APPLICATION POCKET GUIDE

WWW.TECUMSEH.COM

WATERCOOLERS

Capacity (Liters/Hour)	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan motor (watts / HP) XRpm	Evpaorator (Outer Dia (inch) Xlength(Feet) X no of Circuits	Capillary (Bore dia in Inches) X Ft X nos
10-15	THK0384YCG/THK9384YCG	R134a	9"X9"X2	8"	10 w , (1/83)X1300	5/16"x22'x1	0.036"X6'X1
15-20	THK0410YGE/ THK4420YGE/THK9410YGE	R134a	9"X9"X2	8"	10 w , (1/83)X1300	5/16"x25'x1	0.036"X8'X1
20-25	THK9414YGS/THK4428YFS	R134a	10"X10"X2	8"	10 w , (1/83)X1300	5/16"x25'x1	0.036"X9'X1
30 -35	THK9417YJE/THK4430YGS	R134a	10"X11"X2	10"	10 w , (1/83)X1300	3/8"X30'X1	0.044"X8'X1
40	AE4440YGH	R134a	11"X11"X 3	10"	10 w , (1/83)X1300	3/8"X50'X1	0.044"X10'X1
60	AE4460YGH	R134a	12"X12"X 3	10"	10 w , (1/83)X1300	3/8"X65X1	0.050"X9"X1
80	TYA4475YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X90'X1	0.055"X11'X1
100	TYA4489YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X100'X1	0.060"x10'X1
100-120	TYA9467EKS	R22	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X50'X2	0.055"X4'X2
150	AWQ5515EGE	R22	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X60'X2	0.064"X4'X2
150	AWS4515YJE *	R134a	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X60'X2	0.064"X6'X2
200	AWQ5522EGE	R22	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X90'X2	0.075"X4'X2
200	AWS4518YXC	R134a	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X90'X2	0.064"X6'X2
300	AWR5530EGH	R22	22"X22"X 4	17.5"	250w, (1/3)X1380	3/8"X115'X2	0.075"X6'X2
300	AWS4525YXC	R134a	22"X22"X 4	17.5"	250w, (1/3)X1380	3/8"X115'X2	0.075"X8'X2

Condenser Fins per Inch need to be about 10-12 FPI
* PSC type with Run capacitor is ok for this application
Capacity Rating approximated in reference with IS1475
Amanient Temperature of 35 Deg C

System Parameters need to be maintained	Suction Pressure (Psig)	Discharge Pressure (Psig)	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
R134a (35 Deg C Ambient)	33- 37	160 -170	18-22	<=80
R22 (35 Deg C Ambient)	68- 70	260-280	18-22	<=80
R134a (43 Deg C Ambient)	40- 45	190 -225	20-25	<=85-90
R22 (43 Deg C Ambient)	75- 80	290- 320	20-25	<=85-90

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

VISI COOLERS

Cabinet Volume (Liters)	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan motor (watts / HP) XRpm	Evpaorator (Outer Dia (inch) Xwidth (inch) X Height (Inch) X no of rows	Capillary (Bore dia in Inches)X Ft X nos
100	THK9384YCG	R134a	9"X9"X2	8"	10 w , (1/83)X1300	3/8"X10"X8"X2'	0.036"X6'X1
150	THK9410YGE	R134a	9"X9"X2	8"	10 w , (1/83)X1300	3/8"X11"X10"X2	0.036"X8'X1
200	THK9412YJE	R134a	9"X9"X2	8"	10 w , (1/83)X1300	3/8"X11"X10"X2	0.036"X8'X1
300-400	THK9414YGS	R134a	10"X10"X2	8"	10 w , (1/83)X1300	3/8"X11"X10"X2	0.036"X9'X1
400-500	THK9417YJE	R134a	10"X11"X2	10"	10 w , (1/83)X1300	3/8"X13"X8"X2	0.044"X8'X1
500-800	AE4440YGH	R134a	11"X11"X 3	10"	10 w , (1/83)X1300	3/8"X13"X8"X2	0.044"X10'X1
800- 1000	AE4460YGH	R134a	12"X12"X 3	10"	10 w , (1/83)X1300	3/8"X15"X8"X2	0.050"X9'X1
1000- 1200	TYA4475YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X15"X9"X3	0.055"X11'X1
1200- 1500	TYA4489YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X17"X11"X3	0.060"x10'X1

Condenser Fins per Inch need to be about 10-12 FPI

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

System Parameters need to be maintained

System Parameters need to be maintained	Suction Pressure (Psig)	Discharge Pressure (Psig)	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
R134a (40 Deg C Ambient)	18- 20	180 -210	18-22	<= 85- 90

The capacity is rated for 40 Deg C (Coke -D) Condition , minimum insulation of 40mm PUF, Low E glass
Suitable Evaporator fan motor need to be used

BOTTLE COOLERS(CHEST)

Capacity (Liters)	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan motor (watts / HP) XRpm	Evpaorator (Outer Dia (inch) X length (Feet)X no of Circuits	Capillary (Bore dia in Inches)X Ft X nos
100	THK9384YCG	R134a	9"X9"X2	8"	10 w , (1/83)X1300	5/16"X25X1	0.036"X6'X1
100-120	THK9410YGE	R134a	9"X9"X2	8"	10 w , (1/83)X1300	5/16"X35'X1	0.036"X5'X1
150	THK9414YGS	R134a	10"X10"X2	8"	10 w , (1/83)X1300	3/8"X40'X1	0.036"X9'X1
150	AE4425ZFZ	R404a	10"X10"X2	8"	10 w , (1/83)X1300	3/8"X40'X1	0.044"X10'X1
225	THK9417YJE	R134a	10"X11"X2	10"	10 w , (1/83)X1300	3/8"X45'X1	0.044"X8'X1
225	AE4430ZFZ	R404a	10"X11"X2	10"	10 w , (1/83)X1300	3/8"X45'X1	0.044"X8'X1
250	AE4440YGH	R134a	11"X11"X 3	10"	10 w , (1/83)X1300	3/8"X55'X1	0.044"X10'X1
250	AE4440ZFZ	R404a	11"X11"X 3	10"	10 w , (1/83)X1300	3/8"X55'X1	0.050"X12'X1
350	AE4460YGH	R134a	12"X12"X 3	10"	10 w , (1/83)X1300	3/8"X80X1	0.050"X9'X1
350	AE4460ZFZ	R404a	12"X12"X 3	10"	10 w , (1/83)X1300	3/8"X80X1	0.055"X8'X1
500-550	TYA4475YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X85'X2	0.055"X8'X2
550-550	AE4470Z-FZ	R404a	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X85'X2	0.055"X6'X2
650-800	TYA4489YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X75'X2	0.060"x10"X2

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

System Parameters need to be maintained	Suction Pressure (Psig)	Discharge Pressure (Psig)	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
R134a (40 Deg C Ambient)	15- 18	180 -200	18-22	<= 85- 90
R404a (40 Deg C Ambient)	50-54	320-340	18-22	<= 85- 90

The capacity is rated for 40 Deg C (Coke -D) Condition , minimum insulation of 40mm PUF

PANEL COOLERS

Panel Cooler capacity in Watts	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan motor (watts / HP) XRpm	Evpaorator (Outer Dia3/8 (inch) Xwidth(inch)X Height (Inch)X no of rows	Capillary (Bore dia in Inches) X Ft X nos
400-500	THK4420YGE	R134a	9"X9"X2	8"	10 w , (1/83)X1300	9"X5"X4	0.040"X4'X1
500-700	THK4428YFS	R134a	10"X10"X2	8"	10 w , (1/83)X1300	9"X5"X4	0.050"X10'X1
700-800	THK4430YGS	R134a	10"X11"X2	10"	10 w , (1/83)X1300	8"X7"X3	0.050"X8'X1
800-1000	AE4440YGH	R134a	11"X11"X 3	10"	10 w , (1/83)X1300	9"x4"X4	0.050"X6'X1
1000-1500	AE4460YGH	R134a	12"X12"X 3	10"	10 w , (1/83)X1300	9"x4"X5	0.055"X5'X1
1500-2000	TYA4475YKS	R134a	14"X14"X 4	12"	16 w, (1/47)X1300	11"X6"X3	0.060"X4'X1
2000-2500	TYA4489YKS	R134a	14"X14"X 4	12"	16 w, (1/47)X1300	11"X6"X4	0.064"X3'X1
2500-3500	AWS4515YJE	R134a	22"X18"X 4	14"	140 w,(3/16)X1380	14"X6"X3	0.070"X4'X1
2500-3500	AWQ5515EGE	R22	22"X18"X 4	14"	140 w,(3/16)X1380	14"X6"X3	0.060"X4'X2
2500-3500	AWR4514CGE	R407C	22"X18"X 4	14"	140 w,(3/16)X1380	14"X6"X3	0.060"X4'X2
3500-4500	AWS4518YXC	R134a	22"X18"X 4	14"	140 w,(3/16)X1380	14"X8"X3	0.064"X4'X2
3500-5000	AWQ5522EGE	R22	22"X18"X 4	14"	140 w,(3/16)X1380	14"X8"X3	0.065"X5'x2
3500-5000	AWR4522CGH	R407C	22"X18"X 4	14"	140 w,(3/16)X1380	14"X8"X3	0.065"X5'x2
4500-6000	AWS4525YXC	R134a	22"X22"X 4	18"	250w, (1/3)X1380	14"X10"X4	0.075"X5'X2
5000-7000	AWR4530CGH	R407C	22"X22"X 4	18"	250w, (1/3)X1380	14"X10"X4	0.080"X6'X2
5000-7000	AWR5530EGH	R22	22"X22"X 4	18"	250w, (1/3)X1380	15"x10"x4	0.080"X6'X2

To maintain 28 Deg C Inside the Pane at an outdoor ambient of 35 DegC

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

System Parameters need to be maintained

35 Deg C	Suction Pressure PSIG	Discharge Pressure PSIG	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
R134a	40-45	160 -180	20-25	<= 80- 90
R22	65-70	250- 280	20-25	<= 80- 90
R407c	65-70	250- 280	20-25	<= 80- 90

Please select suitable Evaporator Fan motor for the panel cooler

BOD

CFT	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan motor (watts / HP) XRpm
4	THK4420YGE	R134a	11"X11"X 3	8"	10 w , (1/83)X1300
6	THK4428YFS	R134a	12"X12"X 3	10"	10 w , (1/83)X1300
8-10	AE4440YGH	R134a	12"X12"X 3	10"	10 w , (1/83)X1300
11-15	AKR4460YGH	R134a	12"X12"X 3	10"	10 w , (1/83)X1300
16-20	TYA4475YKS	R134a	14"X14"X 4	12"	16 w, (1/47)X1300
21-30	TYA4489YKS	R134a	14"X14"X 4	12"	16 w, (1/47)X1300

Suction Pressure (Psig)	Discharge Pressure (Psig)	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
18- 20	180 -210	18-22	<= 85- 90

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

WATER CHILLERS

Flow rate (LPH)	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan motor (watts / HP) XRpm	Evpaorator (Outer Dia (inch) Xlength In Feet X no of circuits (Coil in tank type)	TXV
600	AWS4515YJE	R134a	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X60'X2	T2 : Orifice no 3
600	AWS4516ZXN	R404a	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X60'X2	T2 : Orifice no 2
600	AWR4514CGE	R407C	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X60'X2	T2 : Orifice no 1
600	AWQ5515EGE	R22	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X60'X2	T2 : Orifice no 1
800	AWQ5522EGE	R22	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X90'X2	T2 : Orifice no 2
800	AWR4522CGH	R407C	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X90'X2	T2 : Orifice no 2
800	AWS4518YXC	R134a	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X90'X2	T2 : Orifice no 3
800	AWS4522ZXG	R404a	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X90'X2	T2 : Orifice no 3
1000	AWS4532ZXG	R404a	22"X22"X 4	18"	250w, (1/3)X1380	3/8"X105'X2	T2 : Orifice no 4
1000	AWS4525YXG	R134a	22"X22"X 4	18"	250w, (1/3)X1380	3/8"X105'X2	T2 : Orifice no 4
1000	AWR5530EGH	R22	22"X22"X 4	18"	250w, (1/3)X1380	3/8"X105'X2	T2 : Orifice no 3
1000	AWR4530CGH	R407C	22"X22"X 4	18"	250w, (1/3)X1380	3/8"X105'X2	T2 : Orifice no 3
1500	AWR5535EGH	R22	20"X20"X5	18"	250w, (1/3)X1380	3/8"X75'X4	T2 : Orifice no 3
1500	AWR4535CXC	R407C	20"X20"X5	18"	250w, (1/3)X1380	3/8"X75'X4	T2 : Orifice no 3
1500	AWS4538ZXG	R404a	20"X20"X5	18"	250w, (1/3)X1380	3/8"X75'X4	T2 : Orifice no 5
1600	AWZ5542EXG	R22	38"X20"X3	18"	250w,(/1/3)X1380X2 nos	3/8"X75'X4	T2 : Orifice no 4
1600	AWS4544ZXG	R404a	38"X20"X3	18"	250w,(/1/3)X1380X2 nos	3/8"X75'X4	T2 : Orifice no 5
1600	AWR4540CGF	R407C	38"X20"X3	18"	250w,(/1/3)X1380X2 nos	3/8"X75'X4	T2 : Orifice no 4
2500	TAG4573Z	R404a	38"X20"X5	18"	250w,(/1/3)X1380X2 nos	1/2"X140'X4	TE-5 : orifice no 3
3000	TAG4581Z	R404a	38"X20"X5	18"	250w,(/1/3)X1380X2 nos	1/2"X145'X4	TE-5 : orifice no 3

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

Water inlet Deg C	15
Water outlet Deg C	10

Evaporators for Plate heat exchangers , Shell and tube type need to select suitable model
For Plate heat exchanger and Shell and tube type it's advised that a water flow switch need to be installed to avoid icing of PHE and liquid flood back to compressor in case of no water flow

System Parameters need to be maintained	Suction Pressure PSIG	Discharge Pressure PSIG	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
R134a Ambient 43° C	32-36	190 -225	20-25	<= 85- 90
R22 Ambient 43° C	65-70	290- 320	20-25	<= 85- 90
R407C Ambient 43° C	65-70	290- 320	20-25	<= 85- 90
R404a Ambient 43° C	84-90	330-340	20-25	<= 85- 90

ICE CUBES

Ice Cubes (Kg/ Day)	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inch)	Condenser Fan motor (watts / HP) XRpm
12	THK9410YGE	R134a	9"X9"X2	8"	10 w , (1/83)X1300
20	AE4425Z-FZ	R404a	10"X10"X2	8"	10 w , (1/83)X1300
25	AE4430Z-FZ	R404a	10"X11"X2	8"	10 w , (1/83)X1300
25	THK9417YJE	R134a	10"X11"X2	10"	10 w , (1/83)X1300
30	AE4440Z-FZ	R404a	11"X11"X 3	10"	10 w , (1/83)X1300
30	AE4440YGH	R134a	11"X11"X 3	10"	10 w , (1/83)X1300
45	AE4460Z-FZ	R404a	12"X12"X 3	10"	10 w , (1/83)X1300
45	AE4460YGH	R134a	12"X12"X 3	10"	10 w , (1/83)X1300
60	AE4470Z-FZ	R404a	14"X14"X 4	10"	16 w, (1/47)X1300
65	TYA4475YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300
70	TYA4489YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300
85	TYA9456ZKS	R404a	14"X14"X 4	10"	16 w, (1/47)X1300
90	TYA9472ZKS	R404a	22"X18"X 4	14"	16 w, (1/47)X1300
125	AWS4516ZXN	R404a	22"X18"X 4	14"	140 w,(3/16)X1380
150	AWS4522ZXN	R404a	22"X18"X 4	14"	140 w,(3/16)X1380
250	AWS4532ZXN	R404a	22"X22"X 4	18"	250w, (1/3)X1380
350	AWS4538ZXN	R404a	20"X20"X5	18"	250w, (1/3)X1380
400	AWS4544ZXG	R404a	38"X20"X3	18"	250w, (1/3)X1380
550	TAG4573Z	R404a	38"X20"X5	18"	250w,(/1/3)X1380X2 nos
650	TAG4581Z	R404a	38"X20"X5	18"	250w,(/1/3)X1380X2 nos

Water Inlet temp	15 -20	Deg C	-
Ambient	25-30	Deg C	Maximum 32 Deg C

Exceeding the Above Water Inlet and Ambient temperatures will reduce the ice Production Kg/24 hours or hardness

Suitable Evaporator need to be used ,Use of Accumulator is mandatory to avoid liquid flood back during the Ice cube Harvest Cycle the Ice production capacities Kg/24 H are not the same for Cube Ice Machine and Flake Ice Machines

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

System Parameters (R404a)	32 Deg C
Suction Pressure (Psig)	45-50
Discharge Pressure (Psig)	280-300
Discharge temperature (Deg C)	<= 70-80
Return Gas temperature(Deg C)	10 to 20

System Parameters (R134a)	32 Deg C
Suction Pressure (Psig)	14-18
Discharge Pressure (Psig)	160-170
Discharge temperature (Deg C)	<= 70-80
Return Gas temperature(Deg C)	10 to 20

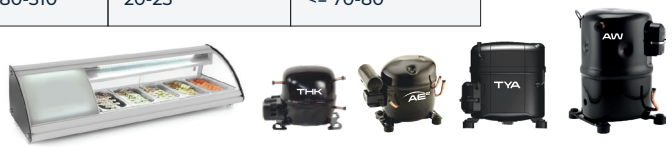
DISPLAY CASES

Running Feet	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan motor (watts / HP) XRpm	Evpaorator (Outer Dia (inch)Xwidth(inch) X Height (Inch)X no of rows/Static (Outer dia inchesX Length ft X no of Circuits)	Capillary (Bore dia in Inches)X Ft X nos
3	THK9417YJE	R134a	10"X11"X2	10"	10 w , (1/83)X1300	3/8"X18"X5"X3 / Static (3/8"X30ft)	0.044"X8'X1
3	AE4430ZFZ	R404a	10"X11"X2	10"	10 w , (1/83)X1300	3/8"X18"X5"X3 / Static (3/8"X30ft)	0.044"X5'X1
4	AE4440YGH	R134a	11"X11"X 3	10"	10 w , (1/83)X1300	3/8"X20"X5"X3 / Static (3/8"X55ft)	0.044"X7'X1
4	AE4440ZFZ	R404a	11"X11"X 3	10"	10 w , (1/83)X1300	3/8"X20"X5"X3 / Static (3/8"X55ft)	0.044"X4'X1
5	AE4460YGH	R134a	12"X12"X 3	10"	10 w , (1/83)X1300	3/8"X22"X5"X3/ Static (3/8"X90ft)	0.050"X9'X1
5	AE4460ZFZ	R404a	12"X12"X 3	10"	10 w , (1/83)X1300	3/8"X22"X5"X3/ Static (3/8"X90ft)	0.050"X7'X1
6	TYA4475YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X40"X5"X3/ Static (3/8"X50ftX2)	0.050"X8'X1 / 0.050"X9'X2
6	AE4470ZFZ	R404a	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X40"X5"X3/ Static (3/8"X50ftX2)	0.050"X6'X1/ 0.050"X7'X2
6	TYA9467EKS	R22	14"X14"X 4	10"	16 w, (1/47)X1300	3/8"X40"X5"X3/ Static (3/8"X50ftX2)	0.050"X5'X1/ 0.050"X6'X2
7-8	AWS4516ZXN	R404a	22"X18"X 4	14"	16 w, (1/47)X1300	3/8"X60"X5"X3/ Static(3/8"X70ftX2)	0.070"X6'X1/0.070"X7'X2
7-8	AWS4515YJE	R134a	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X60"X5"X3/ Static(3/8"X70ftX2)	0.070"X10'X1/0.070"X11'X2
7-8	AWQ5515EGE*	R22	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X60"X5"X3/ Static(3/8"X70ftX2)	0.064"X9'X1/0.064"X10X2
8-10	AWS4522ZXN	R404a	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X70"X10"X3/ Static (3/8"X100ftX2)	0.075"X7'X1/0.075"X8'X2
8-10	AWS4525YXC	R134a	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X70"X10"X3/ Static (3/8"X100ftX2)	0.075"X10'X1/0.075"X11'X2
8-10	AWQ5522EGE*	R22	22"X18"X 4	14"	140 w,(3/16)X1380	3/8"X70"X10"X3/ Static (3/8"X100ftX2)	0.075"X8'X1/0.075"X9'X2

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

35 Deg C	Suction Pressure PSIG	Discharge Pressure PSIG	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
R134a	18-20	160 -180	20-25	<= 70-80
R22	40-45	250- 280	20-25	<= 70-80
R404a	55-60	280-310	20-25	<= 70-80

* Please use Potential relay , start and run capacitor for this application (CSR)



43 Deg C	Suction Pressure PSIG	Discharge Pressure PSIG	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
R134a	18-20	190 -225	20-25	<= 85-90
R22	40-45	290- 320	20-25	<= 85-90
R404a	55-60	320-340	20-25	<= 85-90

All the compressors require mandatory airflow over them for cooling , hence please pass the condenser air out let on to compressor for this purpose

Please do not reverse the air flow (that is passing ambient air over compressor and feeding it to the condeser this will increase the discharge pressures and temperatures and can lead to failure of compressor due to over heat

COLD ROOMS POSITIVE

Cold room Capacity (CFT)	Room Temperature (Deg C)	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan motor (watts / HP) XRpm	Evpaorator / Tecumseh Unit cooler	TXV
500	+4 - +8	AWS4516ZXN	R404a	22"X18"X 4	14"	140 w,(3/16)X1380	TEM-H-2.5/9	T2- Orifice 2
500	+4 - +8	AWS4515EGE	R22	22"X18"X 4	14"	140 w,(3/16)X1380	TEM-H-2.5/9	T2- Orifice 1
500	+4 - +8	AWS4515YGE	R134a	22"X18"X 4	14"	140 w,(3/16)X1380	TEM-H-2.5/9	T2- Orifice 3
500	+4 - +8	AWR4514CGE	R407C	22"X18"X 4	14"	140 w,(3/16)X1380	TEM-H-2.5/9	T2- Orifice 1
800-1000	+4 - +8	AWS4524EGE	R22	22"X18"X 4	14"	140 w,(3/16)X1380	TEM-H-4.0/14	T2- Orifice 2
800-1000	+4 - +8	AWS4522ZXN	R404a	22"X18"X 4	14"	140 w,(3/16)X1380	TEM-H-4.0/14	T2- Orifice 3
800-1000	+4 - +8	AWS4518YXC	R134a	22"X18"X 4	14"	140 w,(3/16)X1380	TEM-H-4.0/14	T2- Orifice 3
800-1000	+4 - +8	AWR4522CGH	R407C	22"X18"X 4	14"	140 w,(3/16)X1380	TEM-H-4.0/14	T2- Orifice 2
1000-1500	+4 - +8	AWR4532EGH	R22	22"X22"X 4	18"	250w, (1/3)X1380	TEM-H-5.4/22	T2- Orifice 3
1000-1500	+4 - +8	AWS4532ZXN	R404a	22"X22"X 4	18"	250w, (1/3)X1380	TEM-H-5.4/22	T2- Orifice 3
1000-1500	+4 - +8	AWS4525YXC	R134a	22"X22"X 4	18"	250w, (1/3)X1380	TEM-H-5.4/22	T2- Orifice 3
1000-1500	+4 - +8	AWR4530CGH	R407C	22"X22"X 4	18"	250w, (1/3)X1380	TEM-H-5.4/22	T2- Orifice 3
1500-2000	+4 - +8	AWS4538EGF	R22	20"X20"X5	18"	250w, (1/3)X1380	TEM-H-7.4/22	T2- Orifice 3
1500-2000	+4 - +8	AWS4538ZXN	R404a	20"X20"X5	18"	250w, (1/3)X1380	TEM-H-7.4/22	T2- Orifice 4
1500-2000	+4 - +8	AWS4535CXC	R407C	20"X20"X5	18"	250w, (1/3)X1380	TEM-H-7.4/22	T2- Orifice 3
2000-2500	+4 - +8	AWS4542EXG	R22	38"X20"X3	18"	250w,(/1/3)X1380X2 nos	TEM-H-7.4/22	T2- Orifice 4
2000-2500	+4 - +8	AWS4544ZXG	R404a	38"X20"X3	18"	250w,(/1/3)X1380X2 nos	TEM-H-7.4/22	T2- Orifice 4
2000-2500	+4 - +8	AWR4540CGF	R407C	38"X20"X3	18"	250w,(/1/3)X1380X2 nos	TEM-H-7.4/22	T2- Orifice 4
4000- 4800	+4 - +8	TAG4573Z	R404a	38"X20"X5	18"	250w,(/1/3)X1380X2 nos	TEM-H-10.5/45	T2- Orifice 6
4800-5000	+4 - +8	TAG4581Z	R404a	38"X20"X5	18"	250w,(/1/3)X1380X2 nos	TEM-H-16.2/80	TE5- Orifice2

Cold room Insulation PUF 80mm Thick for walls and ceiling , 60 mm Puf slabs for the floor Ambient considered for Heat load estimation is +38 Deg C, With Anteroom of +20 Deg C

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer. Please use aircurtains at the entry of Cold room to minimize hot air infiltration

35 Deg C Ambient	Suction Pressure (Psig)	Discharge Pressure (Psig)	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
R134a	40-45	160 -180	10-15	<= 70-80
R22	45-50	250- 280	10-15	<= 70-80
R407c	45-50	250- 280	10-15	<= 70-80
R404a	55-60	280-310	10-15	<= 70-80

43 Deg C Ambient	Suction Pressure (Psig)	Discharge Pressure (Psig)	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
R134a	40-45	190 -225	15-20	<= 85-90
R22	45-50	290- 320	15-20	<= 85-90
R407c	45-50	290- 320	15-20	<= 85-90
R404a	55-60	320-340	15-20	<= 85-90

DEEP FREEZERS

Capacity: (Liters) Hard top	Capacity: (Liters) Glass top	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan blade dia (inch) X Fanmotor (watts / HP) XRpm	Evpaorator (Outer Dia (inch) X length (Feet) X no of Circuits	Capillary (Bore dia in Inches)X Ft X nos
70-100		THK1340YCF	R134a	9"X9"X2	8"	10 w , (1/83)X1300	5/16x25x1	0.031"x6x1
110 L (FOW)*		THK2390YJE	R134a	12"X12"X2	10"	10 w , (1/83)X1300	3/8X55X1	0.036"X10X1
150L (FOW)*		THK2411YGH	R134a	12"X12"X3	10"	10 w , (1/83)X1300	3/8"X65'X1	0.036"X11X1
100-150		THK1351YJF	R134a	9"X9"X2	8"	10 w , (1/83)X1300	5/16x32x1	0.031"x11x1
200-250		THK1365YCG	R134a	10"X10"X2	8"	10 w , (1/83)X1300	5/16x35x1	0.031"x10x1
250-300		THK1374YFS	R134a	10"X11"X2	8"	10 w , (1/83)X1300	5/16x35x1	0.031"x9x1
300-350	250	THK2390YJE	R134a	12"X12"X2	10"	10 w , (1/83)X1300	3/8X55X1	0.040"x10x1/'0.040"x11x1 (GT)
400-450	300	THK2411YGH	R134a	12"X12"X3	10"	10 w , (1/83)X1300	3/8X65X1	0.040"x11x1/'0.40"X12X1 (GT)
550	450	AE2415YGH	R134a	12"X12"X3	10"	10 w , (1/83)X1300	3/8X90X1	0.031"X8X1/'0.031X9X1 (GT)
550	450	AE2415ZFZ	R404A	12"X12"X3	10"	10 w , (1/83)X1300	3/8X90X1	0.036"X9X1/'0.036"X10X1 (GT)
550-600		AE2420ZFZ	R404A	13"X13"X3	12"	16 w,(1/47)X1300	3/8X65X2	0.036"X7X2
650-700		AE2425ZFZ	R404A	13"X13"X3	12"	16 w,(1/47)X1300	3/8X65X2	0.042"X8X2
700-800		AE2430ZFZ	R404A	13"X13"X3	12"	16 w,(1/47)X1300	3/8X70X2	0.042"X6X2
800-900		TYA2438ZKS	R404A	13"X13"X4	12"	16 w, (1/47)X1300	3/8X80X2	0.049"X12X2
900-1000		TYA2446ZKS	R404A	13"X13"X4	12"	16 w, (1/47)X1300	1/2X85X2	0.050"X10X2
1000 -1200		AWS2470ZGE	R404A	18"X16"X3	14"	140w, (1/5)X1300	1/2X105X2	0.050"X8X2
1200 - 1500		AWS2495ZGE	R404A	18"X16"X4	14"	140w, (1/5)X1300	1/2X110X2	0.050"X7X2

Minimum insulation thickness of 60mm PUF

The system configuration is selected for cabinet temperature of -18 Deg C at an ambient of 35 Deg C

Please note that there is a version of THK2390YJE and THK2411YGH models that are compatible for Freezer on wheels application , usage of the stationery models in the Freezer on wheels application can have higher field failure rate .

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

System Parameters (R134a)	32 Deg C	43 Deg C
Suction Pressure (Psig)	2-4	0-5
Discharge Pressure (Psig)	160-170	180- 200
System Parameters (R404a)	**32 Deg C**	**43 Deg C**
Suction Pressure (Psig)	20-23	22-25
Discharge Pressure (Psig)	280-310	320-340
Suction temperature (Deg C)	5-10	10-15
Discharge temperature (Deg C)	<= 70-80	<= 85- 90

SOFTY MACHINES

Capacity of Churner (Liters)	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inch)	Condenser Fan motor (watts / HP) XRpm	Evpaorator (Outer Dia (inch) Xlength In Feet X No of circuits	Capillary (Bore dia in Inches) X Ft X nos
5	AE2430Z-FZ	R404a	13"X13"X3	12"	16 w,(1/47)X1300	3/8"X8'X2	0.036"X8'X2
10	TYA2446ZKS	R404a	13"X13"X4	12"	16 w, (1/47)X1300	1/2"X15'X2	0.044"X8'X2
15	AWS2470ZGE	R404a	18"X16"X3	14"	140w, (1/5)X1300	1/2"X18"X2	0.044"X6'X2
16-30	AWS2495ZGE	R404a	18"X16"X4	14"	140w, (1/5)X1300	1/2"X28'X2	0.050"X8'X2
31-40	AWS2512ZXC	R404a	18"X16"X4	14"	140w, (1/5)X1300	1/2"XX33'X2	0.054"X6'X2/ T2 : Orifice no 4
41-50	TAG2516Z	R404a	20"X20"X3	18"	250w, (1/3)X1380	1/2"X35'X2	T2 : Orifice no 5
51-65	TAG2522Z	R404a	20"X20"X4	18"	250w, (1/3)X1380	1/2"X40'X2	T2 : Orifice no 6
66-75	TAG2525Z	R404a	20"X20"X5	18"	250w, (1/3)X1380	1/2"X45'X2	T2 : Orifice no 6

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

System Parameters (R404a)	32 Deg C	43 Deg C
Suction Pressure (Psig)	18-20	20-22
Discharge Pressure (Psig)	280-310	330-350
Suction temperature (Deg C)	5-10	10-15
Discharge temperature (Deg C)	<= 70-80	<= 85- 90

FREEZER ROOMS NEGATIVE

Cold room Capacity volume (Cubic FT)	Room Temperature (Deg C)	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan motor (watts / HP) XRpm	Evpaorator / Tecumseh Unit cooler	TXV
500	'-18 to -20 Deg C	AWS2470ZGE	R404a	18"X16"X3	14"	140w, (1/5)X1300	TEM-L-2.4/10	T2- Orifice 1
500-750	'-18 to -20 Deg C	AWS2495ZGE	R404a	18"X16"X4	14"	140w, (1/5)X1300	TEM-L-2.4/10	T2- Orifice 2
1000-1400	'-18 to -20 Deg C	AWS2512ZTZ	R404a	18"X16"X4	14"	140w, (1/5)X1300	TEM-L-2.9/13	T2- Orifice 3
1750-2250	'-18 to -20 Deg C	TAG2516Z	R404a	20"X20"X3	18"	250w, (1/3)X1380	TEM-L-4.3/15	T2- Orifice 3
2500- 3000	'-18 to -20 Deg C	TAG2522Z	R404a	20"X20"X4	18"	250w, (1/3)X1380	TEM-L-5.3/21	T2- Orifice 4
3000-3500	'-18 to -20 Deg C	TAG2525Z	R404a	20"X20"X5	18"	250w, (1/3)X1380	TEM-L-5.3/21	T2- Orifice 4

Cold room Insulation PUF 150 mm Thick walls , 150mm PUF slabs for the Flooring
Ambient considered for Heat load estimation is +38 Deg C , Anteroom of 5-10 Deg C

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

System Parameters (R404a)	32 Deg C	43 Deg C
Suction Pressure (Psig)	18-20	20-22
Discharge Pressure (Psig)	280-310	320-340
Discharge temperature (Deg C)	<= 70-80	<= 85- 90
Return Gas temperature(Deg C)	5 to 10	10 to 15

ICE FLAKES

Ice Flakes (Kg/ Day)	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inch)	Condenser Fan motor (watts / HP) XRpm
20	AE2415Z-FZ	R404a	12"X12"X3	10"	10 w , (1/83)X1300
25	AE2420Z-FZ	R404a	13"X13"X3	10"	10 w , (1/83)X1300
35	AE2425Z-FZ	R404a	13"X13"X3	12"	10 w , (1/83)X1300
40	AE2430Z-FZ	R404a	13"X13"X3	12"	10 w , (1/83)X1300
50	TYA2438ZKS	R404a	13"X13"X4	12"	16 w, (1/47)X1300
75	TYA2446ZKS	R404a	13"X13"X4	12"	16 w, (1/47)X1300
100	AWS2470ZGE	R404a	18"X16"X3	14"	140w, (1/5)X1300
150	AWS2495ZGE	R404a	18"X16"X3	14"	140w, (1/5)X1300
200	AWS2512ZTZ	R404a	18"X16"X4	14"	140w, (1/5)X1300
225	TAG2516Z	R404a	20"X20"X3	18"	250w, (1/3)X1380
275	TAG2522Z	R404a	20"X20"X4	18"	250w, (1/3)X1380
300	TAG2525Z	R404a	20"X20"X5	18"	250w, (1/3)X1380

Water Inlet temp	15-20
Ambient	35 -38

Maintain Evaporating temperature of -20 to -25 Deg C for the Thickness and optimum Production capacities

Exceeding the water inlet and ambient temperatures will reduce the Ice Flake Production capacities/ 24 hours Suitable Evaporator to be used

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

System Parameters (R404a)	32 Deg C
Suction Pressure (Psig)	15-20
Discharge Pressure (Psig)	280-300
Discharge temperature (Deg C)	<= 70-80
Return Gas temperature(Deg C)	5 to 10

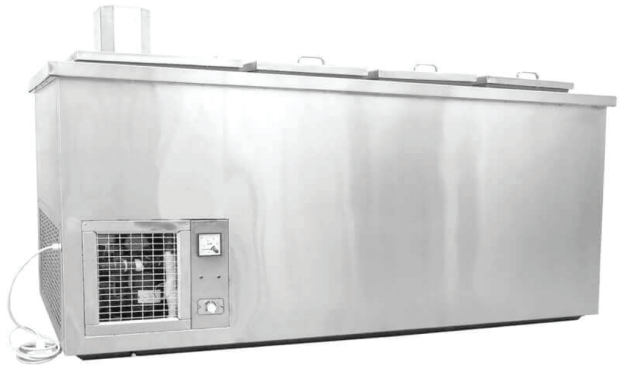
ICE CANDY

Ice Candy (Numbers / Day) 60ml	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inches)	Condenser Fan motor (watts / HP) XRpm	Evaporator (Outer dia (Inch)X Lefgth Feet Xcircuits	Capillary Bore dia Inch X Legth In ft X nos
2000-2300	AE2430Z-FZ	R404a	13"X13"X3	12"	10 w , (1/83)X1300	3/8X75X2	0.036"X9'X2
3800-4000	AWS2470ZGE	R404a	13"X13"X4	14"	16 w, (1/47)X1300	1/2"X90X2	0.050"X10'X2
5500-6200	AWS2495ZGE	R404a	18"X16"X4	14"	140w, (1/5)X1300	1/2"X110X2	0.064"X10'X2
11500 -12000	AWS2512ZTZ	R404a	18"X16"X4	14"	140w, (1/5)X1300	1/2"X110'X4	T2 - Orifice no 4
12000- 12500	TAG2516Z	R404a	20"X20"X5	18"	250w, (1/3)X1380	1/2"X125'X4	T2 - Orifice no 4
14000-14500	TAG2522Z	R404a	20"X20"X5	18"	250w, (1/3)X1380	1/2"X135'X4	T2 - Orifice no 5
15000-16000	TAG2525Z	R404a	20"X20"X5	18"	250w, (1/3)X1380	1/2"X135'X4	T2 - Orifice no 5

Water Based Mix inlet temperature Deg C	10-15
Ambient Air temperature Deg C	35 -38

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

System Parameters (R404a)	32 Deg C	43 Deg C
Suction Pressure (Psig)	20-25	22-28
Discharge Pressure (Psig)	280-300	320-340
Discharge temperature (Deg C)	<= 70-80	<=85-90
Return Gas temperature(Deg C)	5 to 10	10 to 15



REFRIGERATED AIR DRYERS

Air dryer CFM	Air dryer CMH	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inch)	Condenser Fan motor (watts / HP) XRpm
20	35	THK4420YGE	R134a	9"X9"X2	8"	10 w , (1/83)X1300
30	50	THK4430YGS	R134a	10"X11"X2	10"	10 w , (1/83)X1300
40-60	70-100	AE4440YGH	R134a	11"X11"X 3	10"	10 w , (1/83)X1300
80	135	AE4460YGH	R134a	12"X12"X 3	10"	10 w , (1/83)X1300
100	170	TYA4475YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300
120	205	TYA4489YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300
150	255	AWS4515YJE	R134a	22"X18"X 4	14"	140 w,(3/16)X1380
150	255	AWS4516ZXN	R404a	22"X18"X 4	14"	140 w,(3/16)X1380
250	425	AWS4518YXC	R134a	22"X18"X 4	14"	140 w,(3/16)X1380
350	595	AWS4525YXC	R134a	22"X22"X 4	14"	140 w,(3/16)X1380
350	595	AWR4522CGH	R407C	22"X22"X 4	14"	140 w,(3/16)X1380
350	595	AWS4522ZXN	R404a	22"X22"X 4	14"	140 w,(3/16)X1380
400	680	AWR4530CGH	R407C	22"X22"X 4	18"	250w, (1/3)X1380
400	680	AWS4532ZXG	R404a	22"X22"X 4	18"	250w, (1/3)X1380
450	765	AWR4535CGF	R407C	20"X20"X5	18"	250w, (1/3)X1380
450	765	AWS4538ZXG	R404a	20"X20"X5	18"	250w, (1/3)X1380
500	850	AWS4544ZXG	R404a	38"X20"X3	18"	250w,(/1/3)X1380X2 nos
500	850	AWR4540CGF	R407C	38"X20"X3	18"	250w,(/1/3)X1380X2 nos
800	1360	TAG4573Z	R404a	38"X20"X5	18"	250w,(/1/3)X1380X2 nos
1000	1700	TAG4581	R404a	38"X20"X5	18"	250w,(/1/3)X1380X2 nos

CFM	Cubic Feet per Minute
CMH	Cubic Meter per Hour

Above are estimated Cooling capacities for guidance only further fine tuning is required and can vary from Manufacturer to Manufacturer

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

BULK MILK CHILLERS

BMC Capacity (Liters)	Compressor	Condensing unit	Quantity	Refrigerant
250	TYA4475YKS	TYA4475YKSNA	1	R134a
250	TYA9456ZKS	TYA9456ZKSNA	1	R404a
250	TYA9467EKS	TYA9467EKSNA	1	R-22
300	AWS4516ZXN	PAC4516ZXN-FB	1	R404a
300	AWS4515EGE	CDU4515EGE-FB	1	R-22
500	AWS4524EGE	CDU4522EGE-FB	1	R-22
500	AWS4522ZXN	PAC4522ZXN-FB	1	R-404A
800	AWS4532ZXN	PAC4532ZXN-FB	1	R-404A
800	AWS4532EGH	CDU4530EGE-FB	1	R-22
1000	AWS4538EGF	PAC4536ZXG-FB*/CDU4538EGF-FB	1	R-22
1000	AWS4538ZXG	PAC4536ZXG-FB*/PACS4538ZXG-FB	1	R-404A
2000	AWS4538ZXG	PAC4536ZXG-FB*/CDU4538EGF-FB	2	R-404A
2000	AWS4538EGF	PAC4536ZXG-FB*/PACS4538ZXG-FB	2	R-22
5000	TAG4573T	PAC4584ZXG-FB*	2	R-22
5000	TAG4573Z	PAC4584ZXG-FB*	2	R-404A
10000	TAG4581Z	PAC4584ZXG-FB*	4	R-404A
10000	TAG4581T	PAC4584ZXG-FB*	4	R-22

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

The compressor selection is based on below

No of Milkings	2
Ambient Deg C	38
Initial temperature Deg C	35

Final temperature Deg C	4
Pull down time (hours)	3

Due to Higher refrigerant Charge quantities we recommend to use a pump down system for BMC .

Tecumseh Offers Fully Built Condensing units in PAC/odcu platform ideally suited for the BMC application - ask for the dealer / Tecumseh sales representative for more information

* Scroll Condensing units

35 Deg C	Suction Pressure (Psig)	Discharge pressure (Psig)	Return Gas Temperature (Deg C)
R22	45-50	250- 280	20-25
R404a	60-65	280-310	20-25
Discharge temperature (Deg C)		<= 70-80	

43 Deg C	Suction Pressure (Psig)	Discharge pressure (Psig)	Return Gas Temperature (Deg C)
R22	48-52	300-310	20-25
R404a	62-68	320-340	20-25
Discharge temperature (Deg C)		<= 70-80	

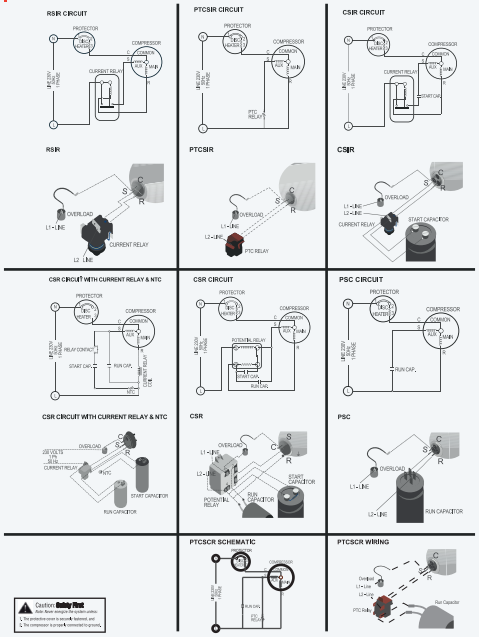
METAL DOOR CHILLER

No OF doors	Liters	Compressor Model	Refrigerant	Condenser # (Outer dia (3/8 Inch)X Width (inch)X Height (Inch)X no of rows deep)	Condenser Fan Blade dia (Inch)	Condenser Fan motor watts, (HP) XRpm
2	500	AE4460YGH	R134a	12"X12"X 3	10"	10 w , (1/83)X1300
2	500	AE4460ZFZ	R404a	12"X12"X 3	10"	10 w , (1/83)X1300
2/4	550-700	TYA4475YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300
2/4	550-700	AE4470ZFZ	R404a	14"X14"X 4	10"	16 w, (1/47)X1300
4	750-800	TYA4489YKS	R134a	14"X14"X 4	10"	16 w, (1/47)X1300
4	850-900	TYA9456ZKS	R404a	14"X14"X 4	10"	16 w, (1/47)X1300
4	950-1000	AWS4515YJE	R134a	22"X18"X 4	14"	140 w,(3/16)X1380
4	950-1000	AWS4516ZXN	R404a	22"X18"X 4	14"	140 w,(3/16)X1380

Note : The above System details mentioned need to be used as guidance only and further balancing and system iterations may be required to obtain optimum Performance. Tecumseh does not have liability on performance or reliability of the End application and it's sole responsibility of the Customer.

35 Deg C	Suction Pressure PSIG	Discharge Pressure PSIG	Return Gas Temperature (Deg C)	Discharge Temperature (Deg C)
R134a	18-20	160 -180	20-25	<= 70-80
R404a	55-60	280-310	20-25	<= 70-80

SCHEMATICS & WIRING DIAGRAMS

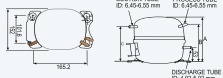


Caution: Risk of Electric Shock
Note: Never damage the system under:
1. The protective cover is secured, fastened, and
2. The compressor is properly connected to ground.

TECHNICAL DRAWINGS

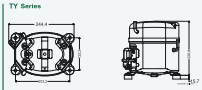
Terminal Identification

TH Series

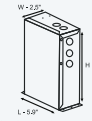


MODEL	DIMENSIONS		
	A	B	C
THK1330YCF, THK1340YCF, THK0384YCG, THK0394YCG	164.7–167.7	139.2–144.2	132.2–137.2
THK1351YJF, THK1360YGS, THK0431YCG, THK0431YCS, THK0431YJE, THK4431YCG	169.2–173.2	143.2–148.3	136.5–141.5
THK0417YJE, THK4430YGS	176.4–179.2	137.7–143.7	137.7–143.7
THK1374YFS, THK2360YJE, THK0414YGS, THK4420YFS	173.2–176.4	147.2–152.3	140.9–145.9

TY Series

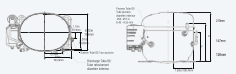


ELECTRICAL BOX

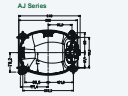


Note:
1) AW5422 Series Single Phase Compressors

AE Series



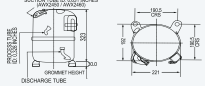
AJ Series



AG Series

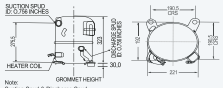
AW Series

SUCTION TUBE ID: 0.630 INCHES
(AW0357 / AW0420)
SUCTION TUBE ID: 0.748 INCHES
(AW0269 / AW0348)



ID: 0.381 INCHES

AWS SERIES WITH SPUDS FOR CONDENSING UNITS



Note:
Suction Spud & Discharge Spud

(1 1/4" - 12UNF)A

TECUMSEH CONTACT DETAILS

REGISTERED OFFICE

Tecumseh Products India Private Limited,
Survey No. 667/P and 784/P, Kistapur Village,
Medchal-Malkajgiri District, Hyderabad, Telangana - 501 401, India

COMPRESSORS PLANT

Tecumseh Products India Private Limited,
38 KM. Stone, Delhi - Mathura Road,
Ballabgarh - 121 004, India

©2021 Tecumseh Compressor Company LLC. All Rights Reserved.