

SILENSYS[®] ADVANCED

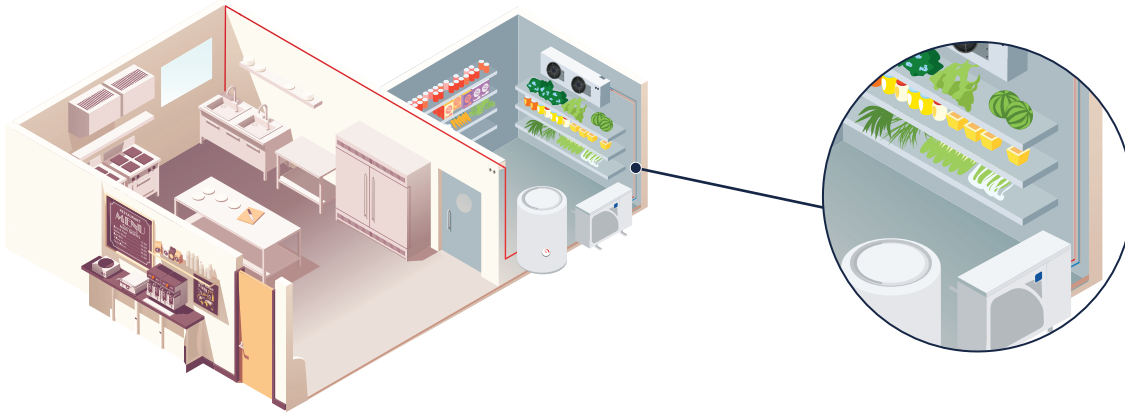
APPROVED FOR A2L FLUIDS,
 COMPATIBLE WITH A1 MID GWP FLUIDS
 SILENSYS ADVANCED FH AND AG WITH HEAT RECOVERY CONNECTIONS



SILENSYS ADVANCED A2L COMPATIBLE A1 QUIET, DURABLE, ENERGY-SAVING.

SILENSYS ADVANCED using 'FH' and 'AG' compressor platforms will now be equipped with heat recovery connections to allow partial or total recovery depending on heating or domestic hot water needs. Use Heat Recovery as part of valuable energy saving and improved system payback.

EXAMPLES OF INSTALLATIONS



Hotels



Butcher shops



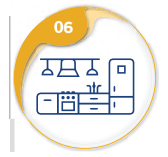
Fast Food Restaurants



Food Laboratories



Convenience stores



Pro. Kitchens

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.

ACOUSTIC REFERENCE

- High performance soundproofing of the compressor compartment.
- Silent dilution fan.

GENEROUS SIZING OF THE CONDENSING SUB-ASSEMBLY

- Operation in 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.

EASY ACCESSIBILITY & ASSEMBLY

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

A2L A2L-A1 COMPATIBILITY OF REFRIGERANTS

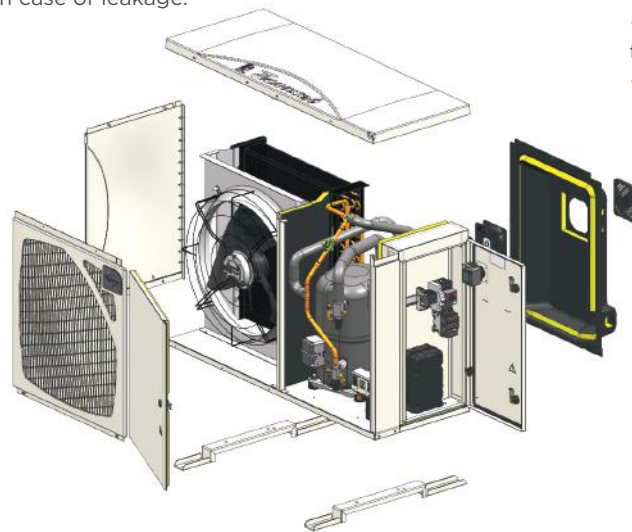
- Facilitates ecological and product transition.
- One product for all requirements.

HEAT RECOVERY

- Provided with connections for system integration to partial or total heat recovery.
- Eligible for the CEE premium.

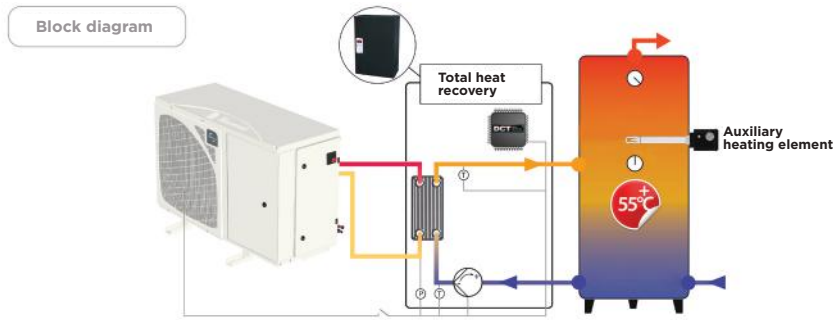
PROTECTIVE PACKAGING

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

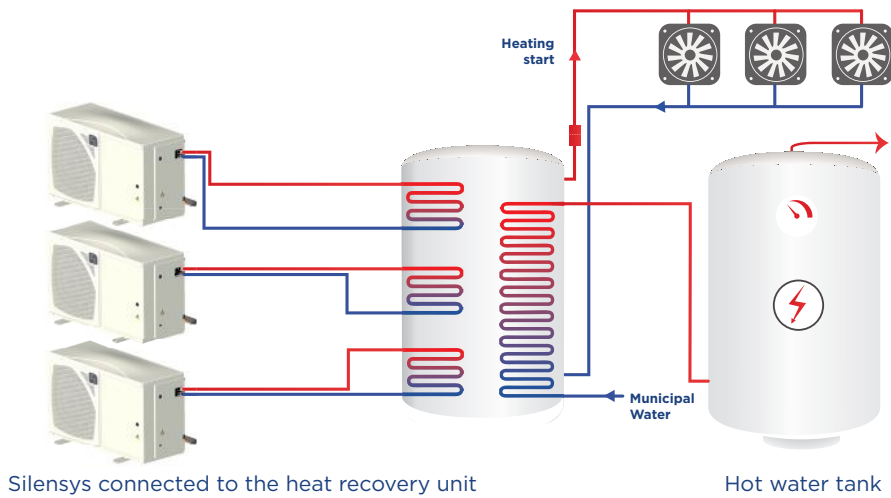


SILENSYS PRODUCTS AND SYSTEMS

HEAT RECOVERY SYSTEMS



Silensys connected to a plate heat exchanger before an auxiliary heating tank.



Silensys connected to the heat recovery unit

Hot water tank

HEAT RECOVERY UNITS ARE ELIGIBLE FOR THE CEE PREMIUM:

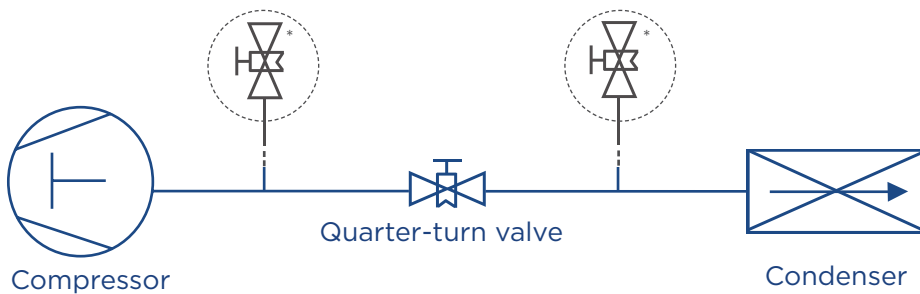
- Industry data sheet: IND-UT-117
- Tertiary data sheet: BAT-TH-139

www.prime-cee.fr

THE PRODUCT CONTRIBUTES TO ACHIEVING THE THRESHOLD OF THE RE2020 REGULATION:

For new buildings subject to the RE2020, the installation of a heat recovery unit is taken into account in the thermal calculation software.

SCHEMATIC DIAGRAM :



*Valve not included



EXAMPLE OF GAIN WITH A SILFH4524P-TX:

- Recoverable heat: 5585 Watts
- Possible domestic hot water heating: 825 l /Day
- Possible annual savings: 10309 kWh or 2577 euros

HYPOTHÈSES

- 250D/year, daily consumption = 800 l /D, water heated from 12 to 55°C
- Power output * Correction factor * 12h/D * 3600/ (55°-12°)
- Price 0.25 euros kw/h

PRODUCT RANGE AND POTENTIAL SAVINGS

Application	Products selected	Recoverable power (Watt)	Water heating available (l/h)	Possible annual recoverable heat (kWh)	Possible 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

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**.

REFRIGERATING PERFORMANCE

NEGATIVE COLD (BP)



MODEL	REFRIGERATING PRODUCTION, R-455A* 32°C ambient, 10K superheat, 3K sub-ref, Mid/Mid Evaporating temperature (°C):						REFRIG. PROD. EN13215 To -35°C		Sound pressure at 10 m dB(A)	Vent. flow m3/h	Res. Vol. L	Pipe Diam.		Chassis	Max. current A	
	-35°	-30°	-25°	-20°	-15°	-10°	Perf. (W)	COP (W/W)				Suction	Liq. disch		FZ (or XC)	TX
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	/	2,9
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 more information on power ratings, please refer to the selection software available for download at <https://www.tecumseh.com>

REFRIGERATING PERFORMANCE

POSITIVE COLD (MHP)

MODEL	REFRIGERATION PRODUCTION 32°C ambient, 10K superheat, 3K sub-ref. Evaporation temperature (°C):							REFRIG. PROD. EN13215 To -10°C		Sound pressure at 10 m dB(A)	Vent. flow m3/h	Vol. Rés. L	Pipe diameter		Chassis	Max. current A	
	-15°	-10°	-5°	0°	5°	10°	15°	Perf. (W)	COP (W/W)				Suct.	Liq. dep.		FZ	TX
SILAE4450N-FZ	560	710	870	1060	1270	1510	1770	790	1,89	28	m3/h	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	/
SILAJ4461N-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
SILAJ4511N-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	/
SILAJ4511N-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

REFRIGERATING PERFORMANCE

POSITIVE COLD (MHBP)

MODEL	REFRIGERATION PRODUCTION, R-455A* 32°C ambient, 10K superheat, 3K sub-ref, Mid/Mid Evaporating temperature (°C):							REFRIG.PROD. EN13215 To -10°C		Sound pr. at 10m dB(A)	Vent. flow m3/h	Res. Vol. L	Pipe diameter		Chassis	Max. current A	
	-25°	-15°	-10°	-5°	0°	5°	15°	Perf. (W)	COP (W/W)				Suct.	Liq. Dep		FZ (ou XC)	TX
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 - 1"1/8"	15,9 - 5/8"	M+	/	20,5
SILAG4581P-TX	4180	7380	9310	11470	13890	16580	22860	9856	2,48	45,00	5400	6	28,6 - 1"1/8"	15,9 - 5/8"	M+	/	21,1

* For other refrigerants, refer to the selection software downloadable at <https://www.tecumseh.com>



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



DIMENSIONS/WEIGHT

POSITIVE COLD (MHP)

R-1234yf



MODEL	Base	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

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

CHASSIS	L (mm)	H (mm)	Depth. (mm)
S	953	837	654
M	1174	837	654
M+	1400	830	654

POSITIVE COLD (BP)

R-455A / R-454C

NEGATIVE COLD (LBP)

R-455A / R-454C

MODEL	Base	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

MODEL	Base	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



Tecumseh

TECUMSEH COMPRESSOR COMPANY LLC

Subsidiary of Tecumseh Products Company LLC

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