HZH ZENITH
HERMETIC PACKAGED UNITS
HUBBARD
A Zanotti Group Company

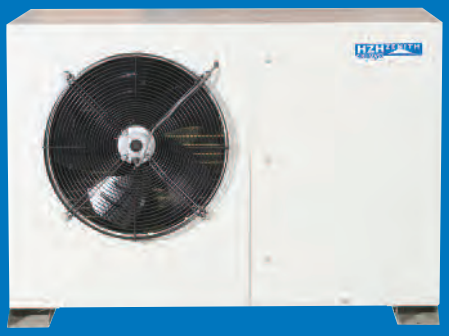
HZH
HUBBARD ZENITH
HERMETIC RANGE



f-gas friendly

HUBBARD
A Zanotti Group Company

HZH Hubbard ZENITH Hermetic Range





f-gas friendly

UK Manufactured

Patented* 'PEEC™' control mode delivers average energy savings of up to

17%

* Patent pending No.GB0918635.4

Performance friendly

- PEEC™ Control system provides improved efficiency and condensing control over standard fan speed regulated systems. Hubbard patent applied for.
- Electronic control board pre-configured for operation providing reduced set up time and inbuilt safety features to improve major component life-cycles. Complete with variable fan speed output. Two modes of operation available PEEC and Standard FSC with ambient setback.
- 3 case sizes cover the Hermetic range, A, B and C with 17 medium temperature options covering 1 kW to 10.3 kW (-10°C / 32°C) and 8 low temperature options covering 0.8 kW to 3.2 kW (-30°C / 32°C).
- Single phase available on medium temperature options up to 5.8 kW and on low temperature 2 kW
- All Zenith HZH units utilise L'Unité Hermetique compressors for reliability
- The A, B and C case Zenith units utilise high surface area low coil row density designs to allow the use of specially profiled 6 and 8 pole German manufactured fans to provide ultra quiet operation. All compressor compartments are sound attenuated with careful consideration given to the prevention of noise breakout.
- Condensers are supplied as standard with Thermoguard coil protection for increased longevity in harsh environments, such as inner city areas, petrol forecourts and coastal regions
- All units high ambient operable as standard

Environment friendly

- Case work utilises an organically coated steel to reduce the use of non recyclable materials and improve the long term durability. Utilising steel fan guards and case-work reduces potential malicious damage and safe-guards against third party incidents.
- Unit materials are over 90% recyclable
- Equipment is UK manufactured to reduce lead-times and is PED certified and CE certificated

F-gas friendly

- No spindle valves, ball valves used throughout
- Circuit design reduces refrigerant loss potential
- PEPI™ Portable Electronic Pressure Indicator removes requirement to break into system to check pressures, useful for F-gas monitoring obligations

Options

- Wall mounting brackets
- Anti-Vandal Security Cages
- Oil separators for extended pipe runs
- PEPI™ Portable Electronic Pressure Indicator

1 YEAR PARTS WARRANTY

Medium temperature Hermetic units

Condensing Unit Models	Ambient Temp°C	Refrigeration capacity in watts at evaporating temperature 10°C	5°C	0°C	-5°C	-10°C	-15°C
HZ460-1A2	27	2198	1851	1529	1252	1007	775
	32	2017	1695	1420	1141	914	716
	38	1798	1506	1239	1006	800	645
HZ480-1A2	27	2967	2504	2093	1724	1398	1119
	32	2735	2294	1910	1562	1263	1003
	38	2439	2045	1688	1377	1111	867
HZ510-1A2	27	3491	2990	2517	2081	1697	1355
	32	3210	2744	2298	1898	1537	1221
	38		2380	2031	1668	1340	1059
HZ513-1A2	27	4752	3962	3270	2652	2116	1651
	32	4350	3627	2967	2505	1901	1470
	38	3900	3220	2624	2104	1650	1267
HZ517-1A2	27	5257	4446	3717	3103	2454	1959
	32	4839	4079	3388	2768	2228	1769
	38	4303	3632	3002	2437	1948	1541
HZ519-1A3 HZ519-3A3	27	6554	5606	4714	3901	3158	2493
	32	6015	5121	4297	3543	2862	2188
	38		4587	3799	3119	2498	1954
HZ524-1B2 HZ524-3B2	27	8156	6895	5752	4737	3820	3047
	32	7478	6289	5227	4271	3422	2691
	38		5583	4594	3711	2968	2274
HZ531-1B3 HZ531-3B3	27	10701	9034	7603	6226	5022	3965
	32	9808	8287	6891	5627	4500	3495
	38	8685	7356	6063	4898	3854	2960
HZ540-1B3 HZ540-3B3	27	13014	11099	9363	7869	6540	5446
	32	11952	10172	8473	7097	5833	4790
	38		8971	7471	6146	4993	4048
HZ553-3C2	27	17389	14458	11744	9373	7358	5757
	32	16018	13191	10855	8478	6581	5056
	38		11691	9398	7367	5650	4296
HZ561-3C2	27	19633	16253	13364	10821	8686	7016
	32	17967	14881	12145	9757	7760	6208
	38			10605	8494	6655	5227
HZ568-3C3	27	22778	19078	16070	13007	10637	8785
	32	20976	17480	14398	11707	9493	7797
	38	18784	15618	12648	10159	8150	6559
HZ573-3C3	27	24600	20660	17134	14048	11478	9315
	32	22602	19015	15548	12671	10272	8354
	38		16754	13688	11022	8805	7050

Low temperature Hermetic units

Condensing Unit Models	Ambient Temp°C	Refrigeration capacity in watts at evaporating temperature -10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
HZL446-1A2	27	2089	1715	1384	1112	900	750	625
	32	1892	1540	1227	977	780	635	517
	38	1643	1329	1052	819	641	517	417
HZL464-1A3	27	2885	2291	1893	1527	1236	1030	858
	32	2575	2095	1677	1337	1067	869	707
	38	2230	1843	1441	1124	880	710	572
HZL480-1A3 HZL480-3A3	27	4016	3202	2541	1890	1436	1197	997
	32	3620	2860	2256	1709	1238	1008	821
	38		2506	1921	1441	1021	823	664
HZL511-1B2 HZL511-3B3	27	5693	4628	3672	2865	2265	1888	1573
	32	5209	4128	3273	2574	1964	1599	1302
	38	4526	3591	2795	2176	1614	1302	1050
HZL516-3B3	27	8188	6536	5181	3967	2994	2495	2079
	32	7263	5992	4622	3507	2641	2150	1750
	38	6505	5124	3902	2976	2207	1780	1436
HZL522-3B3	27	9623	7892	6259	4918	3835	3012	2366
	32	8661	7017	5665	4345	3192	2588	2098
	38		6051	4803	3675	2761	2227	1796

Capacity data stated at EN13215 conditions. Superheat 10K and Sub-cooling within the limits of the condensing unit

Designations

HZ L 531 - 1 B 3

- HZ – Hubbard Zenith Compressor Type
- L – HZ – Medium temperature Hermetic; HZL – Low temperature Hermetic
- 531 – Compressor Model
- 1 – 1 or 3 phase
- B – Case Size A, B or C
- 3 – Coil rows 2 or 3

Hubbard HZH ZENITH Hermetic Range

Medium temperature Hermetic units

	Part numbers for ordering units				Size and weight		Compressor Model
	1 ph units		3 ph units				
	Model	Part No	Model	Part No	Size Ref	Weight (dry) kg	
Hermetic Medium Temperature Condensing Units.	HZ460-1A2	A8550-01			A	64	CAE9460Z
	HZ480-1A2	A8550-02			A	64	CAJ9480Z
	HZ510-1A2	A8550-03			A	64	CAJ9510Z
	HZ513-1A3	A8550-04			A	65	CAJ9513Z
	HZ517-1A3	A8550-05			A	65	FH4517Z
	HZ519-1A3	A8550-06	HZ519-3A3	A8550-07	A	65	T/FH4519Z
	HZ524-1B2	A8550-08	HZ524-3B2	A8550-09	B	95	T/FH4524Z
	HZ531-1B3	A8550-10	HZ531-3B3	A8550-11	B	97	T/FH4531Z
	HZ540-1B3	A8550-12	HZ540-3B3	A8550-13	B	97	T/FH4540Z
			HZ553-3C2	A8550-14	C	119	TAG4553Z
			HZ561-3C2	A8550-15	C	119	TAG4561Z
			HZ568-3C3	A8550-16	C	121	TAG4568Z
			HZ573-3C3	A8550-17	C	121	TAG4573Z

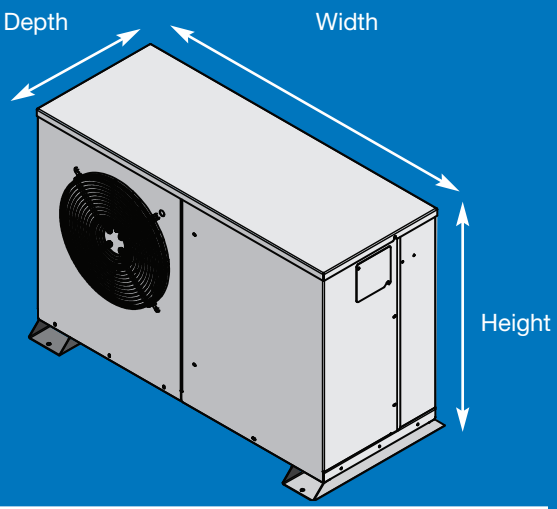
Low temperature Hermetic units

	Part numbers for ordering units				Size and weight		Compressor Model
	1 ph units		3 ph units				
	Model	Part No	Model	Part No	Size Ref	Weight (dry) kg	
Hermetic Low Temperature Condensing Units.	HZL446-1A2	A8550-26			A	66	CAJ2446Z
	HZL464-1A3	A8550-27			A	66	CAJ2464Z
	HZL480-1A3	A8550-28	HZL480-3A3	A8550-29	A	79	T/FH2480Z
	HZL511-1B2	A8550-30	HZL511-3B2	A8550-31	B	98	T/FH2511Z
			HZL516-3B3	A8550-32	B	106	TAG2516Z
			HZL522-3B3	A8550-33	B	108	TAG2522Z

More detail is available in the installation manual D2334 please request a copy from the Hubbard Technical Team on 01473 892280 or 01473 892291.

Case sizes (mm)

Model	Depth	Width	Height	Feet Centres
A	423	1023	684	905
B	435	1150	787	1030
C	547	1368	989	1250



Refrigeration connections		Condenser fan		Receiver Volume Litre	Sound pressure level 10m dB(A)*	Electrical Data			
						1 ph units		3 ph units	
Suction line	Liquid line	Size	Airflow m^3/h			Unit FLA	Unit LRA	Unit FLA	Unit LRA
1/2"	1/4"	1 x 360	2085	2.5	36	5.5	17		
1/2"	3/8"	1 x 360	2085	2.5	36	6.9	22		
5/8"	3/8"	1 x 360	2085	2.5	36	8.3	30		
5/8"	3/8"	1 x 360	1990	2.5	36	10.4	33.5		
5/8"	3/8"	1 x 360	1990	2.5	36	10.9	32		
5/8"	3/8"	1 x 450	1990	2.5	36	15.7	45	5.1	22
7/8"	1/2"	1 x 450	4445	4	39	18.8	49	7.1	24
7/8"	1/2"	1 x 450	4115	4	39	26.9	66	8.85	33
7/8"	1/2"	1 x 450	4115	4	39	27.7	88	9.85	44
1.1/8"	5/8"	1 x 630	7375	6.5	42			14.9	46.5
1.1/8"	5/8"	1 x 630	7375	6.5	42			15.4	51
1.1/8"	5/8"	1 x 630	6955	6.5	42			16.7	54
1.1/8"	5/8"	1 x 630	6955	6.5	42			19.5	56

Refrigeration connections		Condenser fan		Receiver Volume Litre	Sound pressure level 10m dB(A)*	Electrical Data			
						1 ph units		3 ph units	
Suction line	Liquid line	Size	Airflow m^3/h			Unit FLA	Unit LRA	Unit FLA	Unit LRA
5/8"	3/8"	1 x 360	2085	2.5	36	8.2	2		
5/8"	3/8"	1 x 360	1990	2.5	36	10.3	40		
5/8"	3/8"	1 x 360	1990	2.5	36	16.3	68	5.1	23
7/8"	3/8"	1 x 450	4445	4	39	24.7	81	5.7	28
7/8"	1/2"	1 x 450	4115	4	39			10.46	45
1.1/8"	1/2"	1 x 450	4115	4	39			13.2	63

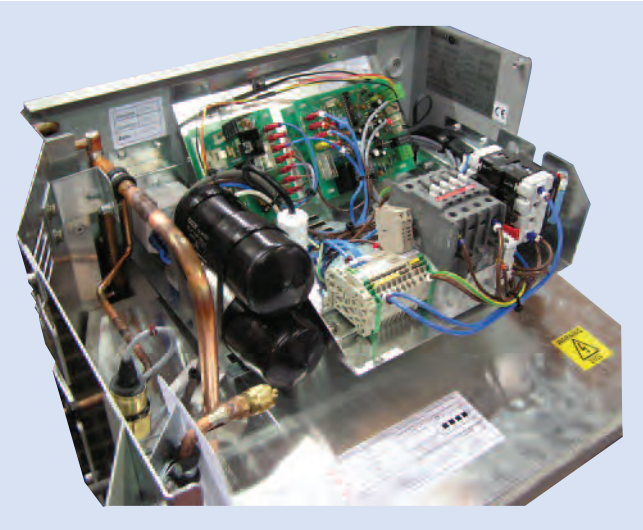
*Sound measurements in accordance with ISO3744 with figures published at 10m free field with fan at full speed

PEEC™ Performance Enhancing Electronic Control SYSTEM

HUBBARD A Zanotti Group Company

The Zenith Range Control Units

All Hubbard 'HZ' ranges incorporate a unique electronic board designed specifically for operation of a refrigeration unit, the Controller uses transducers as well as a temperature probe to provide the most up to date control system currently available. Simple to install with pre-set parameters and functions never seen before on a condensing unit, the HZ board is unique to Hubbard*.



The Control board can operate in two modes:
(Standard supply mode A)

Mode A

Standard Fan Speed control with low ambient setback provides a reduced level of fan noise at low load/ambient conditions. Combined with the option of the maximum speed being reduced via an input from an ambient sensing temperature probe this system provides the best solution for noise sensitive sites.

Mode B

PEEC™ Performance Enhanced Electronic Control* operation provides the system with a sophisticated fan speed control which allows the unit to operate when achievable at the optimum condensing temperature in relation to its evaporating temperature without jeopardizing liquid quality to the expansion valve.

- Pre-configured parameters for pump-down operation, reduce set up time on site
- In built compressor protection to maximise component life expectancy, including anti-cycle and phase rotation sensing
- The control board has the facility to connect to external BMS / monitoring systems via a set of volt free NO/NC contacts to register a fault status such as HP failure or phase rotation

PEPI™ Portable Electronic Pressure Indicator

HUBBARD A Zanotti Group Company

The PEPI™ allows easy system diagnostics without breaking into the refrigeration circuit with traditional guages and is a useful tool to help engineers complete customers F-Gas regulation obligations without adding the potential for loss of refrigerant.



* Patent pending No.GB0918635.4

Notes

HZH ZENITH

HERMETIC PACKAGED UNITS

HUBBARD

A Zanotti Group Company

HZH Zenith Hermetic Packaged Units
Standard equipment

- L'Unité Hermetique Hermetic Compressor
- Weatherproof Housing
- Filter Drier
- Sight Glass
- Receiver
- Charging Valve
- Mains Isolator
- Sound Attenuation
- Low Noise 6 or 8 Pole FAN Motors
- Thermoguard Condenser Coil Protection
- Electronic Control Board consisting of:
  - Fan Speed Control
  - Pre Configured Settings
  - Anti Short Cycle Protection
  - BMS NO/NC Connections
  - Delayed Start
  - On Board Diagnostics

For further information

Contact your refrigeration contractor for further details on the extensive range of Hubbard equipment or telephone the Hubbard Helpline

Sales Helpline 0044(0)1473 892289
Technical Helpline 0044(0)1473 892280 or 0044(0)1473 892291

THE LEADERS IN COMMERCIAL COOLING

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Models and specifications are subject to be changed without notice.