

SILENSYS® ADVANCED

APPROVED FOR A2L FLUIDS, COMPATIBLE WITH A1 FLUIDS.
HEAT RECOVERY CONNECTIONS (FH & AG).



APPLICATIONS



ice maker



display case



cold room



reach-in

AUTHORIZED REFRIGERANTS



R-455A

R-454C

R-452A

R-448A
R-449A

R-404A

R-1234yf

R-513A

R-134a



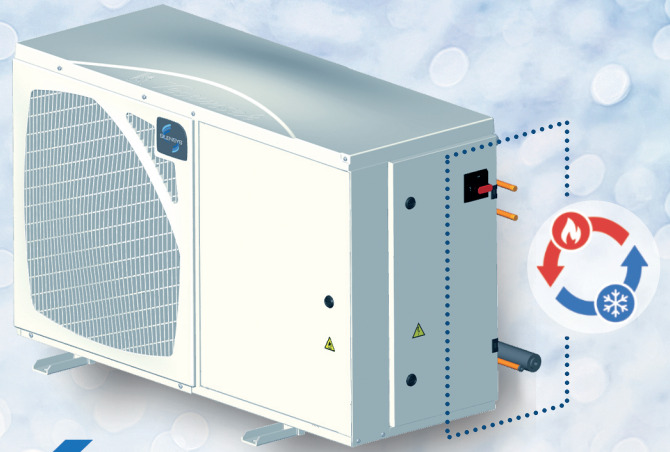
Tecumseh

90 YEARS



SILENSYS® ADVANCED

THE NEW GENERATION
OF HIGH-PERFORMANCE COMMERCIAL
REFRIGERATION SYSTEM WITH HEAT RECOVERY



INNOVATION

PLUG & PLAY INSTALLATION
WITH HEAT RECOVERY
CONNECTIONS



TECUMSEH.COM

FEATURES & BENEFITS

HEAT RECOVERY CONNECTIONS

- Provided with connections for system integration to partial or total heat recovery
- Eligible for energy-saving certificates

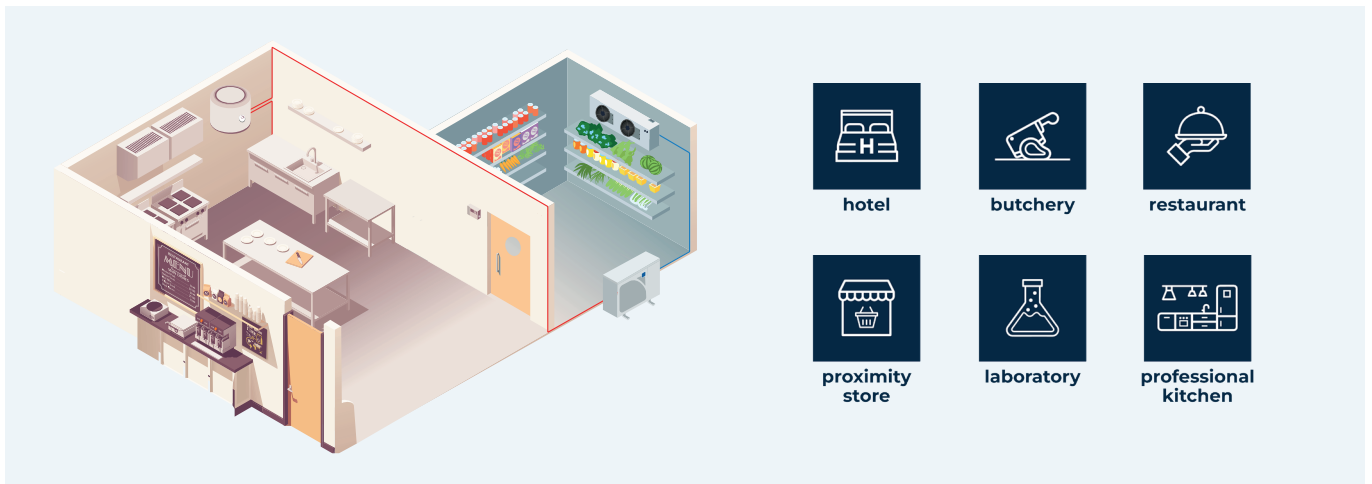
ACOUSTIC REFERENCE

- High performance soundproofing of the compressor compartment
- Fan speed control
- Quiet dilution fan

EASY ACCESSIBILITY & ASSEMBLY

- Direct access to electrical and refrigeration components: no inner panel to unscrew
- Space available on Din Rail for additional connection terminals

EXAMPLE OF INSTALLATION



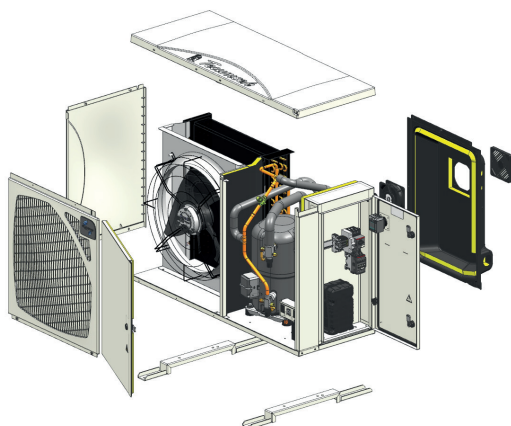
EXCLUSIVE FEATURES OF SILENSYS® ADVANCED

UNCOMPROMISING SAFETY WITH A2L REFRIGERANTS

- One-time and permanent dilution of the refrigerant in case of leakage in the compressor compartment, independent of the cooling requirement.
- Electromechanical components qualified with A2L refrigerants.
- Standard electrical components (disconnecting switch, contactor, circuit breaker) located in an electrical cabinet protected from refrigerant ingress in case of leakage.

AESTHETIC BODY

- Polypropylene, to prevent corrosion.
- Proven UV resistance.



A2L-A1 COMPATIBILITY OF REFRIGERANTS

- Facilitates ecological and product transition.
- One product for all requirements.



PROTECTIVE PACKAGING

- Double fluted cardboard cover.
- The pallet can be safely carried by pallet trucks.
- Easy to unpack thanks to the cardboard cover.



GENEROUS SIZING OF THE CONDENSING SUB-ASSEMBLY

- Operation up to 46°C ambient temperature.
- Ensures the continuity of cooling in periods of peak heat and during transition regimes.
- Contributes to the reliability and life span of the product.

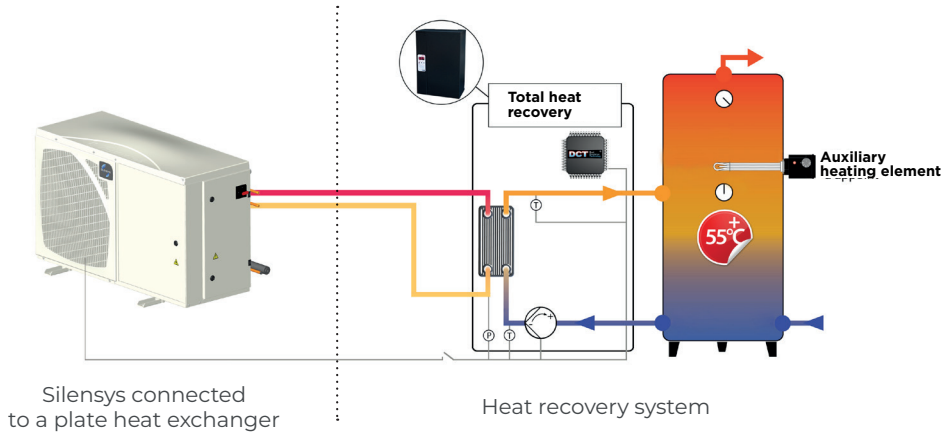


ROBUST, CORROSION-RESISTANT FEET

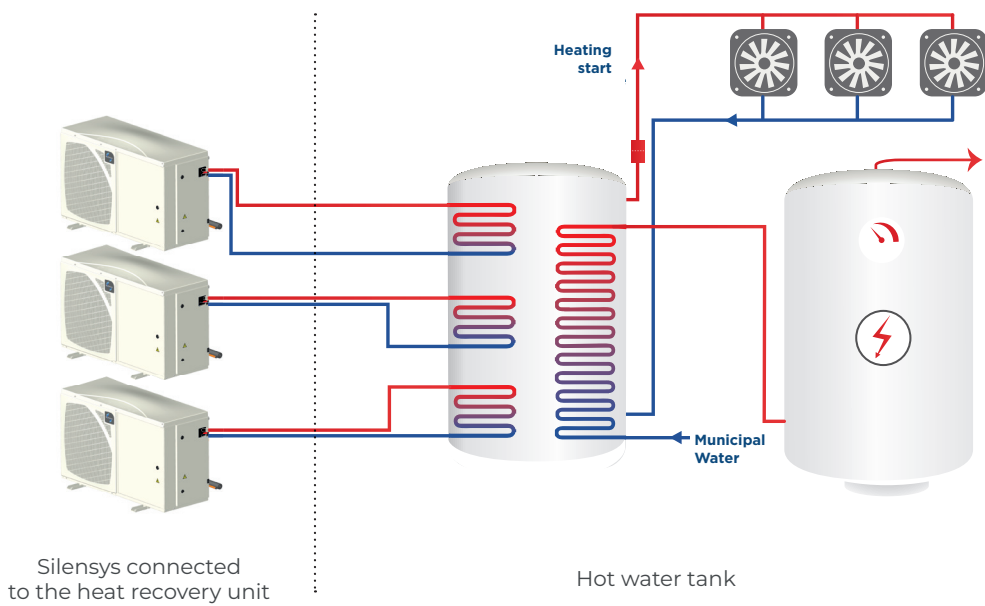
- Fixed ground feet as standard to suit most installations
- Optional, for wall-mounting, removable support feet (single foot 8618848 x2)

SILENSYS PRODUCTS AND HEAT RECOVERY SYSTEMS

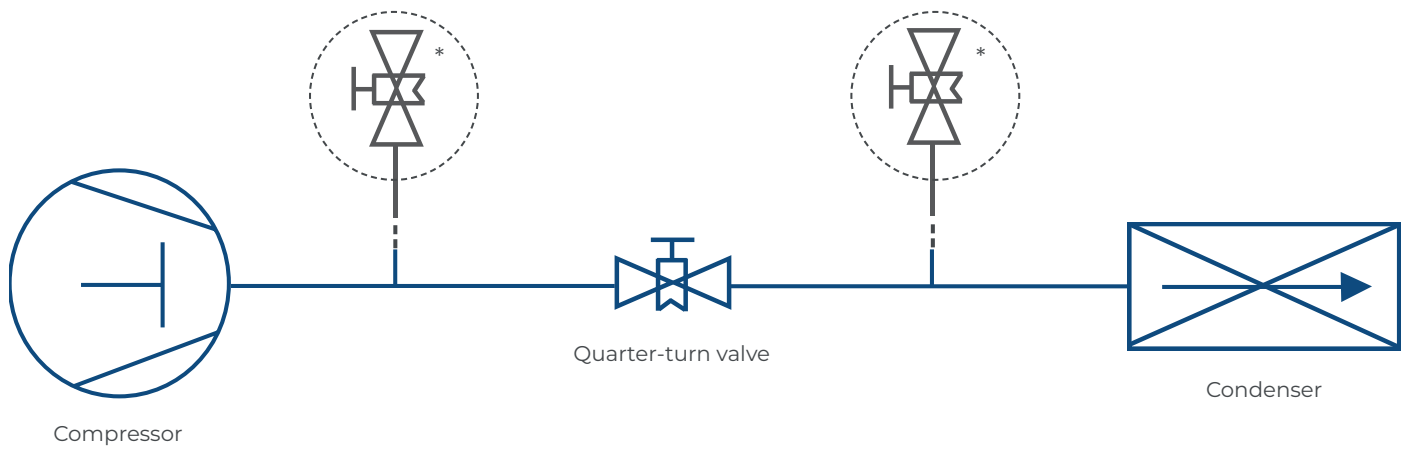
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SCHEMATIC DIAGRAM



*Valve not included

EXAMPLE OF GAIN WITH A SILFH4524P-TX

- Recoverable heat: 5 600 Watts
- Possible domestic hot water heating: 825 l/Day
- Possible annual savings: 10 300 kWh or 2 600€

HYPOTHESIS

- 250D/year, daily consumption = 800 l/D, water heated from 12 to 55°C
- Power output * Correction factor * 12h/D * 3600/ (55°-12°)
- Price 0.26€ kW/h

Estimates made with refrigerants:

R455A (fluid code letter "P")

R1234yf (fluid code letter "N")

Heat recovery is applicable to all other approved **A2L and A1** refrigerants.

Operating time of the condensing unit **12 h/d**

Water heated from 12 to 55°C, Tcond = **49°C**

Number of days the system is in operation = **250 days/year**.



PRODUCT RANGE AND POTENTIAL SAVINGS

APPLICATION	SELECTED PRODUCTS	RECOVERABLE POWER (W)	WATER HEATING AVAILABLE (L/h)	POSSIBLE ANNUAL RECOVERABLE HEAT (kWh)	ESTIMATED ANNUAL SAVINGS (€)
MHP	SILFH4524P-TX	4210	810	10 100	2 520
MHP	SILFH4524P-XC	4300	830	10 310	2 580
MHP	SILFH4532P-TX	4990	960	11 990	3000
MHP	SILFH4532P-XC	5240	1 010	12 590	3 150
MHP	SILFH4538P-XC	6620	1 270	15 890	3 970
MHP	SILFH4538P-TX	6590	1 270	15 820	3 960
MHP	SILFH4544P-TX	7550	1 450	18 110	4 530
MHP	SILFH4544P-XC	7970	1 530	19 120	4 780
MHP	SILAG4553P-TX	8130	1 560	19 520	4 880
MHP	SILAG4561P-TX	9800	1 880	23 530	5 880
MHP	SILAG4568P-TX	10490	2 140	26 760	6 690
MHP	SILAG4573P-TX	12020	2 450	30 660	7 670
MHP	SILAG4581P-TX	13480	2 750	34 380	8 600
MHP	SILFH4518N-TX	2630	510	6 320	1 580
MHP	SILFH4518N-XC	2890	560	6 940	1 740
MHP	SILFH4525N-TX	3510	680	8 430	2 110
MHP	SILFH4525N-XC	3600	700	8 630	2 160
MHP	SILAG4528N-TX	3920	750	9 410	2 350
MHP	SILAG4534N-TX	4540	870	10 890	2 720
MHP	SILAG4537N-TX	5360	1 030	12 870	3 220
MHP	SILAG4543N-TX	6020	1 160	14 450	3 610
MHP	SILAG4547N-TX	6930	1 330	16 630	4 160
BP	SILFH2480P-TX	2240	430	5 380	1 350
BP	SILFH2480P-XC	2290	440	5 490	1 370
BP	SILFH2511P-TX	3220	620	7 730	1 930
BP	SILFH2511P-XC	3320	640	7 970	2000
BP	SILAG2516P-TX	3420	660	8 210	2 050
BP	SILAG2519P-TX	4160	800	9 990	2 500
BP	SILAG2522P-TX	4970	950	11 920	2 980
BP	SILAG2525P-TX	5290	1 020	12 700	3 180

REFRIGERATING PERFORMANCE



NEGATIVE COLD (LBP)

PRODUCT DESIGNATION	COOLING CAPACITY (W), R-455A* 32°C AMB.T°, 10K SUPERHEAT, 3K SUBCOOL, EVAPORATION TEMPERATURE (°C)						CONDITIONS EN13215 AT -35°C		SOUND PRESSURE AT 10 M (dB(A))	VENT. FLOW (m³/h)	REC. VOL. (L)	PIPE Ø		SIZE	MAX. CURRENT (A)	
	-35	-30	-25	-20	-15	-10	PERF. (W)	COP (W/W)				SUCTION	DISCH.		FZ (OR XC)	TX
SILAJ2432P-FZ	340	480	650	860	1100	1380	390	0.97	28	1300	0.75	1/2"	1/4"	S	5.7	-
SILAJ2440P-FZ	430	590	790	1020	1290	1600	490	1.01	28	1300	0.75	1/2"	1/4"	S	6.1	-
SILAJ2446P-FZ	490	690	920	1180	1480	1820	570	0.95	28	1300	1.50	1/2"	1/4"	S	8.0	-
SILAJ2446P-TX	490	690	920	1180	1480	1820	570	0.95	28	1300	1.50	1/2"	1/4"	S	-	2.9
SILAJ2464P-FZ	650	900	1180	1520	1910	2350	750	0.98	28	1300	1.50	1/2"	1/4"	S	9.9	-
SILAJ2464P-TX	650	890	1170	1500	1880	2310	750	0.99	30	1300	1.50	1/2"	1/4"	S	-	3.7
SILFH2480P-XC	970	1420	1960	2580	3310	4130	1120	1.05	33	3110	1.50	5/8"	3/8"	M	17.3	-
SILFH2480P-TX	980	1400	1910	2520	3240	4070	1140	1.12	33	3110	1.50	5/8"	3/8"	M	-	7.6
SILFH2511P-XC	1470	2010	2660	3420	4300	5300	1700	1.11	34	3110	1.50	5/8"	3/8"	M	21.1	-
SILFH2511P-TX	1440	1980	2640	3420	4330	5390	1670	1.17	34	3110	1.50	5/8"	3/8"	M	-	9.1
SILAG2516P-TX	1320	2100	2990	4020	5190	6500	1530	0.92	35	3110	2.35	7/8"	3/8"	M	-	10.9
SILAG2519P-TX	1690	2520	3480	4590	5830	7240	1960	0.99	40	3110	2.35	7/8"	3/8"	M	-	11.2
SILAG2522P-TX	2140	3050	4110	5330	6730	8320	2470	1.45	44	4870	3.90	7/8"	1/2"	M	-	13.0
SILAG2525P-TX	2280	3250	4360	5640	7100	8740	2640	1.46	45	4870	3.90	7/8"	1/2"	M	-	14.4

* For more information on power ratings, please refer to the selection software available for download at www.tecumseh.com.

REFRIGERATING PERFORMANCE

POSITIVE COLD (MHBP)

PRODUCT DESIGNATION	COOLING CAPACITY (W) 32°C AMB.T°, 10K SUPERHEAT, 3K SUBCOOL, EVAPORATION TEMPERATURE (°C)							CONDITIONS EN13215 AT -10°C		SOUND PRES- SURE AT 10M (dB(A))	VENT. FLOW (m³/h)	REC. VOL. (L)	PIPE Ø		SIZE	MAX. CURRENT (A)	
	-15	-10	-5	0	5	10	15	PERF. (W)	COP (W/W)				SUCT.	DISCH.		FZ	TX
SILAE4450N-FZ	560	710	870	1060	1270	1510	1770	790	1.89	28	1300	0.75	3/8"	1/4"	S	-	-
SILAE4460N-FZ	620	770	950	1150	1370	1610	1890	860	1.75	28	1300	0.75	3/8"	1/4"	S	-	-
SILAJ4461N-TX	610	800	1010	1250	1530	1850	2210	880	1.84	28	1300	0.75	1/2"	3/8"	S	-	2.8
SILAJ4476N-FZ	710	910	1150	1410	1720	2060	2450	1010	1.72	28	1300	0.75	1/2"	3/8"	S	7.4	-
SILAJ4492N-FZ	890	1140	1430	1740	2100	2480	2900	1270	1.74	28	1300	1.50	1/2"	3/8"	S	9.1	-
SILAJ4492N-TX	890	1140	1430	1760	2110	2500	2930	1270	1.90	28	1300	1.50	1/2"	3/8"	S	-	3.7
SILAJ4511N-FZ	1130	1430	1780	2170	2600	3080	3600	1600	1.92	28	1300	1.50	1/2"	3/8"	S	8.8	-
SILAJ4511N-TX	1130	1430	1780	2170	2610	3100	3640	1600	1.83	28	1300	1.50	1/2"	3/8"	S	-	4.4
SILAJ4513N-FZ	1160	1480	1830	2230	2680	3170	3710	1650	1.85	28	1300	1.50	1/2"	3/8"	S	10.9	-
SILFH4518N-XC	1620	2070	2610	3220	3920	4700	5580	2310	2.00	33	2900	1.50	5/8"	3/8"	M	13.0	-
SILFH4518N-TX	1530	1980	2490	3080	3750	4490	5320	2200	2.12	33	2900	1.50	5/8"	3/8"	M	-	4.5
SILFH4525N-XC	2070	2620	3260	3990	4810	5730	6760	2920	2.06	33	2900	1.50	5/8"	3/8"	M	16.8	-
SILFH4525N-TX	2010	2540	3150	3840	4620	5490	6470	2830	2.10	34	2900	1.50	5/8"	3/8"	M	-	6.2
SILAG4528N-TX	2160	2890	3740	4690	5750	6930	8230	3220	1.88	35	3115	3.90	7/8"	1/2"	M	-	11.9
SILAG4534N-TX	2510	3310	4210	5230	6350	7590	8970	3690	1.88	35	3115	3.90	7/8"	1/2"	M	-	11.2
SILAG4537N-TX	2950	4020	5310	6810	8500	10400	12560	4490	2.20	34	3115	3.90	7/8"	1/2"	M	-	11.6
SILAG4543N-TX	3350	4330	5440	6680	8040	9530	11170	4840	1.88	44	4870	3.90	7/8"	1/2"	M	-	12.8
SILAG4547N-TX	3885	4990	6240	7620	9140	10780	12540	5570	2.46	39	4000	3.90	7/8"	1/2"	M+	-	12.8

REFRIGERATING PERFORMANCE

POSITIVE COLD (MHBP)

PRODUCT DESIGNATION	COOLING CAPACITY (W), R-455A* 32°C AMB.T°, 10K SUPERHEAT, 3K SUBCOOL, EVAPORATION TEMPERATURE (°C)							CONDITIONS EN13215 AT -10°C		SOUND PRES- SURE AT 10M (dB(A))	VENT. FLOW (m³/h)	RES. VOL. (L)	PIPE Ø		SIZE	MAX. CURRENT (A)	
	-25	-15	-10	-5	0	5	15	PERF. (W)	COP (W/W)				SUCT.	DISCH.		FZ (OR XC)	TX
	SILAE4450P-FZ	390	620	770	940	1140	1380	1940	800				1.76	28		1300	0.75
SILAE4460P-FZ	460	720	890	1080	1310	1570	2190	930	1.78	28	1300	0.75	3/8"	1/4"	S	-	-
SILAE4470P-FZ	540	830	1020	1240	1500	1800	2500	1070	1.70	28	1300	0.75	3/8"	1/4"	S	-	-
SILAJ4480P-FZ	500	890	1140	1420	1750	2110	3000	1200	1.78	29	1300	1.50	1/2"	3/8"	S	6.1	-
SILAJ4480P-TX	500	890	1130	1410	1730	2100	3010	1190	1.74	29	1300	1.50	1/2"	3/8"	S	-	3.1
SILAJ4510P-FZ	600	1060	1340	1660	2030	2450	3480	1410	1.70	28	1300	1.50	1/2"	3/8"	S	7.7	-
SILAJ4510P-TX	660	1120	1410	1730	2110	2530	3550	1490	1.77	28	1300	1.50	1/2"	3/8"	S	-	3.6
SILAJ4513P-FZ	720	1320	1690	2120	2620	3180	4570	1780	1.80	28	1300	1.50	1/2"	3/8"	S	10.2	-
SILAJ4513P-TX	650	1280	1660	2100	2600	3170	4560	1750	1.76	28	1300	1.50	1/2"	3/8"	S	-	3.8
SILAJ4517P-FZ	760	1430	1840	2310	2830	3420	4850	1950	1.76	28	1300	2.35	1/2"	3/8"	S	11.3	-
SILAJ4517P-TX	820	1510	1920	2370	2870	3430	4760	2030	1.86	28	1300	2.35	1/2"	3/8"	S	-	4.3
SILAJ4519P-FZ	1040	1860	2370	2940	3580	4290	5840	2500	1.83	29	1300	2.35	1/2"	3/8"	S	16.5	-
SILAJ4519P-TX	1060	1900	2410	2990	3640	4350	5900	2550	1.76	28	1300	2.35	1/2"	3/8"	S	-	5.5
SILFH4524P-XC	1252	2397	3091	3874	4755	5741	8084	3263	2.06	33	3110	2.35	5/8"	3/8"	M	17	-
SILFH4524P-TX	1280	2370	3040	3800	4660	5640	7960	3210	2.08	33	3110	2.35	5/8"	3/8"	M	-	8
SILFH4532P-XC	1570	2980	3830	4780	5840	7020	9780	4040	2.18	33	3110	3.9	7/8"	1/2"	M	20.4	-
SILFH4532P-TX	1460	2810	3620	4550	5590	6760	9490	3820	2.13	33	3110	3.9	7/8"	1/2"	M	-	8.5
SILFH4538P-XC	2010	3640	4610	5710	6940	8330	11660	4870	1.96	34	3110	3.9	7/8"	1/2"	M	25.2	-
SILFH4538P-TX	2140	3740	4710	5790	7000	8340	11500	4980	2.08	34	3110	3.9	7/8"	1/2"	M	-	9.2
SILFH4544P-TX	2190	4030	5130	6290	7420	8910	12500	5660	2.71	43	4870	3.9	7/8"	1/2"	M	-	12.7
SILAG4553P-TX	2065	4360	5770	7370	9160	11130	15650	6091	2.61	43	4000	3.9	7/8"	5/8"	M+	-	14.9
SILAG4561P-TX	2810	5340	6880	8630	10590	12750	17690	7276	2.55	43	4000	6	7/8"	5/8"	M+	-	15.9
SILAG4568P-TX	2950	5710	7360	9210	11240	13480	18630	7793	2.54	41	4000	6	7/8"	5/8"	M+	-	17.6
SILAG4573P-TX	3570	6620	8440	10470	12720	15210	20970	8920	2.55	45	5400	6	1"1/8"	5/8"	M+	-	20.5
SILAG4581P-TX	4180	7380	9310	11470	13890	16580	22860	9856	2.48	45	5400	6	1"1/8"	5/8"	M+	-	21.1

* For other refrigerants, refer to the selection software downloadable at www.tecumseh.com.



THE ACOUSTIC REFERENCE
FOR HOUSED UNITS.
ENHANCED BY ENERGY RECOVERY
OPTION FOR IMPROVED RETURN
ON END USER CAPEX.



DIMENSIONS/WEIGHT

POSITIVE COLD (MHBP)

R-1234yf

PRODUCT DESIGNATION	SIZE	HEAT RECOVERY CONNECTIONS FOR EXT. DIA. TUBE	NET WEIGHT (KG)	GROSS WEIGHT (KG)
SILAE4450N-FZ	S	-	58	75
SILAE4460N-FZ	S	-	58	75
SILAJ4461N-TX	S	-	65	82
SILAJ4476N-FZ	S	-	65	82
SILAJ4492N-FZ	S	-	69	86
SILAJ4492N-TX	S	-	69	86
SILAJ4511N-FZ	S	-	71	88
SILAJ4511N-TX	S	-	71	88
SILAJ4513N-FZ	S	-	72	89
SILFH4518N-XC	M	3/8" - 9.52	9.52	108
SILFH4518N-TX	M	3/8" - 9.52	9.52	108
SILFH4525N-XC	M	3/8" - 9.52	9.52	108
SILFH4525N-TX	M	3/8" - 9.52	9.52	108
SILAG4528N-TX	M	1/2" - 12.7	9.52	127
SILAG4534N-TX	M	1/2" - 12.7	101	127
SILAG4537N-TX	M	1/2" - 12.7	101	127
SILAG4543N-TX	M	1/2" - 12.7	103	138
SILAG4547N-TX	M+	5/8" - 15.87	118	153

NEGATIVE COLD (LBP)

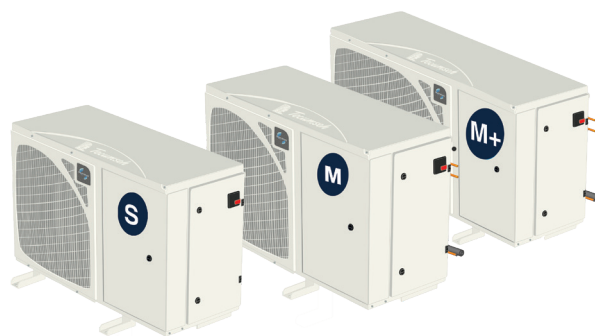
R-455A / R-454C

PRODUCT DESIGNATION	SIZE	HEAT RECOVERY CONNECTIONS FOR EXT. DIA. TUBE	NET WEIGHT (KG)	GROSS WEIGHT (KG)
SILAJ2432P-FZ	S	-	66	85
SILAJ2440P-FZ	S	-	67	86
SILAJ2446P-FZ	S	-	68	87
SILAJ2446P-TX	S	-	68	87
SILAJ2464P-FZ	S	-	69	88
SILAJ2464P-TX	S	-	69	88
SILFH2480P-XC	M	3/8" - 9.52	85	111
SILFH2480P-TX	M	3/8" - 9.52	85	111
SILFH2511P-XC	M	3/8" - 9.52	86	112
SILFH2511P-TX	M	3/8" - 9.52	86	112
SILAG2516P-TX	M	3/8" - 9.52	106	132
SILAG2519P-TX	M	3/8" - 9.52	106	132
SILAG2522P-TX	M	3/8" - 9.52	108	134
SILAG2525P-TX	M	3/8" - 9.52	108	134

POSITIVE COLD (MHBP)

R-455A / R-454C

PRODUCT DESIGNATION	SIZE	HEAT RECOVERY CONNECTIONS FOR EXT. DIA. TUBE	NET WEIGHT (KG)	GROSS WEIGHT (KG)
SILAE4450P-FZ	S	-	57	76
SILAE4460P-FZ	S	-	58	77
SILAE4470P-FZ	S	-	58	77
SILAJ4480P-FZ	S	-	67	86
SILAJ4480P-TX	S	-	67	76
SILAJ4510P-FZ	S	-	71	77
SILAJ4510P-TX	S	-	71	77
SILAJ4513P-FZ	S	-	71	86
SILAJ4513P-TX	S	-	71	86
SILAJ4517P-FZ	S	-	71	90
SILAJ4517P-TX	S	-	71	90
SILAJ4519P-FZ	S	-	72	90
SILAJ4519P-TX	S	-	72	90
SILFH4524P-XC	M	3/8" - 9.52	82	87
SILFH4524P-TX	M	3/8" - 9.52	82	87
SILFH4532P-XC	M	3/8" - 9.52	90	95
SILFH4532P-TX	M	3/8" - 9.52	90	95
SILFH4538P-XC	M	3/8" - 9.52	90	95
SILFH4538P-TX	M	3/8" - 9.52	90	95
SILFH4544P-TX	M	3/8" - 9.52	90	113
SILAG4553P-TX	M+	5/8" - 15.87	120	150
SILAG4561P-TX	M+	5/8" - 15.87	121	151
SILAG4568P-TX	M+	5/8" - 15.87	123	153
SILAG4573P-TX	M+	5/8" - 15.87	125	158
SILAG4581P-TX	M+	5/8" - 15.87	125	158



Heat recovery connections are available on standard condensing units, on M and M+ chassis.

SIZE	L (mm)	H (mm)	D (mm)
S	953	837	654
M	1174	837	654
M+	1400	830	654

