

VTCX410U-MD5C

VARIABLE SPEED COMPRESSOR

250V / 83-150Hz / R-290



GENERAL DATA	
Compressor Model	VTCX410U-MD5C
Compressor Drawing - Universal Mounting Brackets	DCVTC052
Dual Voltage Inverter	030F0207
115-127V Inverter (TAL™) ¹	030F0216
220-240V Inverter (TAL™) ¹	030F0217
85-260V Inverter with Power Factor Corrector (PFC) (TAL™) ¹	030F0218
Inverter Drawing ²	DGMX0086, DGMX0093
Wiring Diagram ³	DEMXX0056, DEMXX0061

¹ Usage with 030F0216, 030F0217, 030F0218 approved under UL 60335-2-34 with Annex AA.

² For 030F0207 inverter model see Drawing DGMX0086. For 030F0216, 030F0217 and 030F0218 models see DGMX0093.

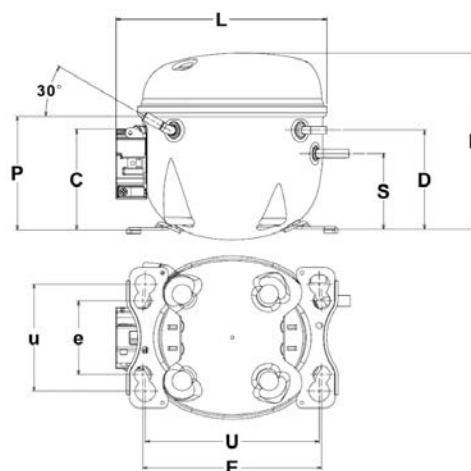
³ For 030F0207 inverter model see Wiring Diagram DEMXX0056. For 030F0216, 030F0217 and 030F0218 models see DEMXX0061.

APPLICATION DATA	
Application (Commercial Reference)	L/MBP (1/6 – 1/3 hp)
Speed Range	2500 – 4500 rpm
Cooling Capacity Range ⁴	848 – 1410 BTU/h
Maximum Efficiency ⁴	6.22 BTU/Wh
Refrigerant	R-290
Evaporating Temperature Range	-35°C to -5°C (-31°F to +23°F)
Speed Range	2500 – 4500 rpm
Starting Torque	High Starting Torque (HST)
Cooling System	Fan Cooling (3 m/s)
Expansion Device	Expansion Valve / Capillary Tube

⁴ Data for ASHRAE32 condition.

DESIGN INFORMATION	
Displacement	6.06 cm ³ (0.37 in ³)
Oil Type / Quantity	POE 10 cSt / 170 ml
Compressor Weight	7.45 kg
Motor Technology	PMSM

COMPRESSOR DIMENSIONS⁵



Dimension	mm	in
L	200	7.88
H	167	6.59
C	95.6	3.76
P	108	4.25
D	94	3.70
S	72	2.84
E	170	6.69
e	70	2.76
U	165	6.50
u	101.6	4.00

Process tube

I.D.: 6.50±0.50mm – Depth: 16.0±1.0mm – Copper

Discharge tube

I.D.: 4.97±0.50mm – Depth: 16.0±1.0mm – Copper

Suction tube

I.D.: 6.50±0.50mm – Depth: 16.0±1.0mm – Copper

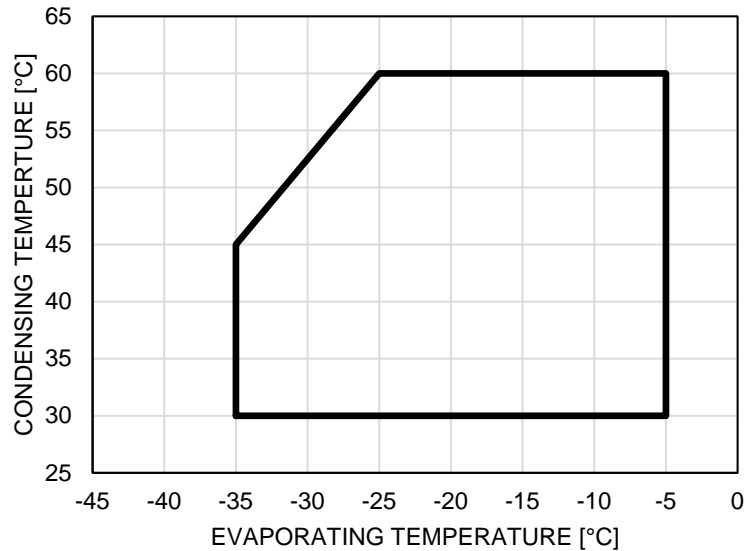
⁵ Drawing only for reference. Other options may be available. Universal mounting brackets.

IntelliCool™



**THE VARIABLE SPEED COMPRESSOR CAN NOT BE CONNECTED DIRECTLY TO THE MAINS.
THE COMPRESSOR MUST BE USED WITH THE APPROPRIATE TECUMSEH VARIABLE SPEED INVERTER.**

COMPRESSOR OPERATING ENVELOPE



COMPRESSOR PERFORMANCE

ASHRAE32 ⁽¹⁾⁽²⁾ - 220V / 60Hz (030F0207 / 030F0217 CONTROLLER)

RPM	COND. TEMP.		EVAP. TEMP.		COOLING CAPACITY		POWER	CURRENT	EFFICIENCY	
	°C	(°F)	°C	(°F)	BTU/h	(W)	W	A	EER	(COP)
2500	54.4	(130)	-23.3	(-10)	848	(248)	140.5	1.29	6.03	(1.77)
3000	54.4	(130)	-23.3	(-10)	1023	(300)	166.0	1.47	6.16	(1.80)
3600	54.4	(130)	-23.3	(-10)	1199	(351)	192.9	1.67	6.22	(1.82)
4000	54.4	(130)	-23.3	(-10)	1300	(381)	209.6	1.79	6.20	(1.82)
4500	54.4	(130)	-23.3	(-10)	1410	(413)	230.1	1.92	6.13	(1.79)
2500	54.4	(130)	-6.7	(20)	1725	(505)	195.7	1.71	8.82	(2.58)
3000	54.4	(130)	-6.7	(20)	2070	(606)	230.7	1.96	8.97	(2.63)
3600	54.4	(130)	-6.7	(20)	2465	(722)	273.6	2.28	9.01	(2.64)
4000	54.4	(130)	-6.7	(20)	2720	(796)	303.8	2.48	8.95	(2.62)
4500	54.4	(130)	-6.7	(20)	3032	(888)	344.2	2.72	8.81	(2.58)

(1) Test condition with Ambient: 32.2°C (90°F); Return Gas: 32.2°C (90°F); Liquid: 32.2°C (90°F).

(2) Tolerance for cooling capacity, input current and input power are ±5%. Tolerance for efficiency is ±7%.

EN12900 ⁽¹⁾⁽²⁾ - 220V / 50Hz (030F0207 / 030F0217 CONTROLLER)

RPM	COND. TEMP.		EVAP. TEMP.		COOLING CAPACITY		POWER	CURRENT	EFFICIENCY	
	°C	(°F)	°C	(°F)	BTU/h	(W)	W	A	EER	(COP)
2500	40	(104)	-35	(-31)	451	(132)	95.0	0.91	4.75	(1.39)
3000	40	(104)	-35	(-31)	527	(154)	109.3	1.04	4.82	(1.41)
3600	40	(104)	-35	(-31)	663	(194)	133.4	1.21	4.97	(1.46)
4000	40	(104)	-35	(-31)	745	(218)	149.6	1.32	4.98	(1.46)
4500	40	(104)	-35	(-31)	795	(233)	165.2	1.43	4.81	(1.41)
2500	45	(113)	-10	(14)	1358	(398)	166.0	1.45	8.18	(2.40)
3000	45	(113)	-10	(14)	1575	(461)	190.3	1.63	8.28	(2.42)
3600	45	(113)	-10	(14)	1920	(562)	233.0	1.92	8.24	(2.41)
4000	45	(113)	-10	(14)	2165	(634)	265.5	2.14	8.16	(2.39)
4500	45	(113)	-10	(14)	2448	(717)	306.0	2.43	8.00	(2.34)

(1) Test condition with Ambient: 32°C (90°F); Return Gas: 20°C (68°F); Subcooling: 0 K.

(2) Tolerance for cooling capacity, input current and input power are ±5%. Tolerance for efficiency is ±7%.

COMPRESSOR PERFORMANCE

ASHRAE32 ⁽¹⁾⁽²⁾ - 220V / 60Hz (030F0218 CONTROLLER)

RPM	COND. TEMP.		EVAP. TEMP.		COOLING CAPACITY		POWER	CURRENT	EFFICIENCY	
	°C	(°F)	°C	(°F)	BTU/h	(W)	W	A	EER	(COP)
2500	54.4	(130)	-23.3	(-10)	848	(248)	145.5	0.69	5.83	(1.71)
3000	54.4	(130)	-23.3	(-10)	1023	(300)	173.2	0.81	5.91	(1.73)
3600	54.4	(130)	-23.3	(-10)	1199	(351)	202.4	0.94	5.93	(1.74)
4000	54.4	(130)	-23.3	(-10)	1300	(381)	220.3	1.02	5.90	(1.73)
4500	54.4	(130)	-23.3	(-10)	1410	(413)	242.2	1.11	5.82	(1.70)
2500	54.4	(130)	-6.7	(20)	1725	(505)	205.3	0.97	8.40	(2.46)
3000	54.4	(130)	-6.7	(20)	2070	(606)	242.8	1.14	8.52	(2.50)
3600	54.4	(130)	-6.7	(20)	2465	(722)	288.5	1.35	8.54	(2.50)
4000	54.4	(130)	-6.7	(20)	2720	(796)	320.3	1.48	8.49	(2.49)
4500	54.4	(130)	-6.7	(20)	3032	(888)	362.6	1.65	8.36	(2.45)

(1) Test condition with Ambient: 32.2°C (90°F); Return Gas: 32.2°C (90°F); Liquid: 32.2°C (90°F).

(2) Tolerance for cooling capacity, input current and input power are ±5%. Tolerance for efficiency is ±7%.

EN12900 ⁽¹⁾⁽²⁾ - 220V / 50Hz (030F0218 CONTROLLER)

RPM	COND. TEMP.		EVAP. TEMP.		COOLING CAPACITY		POWER	CURRENT	EFFICIENCY	
	°C	(°F)	°C	(°F)	BTU/h	(W)	W	A	EER	(COP)
2500	40	(104)	-35	(-31)	451	(132)	96.5	0.44	4.68	(1.37)
3000	40	(104)	-35	(-31)	527	(154)	112.1	0.53	4.71	(1.38)
3600	40	(104)	-35	(-31)	663	(194)	138.3	0.64	4.80	(1.40)
4000	40	(104)	-35	(-31)	745	(218)	155.8	0.72	4.78	(1.40)
4500	40	(104)	-35	(-31)	795	(233)	172.7	0.79	4.61	(1.35)
2500	45	(113)	-10	(14)	1358	(398)	173.4	0.80	7.83	(2.29)
3000	45	(113)	-10	(14)	1575	(461)	199.6	0.92	7.89	(2.31)
3600	45	(113)	-10	(14)	1920	(562)	245.2	1.12	7.83	(2.29)
4000	45	(113)	-10	(14)	2165	(634)	279.6	1.27	7.74	(2.27)
4500	45	(113)	-10	(14)	2448	(717)	322.1	1.47	7.60	(2.22)

(1) Test condition with Ambient: 32°C (90°F); Return Gas: 20°C (68°F); Subcooling: 0 K.

(2) Tolerance for cooling capacity, input current and input power are ±5%. Tolerance for efficiency is ±7%.

APPLICATION CONDITION 1 ⁽¹⁾⁽²⁾ - 220V / 60Hz (030F0218 CONTROLLER)

RPM	COND. TEMP.		EVAP. TEMP.		COOLING CAPACITY		POWER	CURRENT	EFFICIENCY	
	°C	(°F)	°C	(°F)	BTU/h	(W)	W	A	EER	(COP)
2500	35	(95)	-25	(-13)	878	(257)	117.7	0.57	7.46	(2.18)
3000	35	(95)	-25	(-13)	1080	(316)	145.1	0.68	7.44	(2.18)
3600	35	(95)	-25	(-13)	1273	(373)	172.5	0.81	7.38	(2.16)
4000	35	(95)	-25	(-13)	1375	(403)	188.5	0.87	7.30	(2.14)
4500	35	(95)	-25	(-13)	1476	(432)	207.0	0.91	7.13	(2.09)

(1) Test condition with Return Gas: 32.2°C (90°F); Liquid: 32.2°C (90°F).

(2) Tolerance for cooling capacity, input current and input power are ±5%. Tolerance for efficiency is ±7%.

APPLICATION CONDITION 2 ⁽¹⁾⁽²⁾ - 220V / 50Hz (030F0218 CONTROLLER)

RPM	COND. TEMP.		EVAP. TEMP.		COOLING CAPACITY		POWER	CURRENT	EFFICIENCY	
	°C	(°F)	°C	(°F)	BTU/h	(W)	W	A	EER	(COP)
2500	45	(113)	-10	(14)	1387	(406)	165.2	1.42	8.39	(2.46)
3000	45	(113)	-10	(14)	1609	(471)	190.2	1.57	8.46	(2.48)
3600	45	(113)	-10	(14)	1961	(574)	233.6	1.89	8.39	(2.46)
4000	45	(113)	-10	(14)	2211	(647)	266.4	2.14	8.30	(2.43)
4500	45	(113)	-10	(14)	2500	(732)	307.0	2.43	8.14	(2.38)

(1) Test condition with Return Gas: 32°C (90°F); Subcooling: 0 K.

(2) Tolerance for cooling capacity, input current and input power are ±5%. Tolerance for efficiency is ±7%.

ASHRAE32 PERFORMANCE CURVE COEFFICIENTS – 030F0207 / 030F0216 / 030F0217

COEFFICIENT	COOLING CAPACITY	POWER	CURRENT	MASS FLOW
C _n	BTU/h	W	A	lb/h
C ₁	-2.504292683661E+03	4.477301212028E+02	1.150306008707E+01	-1.786334887845E+01
C ₂	3.330870577411E+00	1.394228218142E-01	-1.218636738642E-03	2.247544426405E-02
C ₃	-3.209941982090E-04	-2.502693460330E-05	2.211294248709E-07	-2.232721980469E-06
C ₄	5.016844733806E-09	1.569244106370E-09	-2.079299668484E-11	5.466319090715E-11
C ₅	-8.457588895224E+01	2.967218808597E+00	1.237198642229E-01	-5.666201613785E-01
C ₆	1.035348428228E+00	9.991522070259E-02	3.993633995688E-04	7.087163857362E-03
C ₇	1.218351874750E-02	1.064541758379E-03	6.984604660565E-06	9.329976821586E-05
C ₈	-1.552456962503E+01	-3.860509353527E+01	-6.436535893936E-01	-3.906390682823E-02
C ₉	1.860012592704E+00	8.710209422552E-01	1.287625840006E-02	1.104128539305E-02
C ₁₀	-1.499888360805E-02	-5.701385250079E-03	-8.273506683063E-05	-9.309149776462E-05
C ₁₁	-1.184073289636E-03	4.104155398821E-05	1.807881811366E-06	-8.091564050794E-06
C ₁₂	1.434438203167E-07	8.356676210405E-09	-7.617042966149E-11	8.862665943282E-10
C ₁₃	1.043209827681E-06	4.618265877969E-07	1.599794569085E-09	2.227769196840E-09
C ₁₄	7.701945705652E-07	-8.208729407322E-07	-1.194863280931E-08	9.837271447086E-09
C ₁₅	8.730332557616E-02	-3.308519455345E-04	-5.995407286719E-05	5.822586292688E-04
C ₁₆	-4.314685929694E-02	4.940262165292E-04	4.000321729514E-05	-2.871032407636E-04
C ₁₇	2.262830414285E+00	-1.244902924082E-01	-3.740009086528E-03	1.621267199789E-02
C ₁₈	-6.485757395029E-06	-4.084617209964E-08	5.782894361916E-09	-3.956750355244E-08
C ₁₉	3.410982027044E-04	-5.307270921660E-06	9.166660555907E-09	2.578382370016E-06
C ₂₀	4.700613442265E-06	2.741681244125E-07	4.252175806302E-11	2.927941552962E-08
C ₂₁	5.074468413113E-05	-2.213755938785E-05	-3.849095104244E-07	4.566819735985E-07
C ₂₂	-1.091213959227E-02	-1.830370996909E-03	-7.011562760204E-06	-6.014405475290E-05
C ₂₃	-7.714930109614E-03	2.217471538984E-03	3.035203539614E-05	-6.544193955094E-05

PERFORMANCE CURVE EQUATION
INPUTS

$$Y = C_1 + C_2 X_1 + C_3 X_1^2 + C_4 X_1^3 + C_5 X_2 + C_6 X_2^2 + C_7 X_2^3 + C_8 X_3 + C_9 X_3^2 + C_{10} X_3^3 + C_{11} X_1 X_2 X_3 + C_{12} X_1^2 X_2 X_3 + C_{13} X_1 X_2^2 X_3 + C_{14} X_1 X_2 X_3^2 + C_{15} X_1 X_2 + C_{16} X_1 X_3 + C_{17} X_2 X_3 + C_{18} X_1^2 X_2 + C_{19} X_1 X_2^2 + C_{20} X_1^2 X_3 + C_{21} X_1 X_3^2 + C_{22} X_2^2 X_3 + C_{23} X_2 X_3^2$$

 X₁ = Motor speed (rpm)

 X₂ = Evaporating temperature (°C)

 X₃ = Condensing temperature (°C)

EN12900 PERFORMANCE CURVE COEFFICIENTS – 030F0207 / 030F0216 / 030F0217

COEFFICIENT	COOLING CAPACITY	POWER	CURRENT	MASS FLOW
C _n	BTU/h	W	A	lb/h
C ₁	-8.412354665160E+03	1.164394603647E+03	1.858231493953E+01	-6.103341492452E+01
C ₂	1.368093195335E+00	6.973727634977E-02	1.174473485605E-03	8.604278882444E-03
C ₃	7.993704530724E-04	8.560307414294E-05	4.621436309424E-07	6.160729785306E-06
C ₄	-6.021482539449E-08	-6.888709583874E-09	-3.135000790399E-11	-4.710672090096E-10
C ₅	-3.228837561179E+02	-2.443207145482E+01	-1.337724047280E-01	-2.462361094949E+00
C ₆	1.237699374884E+00	3.473899086584E-01	2.736894442381E-03	1.387653439818E-02
C ₇	1.214148451619E-03	2.376579731221E-03	3.149781764061E-05	4.118979720389E-05
C ₈	5.077195222881E+02	-7.191684707510E+01	-1.171071804787E+00	3.705124045860E+00
C ₉	-5.610143934216E+00	2.007536631225E+00	2.782547855642E-02	-3.811297407765E-02
C ₁₀	6.888558151591E-04	-1.708340807014E-02	-2.126365234899E-04	-4.071849606087E-05
C ₁₁	-4.355754625450E-03	-4.334197775897E-04	-3.272096303575E-06	-3.266451118245E-05
C ₁₂	-8.363496435944E-08	-4.120073259070E-09	-1.364194578415E-10	-5.561572057850E-10
C ₁₃	3.123083316831E-06	1.277948732319E-06	2.810756652396E-09	6.219759842038E-08
C ₁₄	4.962803857955E-05	5.430699795111E-06	4.523320390319E-08	3.992435747072E-07
C ₁₅	1.072619178663E-01	7.307373762330E-03	4.102941939976E-05	7.658536642765E-04
C ₁₆	-1.371287411748E-01	-1.451827396755E-02	-1.101417256231E-04	-1.034991239857E-03
C ₁₇	1.623709793546E+01	1.435314291695E+00	9.946473583341E-03	1.277296739531E-01
C ₁₈	6.037013881818E-06	5.487795965044E-07	8.881371741451E-09	4.309161961654E-08
C ₁₉	1.486466044330E-04	-5.572499578575E-05	-1.993630083717E-07	-2.837824185811E-07
C ₂₀	-2.242856838752E-06	2.596305795206E-08	-7.148316132706E-10	-1.516233969719E-08
C ₂₁	1.471340856192E-03	1.577941003625E-04	1.233746163710E-06	1.175570012441E-05
C ₂₂	-2.602556978827E-02	-4.433262968024E-03	-1.443706877639E-05	-2.572803807956E-04
C ₂₃	-1.871651137490E-01	-1.660199481819E-02	-1.181262990242E-04	-1.496148279308E-03

PERFORMANCE CURVE EQUATION
INPUTS

$$Y = C_1 + C_2 X_1 + C_3 X_1^2 + C_4 X_1^3 + C_5 X_2 + C_6 X_2^2 + C_7 X_2^3 + C_8 X_3 + C_9 X_3^2 + C_{10} X_3^3 + C_{11} X_1 X_2 X_3 + C_{12} X_1^2 X_2 X_3 + C_{13} X_1 X_2^2 X_3 + C_{14} X_1 X_2 X_3^2 + C_{15} X_1 X_2 + C_{16} X_1 X_3 + C_{17} X_2 X_3 + C_{18} X_1^2 X_2 + C_{19} X_1 X_2^2 + C_{20} X_1^2 X_3 + C_{21} X_1 X_3^2 + C_{22} X_2^2 X_3 + C_{23} X_2 X_3^2$$

X₁ = Motor speed (rpm)

X₂ = Evaporating temperature (°C)

X₃ = Condensing temperature (°C)

ASHRAE32 PERFORMANCE CURVE COEFFICIENTS – 030F0218

COEFFICIENT	COOLING CAPACITY	POWER	CURRENT	MASS FLOW
C _n	BTU/h	W	A	lb/h
C ₁	-2.504292683661E+03	4.599932950474E+02	7.510743297607E+00	-1.786334887845E+01
C ₂	3.330870577411E+00	1.564141023537E-01	-8.286223243203E-04	2.247544426405E-02
C ₃	-3.209941982090E-04	-2.742025356788E-05	1.480468635525E-07	-2.232721980469E-06
C ₄	5.016844733806E-09	1.697866165312E-09	-1.387525075199E-11	5.466319090715E-11
C ₅	-8.457588895224E+01	3.069532194408E+00	8.229725323417E-02	-5.666201613785E-01
C ₆	1.035348428228E+00	1.093832007135E-01	2.603221365459E-04	7.087163857362E-03
C ₇	1.218351874750E-02	1.136296377473E-03	4.601949222554E-06	9.329976821586E-05
C ₈	-1.552456962503E+01	-4.106801057979E+01	-4.281892750732E-01	-3.906390682823E-02
C ₉	1.860012592704E+00	9.318513509588E-01	8.549908665294E-03	1.104128539305E-02
C ₁₀	-1.499888360805E-02	-6.118277892262E-03	-5.485455332734E-05	-9.309149776462E-05
C ₁₁	-1.184073289636E-03	4.108174704953E-05	1.209674886080E-06	-8.091564050794E-06
C ₁₂	1.434438203167E-07	8.723153707549E-09	-4.938651569349E-11	8.862665943282E-10
C ₁₃	1.043209827681E-06	4.674426989653E-07	1.139074099713E-09	2.227769196840E-09
C ₁₄	7.701945705652E-07	-8.605846571197E-07	-8.041783789879E-09	9.837271447086E-09
C ₁₅	8.730332557616E-02	-2.627294937270E-04	-3.989664216064E-05	5.822586292688E-04
C ₁₆	-4.314685929694E-02	4.349375254264E-04	2.695700593880E-05	-2.871032407636E-04
C ₁₇	2.262830414285E+00	-1.260966536938E-01	-2.509410853861E-03	1.621267199789E-02
C ₁₈	-6.485757395029E-06	-4.860233228912E-08	3.804454285800E-09	-3.956750355244E-08
C ₁₉	3.410982027044E-04	-6.042875056795E-06	5.951124600402E-09	2.578382370016E-06
C ₂₀	4.700613442265E-06	2.876300779495E-07	4.677331789584E-11	2.927941552962E-08
C ₂₁	5.074468413113E-05	-2.291691596001E-05	-2.593658760229E-07	4.566819735985E-07
C ₂₂	-1.091213959227E-02	-1.947680249291E-03	-4.705838049533E-06	-6.014405475290E-05
C ₂₃	-7.714930109614E-03	2.324209484527E-03	2.043293066922E-05	-6.544193955094E-05

PERFORMANCE CURVE EQUATION

INPUTS

$$Y = C_1 + C_2 X_1 + C_3 X_1^2 + C_4 X_1^3 + C_5 X_2 + C_6 X_2^2 + C_7 X_2^3 + C_8 X_3 + C_9 X_3^2 + C_{10} X_3^3 + C_{11} X_1 X_2 X_3 + C_{12} X_1^2 X_2 X_3 + C_{13} X_1 X_2^2 X_3 + C_{14} X_1 X_2 X_3^2 + C_{15} X_1 X_2 + C_{16} X_1 X_3 + C_{17} X_2 X_3 + C_{18} X_1^2 X_2 + C_{19} X_1 X_2^2 + C_{20} X_1^2 X_3 + C_{21} X_1 X_3^2 + C_{22} X_2^2 X_3 + C_{23} X_2 X_3^2$$

X₁ = Motor speed (rpm)

X₂ = Evaporating temperature (°C)

X₃ = Condensing temperature (°C)

EN12900 PERFORMANCE CURVE COEFFICIENTS – 030F0218

COEFFICIENT	COOLING CAPACITY	POWER	CURRENT	MASS FLOW
C _n	BTU/h	W	A	lb/h
C ₁	-8.412354665160E+03	1.258420775305E+03	1.140479996565E+01	-6.103341492452E+01
C ₂	1.368093195335E+00	6.487746033054E-02	5.676987889487E-04	8.604278882444E-03
C ₃	7.993704530724E-04	9.297184696679E-05	3.263992746457E-07	6.160729785306E-06
C ₄	-6.021482539449E-08	-7.484912427923E-09	-2.342206408620E-11	-4.710672090096E-10
C ₅	-3.228837561179E+02	-2.550224449742E+01	-8.723721565912E-02	-2.462361094949E+00
C ₆	1.237699374884E+00	3.701424137837E-01	1.635237692378E-03	1.387653439818E-02
C ₇	1.214148451619E-03	2.530215451859E-03	2.006572198522E-05	4.118979720389E-05
C ₈	5.077195222881E+02	-7.762593148649E+01	-7.196905367127E-01	3.705124045860E+00
C ₉	-5.610143934216E+00	2.152917382902E+00	1.711881141738E-02	-3.811297407765E-02
C ₁₀	6.888558151591E-04	-1.825796979546E-02	-1.303530617176E-04	-4.071849606087E-05
C ₁₁	-4.355754625450E-03	-4.527300780666E-04	-2.008213659768E-06	-3.266451118245E-05
C ₁₂	-8.363496435944E-08	-5.204592679374E-09	-7.190756123547E-11	-5.561572057850E-10
C ₁₃	3.123083316831E-06	1.308389594958E-06	1.340747071666E-09	6.219759842038E-08
C ₁₄	4.962803857955E-05	5.706724765325E-06	2.664410292440E-08	3.992435747072E-07
C ₁₅	1.072619178663E-01	7.598467274704E-03	2.757460363290E-05	7.658536642765E-04
C ₁₆	-1.371287411748E-01	-1.516718161156E-02	-6.624727603999E-05	-1.034991239857E-03
C ₁₇	1.623709793546E+01	1.508427218912E+00	6.121728626567E-03	1.277296739531E-01
C ₁₈	6.037013881818E-06	5.978876649501E-07	5.105610080203E-09	4.309161961654E-08
C ₁₉	1.486466044330E-04	-5.852344591665E-05	-9.013914281406E-08	-2.837824185811E-07
C ₂₀	-2.242856838752E-06	3.503317723873E-09	-2.608330754473E-10	-1.516233969719E-08
C ₂₁	1.471340856192E-03	1.658788927608E-04	7.276763646091E-07	1.175570012441E-05
C ₂₂	-2.602556978827E-02	-4.651433928350E-03	-7.661890820618E-06	-2.572803807956E-04
C ₂₃	-1.871651137490E-01	-1.747590773005E-02	-7.012862243938E-05	-1.496148279308E-03

PERFORMANCE CURVE EQUATION

INPUTS

$$Y = C_1 + C_2 X_1 + C_3 X_1^2 + C_4 X_1^3 + C_5 X_2 + C_6 X_2^2 + C_7 X_2^3 + C_8 X_3 + C_9 X_3^2 + C_{10} X_3^3 + C_{11} X_1 X_2 X_3 + C_{12} X_1^2 X_2 X_3 + C_{13} X_1 X_2^2 X_3 + C_{14} X_1 X_2 X_3^2 + C_{15} X_1 X_2 + C_{16} X_1 X_3 + C_{17} X_2 X_3 + C_{18} X_1^2 X_2 + C_{19} X_1 X_2^2 + C_{20} X_1^2 X_3 + C_{21} X_1 X_3^2 + C_{22} X_2^2 X_3 + C_{23} X_2 X_3^2$$

$X_1 =$ Motor speed (rpm)
 $X_2 =$ Evaporating temperature (°C)
 $X_3 =$ Condensing temperature (°C)

IMPORTANT PRODUCT NOTICE

All statements, technical information or data related to Tecumseh Products Co. are based on information believed to be reliable. However, no representation or warranty, express or implied, is made as to their completeness, accuracy, fitness for a particular purpose or any other matter, including, without limitation, that the practice or application of any such statements, technical information or data is free of patent infringement or other intellectual property misappropriation.

All information provided in this specification is intended for persons having the requisite knowledge, skill, and expertise to properly and completely evaluate such information. Tecumseh Products Co. shall not be responsible or liable for the use, application or implementation of the information provided herein, and all such information is to be used at the risk, and in the sole judgment and discretion, of such persons, their employees, advisors and agents and only after their independent evaluation and determination that the product is suitable for the application intended by such persons.

Tecumseh Products Co. is not in the business of providing technical, engineering or operational information for a fee, and, therefore, any such information is provided as an accommodation and without charge. Tecumseh Products Co. reserves the right to make changes to its products or to discontinue any product at any time without notice and advises customers to obtain the latest relevant information prior to ordering.

LIMITED WARRANTY; DISCLAIMER OF WARRANTY; LIMITED REMEDY; LIMITED LIABILITY

All Tecumseh Products Co. products are sold subject to the terms and conditions of sale supplied at the time of order acknowledgement, including, but not limited to, those pertaining to warranty (as stated in its "Warranty to Original Equipment Manufacturers"), patent infringement, and limitation of liability. TECUMSEH PRODUCTS CO. MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE INCLUDING, WITHOUT LIMITATION, ANY WARRANTY THAT TECUMSEH PRODUCTS CO. PRODUCTS ARE SUITABLE OR FIT FOR USE IN ANY HUMAN SAFETY OR LIFE SUPPORT SYSTEMS. If a Tecumseh Products Co. product is found to be defective in materials or workmanship within the warranty period set forth in the "Warranty to Original Equipment Manufacturers," Tecumseh Products Co.'s sole and exclusive obligation, exercisable in its sole discretion, shall be to repair or replace the product or refund the purchase price of the product as more fully set forth in the "Warranty to Original Equipment Manufacturers."

"Tecumseh Products Co. will not be liable for any loss or damage arising from any Tecumseh Products Co. product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, even if Tecumseh Products Co. shall have been advised of the possibility of such potential loss or damage. This publication supersedes and replaces all information previously supplied."

Tecumseh Products Company Tecumseh do Brasil Ltda.

Rua Ray Wesley Herrick, 700 – Jardim Jockey Club
São Carlos, SP - CEP 13565-090
Phone (16) 3363-7000 / (16) 3363-3000