

TECUMSEH MALAYSIA

AE² CATALOGUE

Cooling for a Better Tomorrow

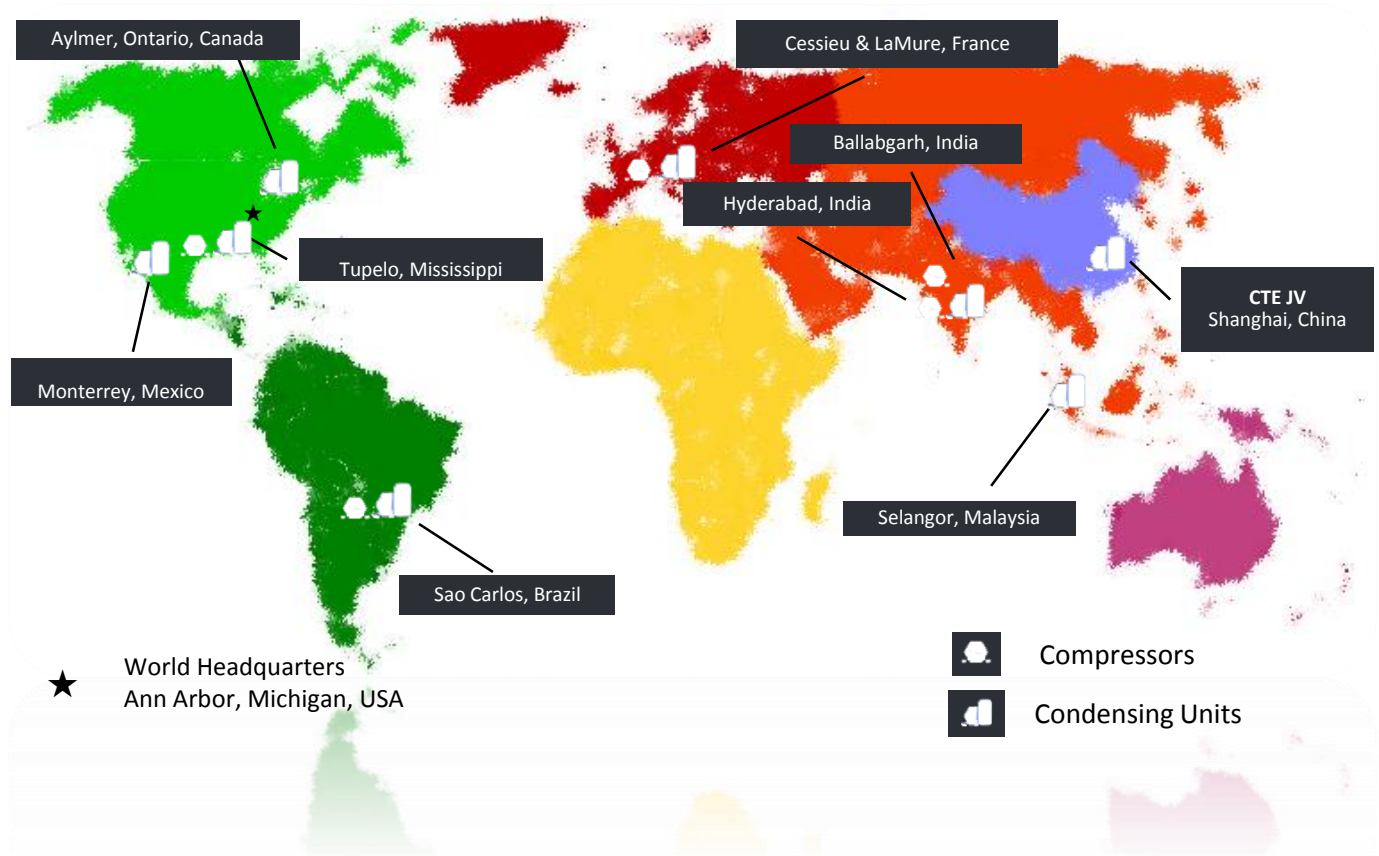


Tecumseh



GREEN
TECHNOLOGY

Tecumseh Product Company



About Tecumseh

Demonstrated performance. Tecumseh Products Company is renowned for bringing an extra dimension of product innovation, customer reliance, and product quality to the air conditioning and refrigeration industry. As a result of our innovative spirit and product performance, people rely on our products every day. We literally touch the lives of millions.

Early beginnings. We developed the first “hermetic” compressor for consumer refrigerators in 1937. As the name Tecumseh became synonymous with commercial refrigeration and central home air conditioning, we expanded our product line to include automotive air conditioning compressors in 1953. Our reputation for innovation was further enhanced in 1959 when we developed the first high-speed hermetically-sealed compressor for commercial applications.

A focused company. Although our product manufacturing focus remains constant, Tecumseh has substantially invested in research and development engineering laboratories in North America, Europe, South American and India. We've also partnered with R&D facilities at universities throughout the globe. These facilities are not just responsible for engineering product solutions, but our university partners also provide Life Science Research on how our products interface with mankind and the environment.

Tecumseh innovation. Today, we engineer a full-line of hermetically-sealed compressors for residential and specialty air conditioning, home refrigerators and freezers, and commercial refrigeration. But our expertise doesn't stop there; we also offer a complete line of indoor and outdoor condensing units, evaporator coils, heat pumps, complete refrigeration systems and authorized spare parts.

Global products. Our products can be quickly accessed from manufacturing facilities on four continents when needed on a worldwide basis. We can provide coordination among our global facilities and your plant locations anywhere, so product selection, specifications and delivery of product are assured.

Unwavering commitment. Tecumseh has responded to the challenges of the refrigeration and air conditioning marketplace for over seven decades, leading the way with improved products and service in support of the industry we serve. A company-wide dedication to quality control has already earned Tecumseh the highest quality rating from major refrigeration and air conditioning manufacturers. And the people we employ are honoured to touch so many lives, in so many countries, every day.

GENERAL INFORMATION

Rating Condition

Compressors

EN 12900

	LBP	HP / MHBP
Evaporating Temperature	- 35 °C	- 10 °C
Condensing Temperature	+ 40 °C	+ 45 °C
Return Gas Temperature	+ 20 °C	+ 20 °C
Sub-cooling	0K	0K

Condensing Units

EN13215

	LBP	HP / MHBP
Evaporating Temperature	- 35 °C	- 10 °C
Condensing Temperature	+ 32 °C	+ 32 °C
Return Gas Temperature	+ 20 °C	+ 20 °C
Sub-cooling	3K	3K

Unit Conversion

*For the conversion of the refrigeration capacity from watt at 50 Hz to:

Btu/hr at 50 Hz, use multiplying factor 3.41

Kcal/hr at 50 Hz, use multiplying factor 0.86

Conversion factor for obtaining the capacity in HP

- in medium and high back pressure and all air con
(Evap Temp: +7.2 °C, Cond Temp.: 54.5 °C)

$$\text{HP} = \frac{\text{Performance at 60 Hz in Btu/hr}}{12,000}$$

- in low back pressure
(Evap Temp: -23.3 °C, Cond Temp.: 54.5 °C)

$$\text{HP} = \frac{\text{Performance at 60 Hz in Btu/hr}}{4,000}$$

Voltage Code

Code	AA	DS	GS	GH	XN	FZ
Phase	1	1	1	1	1	1
50 Hz Rated (V)	-	-	220	230	200 - 220	220 - 240
Approved Range (V)	-	-	180 - 242	187 - 264	180 - 242	198 - 253
60 Hz Rated (V)	115	115 - 127	220	-	208 - 230	-
Approved Range (V)	103 - 127	104 - 140	187 - 242	-	197 - 253	-

AE2 COMPRESSOR

COMMERCIAL LOW TEMPERATURE REFRIGERATION

Model	Nominal Power (HP)	Displacement (cm ³)	EN12900 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Weight (kg)
			-35 °C	-30 °C	-20 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	
AE2410Z-FZ	1/4	5.02	120	168	291	1.4	2.5	1/4	3/16	10.3
AE2415Z-FZ	3/8	6.69	194	260	429	1.9	3.0	1/4	3/16	10.9
AE1420Z-FZ	1/2	9.35	246	332	555	2.3	4.4	3/8	1/4	11.5
AE2420Z-FZ	1/2	9.35	246	332	555	2.3	4.4	3/8	1/4	11.5
AE2425Z-FZ	5/8	12.01	329	441	723	2.3	4.2	3/8	1/4	11.7

Model	Nominal Power (HP)	Displacement (cm ³)	EN12900 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Weight (kg)
			-35 °C	-30 °C	-20 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	
AE1390Y-FZ	1/5	8.02	106	150	268	1.4	1.7	1/4	3/16	9.5
AE2390Y-FZ	1/5	8.02	101	147	261	1.3	1.7	1/4	3/16	9.5
AE2410Y-FZ	1/4	9.39	117	168	298	1.4	1.7	5/16	1/4	9.5
AE2413Y-FZ	1/3	12.01	115	210	464	1.8	2.8	5/16	1/4	11.2
AE2415Y-GH	3/8	12.48	173	239	418	1.8	3.0	5/16	1/4	12.1

COMMERCIAL HIGH TEMPERATURE REFRIGERATION

Model	Nominal Power (HP)	Displacement (cm ³)	EN12900 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Weight (kg)
			-5 °C	0 °C	+7.2 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	
AE4425Z-FZ	1/5	4.24	362	446	593	1.8	2.8	1/4	3/16	9.9
AE4430Z-FZ	1/4	5.16	447	547	717	2.1	2.9	1/4	3/16	10.2
AE4440Z-FZ	1/3	6.69	603	737	968	2.7	3.7	3/8	1/4	10.5
AE4450Z-FZ	3/8	8.85	791	959	1,243	3.4	5.1	3/8	1/4	10.8
AE4460Z-FZ	1/2	10.33	952	1,144	1,469	4.3	5.9	3/8	1/4	11.6
AE4470Z-FZ	5/8	12.01	1,129	1,349	1,718	3.7	5.3	3/8	1/4	12.4

Model	Nominal Power (HP)	Displacement (cm ³)	EN12900 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Weight (kg)
			-5 °C	0 °C	+7.2 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	
AE4425Y-FZ	1/8	6.69	348	443	605	1.6	2.4	1/4	3/16	9.2
AE4430Y-FZ	1/4	8.02	450	566	769	2.1	3.1	1/4	3/16	9.7
AE4440Y-FZ	1/3	10.33	591	733	981	2.5	3.7	5/16	1/4	9.8
AE4450Y-FZ	3/8	13.24	779	964	1,285	3.1	4.6	3/8	1/4	11.5
AE4456Y-FZ	1/2	14.51	854	1,052	1,394	3.6	8.0	3/8	1/4	11.5
AE4460Y-FZ	1/2	15.09	889	1,098	1,454	3.0	4.7	3/8	1/4	12.2

COMMERCIAL HIGH TEMPERATURE REFRIGERATION

Model	Nominal Power (HP)	Displacement (cm ³)	EN12900 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Weight (kg)
			-5 °C	0 °C	+7.2 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	
AE4425E-FZ	1/5	4.24	383	471	615	1.7	2.7	1/4	3/16	9.6
AE4430E-FZ	1/4	5.16	469	574	753	2.0	2.8	1/4	3/16	10.0
AE4440E-FZ	1/3	6.69	603	744	989	2.4	3.4	3/8	1/4	10.2
AE4450E-FZ	3/8	8.02	719	890	1,177	3.0	4.7	3/8	1/4	11.2
AE4460E-FZ	1/2	10.33	952	1,176	1,534	3.7	5.3	3/8	1/4	11.2
AE4470E-FZ	5/8	12.01	1,157	1,435	1,923	3.8	5.4	3/8	1/4	11.1

Note : Constant endeavour to improve its products reserves the right to change any information contained in this leaflet without prior warning.



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AE² STANDARD CONDENSING UNIT

COMMERCIAL LOW TEMPERATURE REFRIGERATION

Model	EN13215 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Condenser Fan		Weight (kg)	Bases
	-35 °C	-30 °C	-20 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	Nos	Dia. (mm)		
AE2410ZBR-FZ	131	177	284	1.6	2.7	3/8	1/4	1	200	18.8	I
AE2415ZBR-FZ	199	255	381	2.1	3.2	3/8	1/4	1	200	19.4	I
AE2420ZBR-FZ	258	334	511	2.5	4.6	3/8	1/4	1	200	20.7	I
AE2425ZBR-FZ	343	442	669	2.9	4.8	3/8	1/4	1	250	25.5	II

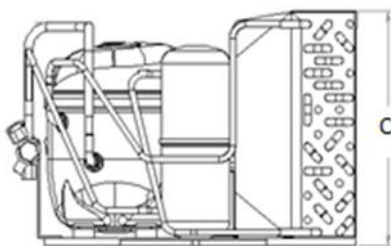
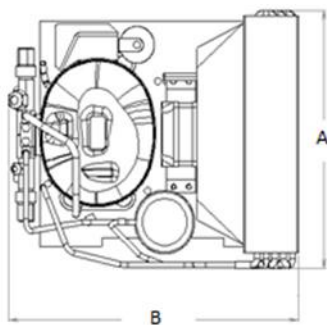
COMMERCIAL HIGH TEMPERATURE REFRIGERATION

Model	EN13215 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Condenser Fan		Weight (kg)	Bases
	-5 °C	0 °C	+7.2 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	Nos	Dia. (mm)		
AE4425ZHR-FZ	397	464	564	2.0	3.0	3/8	1/4	1	200	19.1	I
AE4430ZHR-FZ	519	608	742	2.3	3.1	3/8	1/4	1	200	19.3	I
AE4440ZHR-FZ	708	829	1,014	3.3	4.3	3/8	1/4	1	250	23.9	II
AE4450ZHR-FZ	870	1,000	1,188	4.0	5.7	3/8	1/4	1	250	24.9	II
AE4460ZHR-FZ	915	1,028	1,191	4.9	6.5	3/8	1/4	1	250	24.8	II
AE4470ZHR-FZ	1,299	1,497	1,800	4.3	5.9	3/8	1/4	1	300	27.6	III

COMMERCIAL HIGH TEMPERATURE REFRIGERATION

Model	EN13215 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Condenser Fan		Weight (kg)	Bases
	-5 °C	0 °C	+7.2 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	Nos	Dia. (mm)		
AE4425YHR-FZ	374	452	568	1.8	2.6	3/8	1/4	1	200	14.7	I
AE4430YHR-FZ	506	612	780	2.4	2.8	3/8	1/4	1	200	15.2	I
AE4440YHR-FZ	624	739	917	2.8	3.4	3/8	1/4	1	200	17.3	I
AE4450YHR-FZ	831	984	1,221	3.7	5.2	3/8	1/4	1	250	25.0	II
AE4456YHR-FZ	918	1,087	1,384	4.2	8.6	3/8	1/4	1	250	25.8	II
AE4460YHR-FZ	953	1,130	1,402	3.6	5.3	3/8	1/4	1	250	25.4	II

DIMENSION



Bases	Description	A	B	C
I	Overall Unit	304	350	253
II	Overall Unit	328	485	292
III	Overall Unit	425	480	338

Dimension given in mm



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AE² HTA CONDENSING UNIT

COMMERCIAL LOW TEMPERATURE REFRIGERATION

Model	EN13215 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Condenser Fan		Weight (kg)	Bases
	-35 °C	-30 °C	-20 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	Nos	Dia. (mm)		
AET2415ZBR-FZ	211	271	414	2.1	3.2	3/8	1/4	1	200	20.3	I
AET2420ZBR-FZ	271	349	533	2.9	5.0	3/8	1/4	1	250	24.1	II
AET2425ZBR-FZ	369	481	752	2.9	4.8	3/8	1/4	1	300	27.5	III

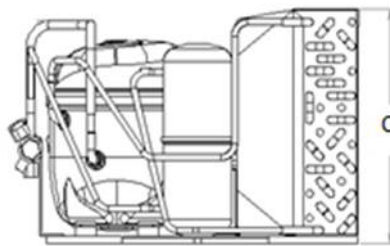
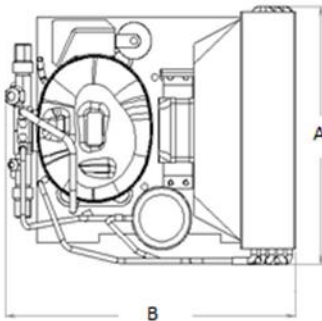
COMMERCIAL HIGH TEMPERATURE REFRIGERATION

Model	EN13215 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Condenser Fan		Weight (kg)	Bases
	-5 °C	0 °C	+7.2 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	Nos	Dia. (mm)		
AET4425ZHR-FZ	432	511	636	2.0	3.0	3/8	1/4	1	200	18.5	I
AET4430ZHR-FZ	525	615	754	2.7	3.5	3/8	1/4	1	250	23.5	II
AET4440ZHR-FZ	692	808	983	3.3	4.3	3/8	1/4	1	250	23.9	II
AET4450ZHR-FZ	980	1,154	1,424	4.0	5.7	3/8	1/4	1	300	25.7	III
AET4460ZHR-FZ	1,141	1,324	1,607	4.9	6.5	3/8	1/4	1	300	25.5	III
AET4470ZHR-FZ	1,316	1,519	1,829	4.3	5.9	3/8	1/4	1	300	28.2	III

COMMERCIAL HIGH TEMPERATURE REFRIGERATION

Model	EN13215 (RTG 20 °C) Capacity (Watt)			Current (Amps)		Diameter of Connection		Condenser Fan		Weight (kg)	Bases
	-5 °C	0 °C	+7.2 °C	I Nom	I Max	Suction (Inches)	Discharge (Inches)	Nos	Dia. (mm)		
AET4425YHR-FZ	402	493	635	1.8	2.6	3/8	1/4	1	200	18.9	I
AET4430YHR-FZ	510	622	801	2.7	3.7	3/8	1/4	1	250	23.2	II
AET4440YHR-FZ	656	786	996	3.1	4.5	3/8	1/4	1	250	24.1	II
AET4450YHR-FZ	870	1,049	1,337	3.7	5.2	3/8	1/4	1	300	26.5	III
AET4456YHR-FZ	984	1,181	1,499	4.2	5.8	3/8	1/4	1	300	26.1	III
AET4460YHR-FZ	1,022	1,231	1,573	3.6	5.3	3/8	1/4	1	300	26.1	III

DIMENSION



Bases	Description	A	B	C
I	Overall Unit	304	350	253
II	Overall Unit	328	485	292
III	Overall Unit	425	480	338

Dimension given in mm



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Tecumseh Product Company

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