

ON THE MOVE TO A2L WITH TECUMSEH

R-1234yf

R-455A

R-454C



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ACTING AS A LEADER FOR AN EFFECTIVE ENVIRONMENTAL TRANSITION IN THE EU

SUSTAINABLE - SIMPLE - RISK-FREE - RELIABLE

The current sustainable transformation of our world and our companies calls for solid understanding and anticipation of the next stages of its deployment, reflecting the global transition.

For several years, Tecumseh has been preparing for the transition to new very low GWP A2L refrigerants by testing applications and validating product ranges or solutions. Respect for the safety of people and property, high energy efficiency and reliability are taken into account from the design stage to make the solution economical for the operator and owner of the system: our solutions are "Safe by Design".

The use of very low GWP (Global Warming Potential) refrigerants will help to achieve the targets set by F-Gas for 2030, without any time limit for use. They all comply with this regulation and help to save energy, which is essential for the future and the only true definition of environmental concern.

Why are A2L refrigerants the SOLUTION for direct expansion commercial refrigeration equipment from 1 to 20 kW?

For the user's point of view:

- We have an obligation because of F-Gas, and the schedule is forcing us to act as quickly as possible to avoid maintenance problems in the cold chain.

Durable refrigerant, the industry's choice from a technical and economical point of view

- The Total Cost of Ownership (TCO) associated with the energy efficiency of A2L is 10 to 20% better than that of "natural" alternatives.

Simple: it's no more complicated than before:

- Selection, implementation and maintenance are as easy as they are today with HFCs - apart from a few special precautions to be taken in terms of safety.

Risk-free: safety by design

- Assessment of the main risks (load limitation, protection of electrical components, etc.) is taken into account from the product design stage. The remaining share for the operator is approximately 20%, i.e. choice of the right location for the condensing unit and compliance with best practices. The safety of property and people in terms of risks is managed by the design.

Reliable: Direct expansion technology for efficiency

- The design of this new generation of A2L condensing units was developed to ensure correct operation at a very high ambient temperature without any additional components (remember the effects of the 2019 heat wave).

In the pages of this catalogue, you will discover our entire range of compressors and condensing units, compatible with the A2L refrigerants (R-454C / R-455A and R-1234yf).



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CERTIFIED PRODUCTS

Tecumseh wishes to provide its customers with innovative, high-quality products and services with high added value. The company therefore guarantees certification of its products.

ASERCOM

An active member of the association for over 20 years, Tecumseh Europe submits its main products to ASERCOM certification procedures.

The performance and quality of Tecumseh products are measured in the laboratory according to the procedures and conditions defined by standards EN 13771-1 and -2 and declared according to EN 13215 and EN 12900. They are also compared with competitor products certified by ASERCOM.



QUALITY AND ENVIRONMENT

The two Management systems operated by Tecumseh bear witness to its daily commitment and its ability to maintain and develop its certifications.

ISO 17025 par le COFRAC

The laboratory is accredited by Cofrac.

The laboratory guarantees the accuracy of the measurements provided and the compliance of the products for installation engineers, specifiers and users.

Accreditation no. 1-6818.
Scope available on
www.cofrac.fr



ISO 9001, version 2015 : Quality Management System

This certification meets the requirements and expectations of our customers by offering products that satisfy the requirements of European regulations.



ISO 14001 version 2015 : Environmental Management System

The Cessieu factory has received ISO 14001 certification.

This certification vouches for Tecumseh's commitment to environmental aspects.



COMPRESSOR TYPE APPROVAL

Tecumseh compressors comply with EC harmonised standards and are certified by the following external organisations*:

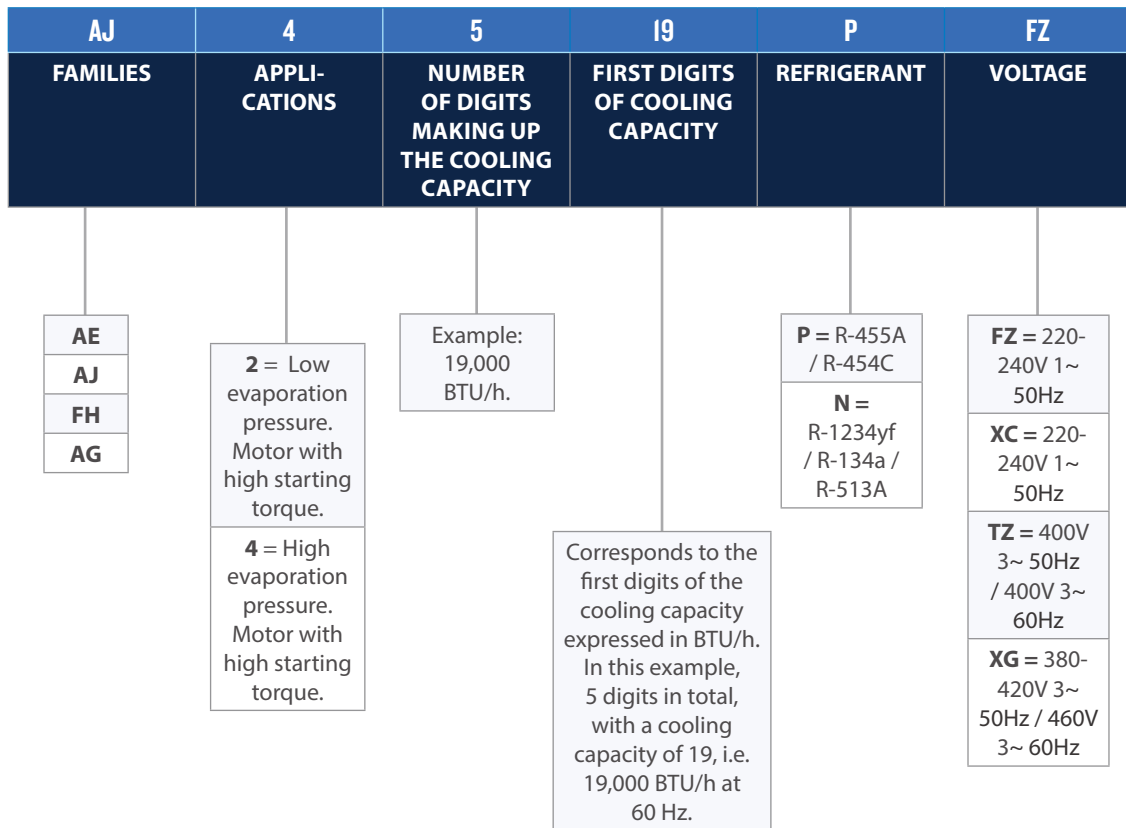


GOST
Ukraine



*Your Tecumseh contact can provide you with an accurate list of the compressors that meet the above certifications.

EXPLANATION OF DESIGNATIONS COMPRESSOR MODELS



Low pressure: -23.3 °C evap. T. / +54.5 °C cond. T. / +32 °C Gas Return / +32 °C Liquid T.
 High pressure: +7.2 °C evap. T. / +54.5 °C cond. T. / +35 °C Gas Return / +35 °C Liquid T.

EXPLANATION CODES AND VOLTAGE RANGES COMPRESSORS AND CONDENSING UNITS

CODE	FZ	XC	TZ	XG	TX*
PHASE	1~	1~	3~	3~	3~
DESIGNATION	220 - 240V / 50Hz	220 - 240V / 50Hz	400V / 50Hz 440V / 60Hz	380 - 420V / 50Hz 460V / 60Hz	400V / 50Hz
VOLTAGE RANGE 50HZ	198 - 253V	198 - 264V	340 - 440V	342 - 462V	360 - 440V
VOLTAGE RANGE 60HZ	x	x	396 - 499V	396 - 506V	x

*only for condensing units

EXPLANATION OF DESIGNATIONS

CONDENSING UNIT MODELS

AJ	T	4	5	19	P	H	R																
FAMILIES	CONDENSING UNITS	APPLI-CATIONS	NUMBER OF DIGITS MAKING UP THE COOLING CAP.	FIRST DIGITS OF COOLING CAPACITY	REFRIGE-RANT	PRESSURE	CONNEC-TION																
<table border="1"> <tr><td>AE</td></tr> <tr><td>AJ</td></tr> <tr><td>FH</td></tr> <tr><td>AG</td></tr> </table>	AE	AJ	FH	AG	<table border="1"> <tr> <td>T = HAT (High Ambient Temperature)</td> </tr> <tr> <td>N = New AJ model</td> </tr> </table>	T = HAT (High Ambient Temperature)	N = New AJ model	<table border="1"> <tr> <td>2 = Low evaporation pressure. Motor with high starting torque.</td> </tr> <tr> <td>4 = High evaporation pressure. Motor with high starting torque.</td> </tr> </table>	2 = Low evaporation pressure. Motor with high starting torque.	4 = High evaporation pressure. Motor with high starting torque.	<table border="1"> <tr> <td>Example: 19,000 BTU/h.</td> </tr> </table>	Example: 19,000 BTU/h.	<table border="1"> <tr> <td>in BTU/h at 60 Hz according to the announcement conditions given. Example: 19 preceded by the number 5 means: 19,000 BTU/h.</td> </tr> </table>	in BTU/h at 60 Hz according to the announcement conditions given. Example: 19 preceded by the number 5 means: 19,000 BTU/h.	<table border="1"> <tr> <td>P = R-455A / R-454C</td> </tr> <tr> <td>N = R-1234yf / R-134a</td> </tr> </table>	P = R-455A / R-454C	N = R-1234yf / R-134a	<table border="1"> <tr> <td>H = High suction pressure (-25 °C to +15 °C)</td> </tr> <tr> <td>B = Low pressure (-40 °C to -10 °C)</td> </tr> </table>	H = High suction pressure (-25 °C to +15 °C)	B = Low pressure (-40 °C to -10 °C)	<table border="1"> <tr> <td>No letter = valve or weld</td> </tr> <tr> <td>R = with liquid receiver</td> </tr> </table>	No letter = valve or weld	R = with liquid receiver
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P = R-455A / R-454C																							
N = R-1234yf / R-134a																							
H = High suction pressure (-25 °C to +15 °C)																							
B = Low pressure (-40 °C to -10 °C)																							
No letter = valve or weld																							
R = with liquid receiver																							



THE LABEL COMPRESSOR INFORMATION



REFERENCE	DESIGNATION
A	Voltage
B	Frequency
C	Number of phases
D	Nomenclature
E	Refrigerants
F	Compressor designation
G	Serial number
H	Maximum permissible pressure
I	Min/max temperature
J	Test pressure 1.1 * SP
K	Registration number of the notified body
L	Date of manufacture and testing
M	Volume libre

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53	Factory	J2220	Date (M/D/Y)	00	Production Line	I60829	Time	A	Version
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THE LABEL CONDENSING UNIT INFORMATION



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F D G I A C B E H

REFERENCE	DESIGNATION
A	Tension
B	Fréquence
C	Nombre de phases
D	Désignation du groupe de condensation
E	Réfrigérants
F	Code article
G	Numéro de série
H	Intensité nominale
I	Numéro d'ordre de fabrication

CASE STUDIES

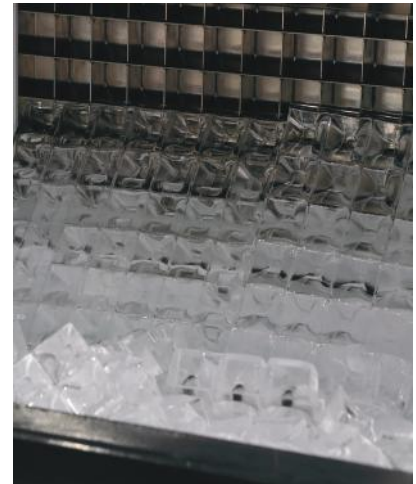


ICE CUBE MAKER

POSITIVE COLD (HBP)

DESCRIPTION

Application :	ice cube maker, production of 320 kg/day
Ambient temperature:	20°C
Water temperature:	15°C
Expansion:	capillary tube
Compressor model:	FH4532P
Initial refrigerant:	R-452A
Refrigerants tested:	R-454C et R-455A



TEST OBJECTIVES AND CONDITIONS

The application is first tested in factory configuration, charged with 950 g of R-452A.

Objective of the test: Convert the application to A2L, R-454C or R-455A.

- **1st stage:** determination of the optimum refrigerant load.
- **2nd stage:** performance of new tests under conditions identical to the initial test.

RESULTS

- Production of 323 kg of ice cubes in original configuration, system loaded with R-452A.
- Daily production identical with the 2 fluids tested R-454C and R-455A.

	Refrigerant load (kg)	Ice cube production (kg/24h)	Energy consumed (Wh/kg)
R-452A	0.90	323	147
R-455A	0.82	322	147
R-454C	0.85	315	140
R-455A vs. R-452A	- 8.8%	=	=
R-454C vs. R-452A	- 5.5%	-2.4%	-4.7%

CONCLUSION

- Use of refrigerants R-454C and R-455A validated for this type of application.
- Achievement of the same daily ice production regardless of the refrigerant selected. The same goes for the energy consumed per kilogram of ice formed.
- The temperature glide of the fluids has no impact on the system's refrigeration performance despite the use of a capillary not optimised for these new refrigerants.

BAKER'S CABINET

POSITIVE COLD (HBP)

DESCRIPTION

Application :	cabinet for storing dough
Ambient temperature:	20°C
Operating temperature:	static temperature regime, 2 °C
Expansion:	thermostatic expansion valve
Compressor model:	AE4470P
Initial refrigerant:	R-404A
Refrigerants tested:	R-454C and R-455A

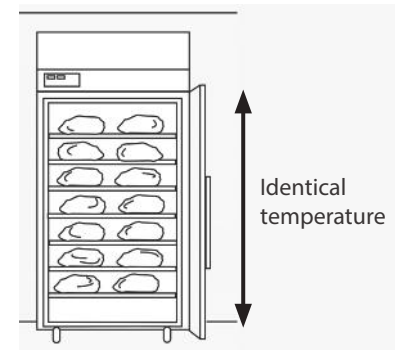


TEST OBJECTIVES AND CONDITIONS

The application is first tested in factory configuration, charged with 650 g of R-404A.

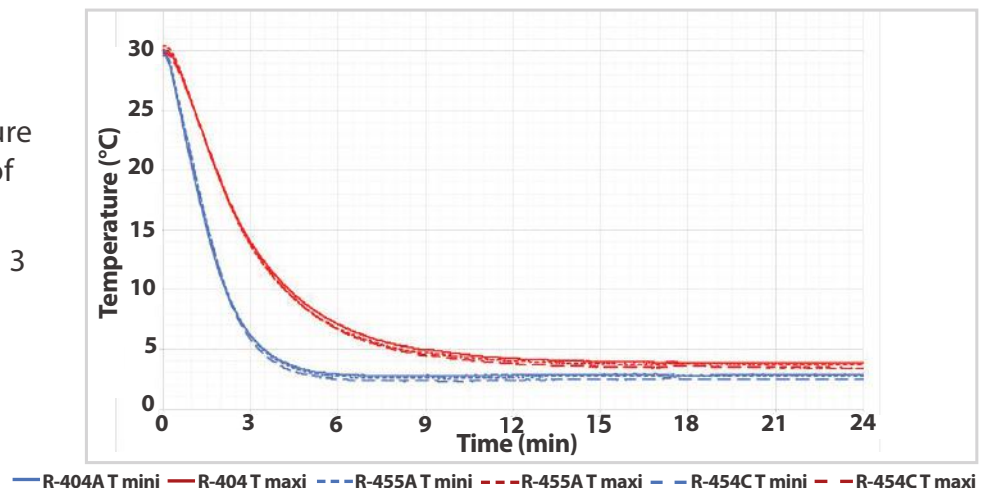
Objective of the test: Convert the application to A2L, R-454C or R-455A.

- **Step 1:** determination of the optimum load depending on the cooling capacity to be achieved.
- **Step 2:** performance of new tests under conditions identical to the initial test.



RESULTS

- The drop in temperature is the same regardless of the fluid selected.
- Identical COP for the 3 refrigerants tested.



CONCLUSION

- Use of refrigerants R-454C and R-455A validated for this type of application.
- Thermostatic expansion enables adaptation to the properties of the A2L fluids.

REFRIGERATED SALES CABINETS

POSITIVE COLD (HBP)

DESCRIPTION

Application :	self-service refrigeration units for the sale of food products
Ambient temperature:	32°C
Operating temperature:	0/+2°C
Expansion:	direct expansion
Compressor model:	AJ4519P
Initial refrigerant:	R-452A
Refrigerants tested:	R-455A



OBJECTIVES

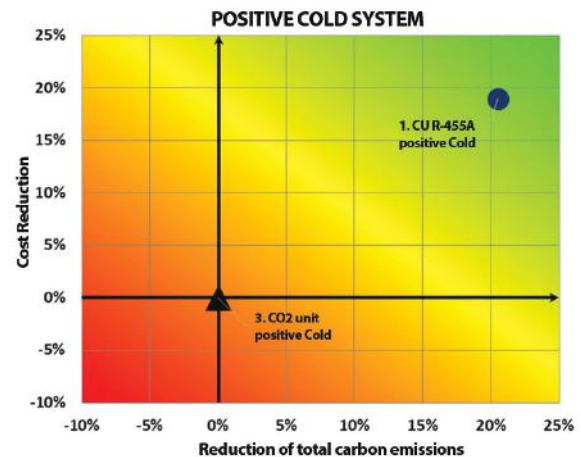
Remodeling of a food surface in an environmental perspective "Eco-Efficient".

The client had initially chosen a CO₂ solution. This was replaced by an HFO-HFC solution with low environmental impact; R-455A being a choice in compliance with the requirements of F-Gas 517/2014. Two main reasons:

- **Technical:** Willingness to decentralize and make autonomous the production of cold.
- **Economical :** Total cost of the installation (initial investment cost, and lower power consumption of the installation, easier maintenance).

RESULTS

- Reduced total cost of ownership and CO₂ emissions by 20% compared to a CO₂ installation



CONCLUSION

- Validated use of R-455A refrigerant for this type of application.
- Choice of the SILENSYS® advanced silent unit specifically adapted with easy installation
- The technical and economical solution with R-455A is far superior to the alternative solution with CO₂.

REFRIGERATION CABINET

POSITIVE COLD (HBP)

DESCRIPTION

Application :	meat ageing cabinet
Ambient temperature:	20°C
Operating temperature:	2 °C, 65% humidity
Expansion:	thermostatic expansion valve
Compressor model:	CAJ4511N
Initial refrigerant:	R-134a
Refrigerants tested:	R-1234yf



OBJECTIVES

The manufacturer of the ageing cabinets decided to use a low GWP refrigerant from 2019. R-1234yf was chosen logically as a follow-on from R-134a.

It was relevant to provide customers with more environmentally friendly solutions without compromising on cooling efficiency. The "go-to-green" choice made by the manufacturer met customer expectations.

RESULTS

The efficiency, cooling capacity and maintenance of temperature are similar to those of the previous generation of ageing cabinet. The decision made meets the quality and seriousness requirements of the company and its customers. All of the models in the range now run on R-1234yf.

"Implementation of the R-1234yf refrigerant went smoothly, our customers are very satisfied and so are we," declared the cabinet manufacturer.

CONCLUSION

- The transition to this A2L fluid was very simple and there were no technical constraints.
- R-1234yf: a reliable and efficient long-term choice for commercial cooling.
- Customers like the cabinet manufacturer's environmentally friendly message.

COLD CHAMBER

POSITIVE COLD (HBP)

DESCRIPTION

Application :	14 m ³ cold chamber for storing foodstuffs.
Storage temperature:	0°C / +4°C
Expansion:	thermostatic expansion
Model:	SILENSYS® Advanced SILAJ4513N enclosed unit, capacity 1,600 W
Refrigerant :	R-1234yf



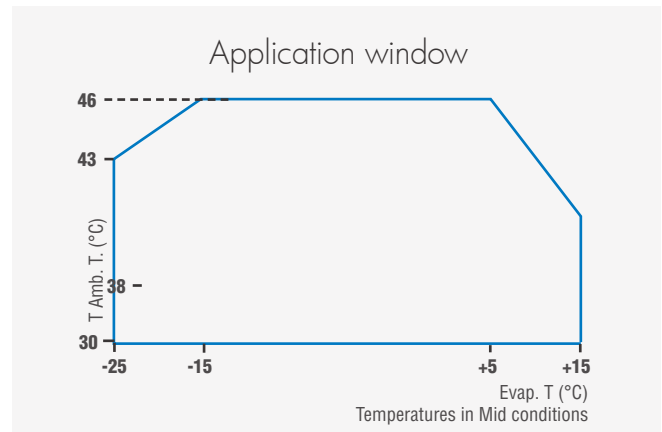
OBJECTIVES

Request from the end user: Implement a refrigeration system in line with its environmental policy. The designer of the refrigeration system chose direct expansion technology with pure R-1234yf fluid, without temperature glide and the SILENSYS® advanced unit.

R-1234yf has a GWP of 4 and no impact on the ozone layer. The refrigeration system installed complies with the standards in the series EN378 (controlled "category b" access, "class II" outdoor location).

RESULTS

"The solution is easy to implement and there are no particular difficulties with installation. It is interesting from an energy and economical point of view," confirmed the engineer responsible for installing the system.



CONCLUSION

- This enclosed condensing unit, charged with R-1234yf, meets the requirements of F-Gas Directive 517/2014.
- Expansion with synthetic fluids is recognised as the best technical and economic solution, simple to implement, with a low Total Cost of Ownership (TCO).
- This low-carbon refrigeration system is in line with the customer's strategic choices.

COMPRESSORS



THE FIRST RANGE OF A2L COMPRESSORS AVAILABLE ON THE MARKET

AE²



W POWER RANGE

Negative cold: 100 to 300 W
Positive cold: 280 to 1000 W

- The most compact compressor on the market running on A2L refrigerants
- Developed to achieve optimum performance with low GWP refrigerants

AJ²



W POWER RANGE

Negative cold: 300 to 700 W
Positive cold: 700 to 2400 W

- Sturdy, reliable design
- Wide operational window
- Low acoustic level

APPLICATIONS



FH²

W POWER RANGE

Negative cold: 1000 to 1200 W
Positive cold: 1400 to 3700 W

- Window of application identical to HFC refrigerants
- Very good energy efficiency
- Compact

AG

W POWER RANGE

Negative cold: 1100 to 2300 W
Positive cold: 2600 to 9800 W

- Suitable for applications with difficult or challenging conditions
- Compatible with refrigeration systems with wide variations in cooling capacity
- Sturdy and reliable



POSITIVE COLD APPLICATION (HBP)



R-1234yf

AE2 compressor

MODEL	CAPA CITY cm ³	MOTOR	REFRIGERATION OUTPUT (Watt) 45 °C condensing, 10K superheat, 3K subcool Evaporation temperature (°C):							REFRIG. OUTPUT ENI2900 (+5 °C / 50 °C / RG 20 °C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			-15°	-10°	-5°	0°	+5°	+10°	+15°	QPF (W)	COP (W/W)	Suction	Discharge	Load			
AE4425N	6,69	CSIR	197	273	360	461	578	711	864	524	2,00	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	9,1	199	FZ
AE4430N	8,02	CSIR	270	358	463	587	732	902	1098	667	2,08	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	9,4	199	FZ
AE4440N	10,33	CSIR	367	476	605	756	934	1141	1381	854	2,01	7,9 - 5/16"	6,35 - 1/4"	6,35 - 1/4"	9,6	199	FZ
AE4450N	13,24	CSIR	483	630	800	998	1227	1493	1799	1120	2,13	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,5	210	FZ
AE4456N	14,51	CSIR	532	690	873	1085	1330	1613	1939	1218	2,03	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	11	210	FZ
AE4460N	15,09	CSIR	536	697	882	1093	1336	1615	1935	1224	1,95	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	11,3	210	FZ



AJ2 compressor

MODEL	CAPA CITY cm ³	MOTOR	REFRIGERATION OUTPUT (Watt) 45 °C condensing, 10K superheat, 3K subcool Evaporation temperature (°C):							REFRIG. OUTPUT ENI2900 (+5 °C / 50 °C / RG 20 °C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			-15°	-10°	-5°	0°	+5°	+10°	+15°	QPF (W)	COP (W/W)	Suction	Discharge	Load			
AJ4461N	18,3	CSIR / TRI	523	705	923	1186	1500	1875	2319	1339	2,01	12,7 - 1/2"	6,35 - 1/4"	6,35 - 1/4"	20,8	268	FZ / TZ
AJ4476N	22,8	CSIR	620	835	1093	1403	1774	2214	2733	1634	2,14	15,9 - 5/8"	6,35 - 1/4"	6,35 - 1/4"	21,5	280	FZ
AJ4492N	25,9	CSIR / TRI	790	1075	1408	1799	2260	2801	3436	2036	2,13	15,9 - 5/8"	7,9 - 5/16"	6,35 - 1/4"	22	280	FZ / TZ
AJ4511N	32,7	CSR / TRI	1038	1377	1777	2249	2801	3445	4191	2529	2,28	15,9 - 5/8"	7,9 - 5/16"	6,35 - 1/4"	23	280	FZ / TZ
AJ4513N	34,45	CSR	1083	1427	1835	2319	2892	3567	4359	2618	2,22	15,9 - 5/8"	7,9 - 5/16"	6,35 - 1/4"	23	280	FZ



FH2 compressor

MODEL	CAPA CITY cm ³	MOTOR	REFRIGERATION OUTPUT (Watt) 45 °C condensing, 10K superheat, 3K subcool Evaporation temperature (°C):							REFRIG. OUTPUT ENI2900 (+5 °C / 50 °C / RG 20 °C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			-15°	-10°	-5°	0°	+5°	+10°	+15°	QPF (W)	COP (W/W)	Suction	Discharge	Load			
FH4518N	48,5	CSR / TRI	1433	1912	2510	3249	4153	5148	6562	3712	2,66	15,9 - 5/8"	12,7 - 1/2"	6,35 - 1/4"	29	354	XC, XG, KZ
FH4525N	63	CSR / TRI	1859	2477	3233	4154	5266	6601	8190	4751	2,57	15,9 - 5/8"	12,7 - 1/2"	6,35 - 1/4"	30	354	XC, XG, KZ

POSITIVE COLD APPLICATION (HBP)



AG compressor

R-1234yf

MODEL	CAPA CITY cm3	MOTOR	REFRIGERATION OUTPUT (Watt) 45°C condensing, 10K superheat, 3K subcool Evaporation temperature (°C):							REFRIG. OUTPUT ENI2900 (+5°C / 50°C / RG 20°C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			-15°	-10°	-5°	0°	+5°	+10°	+15°	QPF (W)	COP (W/W)	Suction	Discharge	Load			
AG4528N	90,2	TRI	1755	2589	3627	4910	6479	8382	10669	5638	2,44	22,2 - 7/8"	15,9 - 5/8"	6,35 - 1/4"	44	368	TZ
AG4534N	100,7	TRI	2159	3103	4270	5704	7452	9563	12092	6528	2,45	22,2 - 7/8"	15,9 - 5/8"	6,35 - 1/4"	44	368	TZ
AG4537N	112,5	TRI	2568	3629	4920	6482	8363	10613	13286	7387	2,43	22,2 - 7/8"	15,9 - 5/8"	6,35 - 1/4"	44	368	TZ
AG4543N	124,4	TRI	2980	4160	5575	7267	9283	11672	14489	8252	2,42	22,2 - 7/8"	15,9 - 5/8"	6,35 - 1/4"	45	368	TZ
AG4547N	135	TRI	3480	4742	6264	8092	10277	12874	15943	9165	2,36	22,2 - 7/8"	15,9 - 5/8"	6,35 - 1/4"	45	368	TZ



NEGATIVE COLD APPLICATION (LBP)


R-455A

R-454C

AE2 Compressor



MODEL	CAPA CITY cm ³	MOTOR	REFRIGERATION OUTPUT (Watt) Mid/Mid, R-455A* 40 °C condensing, 10K superheat, 3K subcool						REFRIG. OUTPUT ENI2900 (-35 °C / 40 °C / RG 20 °C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			Evaporation temperature (°C):						QPF (W)	COP (W/W)	Suction	Discharge	Load			
			-35°	-30°	-25°	-20°	-15°	-10°								
AE2410P	5,02	CSIR	101	144	197	260	335	420	113	0,74	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10	200	FZ
AE2415P	7,33	CSIR	168	230	306	398	508	639	188	0,95	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10	200	FZ
AE2420P	9,33	CSIR	213	290	384	499	640	812	239	0,97	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,2	210	FZ
AE2425P	12,01	CSIR	271	372	495	642	813	1011	304	0,97	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,5	210	FZ

* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>

AJ2 Compressor



MODEL	CAPA CITY cm ³	MOTOR	REFRIGERATION OUTPUT (Watt) Mid/Mid, R-455A* 40 °C condensing, 10K superheat, 3K subcool						REFRIG. OUTPUT ENI2900 (-35 °C / 40 °C / RG 20 °C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			Evaporation temperature (°C):						QPF (W)	COP (W/W)	Suction	Discharge	Load			
			-35°	-30°	-25°	-20°	-15°	-10°								
AJ2432P	18,3	CSR / TRI	324	474	662	895	1180	1523	362	1,01	12,7 - 1/2"	7,9 - 5/16"	6,35 - 1/4"	20,8	268	FZ
AJ2440P	21	CSR / TRI	417	596	818	1088	1415	1806	467	1,05	15,9 - 5/8"	7,9 - 5/16"	6,35 - 1/4"	21,5	280	FZ
AJ2446P	26,15	CSR / TRI	486	708	971	1284	1653	2087	544	0,99	15,9 - 5/8"	7,9 - 5/16"	6,35 - 1/4"	22	280	FZ / TZ
AJ2464P	34,45	CSR / TRI	667	953	1304	1734	2253	2874	748	1,03	15,9 - 5/8"	7,9 - 5/16"	6,35 - 1/4"	23	280	FZ/TZ/KZ

* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>

FH2 Compressor



MODEL	CAPA CITY cm ³	MOTOR	REFRIGERATION OUTPUT (Watt) Mid/Mid, R-455A* 40 °C condensing, 10K superheat, 3K subcool						REFRIG. OUTPUT ENI2900 (-35 °C / 40 °C / RG 20 °C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			Evaporation temperature (°C):						QPF (W)	COP (W/W)	Suction	Discharge	Load			
			-35°	-30°	-25°	-20°	-15°	-10°								
FH2480P	54,3	CSR / TRI	986	1455	2053	2801	3723	4841	1104	1,21	15,9 - 5/8"	12,7 - 1/2"	6,35 - 1/4"	29	354	XC,XG,KZ
FH2511P	68	CSR / TRI	1494	2141	2964	3998	5277	6839	1675	1,26	15,9 - 5/8"	12,7 - 1/2"	6,35 - 1/4"	30	354	XC,XG,KZ

* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>

AG Compressor



MODEL	CAPA CITY cm ³	MOTOR	REFRIGERATION OUTPUT (Watt) Mid/Mid, R-455A* 40 °C condensing, 10K superheat, 3K subcool						REFRIG. OUTPUT ENI2900 (-35 °C / 40 °C / RG 20 °C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			Evaporation temperature (°C):						QPF (W)	COP (W/W)	Suction	Discharge	Load			
			-35°	-30°	-25°	-20°	-15°	-10°								
AG2513P	100	TRI	1123	1901	2897	4150	5702	7595	1251	0,94	22,2 - 7/8"	15,9 - 5/8"	6,35 - 1/4"	44	368	TZ
AG2516P	112,5	TRI	1346	2262	3383	4746	6388	8351	1498	0,96	22,2 - 7/8"	15,9 - 5/8"	6,35 - 1/4"	44	368	TZ
AG2519P	124,4	TRI	1771	2778	4018	5528	7349	9524	1978	1,05	22,2 - 7/8"	15,9 - 5/8"	6,35 - 1/4"	44	381	TZ
AG2522P	135	TRI	2120	3194	4521	6145	8113	10474	2372	1,14	28,6 - 1/8"	15,9 - 5/8"	6,35 - 1/4"	47	393	TZ
AG2525P	145	TRI	2266	3425	4841	6560	8628	11098	2534	1,15	28,6 - 1/8"	15,9 - 5/8"	6,35 - 1/4"	47	393	TZ

* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>



POSITIVE COLD APPLICATION (HBP)

AE2 Compressor



R-455A

R-454C

MODEL	CAPA CITY cm3	MOTOR	REFRIGERATION OUTPUT (Watt) Mid/Mid, R-455A* 45°C condensing, 10K superheat, 3K subcool Evaporation temperature (°C):							REFRIG. OUTPUT ENI2900 (+5°C / 50°C / RG 20°C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			-15°	-10°	-5°	0°	+5°	+10°	+15°	QPF (W)	COP (W/W)	Suction	Discharge	Load			
AE4425P	4,24	CSIR	242	315	403	508	631	774	941	547	2,12	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10	200	FZ
AE4430P	5,16	CSIR	308	395	502	630	784	966	1180	680	2,18	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10	200	FZ
AE4440P	6,69	CSIR	375	481	606	756	936	1154	1415	810	2,03	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,2	210	FZ
AE4450P	8,85	CSIR	556	706	886	1101	1355	1653	1999	1180	2,16	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,5	210	FZ
AE4460P	10,33	CSIR	658	830	1036	1281	1571	1914	2314	1372	2,18	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	11	210	FZ
AE4470P	12,01	CSR	768	967	1208	1497	1840	2242	2709	1613	2,20	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	11,2	210	FZ

* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>

AJ2 Compressor



MODEL	CAPA CITY cm3	MOTOR	REFRIGERATION OUTPUT (Watt) Mid/Mid, R-455A* 45°C condensing, 10K superheat, 3K subcool Evaporation temperature (°C):							REFRIG. OUTPUT ENI2900 (+5°C / 50°C / RG 20°C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			-15°	-10°	-5°	0°	+5°	+10°	+15°	QPF (W)	COP (W/W)	Suction	Discharge	Load			
AJ4480P	15,2	CSR / TRI	826	1094	1415	1797	2250	2784	3409	1958	2,36	12,7 - 1/2"	7,9 - 5/16"	6,35 - 1/4"	20,8	268	FZ / TZ
AJ4510P	18,3	CSR / TRI	980	1303	1692	2160	2719	3381	4163	2346	2,27	15,9 - 5/8"	7,9 - 5/16"	6,35 - 1/4"	21,5	280	FZ / TZ
AJ4513P	24,2	CSR / TRI	1273	1701	2221	2852	3611	4519	5597	3094	2,45	15,9 - 5/8"	7,9 - 5/16"	6,35 - 1/4"	22	280	FZ / TZ
AJ4517P	25,95	CSR / TRI	1408	1883	2449	3124	3926	4875	5991	3387	2,44	15,9 - 5/8"	7,9 - 5/16"	6,35 - 1/4"	23	280	FZ/TZ/NZ
AJ4519P	34,45	CSR / TRI	1820	2390	3077	3903	4892	6070	7463	4225	2,35	15,9 - 5/8"	7,9 - 5/16"	6,35 - 1/4"	23	280	FZ/TZ/NZ

* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>



POSITIVE COLD APPLICATION (HBP)



FH2 Compressor



MODEL	CAPA CITY cm3	MOTOR	REFRIGERATION OUTPUT (Watt) Mid/Mid, R-455A* 45°C condensing, 10K superheat, 3K subcool Evaporation temperature (°C):							REFRIG. OUTPUT ENI2900 (+5°C / 50°C / RG 20°C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			-15°	-10°	-5°	0°	+5°	+10°	+15°	QPF (W)	COP (W/W)	Suction	Discharge	Load			
FH4522P	39,6	CSR / TRI	2147	2910	3824	4918	6222	7769	9594	5325	2,90	15,9 - 5/8"	12,7 - 1/2"	6,35 - 1/4"	29	354	XC,XG,KZ
FH4524P	43,3	CSR / TRI	2312	3145	4149	5357	6803	8524	10560	5795	2,90	15,9 - 5/8"	12,7 - 1/2"	6,35 - 1/4"	30	354	XC,XG,KZ
FH4532P	50,6	CSR / TRI	2839	3810	4960	6324	7939	9843	12079	6850	2,98	22,2 - 7/8"	12,7 - 1/2"	6,35 - 1/4"	30	354	XC,XG,KZ
FH4538P	63	CSR / TRI	3716	4884	6286	7960	9950	12301	15060	8616	2,89	22,2 - 7/8"	12,7 - 1/2"	6,35 - 1/4"	31	354	XC,XG,KZ
FH4544P	68	CSR / TRI	4108	5367	6878	8690	10852	13422	16455	9365	2,70	22,2 - 7/8"	12,7 - 1/2"	6,35 - 1/4"	31	354	XC,XG


* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>




AG Compressor

MODEL	CAPA CITY cm3	MOTOR	REFRIGERATION OUTPUT (Watt) Mid/Mid, R-455A* 45°C condensing, 10K superheat, 3K subcool Evaporation temperature (°C):							REFRIG. OUTPUT ENI2900 (+5°C / 50°C / RG 20°C / SR OK)		Pipe diam. (mm / inches)			Weight kg	Height mm	Avail. voltages
			-15°	-10°	-5°	0°	+5°	+10°	+15°	QPF (W)	COP (W/W)	Suction	Discharge	Load			
AG4546P	90,2	TRI	3124	4623	6437	8626	11254	14388	18100	9396	2,52	22,2 - 7/8"	15,9 - 5/8"	6,35 - 1/4"	43	368	TZ
AG4553P	100,7	TRI	4097	5769	7804	10265	13222	16751	20930	11165	2,72	22,2 - 7/8"	15,9 - 5/8"	6,35 - 1/4"	45	381	TZ
AG4561P	112,5	TRI	5255	7160	9474	12276	15645	19670	24444	13408	2,66	28,6 - 1 1/8"	15,9 - 5/8"	6,35 - 1/4"	46	381	TZ
AG4568P	124,4	TRI	5718	7795	10278	13245	16776	20959	25984	14438	2,61	28,6 - 1 1/8"	15,9 - 5/8"	6,35 - 1/4"	47	393	TZ
AG4573P	135	TRI	6552	8787	11440	14591	18323	22729	27902	15808	2,62	28,6 - 1 1/8"	15,9 - 5/8"	6,35 - 1/4"	48	393	TZ
AG4581P	145	TRI	7471	9883	12781	16255	20401	25323	31128	17705	2,58	28,6 - 1 1/8"	15,9 - 5/8"	6,35 - 1/4"	49	393	TZ


* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>



TecTools
by Tecumseh



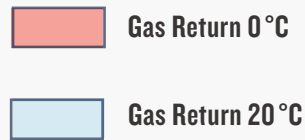
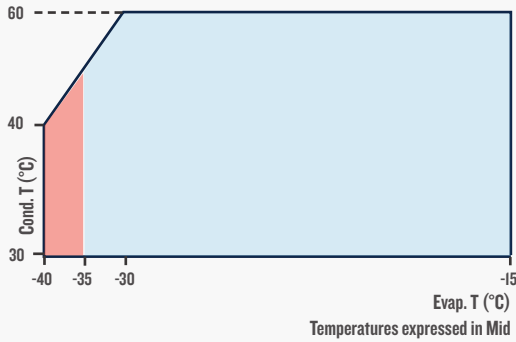
TXRef



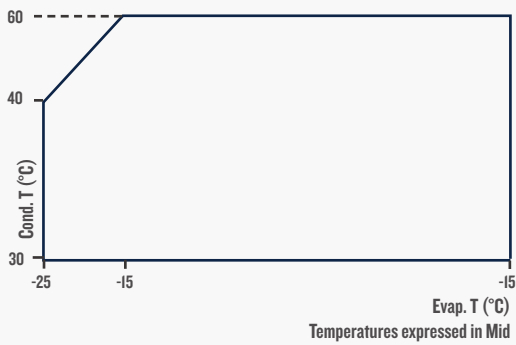
An ergonomic and functional tool, allowing you to determine the equivalent Tecumseh Compressor from a competitor model.

APPLICATION WINDOWS

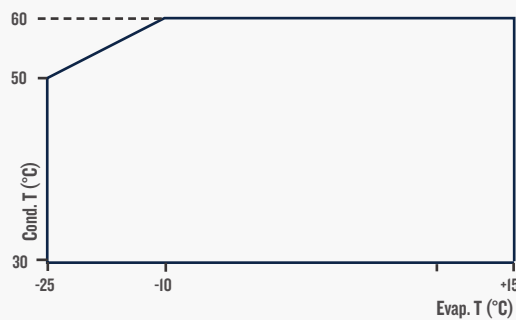
Negative cold (LBP) R-455A / R-454C



Positive cold (HBP) R-455A / R-454C



Positive cold (HBP) R-1234yf



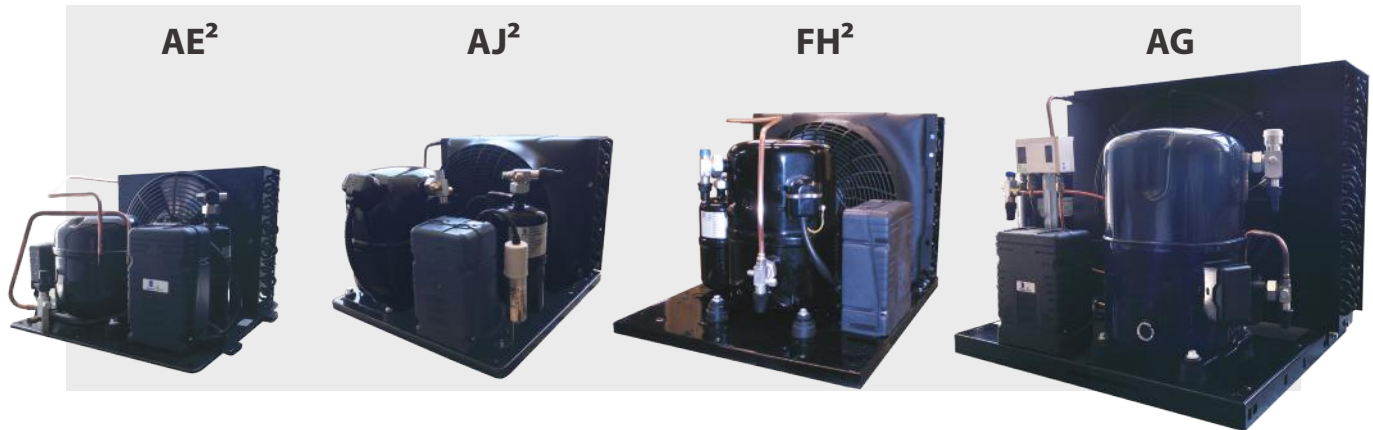
- The High Pressure compressors (HBP) have the same application window with the R-134a and R-1234yf refrigerants.

CONDENSING UNITS



TRADITIONAL CONDENSING UNITS

THE LEADING RELIABILITY ON THE MARKET



SUSTAINABLE SOLUTION

- In line with F-Gas Regulation 517/2014 with low GWP refrigerants (R-455A/R-454C: 148; R-1234yf: 4).
- Complies with standard IEC 60335-2-89: specific rules for commercial refrigeration equipment with a built-in or remote refrigerant unit or compressor.
- ASERCOM certified performance, meeting the requirements of the Ecodesign Directive 2015/1095.

EASY TO USE

- Selection, implementation and maintenance as easy as with HFC refrigerants.
- Options to save time: Liquid line, pressure switch.

SAFE BY DESIGN

- Electrical components with "type n" protection in accordance with standards in series 60079.

RELIABLE

- New components tested and qualified in the Tecumseh laboratory.
- Operation at high ambient temperature (up to 46 °C).
- Recognised reliability for our customers' most extreme applications.

POSITIVE COLD APPLICATION (HBP)



R-1234yf

Traditional Condensing Unit

MODEL	REFRIGERATION OUTPUT 32°C amb., 10K superheat, 3K subcool							REFRIG. OUTPUT EN13215 To -10°C		Aco. P dB(A) free field 10m	Vent. flow rate m ³ /h	Res. Vol. L	Pipe diam.		Dim. No.	Ø fan mm	Max. current A	
	Evaporation temperature (°C):							Perf. (W)	COP (W/W)				Suc- tion	Liq. disch.			FZ	TX
	-25°	-15°	-10°	-5°	0°	5°	15°											
AET4425NHR-FZ	106	224	294	372	458	550	753	328	1.43	29	410	0.75	1/4"	1/4"	M200	200	2.8	/
AET4430NHR-FZ	172	309	394	493	603	724	998	438	1.44	38	500	0.75	3/8"	1/4"	M250	250	3.5	/
AET4440NHR-FZ	236	400	499	610	733	868	1167	556	1.48	38	500	0.75	3/8"	1/4"	M250	250	4.3	/
AET4450NHR-FZ	314	543	681	837	1010	1203	1651	757	1.61	38	1130	0.75	3/8"	1/4"	M300	300	5.1	/
AET4456NHR-FZ	340	589	736	901	1083	1286	1753	819	1.55	38	1130	0.75	3/8"	1/4"	M300	300	5.7	/
AJT4461NHR-FZ	335	600	768	961	1179	1422	1977	853	1.68	31	900	0.75	1/2"	1/4"	M300	300	6.2	/
AJT4461NHR-TX	326	604	779	978	1202	1449	2009	865	1.83	31	900	0.75	1/2"	1/4"	M300	300	/	2.8
AJT4476NHR-FZ	404	723	918	1137	1378	1641	2225	1023	1.76	31	900	1.50	1/2"	1/4"	M300	300	7.4	/
AJT4492NHR-FZ	478	876	1107	1358	1629	1919	2560	1237	1.70	32	900	1.50	1/2"	3/8"	M300	300	9.1	/
AJT4492NHR-TX	475	872	1106	1362	1638	1933	2579	1237	1.87	31	900	1.50	1/2"	3/8"	M300	300	/	3.7
AJT4511NHR-FZ	662	1137	1421	1731	2066	2422	3197	1587	1.93	33	820	1.50	5/8"	3/8"	M300	300	8.8	/
AJT4511NHR-TX	665	1135	1417	1728	2066	2428	3222	1583	1.83	32	820	1.50	5/8"	3/8"	M300	350	/	4.4
AJT4513NHR-FZ	679	1192	1509	1868	2269	2712	3713	1682	1.80	40	1750	1.50	5/8"	3/8"	M350	350	11.3	/
FHT4518NHR-TX	805	1516	1962	2471	3043	3673	5088	2183	2.11	43	1650	1.50	7/8"	3/8"	M350	350	/	4.3
FHT4518NHR-XC	915	1607	2058	2582	3176	3833	5309	2292	1.99	43	1650	1.50	7/8"	3/8"	M350	350	12.8	/
FHT4525NHR-TX	1151	1991	2514	3102	3752	4460	6034	2809	2.09	45	1650	1.50	7/8"	3/8"	M350	350	/	6.0
FHT4525NHR-XC	1141	2009	2545	3149	3819	4550	6190	2845	2.00	45	1650	1.50	7/8"	3/8"	M350	350	16.6	/
AGT4528NHR-TX	972	2072	2774	3579	4486	5490	7767	3096	1.69	50	3900	3.90	7/8"	1/2"	M420	420	/	12.2
AGT4534NHR-TX	1201	2466	3265	4182	5219	6377	9073	3647	1.75	50	3670	3.90	7/8"	1/2"	M420	420	/	11.5
AGT4537NHR-TX	1383	2730	3581	4557	5657	6888	9763	4008	1.73	50	3670	3.90	7/8"	1/2"	M420	420	/	11.9
AGT4543NHR-TX	1674	3280	4259	5363	6600	7979	11226	4764	1.83	50	3300	3.90	7/8"	1/2"	M420	420	/	13.0
AGT4547NHR-TX	2148	3912	4968	6141	7433	8851	12136	5546	1.97	44	2500	3.90	7/8"	1/2"	M450	450	/	12.2



NEGATIVE COLD APPLICATION (LBP)



Traditional Condensing Unit

MODEL	REFRIGERATION OUTPUT, R-455A* 32°C amb., 10K superheat, 3K subcool, Mid/Mid						REFRIG. OUTPUT ENI3215 To -35°C		Aco. P dB(A) free field 10m	Vent. flow rate m3/h	Res. Vol. L	Pipe diam.		Dim. No.	Ø fan mm	Max. current A	
	Evaporation temperature (°C):						Perf. (W)	COP (W/W)				Suc- tion	Liq. disch.			FZ (or XC)	TX
	-35°	-30°	-25°	-20°	-15°	-10°											
AET2415PBR-FZ	161	213	273	340	417	503	188	0,83	29	410	0,75	3/8"	1/4"	M200	200	3,2	/
AET2420PBR-FZ	194	258	331	415	514	628	227	0,82	29	410	0,75	3/8"	1/4"	M200	200	4,1	/
AET2425PBR-FZ	260	348	450	564	691	828	303	0,81	38	500	0,75	3/8"	1/4"	M250	250	4,6	/
AJT2432PBR-FZ	310	442	600	787	1005	1253	360	0,93	28	550	0,75	1/2"	1/4"	M250	250	5,7	/
AJT2440PBR-FZ	392	545	726	935	1175	1446	456	0,97	31	900	0,75	1/2"	1/4"	M300	300	6,0	/
AJT2446PBR-TX	442	624	835	1077	1349	1650	514	0,96	31	900	0,96	1/2"	3/8"	M300	300	/	2,9
AJT2446PBR-FZ	450	635	845	1079	1339	1626	524	0,91	31	900	1,50	1/2"	3/8"	M300	300	7,7	/
AJT2464PBR-TX	653	895	1178	1502	1867	2273	756	1,00	42	820	1,50	5/8"	3/8"	M300	300	/	3,7
AJT2464PBR-FZ	654	900	1187	1517	1891	2308	758	1,00	33	820	1,50	5/8"	3/8"	M300	300	9,9	/
FHT2480PBR-TX	927	1314	1781	2333	2969	3688	1078	1,08	43	1750	1,50	3/8"	1/4"	M350	350	/	7,1
FHT2480PBR-XC	910	1333	1826	2392	3032	3746	1057	1,01	43	1750	1,50	3/8"	1/4"	M350	350	16,8	/
FHT2511PBR-TX	1416	1963	2618	3385	4263	5246	1646	1,16	45	1650	1,50	3/8"	1/4"	M350	350	/	8,6
FHT2511PBR-XC	1445	1995	2641	3386	4229	5168	1680	1,10	45	1650	1,50	3/8"	1/4"	M350	350	20,6	/
AGT2516PBR-TX	1346	2134	3048	4095	5279	6603	1556	0,87	50	3300	2,35	1/2"	1/4"	M420	420	/	11,2
AGT2519PBR-TX	1719	2565	3548	4672	5938	7349	1991	0,95	51	3300	2,35	1/2"	1/4"	M420	420	/	11,5
AGT2522PBR-TX	2028	2880	3857	4962	6194	7553	2353	1,09	48	2500	3,90	5/8"	3/8"	M450	450	/	12,5
AGT2525PBR-TX	2144	3050	4077	5230	6510	7920	2490	1,09	53	2500	3,90	5/8"	3/8"	M450	450	/	13,9

* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>



POSITIVE COLD APPLICATION (HBP)


R-455A
R-454C

Traditional Condensing Unit

MODEL	PRODUCTION FRIGORIFIQUE, R-455A* 32°C amb., 10K surchauffe, 3K sous-ref., Mid/Mid							REFRIG. OUTPUT ENI3215 To -10°C		Aco. P dB (A) free field 10m	Vent. flow rate m3/h	Res. Vol. L	Pipe diam.		Dim. No.	Ø fan mm	Max. current A	
	Température d'évaporation (°C) :							Perf. (W)	COP (W/W)				Suc- tion	Liq. disch.			FZ (or XC)	TX
	-25°	-15°	-10°	-5°	0°	5°	15°C											
AET4425PHR-FZ	141	244	309	383	467	560	778	327	1,36	31	410	0,75	3/8"	1/4"	M200	200	2,5	/
AET4430PHR-FZ	186	302	376	460	555	662	911	398	1,72	30	410	0,75	3/8"	1/4"	M200	200	2,6	/
AET4440PHR-FZ	225	388	483	588	706	838	1148	510	1,34	38	500	0,75	3/8"	1/4"	M250	250	3,1	/
AET4450PHR-FZ	346	542	663	797	944	1103	1453	704	1,41	38	500	0,75	3/8"	1/4"	M250	250	4,6	/
AET4460PHR-FZ	448	706	868	1055	1268	1507	2070	914	1,57	38	1130	0,75	3/8"	1/4"	M300	300	5,4	/
AET4470PHR-FZ	533	809	992	1205	1447	1719	2348	1047	1,53	38	1130	0,75	3/8"	1/4"	M300	300	5,6	/
AJT4480PHR-TX	454	815	1032	1278	1567	1861	2567	1092	1,60	32	900	1,50	1/2"	3/8"	M300	300	/	3,1
AJT4480PHR-FZ	460	817	1038	1288	1554	1877	2590	1099	1,64	33	900	1,50	1/2"	3/8"	M300	300	6,1	/
AJT4510PHR-FZ	559	979	1230	1513	1826	2172	2966	1304	1,57	34	900	1,50	5/8"	3/8"	M300	300	7,7	/
AJT4510PHR-TX	621	1041	1292	1573	1885	2228	3014	1371	1,63	33	900	1,50	5/8"	3/8"	M300	300	/	3,6
AJT4513PHR-TX	753	1307	1666	2066	2521	2992	4106	1758	1,78	33	820	1,50	5/8"	3/8"	M300	300	/	3,8
AJT4513PHR-FZ	703	1339	1691	2085	2507	2998	4083	1785	1,82	35	820	1,50	5/8"	3/8"	M300	300	10,2	/
AJT4517PHR-FZ	781	1472	1889	2360	2887	3470	4812	1993	1,73	40	1750	2,35	5/8"	3/8"	M350	350	11,7	/
AJT4517PHR-TX	848	1555	1965	2419	2921	3472	4734	2074	1,82	40	1750	2,35	5/8"	3/8"	M350	350	/	4,7
AJT4519PHR-FZ	1081	1925	2447	3042	3711	4454	6146	2578	1,83	41	1650	2,35	5/8"	3/8"	M350	350	16,9	/
AJT4519PHR-TX	1105	1967	2496	3097	3771	4518	6215	2631	1,77	41	1650	2,35	5/8"	3/8"	M350	350	/	5,9
FHT4524PHR-TX	1302	2424	3119	3915	4821	5843	8271	3288	1,97	51	3900	2,35	7/8"	1/2"	M420	420	/	8
FHT4524PHR-XC	1280	2462	3183	4003	4928	5964	8409	3357	1,96	49	3900	2,35	7/8"	1/2"	M420	420	17	/
FHT4532PHR-TX	1413	2740	3542	4449	5470	6614	9317	3739	1,94	49	3670	3,90	7/8"	1/2"	M420	420	/	8,5
FHT4532PHR-XC	1523	2915	3744	4674	5715	6876	9606	3955	1,99	50	3670	3,90	7/8"	1/2"	M420	420	20,4	/
FHT4538PHR-XC	2034	3686	4678	5793	7040	8427	11679	4941	1,90	50	3300	3,90	7/8"	1/2"	M420	420	25,2	/
FHT4538PHR-TX	2159	3797	4781	5883	7105	8448	11530	5052	2,01	50	3300	3,90	7/8"	1/2"	M420	420	/	9,2
FHT4544PHR-TX	2551	4519	5744	7153	8762	10581	14894	6035	2,17	53	7000	6,00	7/8"	1/2"	B420	2x420	/	13,8
AGT4553PHR-TX	2222	4680	6219	7986	9993	12251	17562	6538	1,92	56	7000	6,00	7/8"	1/2"	B420	2x420	/	14,6
AGT4561PHR-TX	2998	5722	7419	9366	11579	14070	19955	7812	1,93	56	7000	6,00	7/8"	1/2"	B420	2x420	/	15,8
AGT4568PHR-TX	3175	6153	7961	10009	12312	14889	20966	8389	1,95	55	7000	6,00	7/8"	1/2"	B420	2x420	/	17,5
AGT4573PHR-TX	3704	6890	8788	10910	13267	15869	21886	9270	1,96	56	6000	6,00	7/8"	1/2"	B420	2x420	/	19,6
AGT4581PHR-TX	4333	7674	9688	11953	14481	17284	23852	10233	1,91	57	6000	6,00	7/8"	1/2"	B420	2x420	/	20,2

* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>


TSelect

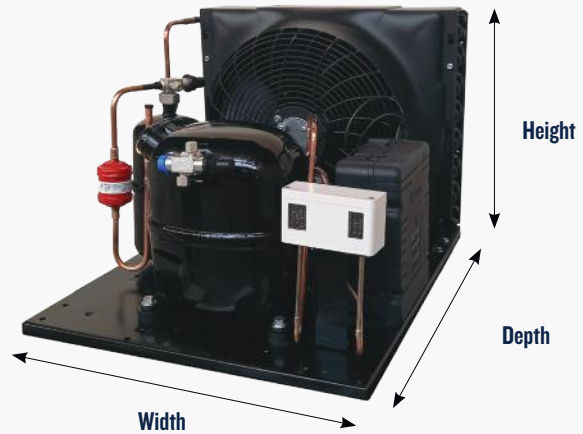
TecTools™
by Tecumseh

Selection of the compressor and/or condensing unit according to various parameters, performance data and polynomials, documentation...

DIMENSIONS / WEIGHTS

Positive Cold (HBP) R-1234yf

MODEL	Base	Width mm	Height mm	Depth mm	Net Weight kg	Gross Weight Kg
AET4425NHR	M200	322	257	404	17	20
AET4430NHR	M250	336	298	501	19	25
AET4440NHR	M250	336	298	501	19	25
AET4450NHR	M300	430	340	490	24	28
AET4456NHR	M300	430	340	490	24	28
AJT4461NHR	M300	340	432	487	29	33
AJT4476NHR	M300	340	432	487	29	33
AJT4492NHR	M300	340	432	487	31	33
AJT4511NHR	M300	340	432	487	34	34
AJT4513NHR	M350	450	512	615	38	40
FHT4518NHR	M350	512	436	607	48	51
FHT4525NHR	M350	512	436	607	48	51
AGT4528NHR	M420	591	540	685	71	85
AGT4534NHR	M420	591	540	685	73	87
AGT4537NHR	M420	591	540	685	73	87
AGT4543NHR	M420	591	540	685	75	89
AGT4547NHR	M450	760	607	642	78	98



Negative Cold (LBP) R-455A / R-454C

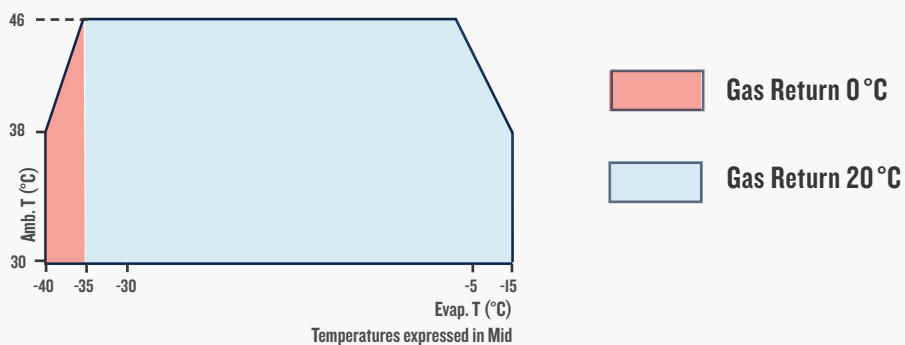
MODEL	Base	Width mm	Height mm	Depth mm	Net Weight kg	Gross Weight Kg
AET2415PBR	M200	257	322	404	17	18
AET2420PBR	M200	257	322	404	19	20
AET2425PBR	M250	298	336	501	21	22
AJT2432PBR	M250	304	345	511	28	29
AJT2440PBR	M300	340	432	487	31	33
AJT2446PBR	M300	340	432	487	33	35
AJT2464PBR	M300	340	432	487	34	36
FHT2480PBR	M350	512	436	607	49	52
FHT2511PBR	M350	512	436	607	52	55
AGT2516PBR	M420	591	540	707	75	89
AGT2519PBR	M420	591	540	707	75	89
AGT2522PBR	M450	760	607	642	81	101
AGT2525PBR	M450	760	607	642	83	103

Positive Cold (HBP) R-455A / R-454C

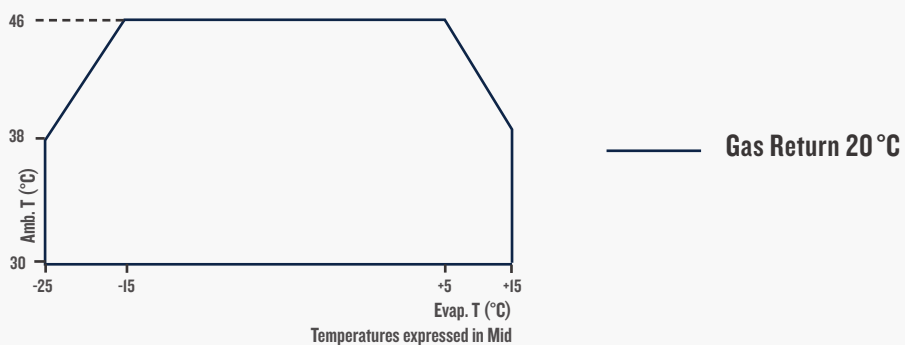
MODEL	Base	Width mm	Height mm	Depth mm	Net Weight kg	Gross Weight Kg
AET4425PHR	M200	322	257	404	17	18
AET4430PHR	M200	322	257	404	17	18
AET4440PHR	M250	336	298	501	20	21
AET4450PHR	M250	298	336	501	20	21
AET4460PHR	M300	340	430	490	24	26
AET4470PHR	M300	340	430	490	24	26
AJT4480PHR	M300	340	432	487	32	34
AJT4510PHR	M300	340	432	487	32	34
AJT4513PHR	M300	340	432	487	33	35
AJT4517PHR	M350	450	512	615	39	42
AJT4519PHR	M350	450	512	615	41	43
AJT4480PHR	M300	340	432	487	32	34
AJT4510PHR	M300	340	432	487	32	34
AJT4513PHR	M300	340	432	487	33	35
AJT4517PHR	M350	450	512	615	39	42
AJT4519PHR	M350	450	512	615	41	43
FHT4524PHR	M420	591	540	642	55	69
FHT4532PHR	M420	591	540	642	63	77
FHT4538PHR	M420	591	540	664	64	78
FHT4544PHR	B420	1060	555	616	90	110
AGT4553PHR	B420	1060	555	616	103	123
AGT4561PHR	B420	1060	555	616	104	124
AGT4568PHR	B420	1060	555	616	105	125
AGT4573PHR	B420	1060	555	660	112	132
AGT4581PHR	B420	1060	555	660	112	132

APPLICATION WINDOWS

Negative Cold (LBP) R-455A / R-454C



Positive Cold (HBP) R-455A / R-454C, R-1234yf



SILENSYS[®] ADVANCED

THE ACOUSTIC REFERENCE FOR ENCLOSED UNITS SINCE 2001.



DURABLE SOLUTION

- In line with the F-Gas Directive 517/2014.
- Low GWP solution (R-455A/R-454C: 148; R-1234yf: 4) exceeding the requirements of F-Gas for fixed refrigeration systems.
- COP compliant with the requirements of the Ecodesign Directive 2015/1095.

EASY TO USE

- Selection, implementation and maintenance as easy as with HFCs.
- Independent refrigeration and electrical compartments, with their own door.
- Control of the refrigeration system identical to the current SILENSYS[®].

SAFE BY DESIGN

- No creation of flammable zones.
- Containment of fluid: reduction of internal volumes, design preventing fatigue of the assemblies.
- Components housed in the compressor compartment with "type n" protection in accordance with standards in series 60079.

TECHNICAL AND ECONOMICAL CHOICE

- Technical solution adapted to power 1-15 kW.
- Energy efficiency of direct expansion.
- Simplicity of the refrigeration system.

POSITIVE COLD APPLICATION (HBP)



R-1234yf

SILENSYS® ADVANCED

MODEL	REFRIGERATION OUTPUT 32°C amb., 10K superheat, 3K subcool							REFRIG. OUTPUT EN13215 To -10 °C		Aco. P dB(A) at 10 m	Vent. flow rate m ³ /h	Res. Vol. L	Pipe diam.		Dim. No.	Max. current A	
	Evaporation temperature (°C):							Perf. (W)	COP (W/W)				Suction	Liq. disch.		FZ	TX
	-15°	-10°	-5°	0°	5°	10°	15°										
SILAE4450N-FZ	560	710	870	1060	1270	1510	1770	790	1.89	28	1300	0,75	9,5-3/8"	6,35-1/4"	S	na	/
SILAE4460N-FZ	620	770	950	1150	1370	1610	1890	860	1,75	28	1300	0,75	9,5-3/8"	6,35-1/4"	S	na	/
SILAJ446IN-TX	610	800	1010	1250	1530	1850	2210	880	1,84	28	1300	0,75	12,7-1/2"	9,5-3/8"	S	/	2,8
SILAJ4476N-FZ	710	910	1150	1410	1720	2060	2450	1010	1,72	28	1300	0,75	12,7-1/2"	9,5-3/8"	S	7,4	/
SILAJ4492N-FZ	890	1140	1430	1740	2100	2480	2900	1270	1,74	28	1300	1,50	12,7-1/2"	9,5-3/8"	S	9,1	/
SILAJ4492N-TX	890	1140	1430	1760	2110	2500	2930	1270	1,90	28	1300	1,50	12,7-1/2"	9,5-3/8"	S	/	3,7
SILAJ451IN-FZ	1130	1430	1780	2170	2600	3080	3600	1600	1,92	28	1300	1,50	12,7-1/2"	9,5-3/8"	S	8,8	/
SILAJ451IN-TX	1130	1430	1780	2170	2610	3100	3640	1600	1,83	28	1300	1,50	12,7-1/2"	9,5-3/8"	S	/	4,4
SILAJ4513N-FZ	1160	1480	1830	2230	2680	3170	3710	1650	1,85	28	1300	1,50	12,7-1/2"	9,5-3/8"	S	10,9	/
SILFH4518N-XC	1620	2070	2610	3220	3920	4700	5580	2310	2,00	33	2900	1,50	15,9-5/8"	9,5-3/8"	M	13,0	/
SILFH4518N-TX	1530	1980	2490	3080	3750	4490	5320	2200	2,12	33	2900	1,50	15,9-5/8"	9,5-3/8"	M	/	4,5
SILFH4525N-XC	2070	2620	3260	3990	4810	5730	6760	2920	2,06	33	2900	1,50	15,9-5/8"	9,5-3/8"	M	16,8	/
SILFH4525N-TX	2010	2540	3150	3840	4620	5490	6470	2830	2,10	34	2900	1,50	15,9-5/8"	9,5-3/8"	M	/	6,2
SILAG4528N-TX	2160	2890	3740	4690	5750	6930	8230	3220	1,88	35	3115	3,90	22,2-7/8"	12,7-1/2"	M	/	11,9
SILAG4534N-TX	2510	3310	4210	5230	6350	7590	8970	3690	1,88	35	3115	3,90	22,2-7/8"	12,7-1/2"	M	/	11,2
SILAG4537N-TX	2950	4020	5310	6810	8500	10400	12560	4490	2,20	34	3115	3,90	22,2-7/8"	12,7-1/2"	M	/	11,6
SILAG4543N-TX	3350	4330	5440	6680	8040	9530	11170	4840	1,88	44	4870	3,90	22,2-7/8"	12,7-1/2"	M	/	12,8
SILAG4547N-TX	3885	4990	6240	7620	9140	10780	12540	5570	2,46	39	4000	3,90	22,2-7/8"	12,7-1/2"	M*	/	12,8



NEGATIVE COLD APPLICATION (LBP)



SILENSYS® ADVANCED

MODEL	REFRIGERATION OUTPUT, R-455A* 32°C amb., 10K superheat, 3K subcool, Mid/Mid						REFRIG. OUTPUT ENI3215 To -35°C		Acc. P dB(A) at 10m	Vent. flow rate m3/h	Res. Vol. L	Pipe diam.		Dim. No.	Max. current A	
	Evaporation temperature (°C):						Perf. (W)	COP (W/W)				Suction	Liq. disch.		FZ (or XC)	TX
	-35°	-30°	-25°	-20°	-15°	-10°										
SILAJ2432P-FZ	340	480	650	860	1100	1380	390	0,97	28	1300	0,75	12,7-1/2"	6,35-1/4"	S	5,7	/
SILAJ2440P-FZ	430	590	790	1020	1290	1600	490	1,01	28	1300	0,75	12,7-1/2"	6,35-1/4"	S	6,1	/
SILAJ2446P-FZ	490	690	920	1180	1480	1820	570	0,95	28	1300	1,50	12,7-1/2"	6,35-1/4"	S	8,0	/
SILAJ2446P-TX	490	690	920	1180	1480	1820	570	0,95	28	1300	1,50	12,7-1/2"	6,35-1/4"	S	/	/
SILAJ2464P-FZ	650	900	1180	1520	1910	2350	750	0,98	28	1300	1,50	12,7-1/2"	6,35-1/4"	S	9,9	/
SILAJ2464P-TX	650	890	1170	1500	1880	2310	750	0,99	30	1300	1,50	12,7-1/2"	6,35-1/4"	S	/	3,7
SILFH2480P-XC	970	1420	1960	2580	3310	4130	1120	1,05	33	3110	1,50	15,9-5/8"	9,5-3/8"	M	17,3	/
SILFH2480P-TX	980	1400	1910	2520	3240	4070	1140	1,12	33	3110	1,50	15,9-5/8"	9,5-3/8"	M	/	7,6
SILFH2511P-XC	1470	2010	2660	3420	4300	5300	1700	1,11	34	3110	1,50	15,9-5/8"	9,5-3/8"	M	21,1	/
SILFH2511P-TX	1440	1980	2640	3420	4330	5390	1670	1,17	34	3110	1,50	15,9-5/8"	9,5-3/8"	M	/	9,1
SILAG2516P-TX	1320	2100	2990	4020	5190	6500	1530	0,92	35	3110	2,35	22,2-7/8"	9,5-3/8"	M	/	10,9
SILAG2519P-TX	1690	2520	3480	4590	5830	7240	1960	0,99	40	3110	2,35	22,2-7/8"	9,5-3/8"	M	/	11,2
SILAG2522P-TX	2140	3050	4110	5330	6730	8320	2470	1,45	44	4870	3,90	22,2-7/8"	12,7-1/2"	M	/	13,0
SILAG2525P-TX	2280	3250	4360	5640	7100	8740	2640	1,46	45	4870	3,90	22,2-7/8"	12,7-1/2"	M	/	14,4

* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>



POSITIVE COLD APPLICATION (HBP)



SILENSYS® ADVANCED

MODEL	REFRIGERATION OUTPUT, R455A* 32°C amb., 10K superheat, 3K subcool, Mid/Mid							REFRIG. OUTPUT EN13215 To -10°C		Acc. P dB(A) at 10m	Vent. flow rate m ³ /h	Res. Vol. L	Pipe diam.		Dim. No.	Max. current A	
	Evaporation temperature (°C):							Perf. (W)	COP (W/W)				Suction	Liq. disch.		FZ (or XC)	TX
	-25°	-15°	-10°	-5°	0°	5°	15°										
SILAE4450P-FZ	390	620	770	940	1140	1380	1940	800	1,76	28	1300	0,75	9,5-3/8"	6,35-1/4"	S	na	/
SILAE4460P-FZ	460	720	890	1080	1310	1570	2190	930	1,78	28	1300	0,75	9,5-3/8"	6,35-1/4"	S	na	/
SILAE4470P-FZ	540	830	1020	1240	1500	1800	2500	1070	1,70	28	1300	0,75	9,5-3/8"	6,35-1/4"	S	na	/
SILAJ4480P-FZ	500	890	1140	1420	1750	2110	3000	1200	1,78	29	1300	1,50	12,7-1/2"	9,5-3/8"	S	6,1	/
SILAJ4480P-TX	500	890	1130	1410	1730	2100	3010	1190	1,74	29	1300	1,50	12,7-1/2"	9,5-3/8"	S	/	3,1
SILAJ4510P-FZ	600	1060	1340	1660	2030	2450	3480	1410	1,70	28	1300	1,50	12,7-1/2"	9,5-3/8"	S	7,7	/
SILAJ4510P-TX	660	1120	1410	1730	2110	2530	3550	1490	1,77	28	1300	1,50	12,7-1/2"	9,5-3/8"	S	/	3,6
SILAJ4513P-FZ	720	1320	1690	2120	2620	3180	4570	1780	1,80	28	1300	1,50	12,7-1/2"	9,5-3/8"	S	10,2	/
SILAJ4513P-TX	650	1280	1660	2100	2600	3170	4560	1750	1,76	28	1300	1,50	12,7-1/2"	9,5-3/8"	S	/	3,8
SILAJ4517P-FZ	760	1430	1840	2310	2830	3420	4850	1950	1,76	28	1300	2,35	12,7-1/2"	9,5-3/8"	S	11,3	/
SILAJ4517P-TX	820	1510	1920	2370	2870	3430	4760	2030	1,86	28	1300	2,35	12,7-1/2"	9,5-3/8"	S	/	4,3
SILAJ4519P-FZ	1040	1860	2370	2940	3580	4290	5840	2500	1,83	29	1300	2,35	12,7-1/2"	9,5-3/8"	S	16,5	/
SILAJ4519P-TX	1060	1900	2410	2990	3640	4350	5900	2550	1,76	28	1300	2,35	12,7-1/2"	9,5-3/8"	S	/	5,5
SILFH4524P-XC	1252	2397	3091	3874	4755	5741	8084	3263	2,06	33	3110	2,35	15,9-5/8"	9,5-3/8"	M	17	/
SILFH4524P-TX	1280	2370	3040	3800	4660	5640	7960	3210	2,08	33	3110	2,35	15,9-5/8"	9,5-3/8"	M	/	8
SILFH4532P-XC	1570	2980	3830	4780	5840	7020	9780	4040	2,18	33	3110	3,9	22,2-7/8"	12,7-1/2"	M	20,4	/
SILFH4532P-TX	1460	2810	3620	4550	5590	6760	9490	3820	2,13	33	3110	3,9	22,2-7/8"	12,7-1/2"	M	/	8,5
SILFH4538P-XC	2010	3640	4610	5710	6940	8330	11660	4870	1,96	34	3110	3,9	22,2-7/8"	12,7-1/2"	M	25,2	/
SILFH4538P-TX	2140	3740	4710	5790	7000	8340	11500	4980	2,08	34	3110	3,9	22,2-7/8"	12,7-1/2"	M	/	9,2
SILFH4544P-TX	2190	4030	5130	6290	7420	8910	12500	5660	2,71	43	4870	3,9	22,2-7/8"	12,7-1/2"	M	/	12,7
SILAG4553P-TX	2065	4360	5770	7370	9160	11130	15650	6091	2,61	43	4000	3,9	22,2-7/8"	15,9-5/8"	M+	/	14,9
SILAG4561P-TX	2810	5340	6880	8630	10590	12750	17690	7276	2,55	43	4000	6	22,2-7/8"	15,9-5/8"	M+	/	15,9
SILAG4568P-TX	2950	5710	7360	9210	11240	13480	18630	7793	2,54	41	4000	6	22,2-7/8"	15,9-5/8"	M+	/	17,6
SILAG4573P-TX	3570	6620	8440	10470	12720	15210	20970	8920	2,55	45	5400	6	28,6-11/8"	15,9-5/8"	M+	/	20,5
SILAG4581P-TX	4180	7380	9310	11470	13890	16580	22860	9856	2,48	45	5400	6	28,6-11/8"	15,9-5/8"	M+	/	21,1

* for further details on powers, refer to the selection software that can be downloaded from <https://www.tecumseh.com>



DIMENSIONS / WEIGHTS

Positive Cold (HBP) R-1234yf

MODEL	Base	Width mm	Height mm	Depth mm	Net Weight kg	Gross Weight Kg
SILAE4450N-FZ	S	942	837	654	58	75
SILAE4460N-FZ	S	942	837	654	58	75
SILAJ446IN-TX	S	942	837	654	65	82
SILAJ4476N-FZ	S	942	837	654	65	82
SILAJ4492N-FZ	S	942	837	654	69	86
SILAJ4492N-TX	S	942	837	654	69	86
SILAJ451IN-FZ	S	942	837	654	71	88
SILAJ451IN-TX	S	942	837	654	71	88
SILAJ4513N-FZ	S	942	837	654	72	89
SILFH4518N-XC	M	1174	837	654	82	108
SILFH4518N-TX	M	1174	837	654	82	108
SILFH4525N-XC	M	1174	837	654	82	108
SILFH4525N-TX	M	1174	837	654	82	108
SILAG4528N-TX	M	1174	837	654	101	127
SILAG4534N-TX	M	1174	837	654	101	127
SILAG4537N-TX	M	1174	837	654	101	127
SILAG4543N-TX	M	1174	837	654	103	138
SILAG4547N-TX	M+	1400	830	654	118	153



FRAME	Width mm	Height mm	Depth mm
S	953	837	654
M	1174	837	654
M+	1400	830	654

Negative Cold (LBP) R-455A / R-454C

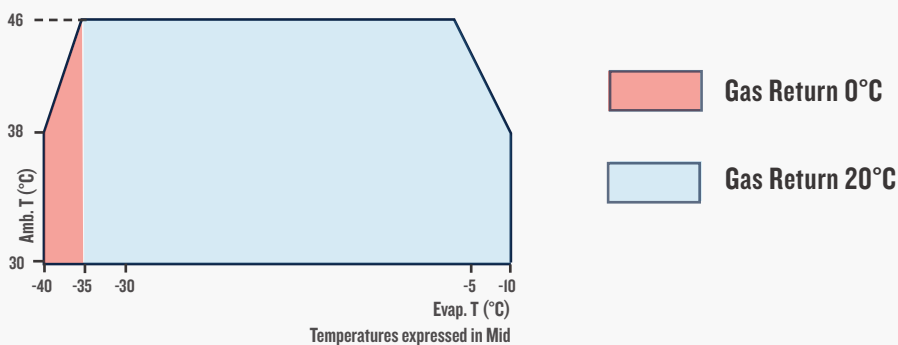
MODEL	Base	Width mm	Height mm	Depth mm	Net Weight kg	Gross Weight Kg
SILAJ2432P-FZ	S	942	837	654	66	85
SILAJ2440P-FZ	S	942	837	654	67	86
SILAJ2446P-FZ	S	942	837	654	68	87
SILAJ2446P-TX	S	942	837	654	68	87
SILAJ2464P-FZ	S	942	837	654	69	88
SILAJ2464P-TX	S	942	837	654	69	88
SILFH2480P-XC	M	1174	837	654	85	111
SILFH2480P-TX	M	1174	837	654	85	111
SILFH2511P-XC	M	1174	837	654	86	112
SILFH2511P-TX	M	1174	837	654	86	112
SILAG2516P-TX	M	1174	837	654	106	132
SILAG2519P-TX	M	1174	837	654	106	132
SILAG2522P-TX	M	1174	837	654	108	134
SILAG2525P-TX	M	1174	837	654	108	134

Positive Cold (HBP) R-455A / R-454C

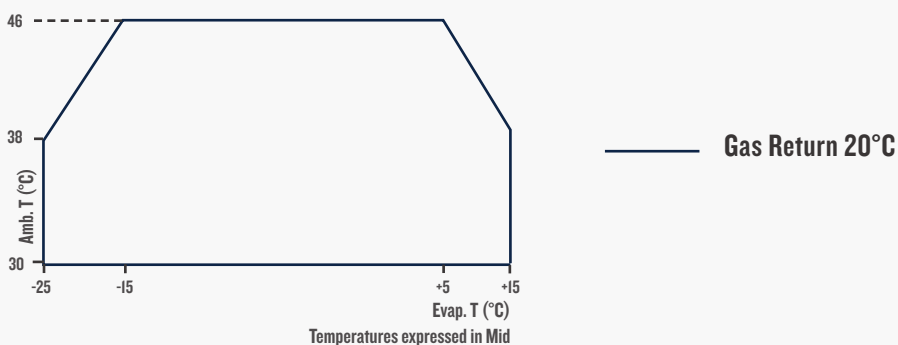
MODEL	Base	Width mm	Height mm	Depth mm	Net Weight kg	Gross Weight Kg
SILAE4450P-FZ	S	942	837	654	57	76
SILAE4460P-FZ	S	942	837	654	58	77
SILAE4470P-FZ	S	942	837	654	58	77
SILAJ4480P-FZ	S	942	837	654	67	86
SILAJ4480P-TX	S	942	837	654	67	76
SILAJ4510P-FZ	S	942	837	654	71	77
SILAJ4510P-TX	S	942	837	654	71	77
SILAJ4513P-FZ	S	942	837	654	71	86
SILAJ4513P-TX	S	942	837	654	71	86
SILAJ4517P-FZ	S	942	837	654	71	90
SILAJ4517P-TX	S	942	837	654	71	90
SILAJ4519P-FZ	S	942	837	654	72	90
SILAJ4519P-TX	S	942	837	654	72	90
SILFH4524P-XC	M	1174	837	654	82	87
SILFH4524P-TX	M	1174	837	654	82	87
SILFH4532P-XC	M	1174	837	654	90	95
SILFH4532P-TX	M	1174	837	654	90	95
SILFH4538P-XC	M	1174	837	654	90	95
SILFH4538P-TX	M	1174	837	654	90	95
SILFH4544P-TX	M	1174	837	654	90	113
SILAG4553P-TX	M+	1400	830	654	120	150
SILAG4561P-TX	M+	1400	830	654	121	151
SILAG4568P-TX	M+	1400	830	654	123	153
SILAG4573P-TX	M+	1400	830	654	125	158
SILAG4581P-TX	M+	1400	830	654	125	158

APPLICATION WINDOWS

Negative Cold (LBP) R-455A / R-454C



Positive Cold (HBP) R-455A / R-454C, R-1234yf



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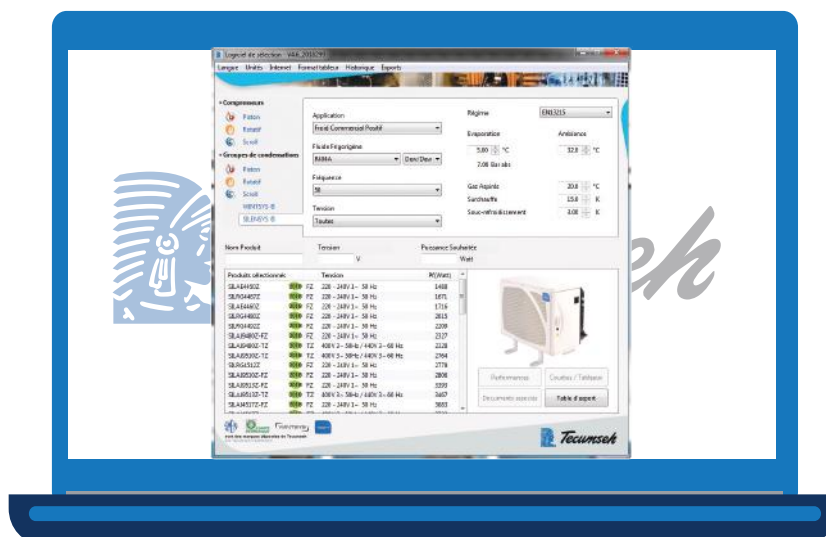
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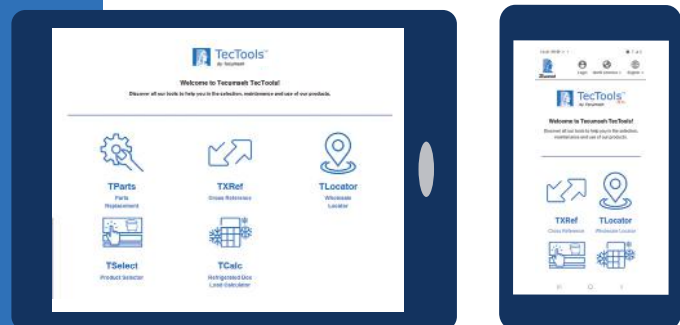
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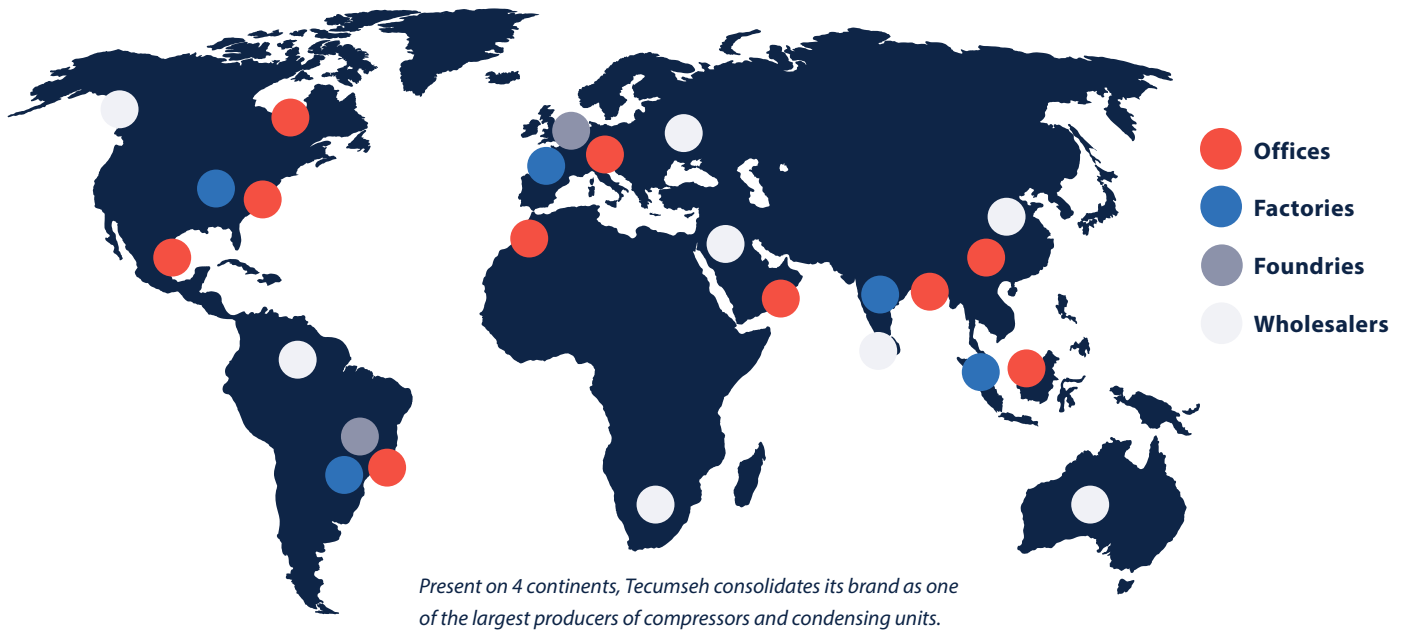


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