

# REFERENCE GUIDE – CUSTOMER USE



**Value-Priced & Ready-to-Install solution for outdoor installations**



**High Efficiency, Easy to install, Tecumseh Reliability**

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# Introduction

## Why a new WINTSYS®?

WINTSYS® is a Value-Priced and Ready-to-Install Outdoor Condensing Unit in commercial refrigeration for medium high and low temperatures.



Current WINTSYS® meets installers' and customers' demand in terms of:

1. on-site time saving
2. productivity
3. economic operation



New WINTSYS® brings additional benefits:

4. high efficiency
5. refrigerant compliance
6. improved competitiveness
7. visually pleasing housing design

## Brief product description

### Key features

- Tecumseh reciprocating compressor, industry proven for reliability
- Required electrical components come pre-installed
- Rugged design, handles ambient temperatures up to 46°C
- High efficiency, runs with highly reliable AC induction fan motor
- Stylish housing design
- Base / Floor mounted unit

### Accessories – unassembled available as replacement parts

- Fan speed variation kit
- Wall mounting feet

**Voltages:** 220-240V / 1 / 50 Hz (FZ) or 400V / 3 / 50 Hz – 440V / 3 / 60Hz (TZ)

### Cooling capacities:

	<b>R404A R452A R449A*</b>	<b>R134a R513A</b>
HBP	0,8 à 5,1 kW	0,7 à 2,9 kW
LBP	0,4 à 1,9 kW	
Compressors	AE , AJ , FH	

Cooling capacity : EN13215 HBP 10°C. LBP-35°C. \*please strictly refer to Tecumseh guidelines and Marketing bulletin when using this refrigerant

## What is the same?

- Quality of Tecumseh manufacturer, recognized leader in commercial refrigeration
- Ready-to-Install condensing unit
- Cooling capacities
- Electrical diagram
- Acoustic
- High quality components
- Availability of replacements parts and accessories
- Made in France

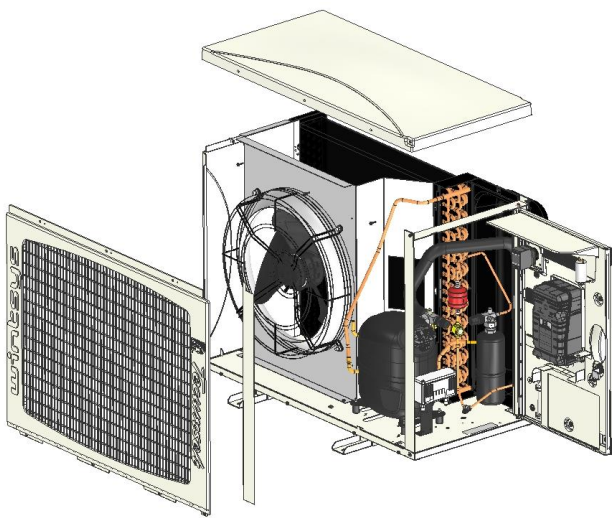
## What is different?

- Improved performance due to fan-condenser coil optimization
- Visually pleasing new housing
- Less models to cover same cooling capacities
- Handles ambient temperature up to 46°C
- High/low pressure with auto or manual reset switch
- High Efficiency AC fan
- Voltages FZ: 220-240V / 1 / 50 Hz and TZ: 400V / 3 / 50 Hz – 440V / 3 / 60Hz only

## Value Proposition

<i>WHICH VALUE</i>	<i>WHICH WAY</i>
<i>RELIABILITY / ROBUSTNESS</i>	Tecumseh standard compressor, industry proven reliability
	Weather - and Schockproof PolyPropylene housing
	High Quality Components. Made in France
	Asercom certified compressor performance
<i>FAST START UP &amp; MAINTENANCE</i>	Pre-equipped at the factory with a pre-wired electrical box for reduced installation time
	Pre-set product for easy installation & easy commissioning
	Easy to use for on site time saving
<i>HIGH PERFORMANCE</i>	Fan-condenser coil optimization
	ErP compliance
<i>HOUSED UNITS ACOUSTIC MARKET STANDARDS</i>	WINAJ4513Y = 31 dB(A) at 10m
	WINFH2480Z = 34 dB(A) at 10m
	WINAJ9513Z = 41 dB(A) at 10m
<i>COMPETITIVENESS</i>	Competitive price positioning
	Required electrical components come pre installed
<i>REFRIGERANT COMPLIANT</i>	Suitable for current refrigerants and requirements of the F-Gas in medium term
<i>VISUALLY PLEASING CONSTRUCTION</i>	Integrates well with the surrounding area

## Equipment



Electrical Equipment

1. 90°C open door lock
2. Tecumseh standard reciprocating compressor, refrigerant compliant
3. Weather and Schockproof PolyPropylene housing
4. IP44 Electrical protection class
5. Crankcase heater
6. Pre wired electrical box
7. External isolator switch
8. Contactor
9. High/low pressure with auto or manual reset switch
10. Pressure switch default signal
11. Rail DIN length increased
12. Rotalock valves on compressor
13. Schrader valve on receiver
14. Condenser to operate in high ambient temperature
15. AC induction fan motor
16. Base / Floor mounted unit
17. Liquid line with filter drier and sight glass

# Replacement parts & accessories

## Size S

R	NEW WINTSYS	⚡	🔌	Ⓜ	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧		
																											🔧	🔧
R404A	WINAE2425Z FZ	FZ	AE2525Z	CSR	8655342	8583025	8527047																					
	WINAJ2440ZFZ	FZ	CAJ2440Z	CSR	8657279		8527047	8527108																				
	WINAJ2446ZFZ	FZ	CAJ2446Z	CSR	8657266		8527047																					
	WINAJ2446ZTZ	TZ	TAJ2446Z	3PH	-		8527047	8527109																				
	WINAJ2464ZFZ	FZ	CAJ2464Z	CSR	8657267		8527042	8527108																				
	WINAJ2464ZTZ	TZ	TAJ2464Z	3PH	-		8527047	8527109																				
	WINAE4450ZFZ	FZ	AE4450Z	CSR	8655333		8527047																					
	WINAE4460ZFZ	FZ	AE4460Z	CSR	8655324	8583025	8527047	8527108																				
	WINAE4470Z FZ	FZ	AE4470Z	CSR	8655341		8527047																					
	WINAJ9480ZFZ	FZ	CAJ9480Z	CSR	8657277		8527047																					
	WINAJ9480ZTZ	TZ	TAJ9480Z	3PH	-		8527047	8527109																				
	WINAJ9510ZFZ	FZ	CAJ9510Z	CSR	8657276		8527042	8527108																				
	WINAJ9510ZTZ	TZ	TAJ9510Z	3PH	-		8527047	8527109																				
	WINAJ9513ZFZ	FZ	CAJ9513Z	CSR	8657274		8527042	8527108	8527112	8668114	8640124																	
	WINAJ9513ZTZ	TZ	TAJ9513Z	3PH	-	8583027	8527047	8527109																				
	WINAJ4517ZFZ	FZ	CAJ4517Z	CSR	8657264		8527042	8527108																				
	WINAJ4517ZTZ	TZ	TAJ4517Z	3PH	-		8527047	8527109																				
WINAJ4519ZTZ	TZ	TAJ4519Z	3PH	-		8527047	8527109																					
WINAJ4519ZFZ	FZ	CAJ4519Z	CSR	8657265		8527042	8527108																					
R134A	WINAE4450YFZ	FZ	AE4450Y	CSIR	8655327		8527047																					
	WINAE4460YFZ	FZ	AE4460Y	CSIR	8655332		8527047																					
	WINAJ4476YFZ	FZ	CAJ4476Y	CSIR	8657287		8527042	8527108																				
	WINAJ4492YFZ	FZ	CAJ4492Y	CSIR	8657262		8527042																					
	WINAJ4492Y TZ	TZ	TAJ4492Y	3PH	-		8527047	8527109																				
	WINAJ4511YFZ	FZ	CAJ4511Y	CSIR	8657263		8527042	8527108																				
	WINAJ4511Y TZ	TZ	TAJ4511Y	3PH	-		8527047	8527109																				
WINAJ4513YFZ	FZ	CAJ4513Y	1PH	8657275		8527042	8527108																					

## Size M

R	NEW WINTSYS	⚡	🔌	Ⓜ	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	🔧	
																											🔧
R404A	WINFH2480ZFZ	FZ	FH2480Z	CSR	8655230		8527042	8527108																			
	WINFH2480ZTZ	TZ	TFH2480Z	3PH		8583032	8527047	8527108																			
	WINFH2511ZFZ	FZ	FH2511Z	CSR	8655231		8527042	8527108																			
	WINFH2511ZTZ	TZ	TFH2511Z	3PH			8527047	8527109																			
	WINFH4524ZFZ	FZ	FH4524Z	CSR	8655235		8527042	8527108																			
	WINFH4524ZTZ	TZ	TFH4524Z	3PH			8527042	8527109																			
	WINFH4531ZFZ	FZ	FH4531 Z	CSR	8655151		8527043	8527142																			
	WINFH4531ZTZ	TZ	TFH4531 Z	3PH			8527042	8527109																			
	WINFH4540ZFZ	FZ	FH4540 Z	CSR	8655232		8527043	8527110	8527113	8551132	8545125	8580145															
	WINFH4540ZTZ	TZ	TFH4540 Z	3PH		8583032	8527042	8527109																			
R134A	WINFH4518YFZ	FZ	FH4518Y	CSR	8655233		8527042	8527108																			
	WINFH4518Y TZ	TZ	TFH4518Y	3PH			8527047	8527109																			
	WINFH4525YFZ	FZ	FH4525Y	CSR	8655236		8527042																				
WINFH4525Y TZ	TZ	TFH4525Y	3PH			8527047	8527109																				

Replacement parts & accessories excel file is available in New WINTSYS launch package



## Tecumseh Outdoor Condensing Units Range

Features		New WINTSYS®	SILENSYS	SILENSYS INVERTER
Compressor	Brand	Tecumseh	Tecumseh	Tecumseh
	Technology	Reciprocating	Reciprocating / Scroll / Rotary	Reciprocating
	Refrigerant	R404A, R452A, R449A* R134a R513A	R404A, R452A, R449A* R134a R513A	R404A, R452A, R449A* R134a R513A
Production	Assembly location	France	France	France
Cooling Capacities EN13215 HBP 10°C, LBP:35°C.	HBP R404A R452A R449A	0,8 to 5,1 kW	0,8 to 19 kW	1 to 17 kW
	LBP R404A R452A R449A	0,4 to 1,9 kW	0,4 to 5,7 kW	✘
	HBP R134a R513A	0,7 to 2,9 kW	0,6 to 9,3 kW	1,3 to 5,3 kW
Electrical Components	Fan motor	AC	AC (EC size M/L/XL)	AC (EC size M/L/XL)
	Electrical box	IP 44	IP 44	IP 44
	Crankcase heater	✓	✓	✓
	Isolator switch	✓	✓	✓
	Contacteur	✓	✓	✓
	Compressor protection	✓	✓	✓
	Fan circuit breaker	✘	✓	✓
	Power circuit breaker	✘	✓	✓
Refrigerating circuit	Alarm connexion HBP LBP	✓	✓	✓
	Filter drier	✓	✓	✓
	Refrigerant sight glass	✓	✓	✓
	Receiver fusible plug	✘	option	option
	Insulated suction line	✘	✓	✓
	Service valves	Internal	Internal	Internal
	Pressure switch	High/low pressure with auto/manual reset switch	HBP/LBP adjustable	HBP/LBP adjustable
	High Temp Cond.	46°C	46°C	46°C
Installation / Maintenance	Nitrogen charge	✓	✓	✓
	Housing material	Polypropylene	Polypropylene	Polypropylene
	Weather and Shockproof housing	✓	✓	✓
	Salt spray	500 h	500 h	500 h
	Floor mounting	✓	✓	✓
	Wall mounting	Repl. Parts	✓	✓
	Compressor insulation	✘	✓	✓
	High Efficiency fan	✘	✓	✓
Variable Capacity	Fan speed regulation	Repl. Parts	✓	✓
	Inverter	✘	✘	✓
Packaging	Controller	✘	✘	✓
	Tiltwatch	✘	✓ (S and M)	✓ (S and M)

\* Please strictly refer to Tecumseh guideline and Marketing Bulletin when using this refrigerant

# Range and Performance

## Range

Size	HBP R404A	Voltage	Cooling cap. (kW)
S	WINAE4450Z	FZ	0,8
	WINAE4460Z	FZ	0,9
	WINAE4470Z	FZ	1,0
	WINAJ9480Z	FZ, TZ	1,3
	WINAJ9510Z	FZ, TZ	1,5
	WINAJ9513Z	FZ, TZ	1,9
	WINAJ4517Z	FZ, TZ	2,1
	WINAJ4519Z	FZ, TZ	2,6
M	WINFH4524Z	FZ, TZ	3,1
	WINFH4531Z	FZ, TZ	3,9
	WINFH4540Z	FZ, TZ	5,1

11 models

Size	LBP R404A	Voltage	Cooling cap. (kW)
S	WINAE2425Z	FZ	0,4
	WINAJ2440Z	FZ	0,6
	WINAJ2446Z	FZ, TZ	0,8
	WINAJ2464Z	FZ, TZ	1,0
M	WINFH2480Z	FZ, TZ	1,4
	WINFH2511Z	FZ, TZ	1,9

6 models

Size	HBP R134a	Voltage	Cooling cap. (kW)
S	WINAE4450Y	FZ	0,7
	WINAE4460Y	FZ	0,8
	WINAJ4476Y	FZ	1,0
	WINAJ4492Y	FZ, TZ	1,2
	WINAJ4511Y	FZ, TZ	1,6
	WINAJ4513Y	FZ	1,9
M	WINFH4518Y	FZ, TZ	2,1
	WINFH4525Y	FZ, TZ	2,9

8 models

FZ: 220-240V / 1 / 50 Hz - TZ: 400V / 3 / 50Hz - 440V / 3 / 60Hz

EN 13215 @ -10°C (HBP) & -35°C (LBP) evp. 32°C ambiance, 10K S.H., 3K S.C

## Performance

### NEW WINTSYS R134a HBP

Models	Rated voltage	Cooling capacity in W EN13215, ambient temp. 32°C, superheating 10K subcooling 3K**							EN 13215 Evaporating 5°C Amb.		Acoustics dB(A)*		
		-15°C	-10°C	-5°C	0°C	5C	+10°C	+15°C	Cooling capacity (W)	Power input (W)	Pressure at 10m	Pressure at 1m	Acoustic power
WINAE4450Y	FZ / 5,1	571	730	918	1138	1395	1691	2032	1418	589	31	51	62
WINAE4460Y	FZ / 5,2	634	811	917	1129	1373	1629	2270	1571	648	31	51	62
WINAJ4476Y	FZ / 8,3	740	975	1250	1571	1943	2369	2856	1977	859	31	52	63
WINAJ4492Y	FZ / 9,4	947	1235	1571	1960	2404	2908	3474	2447	993	29	49	63
WINAJ4511Y	FZ / 9,1	1220	1568	1967	2418	2924	3486	4105	2980	1188	31	51	65
WINAJ4513Y	FZ / 10,4	1286	1652	2071	2547	3087	3539	4355	3145	1255	31	51	65
WINFH4518Y	TZ / 4,9	1548	2091	2730	3473	4330	5308	6421	4412	1924	37	57	68
WINFH4525Y	TZ / 7,4	2190	2848	3616	4504	5523	6686	8012	5835	3124	45	65	74

\* Presentation of the acoustic values in maximum ventilation speed in free field according to the reference point of standard EN13215. We comply with the acoustic standard EN ISO 3743-1

\*\* The refrigeration performances are given for information purpose and may change, without prior notice, with improvement that Tecumseh Products Company is always making to its products

### NEW WINTSYS R404A HBP

Models	Rated voltage	Cooling capacity in W EN13215, ambient temp. 32°C, superheating 10K subcooling 3K**					EN 13215 Evaporating -10°C Amb. 32°C		Acoustics dB(A)*		
		-15°C	-10°C	-5°C	0°C	5°C	Cooling capacity (W)	Power input (W)	Pressure at 10m	Pressure at 1m	Acoustic power
WINAE4450Z	FZ / 5,6	627	790	980	1199	1450	870	545	31	51	62
WINAE4460Z	FZ / 6,4	762	942	1152	1394	1673	1039	686	33	53	64
WINAE4470Z	FZ / 5,8	901	1115	1356	1632	1943	1228	715	33	53	64
WINAJ9480Z	FZ / 7,1	1014	1266	1556	1888	2265	1396	789	31	51	62
WINAJ9510Z	FZ / 8,9	1248	1549	1894	2286	2730	1710	944	33	53	64
WINAJ9513Z	FZ / 11,8	1518	1894	2313	2780	3298	2094	1087	34	53	65
WINAJ4517Z	FZ / 13,3	1671	2066	2512	3012	3575	2296	1230	37	57	68
WINAJ4519Z	FZ / 15,7	2068	2562	3108	3719	4408	2860	1719	39	59	70
WINFH4524Z	TZ / 8,4	2397	3064	3817	4658	5593	3405	1961	43	63	74
WINFH4531Z	TZ / 9,7	3112	3892	4767	5747	6847	4333	2365	44	64	75
WINFH4540Z	TZ / 10,3	4084	5055	6116	7270	8526	5627	3125	49	69	80

\* Presentation of the acoustic values in maximum ventilation speed in free field according to the reference point of standard EN13215. We comply with the acoustic standard EN ISO 3743-1

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## NEW WINTSYS R452A HBP

Models	Rated voltage	Cooling capacity in W EN13215, ambient temp. 32°C, superheating 10K subcooling 3K**					EN 13215 Evaporating -10°C Amb. 32°C		Acoustics dB(A)*		
		-15°C	-10°C	-5°C	0°C	5°C	Cooling capacity (W)	Power input (W)	Pressure at 10m	Pressure at 1m	Acoustic power
WINAE4450Z	FZ / 5,6	555	706	883	1089	1329	774	538	33	53	64
WINAE4460Z	FZ / 6,4	677	845	1042	1271	1538	928	611	34	54	65
WINAE4470Z	FZ / 5,8	809	1006	1213	1468	1721	1097	640	34	54	65
WINAJ9480Z	FZ / 7,1	891	1123	1393	1706	2066	1233	773	31	51	62
WINAJ9510Z	FZ / 8,9	1100	1378	1699	2069	2495	1515	918	33	53	64
WINAJ9513Z	FZ / 11,8	1350	1709	2121	2592	3128	1882	1058	34	53	65
WINAJ4517Z	FZ / 13,3	1464	1829	2244	2719	3262	2023	1196	34	54	65
WINAJ4519Z	FZ / 15,7	1806	2261	2772	3352	4021	2514	1660	37	57	68
WINFH4524Z	TZ / 8,4	2062	2679	3386	4191	5102	2964	1900	43	63	74
WINFH4531Z	TZ / 9,7	2682	3408	4232	5173	6252	3777	2285	44	64	75
WINFH4540Z	TZ / 10,3	3551	4455	5454	6564	7799	4937	2995	49	69	80

\* Presentation of the acoustic values in maximum ventilation speed in free field according to the reference point of standard EN13215. We comply with the acoustic standard EN ISO 3743-1

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## NEW WINTSYS R449A HBP

Models	Rated voltage	Cooling capacity in W EN13215, ambient temp. 32°C, superheating 10K subcooling 3K**					EN 13215 Evaporating -10°C Amb. 32°C		Acoustics dB(A)*		
		-15°C	-10°C	-5°C	0°C	5°C	Cooling capacity (W)	Power input (W)	Pressure at 10m	Pressure at 1m	Acoustic power
WINAE4450Z	FZ / 5,6	543	705	896	1120	1383	749	491	33	53	64
WINAE4460Z	FZ / 6,4	662	843	1057	1308	1602	897	556	34	54	65
WINAE4470Z	FZ / 5,8	789	994	1234	1531	1830	1059	573	34	54	65
WINAJ9480Z	FZ / 7,1	876	1127	1423	1769	2172	1199	703	31	51	62
WINAJ9510Z	FZ / 8,9	1081	1384	1738	2153	2633	1474	833	33	53	64
WINAJ9513Z	FZ / 11,8	1336	1728	2185	2715	3325	1842	958	34	53	65
WINAJ4517Z	FZ / 13,3	1456	1859	2325	2867	3493	1988	1087	34	54	65
WINAJ4519Z	FZ / 15,7	1810	2319	2902	3576	4359	2487	1516	37	57	68
WINFH4524Z	TZ / 8,4	2069	2741	3524	4430	5470	2931	1743	43	63	74
WINFH4531Z	TZ / 9,7	2694	3493	4418	5493	6742	3739	2099	44	64	75
WINFH4540Z	TZ / 10,3	3549	4550	5685	6975	8440	4871	2865	49	69	80

\* Presentation of the acoustic values in maximum ventilation speed in free field according to the reference point of standard EN13215. We comply with the acoustic standard EN ISO 3743-1

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## NEW WINTSYS R404A LBP

Models	Rated voltage	Cooling capacity in W EN13215, ambient temp. 32°C, superheating 10K subcooling 3K**					EN 13215 Evaporating -35°C Amb. 32°C		Acoustics dB(A)*		
		-30°C	-25°C	-20°C	-15°C	-10°C	Cooling capacity (W)	Power input (W)	Pressure at 10m	Pressure at 1m	Acoustic power
WINAE2425Z	FZ/4,7	415	545	697	875	1083	361	385	32	52	63
WINAJ2440Z	FZ / 6,2	587	778	1004	1268	1573	531	629	32	52	63
WINAJ2446Z	FZ / 8,7	768	999	1270	1586	1951	712	732	32	52	63
WINAJ2464Z	FZ / 10,5	1033	1337	1688	2087	2532	957	945	32	52	63
WINFH2480Z	TZ / 7	1426	1845	2309	2819	3373	1308	1352	41	61	72
WINFH2511Z	TZ / 7,9	1867	2472	3177	3988	4912	1688	1625	43	63	74

\* Presentation of the acoustic values in maximum ventilation speed in free field according to the reference point of standard EN13215. We comply with the acoustic standard EN ISO 3743-1

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## NEW WINTSYS R452A LBP

Models	Rated voltage	Cooling capacity in W EN13215, ambient temp. 32°C, superheating 10K subcooling 3K**					EN 13215 Evaporating -35°C Amb. 32°C		Acoustics dB(A)*		
		-30°C	-25°C	-20°C	-15°C	-10°C	Cooling capacity (W)	Power input (W)	Pressure at 10m	Pressure at 1m	Acoustic power
WINAE2425Z	FZ/4,7	358	480	643	798	1000	316	364	28	48	59
WINAJ2440Z	FZ / 6,2	495	674	890	1146	1447	429	594	28	48	59
WINAJ2446Z	FZ / 8,7	651	869	1128	1435	1794	577	691	29	49	60
WINAJ2464Z	FZ / 10,5	881	1168	1505	1894	2335	784	915	31	51	62
WINFH2480Z	TZ / 7	1195	1597	2053	2564	3131	1038	1272	41	61	72
WINFH2511Z	TZ / 7,9	1570	2138	2810	3594	4495	1351	1535	43	63	74

\* Presentation of the acoustic values in maximum ventilation speed in free field according to the reference point of standard EN13215. We comply with the acoustic standard EN ISO 3743-1

\*\* The refrigeration performances are given for information purpose and may change, without prior notice, with improvement that Tecumseh Products Company is always making to its products

## NEW WINTSYS R449A LBP

Models	Rated voltage	Cooling capacity in W EN13215, ambient temp. 32°C, superheating 10K subcooling 3K**					EN 13215 Evaporating -35°C Amb. 32°C		Acoustics dB(A)*		
		-30°C	-25°C	-20°C	-15°C	-10°C	Cooling capacity (W)	Power input (W)	Pressure at 10m	Pressure at 1m	Acoustic power
WINAE2425Z	FZ/4,7	350	475	633	782	996	284	341	28	48	59
WINAJ2440Z	FZ / 6,2	491	676	900	1167	1481	389	464	28	48	59
WINAJ2446Z	FZ / 8,7	644	870	1141	1461	1836	522	654	29	49	60
WINAJ2464Z	FZ / 10,5	867	1164	1514	1920	2384	707	862	31	51	62
WINFH2480Z	TZ / 7	1189	1603	2078	2614	3213	951	1317	41	61	72
WINFH2511Z	TZ / 7,9	1566	2156	2859	3684	4638	1236	1460	43	63	74

\* Presentation of the acoustic values in maximum ventilation speed in free field according to the reference point of standard EN13215. We comply with the acoustic standard EN ISO 3743-1

\*\* The refrigeration performances are given for information purpose and may change, without prior notice, with improvement that Tecumseh Products Company is always making to its products

Lowers the return gas temperature

# Marketing Tools and Availability

## New Product Package

### October 2016

- Reference guide
- Technical data (Excel sheet)
- New logo and product picture
- Product presentation

### January 2017

- Data sheets
- Customized selling point flyer
- Digital images – for distributors e-communication
- Installation instructions
- Electrical diagram by model

## Selection software

- Data available in Tecumseh Selection software : **Available**

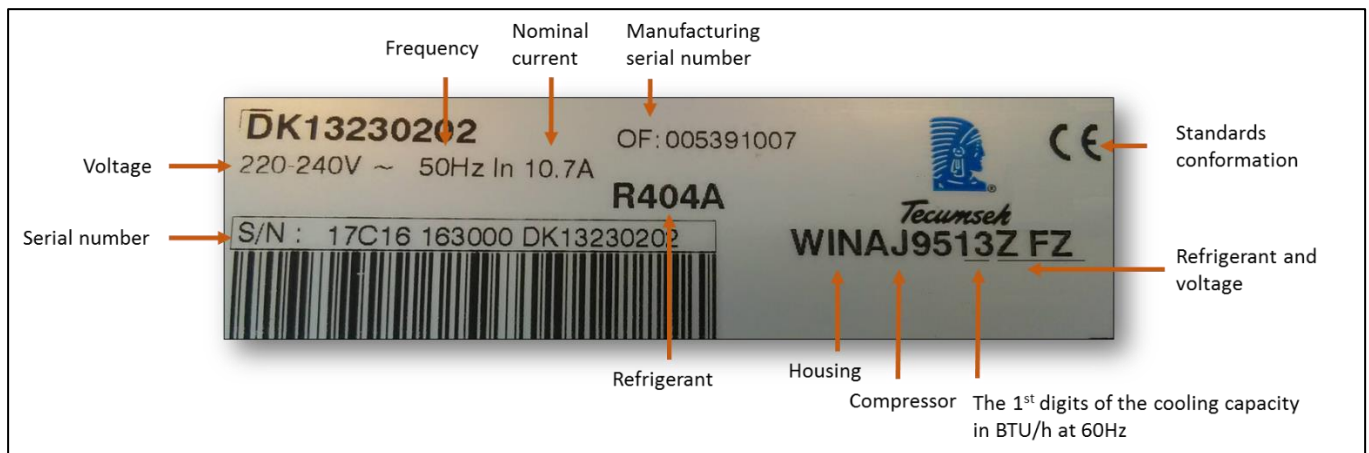
## Condensing Unit Catalogue

- New Tecumseh Condensing Unit Catalogue available : **Q1 2017**

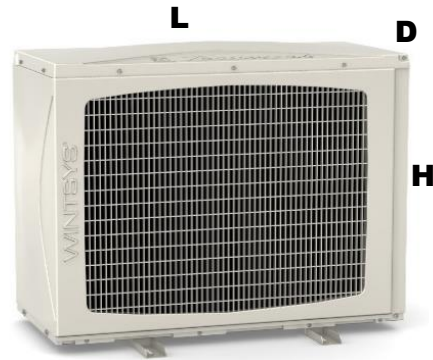
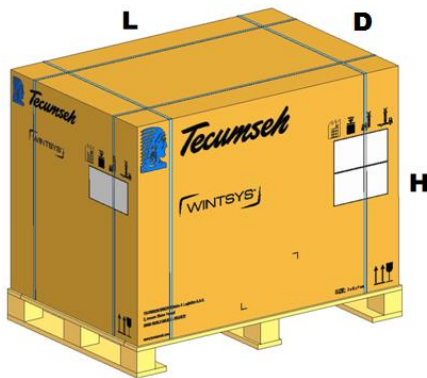
# Additional Information

## Nomenclature

New WINTSYS® nomenclature specifies compressor type. Exemple: WIN AJ 9513Z FZ



## Dimensions



### Packaging - mm

Size	L	D	H
WINTSYS® S	1070	730	867
WINTSYS® M	1290	730	867

### Products – mm

Size	L	D	H
WINTSYS® S	930	575	715
WINTSYS® M	1145	575	715



## Installation Instructions

- Included in each packaging. Available January 2017.

## Bills of Material

Housing	Appli	Ref.	Designation	BOM	
				FZ: 230V / 1 / 50 Hz	TZ: 400V / 3 / 50 Hz
S	HBP	R404A	WINAE4450Z	D K1 10 30 202	-
S	HBP	R404A	WINAE4460Z	D K1 11 30 202	-
S	HBP	R404A	WINAE4470Z	D K1 12 30 202	-
S	HBP	R404A	WINAJ9480Z	D K1 30 30 202	D K2 30 30 202
S	HBP	R404A	WINAJ9510Z	D K1 31 30 202	D K2 31 30 202
S	HBP	R404A	WINAJ9513Z	D K1 32 30 202	D K2 32 30 202
S	HBP	R404A	WINAJ4517Z	D K1 35 30 202	D K2 35 30 202
S	HBP	R404A	WINAJ4519Z	D K1 36 30 202	D K2 36 30 202
M	HBP	R404A	WINFH4524Z	D K1 45 30 202	D K2 45 30 202
M	HBP	R404A	WINFH4531Z	D K1 46 30 202	D K2 46 30 202
M	HBP	R404A	WINFH4540Z	D K1 47 30 202	D K2 47 30 202
S	LBP	R404A	WINAE2425Z	D K1 02 30 202	-
S	LBP	R404A	WINAJ2440Z	D K1 17 30 202	-
S	LBP	R404A	WINAJ2446Z	D K1 18 30 202	D K2 18 30 202
S	LBP	R404A	WINAJ2464Z	D K1 19 30 202	D K2 19 30 202
M	LBP	R404A	WINFH2480Z	D K1 38 30 202	D K2 38 30 202
M	LBP	R404A	WINFH2511Z	D K1 39 30 202	D K2 39 30 202
S	HBP	R134a	WINAE4450Y	D K1 05 30 202	-
S	HBP	R134a	WINAE4460Y	D K1 06 30 202	-
S	HBP	R134a	WINAJ4476Y	D K1 22 30 202	-
S	HBP	R134a	WINAJ4492Y	D K1 23 30 202	D K2 23 30 202
S	HBP	R134a	WINAJ4511Y	D K1 24 30 202	D K2 24 30 202
S	HBP	R134a	WINAJ4513Y	D K1 25 30 202	-
M	HBP	R134a	WINFH4518Y	D K1 40 30 202	D K2 40 30 202
M	HBP	R134a	WINFH4525Y	D K1 41 30 202	D K2 41 30 202

Housing / Taille	Application / Application	Reference / Référence	Designation / Désignation	BOM	
				FZ: 220-240V / 1 / 50 Hz	TZ: 400V/3/50 Hz- 440V/3/60Hz
S	HP	R404A	WINAE4450Z	DK11030202	-
S	HP	R404A	WINAE4460Z	DK11130202	-
S	HP	R404A	WINAE4470Z	DK11230202	-
S	HP	R404A	WINAJ9480Z	DK13030202	DK23030202
S	HP	R404A	WINAJ9510Z	DK13130202	DK23130202
S	HP	R404A	WINAJ9513Z	DK13230202	DK23230202
S	HP	R404A	WINAJ4517Z	DK13530202	DK23530202
S	HP	R404A	WINAJ4519Z	DK13630202	DK23630202
M	HP	R404A	WINFH4524Z	DK14530202	DK24530202
M	HP	R404A	WINFH4531Z	DK14630202	DK24630202
M	HP	R404A	WINFH4540Z	DK14730202	DK24730202
S	BP	R404A	WINAE2425Z	DK10230202	-
S	BP	R404A	WINAJ2440Z	DK11730202	-
S	BP	R404A	WINAJ2446Z	DK11830202	DK21830202
S	BP	R404A	WINAJ2464Z	DK11930202	DK21930202
M	BP	R404A	WINFH2480Z	DK13830202	DK23830202
M	BP	R404A	WINFH2511Z	DK13930202	DK23930202
S	HP	R134a	WINAE4450Y	DK10530202	-
S	HP	R134a	WINAE4460Y	DK10630202	-
S	HP	R134a	WINAJ4476Y	DK12230202	-
S	HP	R134a	WINAJ4492Y	DK12330202	DK22330202
S	HP	R134a	WINAJ4511Y	DK12430202	DK22430202
S	HP	R134a	WINAJ4513Y	DK12530202	-
M	HP	R134a	WINFH4518Y	DK14030202	DK24030202
M	HP	R134a	WINFH4525Y	DK14130202	DK24130202

## Guidelines for using R449A/R452A

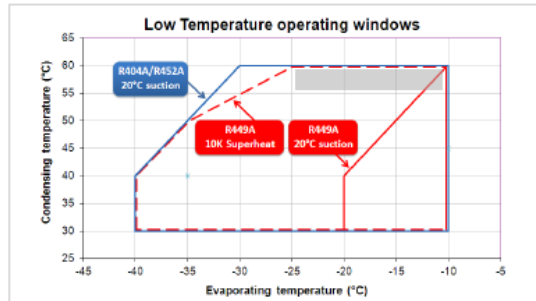
Refer to Tecumseh ‘Guidelines for using R449A/R452A’

[www.tecumseh.com/Library/Guidelines](http://www.tecumseh.com/Library/Guidelines) and Recommendations

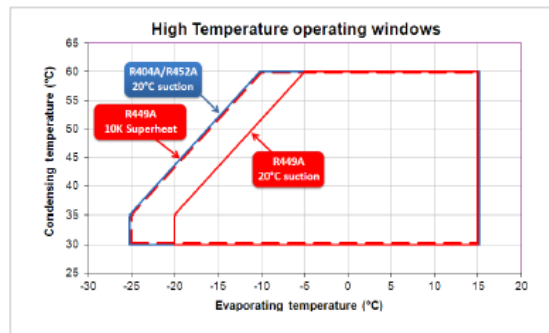
### Extract - Compressor Operating Window

The operating windows shown below are provided as guidelines only and need to be adjusted based on the specific compressor model involved and the overall design of the refrigeration system. In general terms, limiting superheat to a maximum temperature of 10K (18F), the operating window defined for R404A Low Temperature system is fully or mostly usable with refrigerants R449A and R452A.

Please refer to the “Compressor Cooling” section and follow the steps to maintain discharge temperatures within operating limits. Tecumseh requires that compressor discharge gas temperatures be measured and that the necessary steps be taken to maintain temperatures below 125°C (257°F) for multi-cylinder and below 120°C (248°F) for single cylinder compressors with an evaporating temperature of -30°C (-22°F) and below.



In cases where refrigerating systems using a reciprocating compressor would run at steady conditions into the shaded area of the hereof compressor application window, then Tecumseh advises to replace the current POE 32cst oil viscosity grade by a 68cst.



## Cross Ref WINTSYS® – Slim Pack – New WINTSYS®

	FEATURES	WINTSYS	Slim Pack	NEW WINTSYS
Compressor	Compressor technology	Recip	Recip / Scroll	Recip
	Compressor brand	Tecumseh	Danfoss	Tecumseh
	Multi refrigerant capability	No	✓	✓
Production	Manufacturer	Tecumseh	Danfoss	Tecumseh
	Assembly location	France	Malaysia	France
Cooling Capacities EN13215 HBP -10°C. LBP -35°C	R404A HBP	0,8 to 5 kW	0,8 to 10,6 kW	0,8 to 5,1 kW
	R404A LBP	0,3 to 1,5 kW	0,4 to 3,6 kW	0,4 to 1,9 kW
	R134a HBP	0,7 to 3 kW	2,15 to 6,7 kW	0,7 to 2,9 kW
Electrical components	Isolator switch	✓	✓	✓
	Contacteur	✓	✓	✓
	Fan motor	AC EC	AC	AC
	Fan circuit breaker	✗	✗	✗
	Power circuit breaker	✗	✓	✓
	Electrical box	IP44	IP44	IP44
	Compressor protection	Yes	Yes	Yes
	Compressor crankcase heater	✓	✓	✓
Refrigerating circuit	Filter drier	✓	✓	✓
	Refrigerant sight glass	✓	✓	✓
	Liquid receiver volume equivalent to AJ	1,5l / 2,35l	1,3l / 3,4l	1,5l / 2,35l
	Receiver fusible plug	Option	✗	✗
	Insulated suction lines	✓	✓	✗
	Service valves	Internal	External	Internal
	Pressure switch function	Mini pressure switch (HBP+LBP)	KP17WB	KP17WB
	High temp condenser (HTA)	32°C & 43°C	46°C	46°C
Installation / Maintenance	Housing material	Plastic	Coated Steel	Plastic
	Door 90° open lock	✓	✗	✓
	Extended din rail	✗	✓	✓
	Floor/Wall mounting brackets	✗	✗	Repl. parts
	Acoustics	Acoustic foam	✗	✗
	Fan speed regulation	Option	✗	Repl. parts

## Cross Ref WINTSYS® – New WINTSYS® – Slim Pack

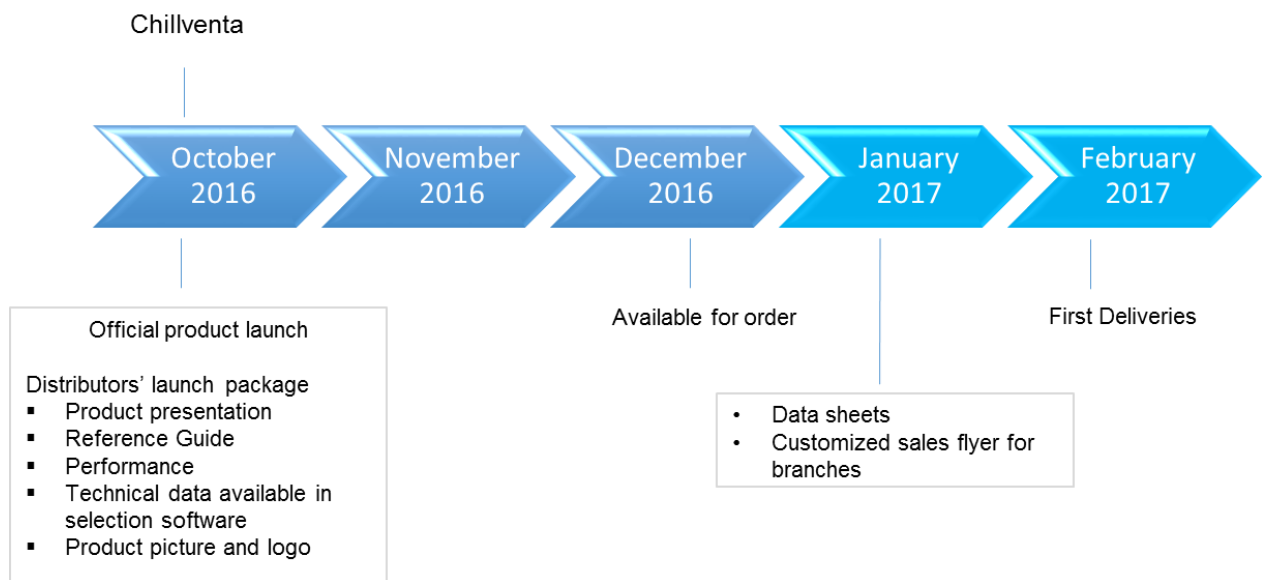
R134a HBP					
Cooling capacity in W EN13215, ambient temp. 32°C, superheating 10K subcooling 3K. Evaporating temperature: -10°C.					
Previous WINTSYS / Ancien WINTSYS	Cooling capacity W / Puissance frigorifique W	New WINTSYS / Nouveau WINTSYS	Cooling capacity W / Puissance frigorifique W	Slim Pack	Cooling capacity W / Puissance frigorifique W
WIN4450Y	707	WINAE4450Y	730		
WIN4456Y	768				
WIN4460Y	788	WINAE4460Y	825		
WIN4476Y	895				
WIN4492Y	1 097	WINAJ4476Y WINAJ4492Y WINAJ4511Y	975 1235 1568		
WIN4511Y	1 368				
WIN4518Y	1 885	WINAJ4513Y WINFH4518Y	1652 2091		
WIN4525Y	2 669	WINFH4525Y	2 848	OP-MSUM034	2 150
				OP-MSUM046	2 900

## Cross Ref WINTSYS® – New WINTSYS® – Slim Pack

<b>R404A HBP</b>					
Cooling capacity in W EN13215, ambient temp. 32°C, superheating 10K subcooling 3K. Evaporating temperature: -10°C					
Previous WINTSYS / Ancien WINTSYS	Cooling capacity W / Puissance frigorifique W	New WINTSYS / Nouveau WINTSYS	Cooling capacity W / Puissance frigorifique W	Slim Pack	Cooling capacity W / Puissance frigorifique W
WIN4450Z	761	WINAE4450Z	790	OP-MSHM010	820
WIN4460Z	886	WINAE4460Z	942	OP-MSHM012	1000
WIN4470Z	1014	WINAE4470Z	1115		
WIN9480Z	1057				
WIN9510Z	1263	WINAJ9480Z	1266	OP-MSHM015	1230
WIN9513Z	1472	WINAJ9510Z	1549	OP-MSHM018	1440
WIN4517Z	1953	WINAJ9513Z	1894	OP-MSHM024	2050
		WINAJ4517Z	2066		
WIN4519Z	2430	WINAJ4519Z	2562		
WIN4524Z	2605				
		WINFH4524Z	3064		
WIN4531Z	3719	WINFH4531Z	3892		
WIN4540Z	4487	WINFH4540Z	4480		

<b>R404A LBP</b>					
Cooling capacity in W EN13215, ambient temp. 32°C, superheating 10K subcooling 3K. Evaporating temperature: -30°C					
Previous WINTSYS / Ancien WINTSYS	Cooling capacity W / Puissance frigorifique W	New WINTSYS / Nouveau WINTSYS	Cooling capacity W / Puissance frigorifique W	Slim Pack	Cooling capacity W / Puissance frigorifique W
WIN2428Z	390	WINAE2425Z	415	OP-LSHM015	530
WIN2425Z	397				
WIN2432Z	464	WINAJ2440Z	587		
WIN2440Z	551				
WIN2446Z	687	WINAJ2446Z	768	OP-LSHM018	580
WIN2464Z	837				
		WINAJ2464Z	1033	OP-LSHM026	850
				OP-LSHM034	1100
WIN2480Z	1276	WINFH2480Z	1426	OP-LSHM048	1400
WIN2511Z	1603	WINFH2511Z	1867		

## Timing





*Tecumseh*

October 2016