	82.0	5/8	7/8	9.5	0-120 watt 230 volt PTC Self Regulating Crankcase Heater	$4,239.06
4FES5Y		1	18.1	4	50%	2.0	86.0	5/8	7/8	10.8		$4,515.62
4EES4Y		2	22.7	4	50%	2.0	84.0	5/8	1-1/8	12.2		$4,339.06
4EES6Y		1	22.7	4	50%	2.0	86.0	5/8	1-1/8	13.6		$4,956.25
4DES5Y		2	26.8	4	50%	2.0	86.0	7/8	1-1/8	14.5		$5,225.00
4DES7Y		1	26.8	4	50%	2.0	89.0	7/8	1-1/8	16.5		$5,109.38
4CES6Y		2	32.5	4	50%	2.0	91.0	7/8	1-1/8	17.7		$5,945.31
4CES9Y		1	32.5	4	50%	2.0	91.0	7/8	1-1/8	20.2		$6,423.44

Extent of Compressor Delivery:

- Compressor oil sight glass
- Oil Charge: BSE-32 Ester Oil
- Compressor service valves
- 4 x vibration dampers
- Terminal box enclosure : IP65
- Crankcase Heater supplied as standard
- 4 cylinder models have one head prepared for capacity control (purchase solenoid valve assembly 34760001)
- Built in thermistor motor temperature sensors including electronic control unit
- Integrated Vericool system option (Option to change from suction gas cooling to direct suction with external air cooling)

Power Supply:

- Motor connections: (DOL) Direct on line
- Voltage: 380-420Y/3/50 (compressor data based on 400volt)

Accessories

Airefrig Part Number	Description	List Price Excl GST
34701901	Motor protection device SE-B1 (replacement for INT69VS7-11 part # 34701301)	$486.32
34702303	Discharge Gas temperature control device (sensor)	$514.99
34302101	Additional cooling fan to suit 2 cylinder (CE1 series compressors)	$1,293.28
34302112	Additional cooling fan to suit 2 cylinder (CE2 series compressors)	$1,064.22
34302119	Additional cooling fan to suit 4 cylinder (CE3 series compressors)	$1,064.22
34760001	Solenoid Valve assembly for capacity control (includes valve, coil & gasket)	$537.15
34330902	Solenoid coil (ONLY) – suit capacity control solenoid valve (240v 50Hz)	P.O.A.

BITZER COMPRESSORS

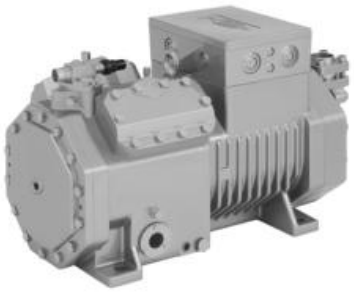
Reciprocating Semi Hermetic Compressors

CE4 Octagon Dynamic Disc Centrifugal Lubrication

Airefrig Part Number	Comp Series	Motor Version	Displ m³/Hr	No of cylinders	Capacity Control	Oil Charge dm³ (litres)	Weight (Kg)	Disch. Valve	Suct. Valve	Max Op Amps	C.C.H.	List Price Excl GST
4VES6Y	CE4	3 small motor	34.7	4	50%	2.6	129.0	7/8	1-1/8	9.4	0-140 watt 230 volt PTC Self Regulating Crankcase Heater	$6,629.23
4VES7Y		2	34.7	4	50%	2.6	129.0	7/8	1-1/8	16.6		$6,567.03
4VES10Y		1	34.7	4	50%	2.6	139.0	7/8	1-1/8	19.9		$6,945.37
4TES8Y		3 small motor	41.3	4	50%	2.6	134.0	1-1/8	1-3/8	11.4		$7,352.95
4TES9Y		2	41.3	4	50%	2.6	134.0	1-1/8	1-3/8	19.9		$7,283.90
4TES12Y		1	41.3	4	50%	2.6	141.0	1-1/8	1-3/8	25.1		$7,343.67
4PES10Y		3 small motor	48.5	4	50%	2.6	139.0	1-1/8	1-3/8	12.9		$7,745.00
4PES12Y		2	48.5	4	50%	2.6	139.0	1-1/8	1-3/8	22.7		$7,672.26
4PES15Y		1	48.5	4	50%	2.6	147.0	1-1/8	1-5/8	28.2		$7,732.01
4NES12Y		3 small motor	56.2	4	50%	2.6	141.0	1-1/8	1-3/8	14.9		$8,599.40
4NES14Y		2	56.2	4	50%	2.6	141.0	1-1/8	1-3/8	26.6		$8,518.64
4NES20Y		1	56.2	4	50%	2.6	150.0	1-1/8	1-5/8	33.2		$8,598.32

Extent of Compressor Delivery:

- Compressor oil sight glass
- Oil Charge: BSE-32 Ester Oil
- Compressor service valves
- 4 x vibration damper
- Terminal box enclosure : IP65
- Crankcase Heater supplied as standard
- Built in thermistor motor temperature sensors including electronic control unit
- Compressors have one head prepared for capacity control (purchase solenoid valve assembly)



Power Supply:

- Motor connections: (PWS) Part Winding Start – winding partition 50% / 50% (select motor contactors @ approx 60% of the maximum operating current)
- Voltage: 380-420YY/3/50 (compressor data based on 400volt)

Accessories

Airefrig Part Number	Description	List Price Excl GST
34733403	OLC-K1 Electronic oil monitoring control (suit CE4 series)	$484.76
34701901	Motor protection device SE-B1 (replacement for INT69VS7-11 part # 34701301)	$486.32
34702303	Discharge Gas temperature control device (sensor)	$514.99
34302113	Additional cooling fan to suit CE4 series (4VES – 4NES compressors)	$886.84
34760001	Solenoid Valve assembly for capacity control 4VES-4NES (includes valve, coil & gasket)	$537.15
34330902	Solenoid coil (ONLY) – suit capacity control solenoid valve (240v 50Hz)	P.O.A.

OLC-K1 Electronic oil monitoring control:

The OLC-K1 is an optical oil level control specifically designed for use with the Dynamic Disc centrifugal lubrication system.
The control directly mounted at the oil reservoir (inside the compressor housing) which supplies oil to the main shaft & bearings.
This system provides superior oil monitoring directly at the point where it is most needed.
The OLC-K1 is considered a recommended requirement for the CE4 series compressors on single compressor applications.

BITZER COMPRESSORS

Reciprocating Semi Hermetic Compressors

BE5 & BE6 Second Generation Compressors

Airefrig Part Number	Comp Series	Motor Version	Displ m³/Hr	No of cylinders	Capacity Control	Oil Charge dm³ (litres)	Weight (Kg)	Disch. Valve	Suct. Valve	Max Op Amps	C.C.H.	List Price Excl GST
4JE13Y	BE5	3 small motor	63.5	4	50%	4.0	179.0	1-1/8	1-5/8	18.8	140 watt 230 volt Crankcase Heater	$9,443.45
4JE15Y		2	63.5	4	50%	4.0	190.0	1-1/8	1-5/8	30.8		$9,354.77
4JE22Y		1	63.5	4	50%	4.0	190.0	1-1/8	1-5/8	37.2		$9,811.84
4HE15Y		3 small motor	73.7	4	50%	4.0	183.0	1-1/8	1-5/8	21.4		$9,473.36
4HE18Y		2	73.7	4	50%	4.0	190.0	1-1/8	1-5/8	36.7		$9,384.40
4HE25Y		1	73.7	4	50%	4.5	194.0	1-1/8	2-1/8	44.0		$10,093.60
4GE20Y		3 small motor	84.6	4	50%	4.5	192.0	1-1/8	2-1/8	24.6		$10,640.38
4GE23Y		2	84.6	4	50%	4.5	192.0	1-1/8	2-1/8	43.9		$10,540.45
4GE30Y		1	84.6	4	50%	4.5	206.0	1-1/8	2-1/8	51.2		$10,987.34
4FE25Y		3 small motor	101.8	4	50%	4.5	196.0	1-1/8	2-1/8	30.5		$11,469.14
4FE28Y		2	101.8	4	50%	4.5	207.0	1-1/8	2-1/8	52.8		$11,361.43
4FE35Y		1	101.8	4	50%	4.5	207.0	1-1/8	2-1/8	62.1		$11,752.83
6JE22Y	BE6	3 small motor	95.3	6	33/66%	4.75	213.0	1-3/8	2-1/8	26.6	140 watt 230 volt Crankcase Heater	$12,258.49
6JE25Y		2	95.3	6	33/66%	4.75	228.0	1-3/8	2-1/8	46.4		$12,143.37
6JE33Y		1	95.3	6	33/66%	4.75	231.0	1-3/8	2-1/8	53.2		$13,042.23
6HE25Y		3 small motor	110.5	6	33/66%	4.75	224.0	1-3/8	2-1/8	31.3		$13,298.03
6HE28Y		2	110.5	6	33/66%	4.75	228.0	1-3/8	2-1/8	53.2		$13,173.14
6HE35Y		1	110.5	6	33/66%	4.75	235.0	1-3/8	2-1/8	64.4		$13,386.86
6GE30Y		3 small motor	126.8	6	33/66%	4.75	228.0	1-3/8	2-1/8	38.0		$14,984.80
6GE34Y		2	126.8	6	33/66%	4.75	228.0	1-3/8	2-1/8	65.5		$14,844.08
6GE40Y		1	126.8	6	33/66%	4.75	238.0	1-3/8	2-1/8	73.9		$15,057.80
6FE40Y		3 small motor	151.6	6	33/66%	4.75	238.0	1-5/8	2-1/8	48.5		$17,750.32
6FE44Y		2	151.6	6	33/66%	4.75	241.0	1-5/8	2-1/8	83.2		$17,583.62
6FE50Y		1	151.6	6	33/66%	4.75	241.0	1-5/8	2-1/8	96.2		$18,302.53

Extent of Compressor Delivery:

- Compressor oil sight glass
- Oil Charge: BSE-32 Ester Oil
- Compressor service valves
- 4 x vibration dampers
- Built in thermistor motor temperature sensors including electronic control unit
- Terminal box enclosure : IP54
- Crankcase Heater supplied as standard
- Oil pressure safety switch. (oil pump fitted as standard)
- Compressors have one head prepared for capacity control (purchase solenoid valve assembly)

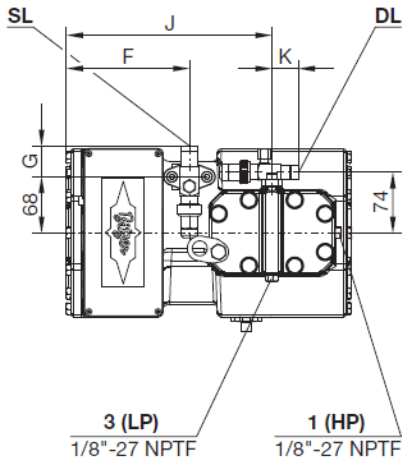
Power Supply:

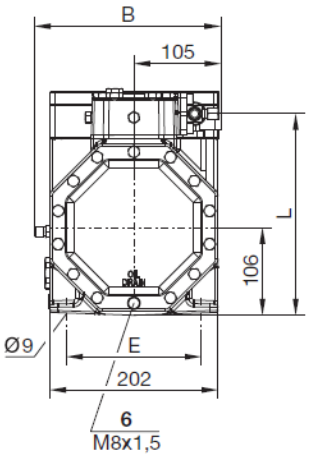
- Motor connections: (PWS) Part Winding Start – winding partition 50% / 50% (select motor contactors @ approx 60% of the maximum operating current)
- Voltage: 380-420YY/3/50 (compressor data based on 400volt)

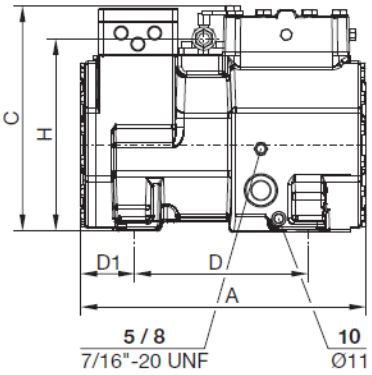
Accessories

Airefrig Part Number	Description	List Price Excl GST
34702801	Motor protection device SE-B2 4V-6F (replacement for INT69VS part # 347024/27-01)	$572.18
34702303	Discharge Gas temperature control device (sensor)	$514.99
34302104	Additional cooling fan to suit B5 series (4JE – 4FE compressors)	$886.85
34302105	Additional cooling fan to suit B6 series (6JE – 6FE compressors)	$886.86
34760003	Solenoid Valve assembly for capacity control 4JE-6FE (includes valve, coil & gasket)	$537.15
34330902	Solenoid coil (ONLY) – suit capacity control solenoid valve (240v 50Hz)	P.O.A.
60B0168	Danfoss oil pressure switch MP54 (replacement part)	$1,035.02

Dimensional Details

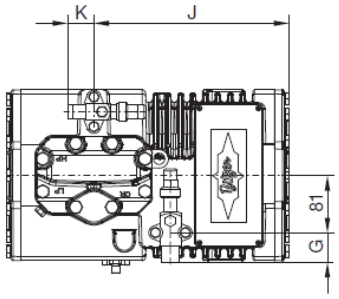


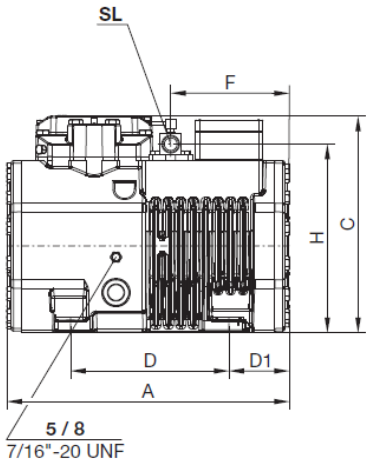


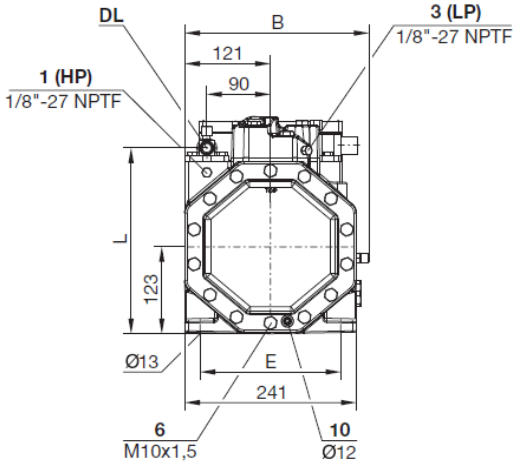


Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
2KES05Y	CE1	343	220	273	208	65	162	148	37	242	247	32	232
2JES07Y		343	220	273	208	65	162	148	37	242	247	32	232
2HES1Y		343	220	273	208	65	162	148	37	242	247	32	232
2HES2Y		343	220	273	208	65	162	148	37	242	247	32	232
2GES2Y		343	220	273	208	65	162	148	37	242	247	32	232
2FES2Y		343	220	273	208	65	162	148	37	242	247	32	232
2FES3Y		343	220	273	208	65	162	148	37	242	247	32	232

Note: legend for connections on last page of Bitzer compressor information.







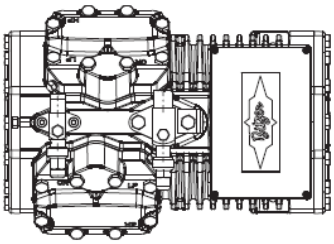
Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
2EES2Y	CE2	398	259	307	223	85	198	167	42	266	275	37	262
2EES3Y		398	259	307	223	85	198	167	42	266	275	37	262
2DES2Y		398	259	307	223	85	198	167	42	266	275	37	262
2DES3Y		398	259	307	223	85	198	167	42	266	275	37	262
2CES3Y		398	259	307	223	85	198	167	42	266	275	37	262
2CES4Y		398	259	307	223	85	198	167	42	266	275	37	262

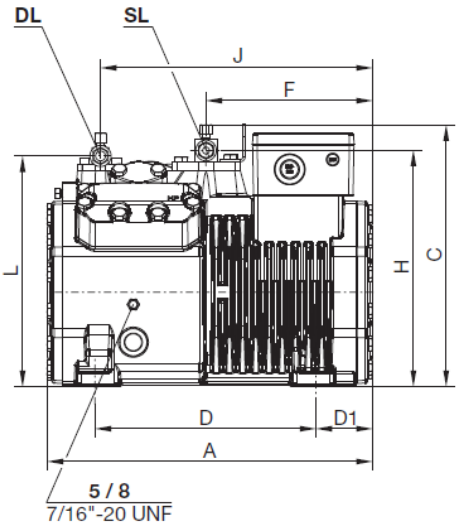
Note: legend for connections on last page of Bitzer compressor information.

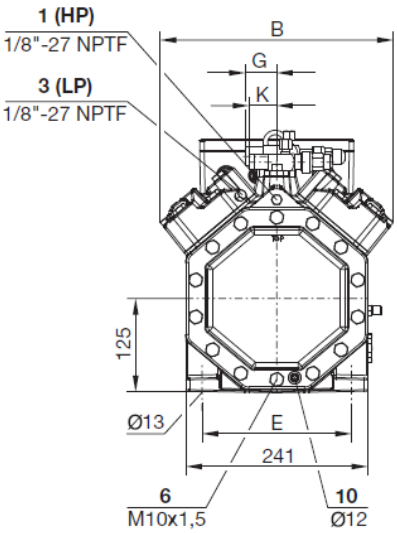
BITZER COMPRESSORS

Dimensional Details

4FES-3(Y) .. 4CES-9(Y)

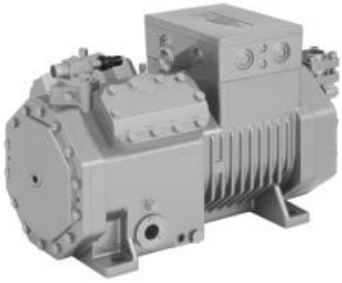






Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
4FES3Y	CE3	432	309	347	293	75	198	221	42	313	361	37	306
4FES5Y		432	309	347	293	75	198	221	42	313	361	37	306
4EES4Y		432	309	352	293	75	198	221	56	316	361	37	306
4EES6Y		432	309	352	293	75	198	221	56	316	361	37	306
4DES5Y		432	309	352	293	75	198	221	56	316	361	42	310
4DES7Y		457	309	352	293	101	198	246	56	316	386	42	310
4CES6Y		457	309	352	293	101	198	246	56	316	386	42	310
4CES9Y		457	309	352	293	101	198	246	56	316	386	42	310

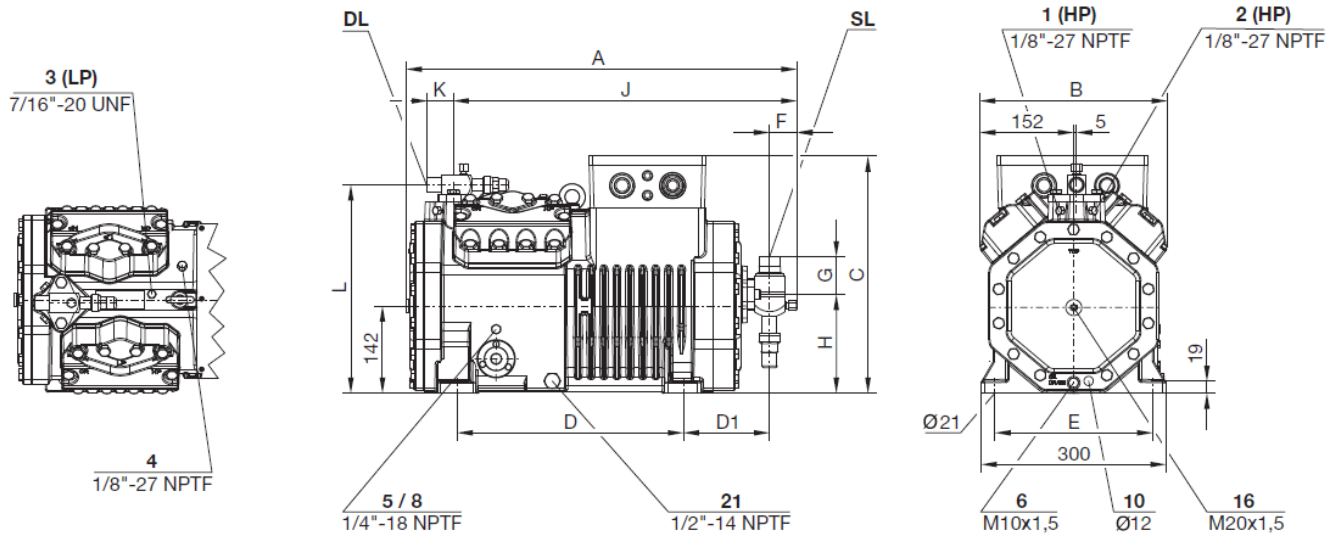
Note: legend for connections on last page of Bitzer compressor information.



BITZER COMPRESSORS

Dimensional Details

4VES-6Y .. 4NES-20(Y)

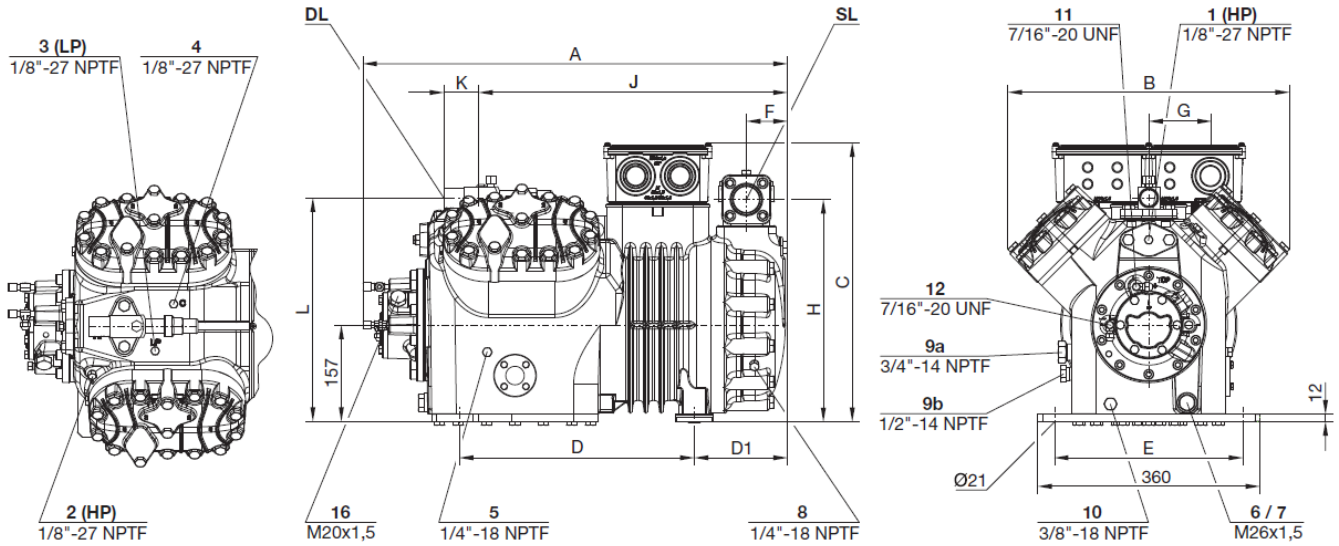


Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
4VES6Y	CE4	633	303	385	367	140	256	44	61	161	558	42	338
4VES7Y		633	303	385	367	140	256	44	61	161	558	42	338
4VES10Y		633	303	385	367	140	256	44	61	161	558	42	338
4TES8Y		633	303	385	367	140	256	44	64	161	557	56	342
4TES9Y		633	303	385	367	140	256	44	64	161	557	56	342
4TES12Y		633	303	385	367	140	256	44	64	161	557	56	342
4PES10Y		633	303	385	367	140	256	44	64	161	557	56	342
4PES12Y		633	303	385	367	140	256	44	64	161	557	56	342
4PES15Y		658	303	385	367	162	256	48	110	173	582	56	342
4NES12Y		633	303	385	367	140	256	44	64	161	557	56	342
4NES14Y		633	303	385	367	140	256	44	64	161	557	56	342
4NES20Y		658	303	385	367	162	256	48	110	173	582	56	342

Note: legend for connections on last page of Bitzer compressor information.

Dimensional Details

4JE-13Y .. 4FE-35(Y)

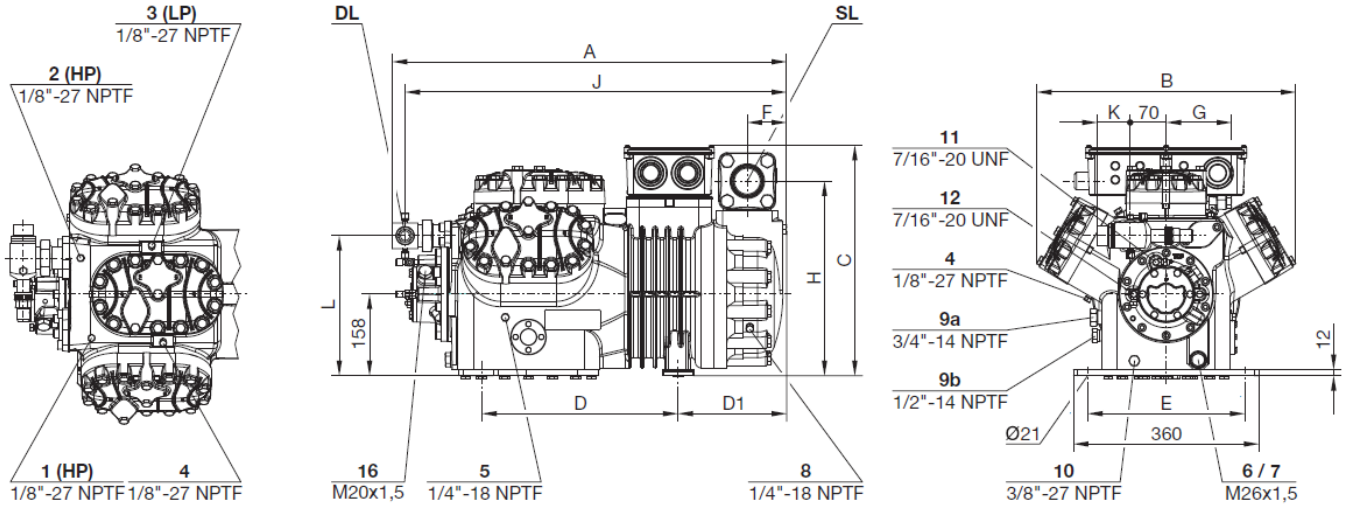


Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
4JE13Y	BE5	688	456	452	381	151	305	66	110	361	501	56	362
4JE15Y		688	456	452	381	151	305	66	110	361	501	56	362
4JE22Y		688	456	452	381	151	305	66	110	361	501	56	362
4HE15Y		688	456	452	381	151	305	66	110	361	501	56	362
4HE18Y		688	456	452	381	151	305	66	110	361	501	56	362
4HE25Y		737	456	452	381	200	305	87	127	377	549	56	362
4GE20Y		706	456	452	381	169	305	76	127	377	519	56	362
4GE23Y		706	456	452	381	169	305	76	127	377	519	56	362
4GE30Y		737	456	452	381	200	305	87	127	377	549	56	362
4FE25Y		737	456	452	381	200	305	87	127	377	549	56	362
4FE28Y		737	456	452	381	200	305	87	127	377	549	56	362
4FE35Y		737	456	452	381	200	305	87	127	377	549	56	362

Note: legend for connections on last page of Bitzer compressor information.

Dimensional Details

6JE-22Y .. 6GE-40(Y)



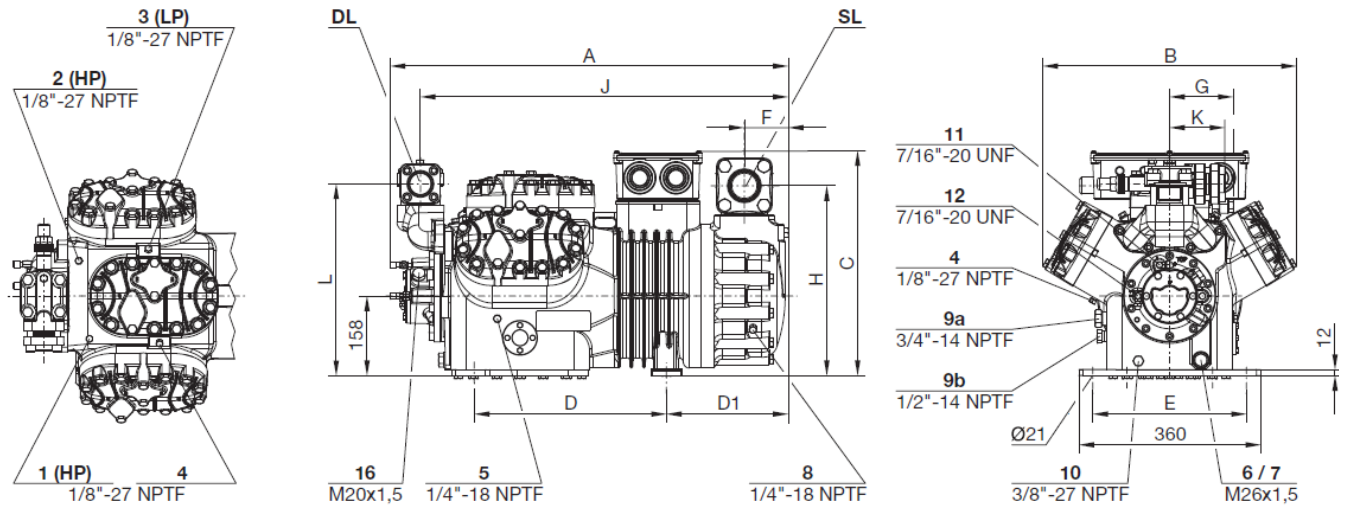
Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
6JE22Y	BE6	766	503	447	381	211	305	76	127	377	740	64	271
6JE25Y		766	503	447	381	211	305	76	127	377	740	64	271
6JE33Y		797	503	447	381	242	305	87	127	377	771	64	271
6HE25Y		766	503	447	381	211	305	76	127	377	740	64	271
6HE28Y		766	503	447	381	211	305	76	127	377	740	64	271
6HE35Y		797	503	447	381	242	305	87	127	377	771	64	271
6GE30Y		766	503	447	381	211	305	76	127	377	740	64	271
6GE34Y		766	503	447	381	211	305	76	127	377	740	64	271
6GE40Y		797	503	447	381	242	305	87	127	377	771	64	271

Note: legend for connections on last page of Bitzer compressor information.

BITZER COMPRESSORS

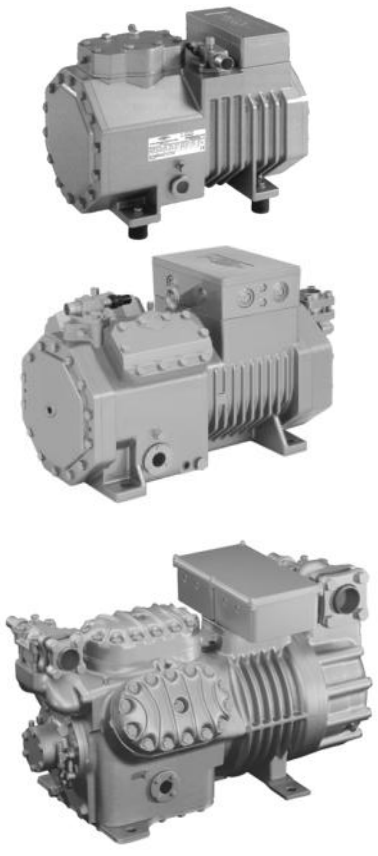
Dimensional Details

6FE-40Y / 6FE-50(Y)



Compressor Model	Comp Series	A mm	B mm	C mm	D mm	D1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
6FE40Y	BE6	790	503	447	381	242	305	87	127	377	729	111	381
6FE44Y		790	503	447	381	242	305	87	127	377	729	111	381
6FE50Y		790	503	447	381	242	305	87	127	377	729	111	381

Note: legend for connections are listed below.

Legend for Connection Positions

No.	Connection Positions
1	High pressure connection (HP)
2	Discharge gas temperature sensor (HP) or CIC sensor
3	Low pressure connection (LP)
4	CIC System: spray nozzle (LP)
5	Oil fill plug
6	Oil drain
7	Oil filter (magnetic screw)
8	Oil return (oil separator)
9a	Gas equalisation (parallel operation)
9b	Oil equalisation (parallel operation)
10	Crankcase heater
11	Oil pressure connection +
12	Oil pressure connection -
16	Connection for oil monitoring (oil sensor or differential oil pressure switch “Delta-P”)
21	Connection for oil service valve