TRANSARCTIC 1-877-COLD-AIR



RTC34030 DUAL LOOP

SERVICE PARTS LIST

12V Rooftop Air Conditioning Unit
With Electronic Thermostat

Rev 25090

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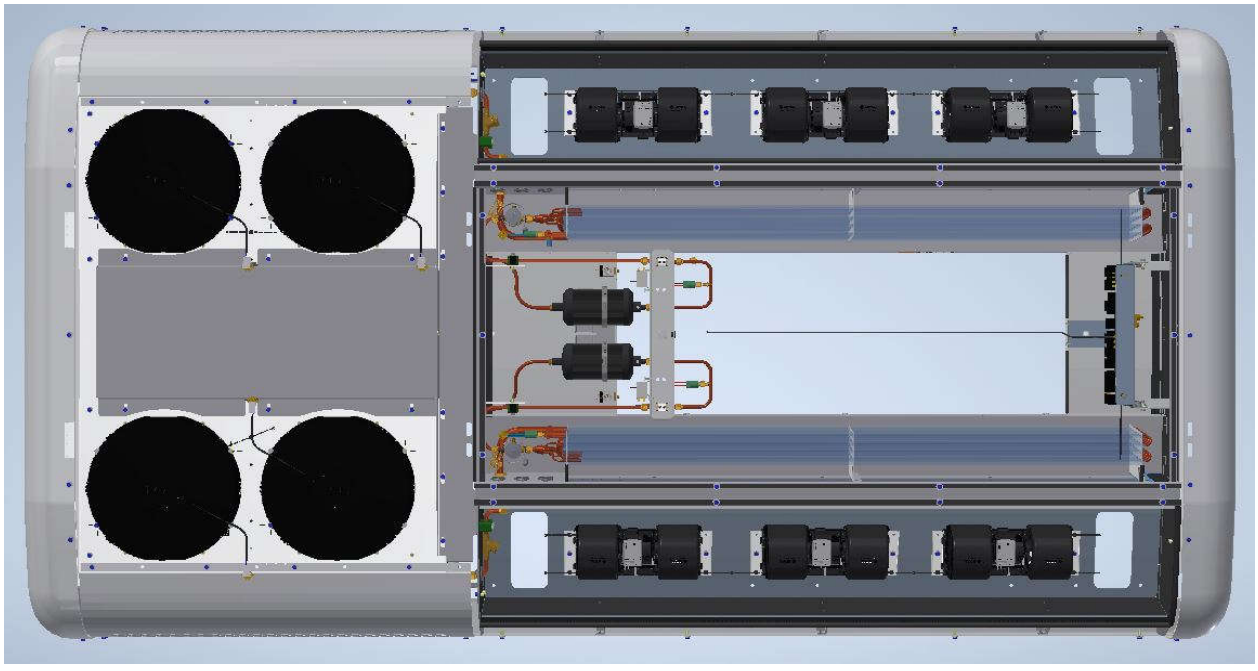
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INTRODUCTION:

This system is a Dual TM21, Or Dual QP25, Or One TM43. 12VRooftop, 170,000 BTU (IMACA) 24.3KW. (ARI)

System Charge = 5.50lbs – R134A Refrigerant Per Side

System Lubricant: 8.00oz - PAG 46 Oil Per Side

Solenoid Warning – Solenoids must be manually opened using appropriate magnets during Recovery and Evacuation Procedures. See Following page for Instructions.

SERVICE PARTS ORDERING INSTRUCTIONS:

Orders must include: The Unit Serial Number, Part Number and quantity required along with part Description as shown on the parts list.

TransArctic of Southern Georgia.

101 Industrial Park Dr. Perry GA. 31069

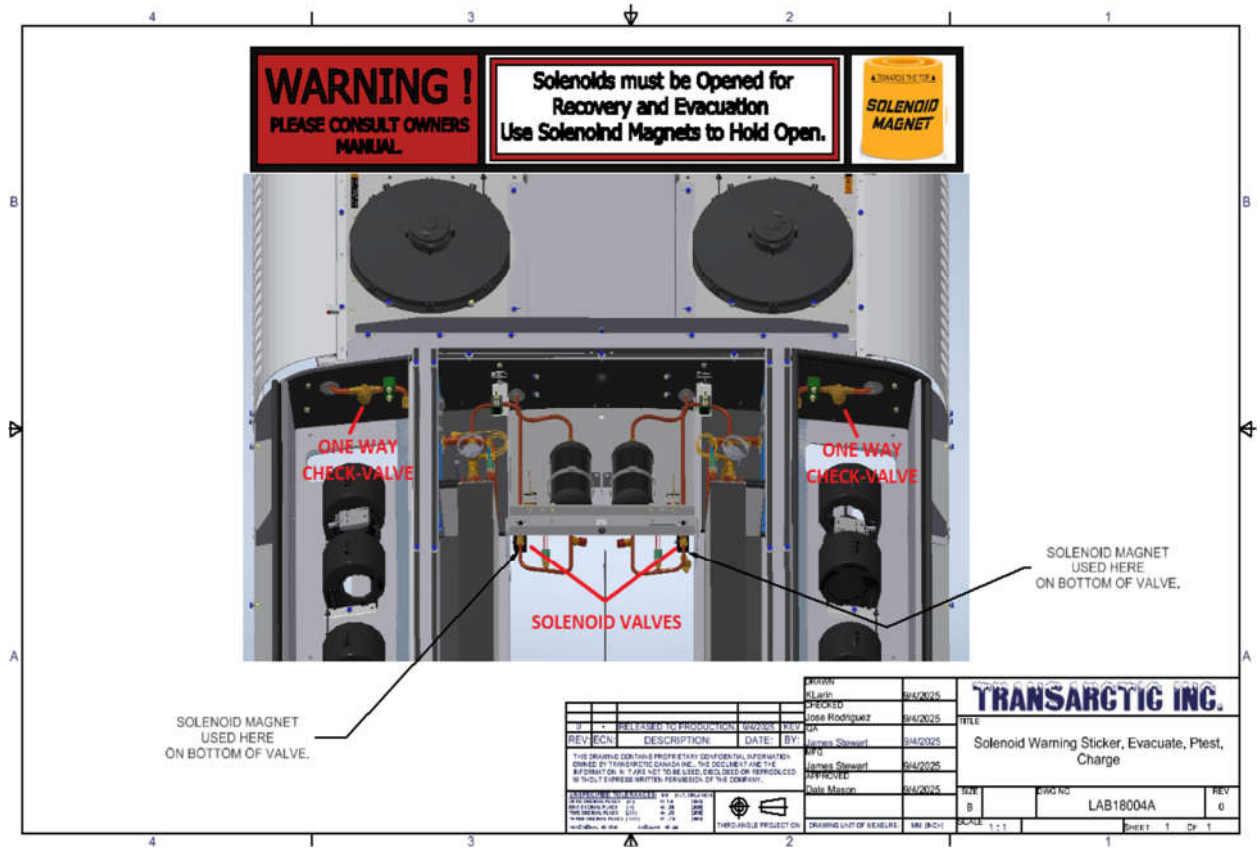
478-822-1126 or 1-877-265-3247

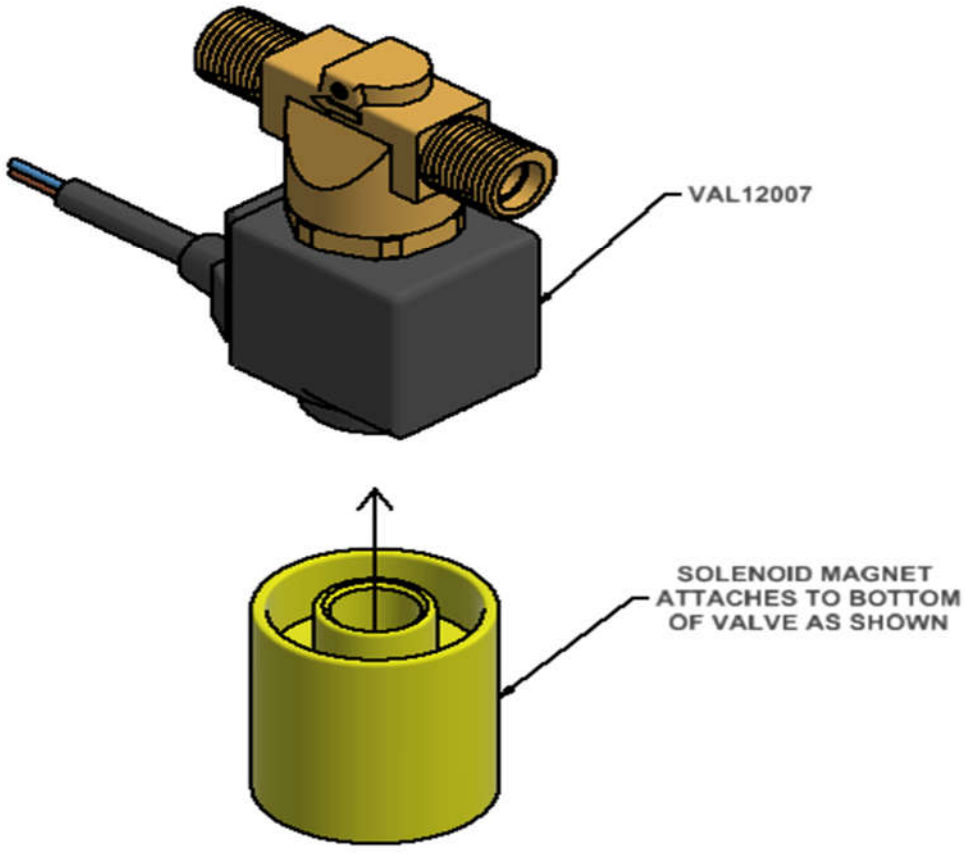
System Sales

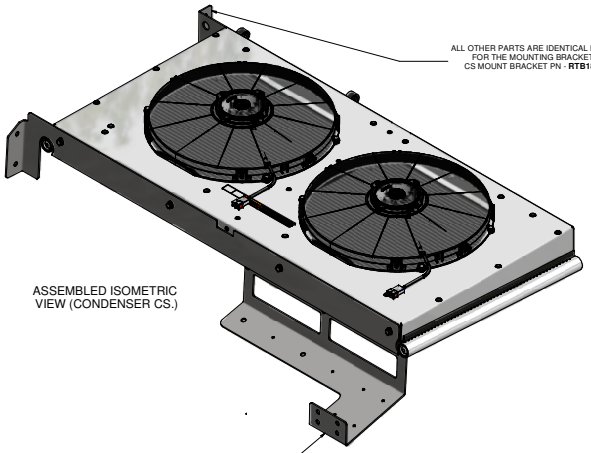
Dale Mason
dmason@transarctic.com
…….

Parts Sales
Rebecca Yeoman
ryeoman@transarctic.com
…….

Kevin Harris
kharris@transarctic.com
……..


WARNING !
PLEASE CONSULT OWNERS MANUAL.
Solenoids must be Opened for Recovery and Evacuation Use Solenoind Magnets to Hold Open.
SOLENOID MAGNET
ONE WAY CHECK-VALVE
ONE WAY CHECK-VALVE
SOLENOID VALVES
SOLENOID MAGNET USED HERE ON BOTTOM OF VALVE.
SOLENOID MAGNET USED HERE ON BOTTOM OF VALVE.
TRANSARCTIC INC.
Solenoid Warning Sticker, Evacuate, Ptest, Charge
LAB18004A

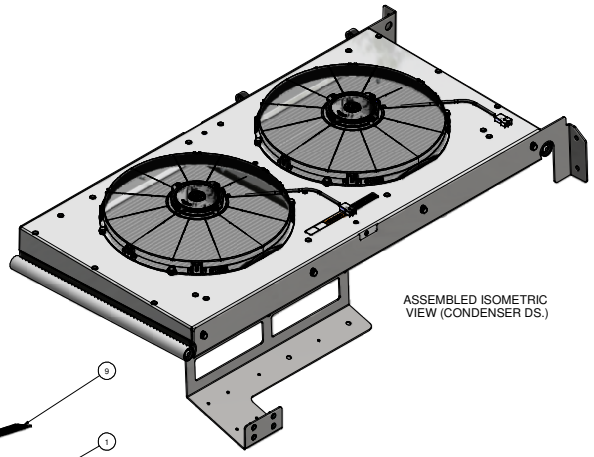

VAL12007
SOLENOID MAGNET ATTACHES TO BOTTOM OF VALVE AS SHOWN



ALL OTHER PARTS ARE IDENTICAL EXCEPT FOR THE MOUNTING BRACKETS. CS MOUNT BRACKET PN - **RTB18032**

ASSEMBLED ISOMETRIC VIEW (CONDENSER CS.)

ALL OTHER PARTS ARE IDENTICAL EXCEPT FOR THE MOUNTING BRACKETS. CS MOUNT BRACKET PN - **RTB18030**



ASSEMBLED ISOMETRIC VIEW (CONDENSER DS.)

DETAIL A
SCALE 2 : 1

ITEM	QTY	U/M	PART NUMBER	DESCRIPTION
16	6	EACH	RIV03014	Rivet, Blind, BH, 3/16", .06-.13, SS/SS
15	5	FT	IRE10B34	TRIM, 9/16" x 1/8" x 20", BLACK, PEBBLE, ALUM
14	1	EACH	RTB18038	BKT, T3 CONDENSER SHROUD BAFFLE, AL
13	42	EACH	NTS04028	NUT, RIV, 1/4-28 UNC, .027"-.165" GRIP.
12	20	EACH	WFS04000	WASHER, FLAT, 1/4", S/S, 2, PLT
11	20	EACH	WLS04000	WASHER, LOCK, 1/4", 18-8, SS
10	20	EACH	BTS04104	BOLT, HEX, 1/4-28UNF x 1.00, SS
9	1	EACH	LAB18000	LABEL, DANGER, WARNING, .75" x 8" x 006"
8	2	EACH	CLP20016	CLAMP, "P" TYPE, #16, 1/2"W, 1", PC
7	2	EACH	RTB18058	BKT, CONDENSER SHROUD STRUT, AL
6	2	EACH	FAN60003	FAN, COND, 12V, 2490 M3/HR (1469 CFM)
5	1	EACH	RTB18033	BKT, T3 CONDENSER, DS INNER, SS
4	2	EACH	GSK18000	RW-55-SBR Duro 70 Extruded channel
3	1	EACH	COC08021	COIL, CONDENSER, MCHX, BH SERIES
2	1	EACH	RTB18031	BKT, T3 CONDENSER, DS OUTER, SS
1	1	EACH	COV18008	COVER, T3 CONDENSER SHROUD, 2 FAN, AL

BILL OF MATERIALS

REV	ECN:	DESCRIPTION:	DATE:	BY:
0		RELEASED TO PRODUCTION.	3/15/2016	KEV

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UNSPECIFIED TOLERANCES: ONE DECIMAL PLACE (.X) ±0.5; TWO DECIMAL PLACE (.XX) ±0.25; THREE DECIMAL PLACE (.XXX) ±0.125; FRACTIONAL +/- 1/32"; ANGULAR +/- 30'; [ALT. DIMS] INCH [MM]: .06 [1.5], .13 [3.0], .25 [6.0], .50 [12.0]

THIRD ANGLE PROJECTION

DRAWING UNIT OF MEASURE: MM [INCH]

DRAWN	Klarin	3/15/2016
CHECKED	James Stewart	3/15/2016
QA	Val Jakowlew	3/15/2016
MFG	James Stewart	3/15/2016
APPROVED	Dale Mason	3/15/2016

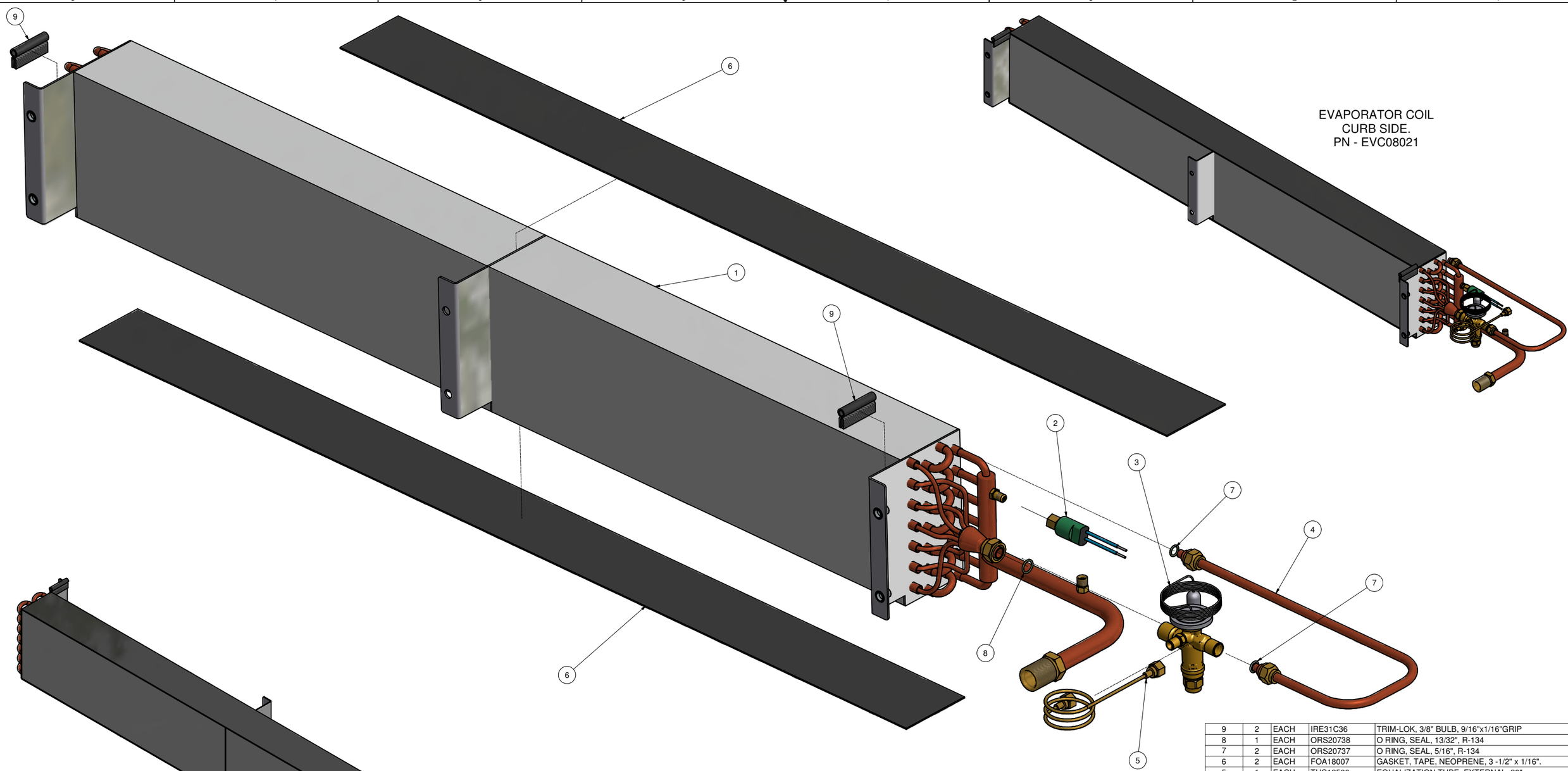
TRANSARCTIC INC.

TITLE: MICROCHANEL, COND, DS. ASSEMBLY.

SIZE: E | DWG NO: CONDENSER, DS. | REV: 0

SCALE: 1 : 2 | SHEET 1 OF 1

SUB ASSEMBLY



EVAPORATOR COIL
CURB SIDE.
PN - EVC08021

EVAPORATOR COIL
DRIVERS SIDE.
PN - EVC08022

ITEM	QTY	U/M	PART NUMBER	DESCRIPTION
9	2	EACH	IRE31C36	TRIM-LOK, 3/8" BULB, 9/16"x1/16"GRIP
8	1	EACH	ORS20738	O RING, SEAL, 13/32", R-134
7	2	EACH	ORS20737	O RING, SEAL, 5/16", R-134
6	2	EACH	FOA18007	GASKET, TAPE, NEOPRENE, 3 -1/2" x 1/16".
5	1	EACH	TUC12500	EQUALIZATION TUBE, EXTERNAL, 20"
4	1	EACH	TUC18020	SOLENOID TO TXV, .375" OD.
3	1	EACH	VAL35010	Valve, TX, Ext Eq, 3.5T, MIO, R134a
2	1	EACH	SWP03022	Switch, LP, Open 3-9/Close 22-28 PSIG
1	1	EACH	EVC08021	COIL, EVAPORATOR, CS, BH SERIES

Parts List

REV:	ECN:	DESCRIPTION:	DATE:	BY:
0	-	RELEASED TO PRODUCTION.	4/6/2016	KEV

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UNSPECIFIED TOLERANCES: [ALT. DIM.]

		MM	[INCH]
ONE DECIMAL PLACE	(.X)	.50	[.020]
TWO DECIMAL PLACE	(.XX)	.25	[.010]
THREE DECIMAL PLACE	(.XXX)	.10	[.005]
FRACTIONAL +/- 1/32"	ANGULAR +/- .50'		

THIRD ANGLE PROJECTION

DRAWN	Klarin	4/6/2016
CHECKED	James Stewart	4/6/2016
QA	Val Jakowlew	4/6/2016
MFG	James Stewart	4/6/2016
APPROVED	Dale Mason	4/6/2016

DRAWING UNIT OF MEASURE: MM [INCH]

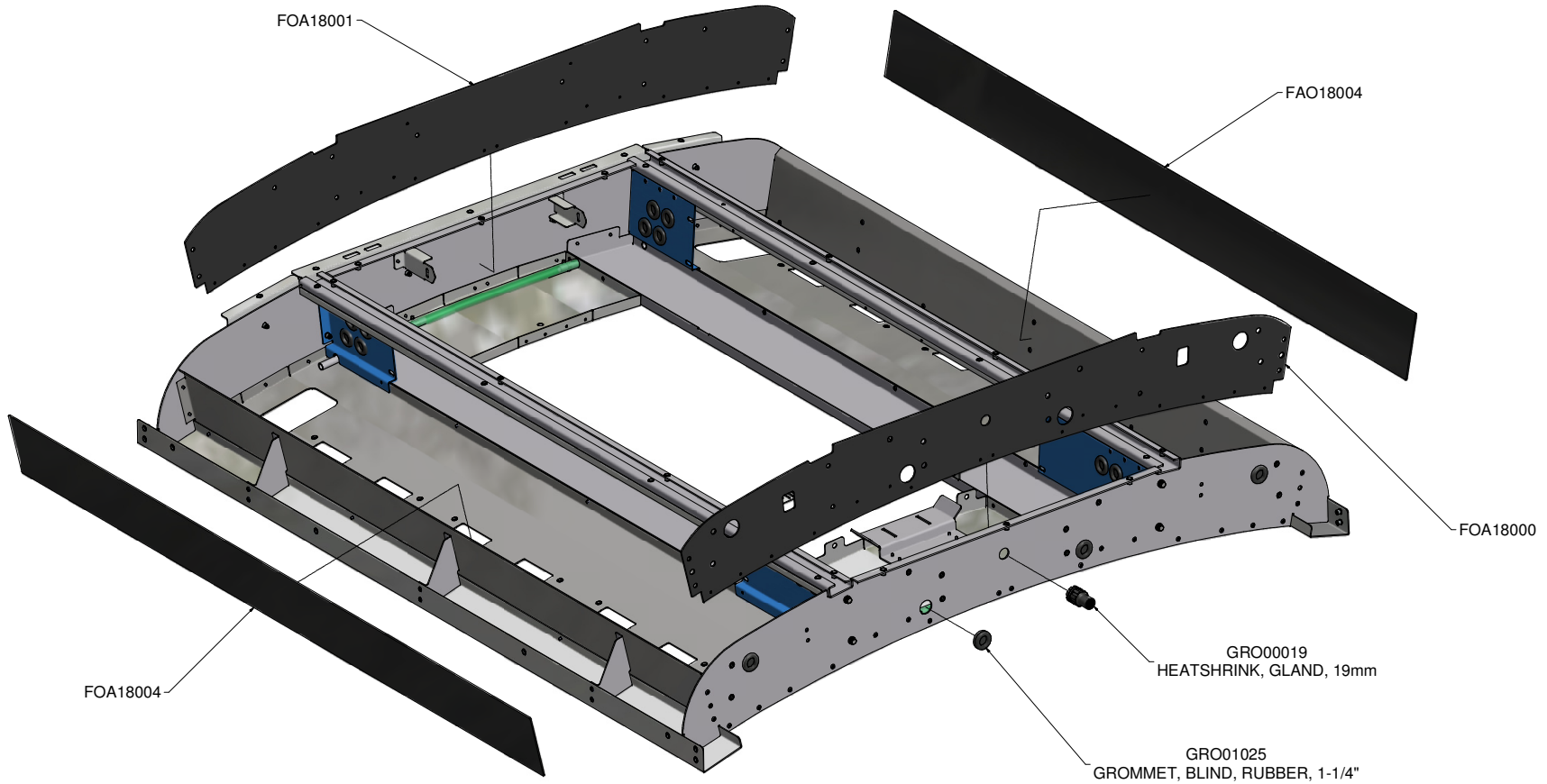
TRANSARCTIC INC.

TITLE

COIL, EVAP, CS, BH SERIES, SUB ASSEMBLY

SIZE	DWG NO	REV
D	EVC08021CS	0

SCALE 1 : 2 SHEET 1 OF 1



REV	ECN	DESCRIPTION:	DATE:	BY:
0	-	RELEASED TO PRODUCTION	3/17/2016	KEY

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UNSPECIFIED TOLERANCES: (MILY-2997)

	MM	INCH
ONE DECIMAL PLACE ±	.X	.X
TWO DECIMAL PLACE ±	.XX	.XX
THREE DECIMAL PLACE ±	.XXX	.XXX
FRACTIONAL +/-	1/32"	
ANGULAR +/-	30'	

THIRD ANGLE PROJECTION

DRAWN	Klarin	3/17/2016
CHECKED	James Stewart	3/17/2016
QA	Val Jakowlew	3/17/2016
MFG	James Stewart	3/17/2016
APPROVED	Dale Mason	3/17/2016

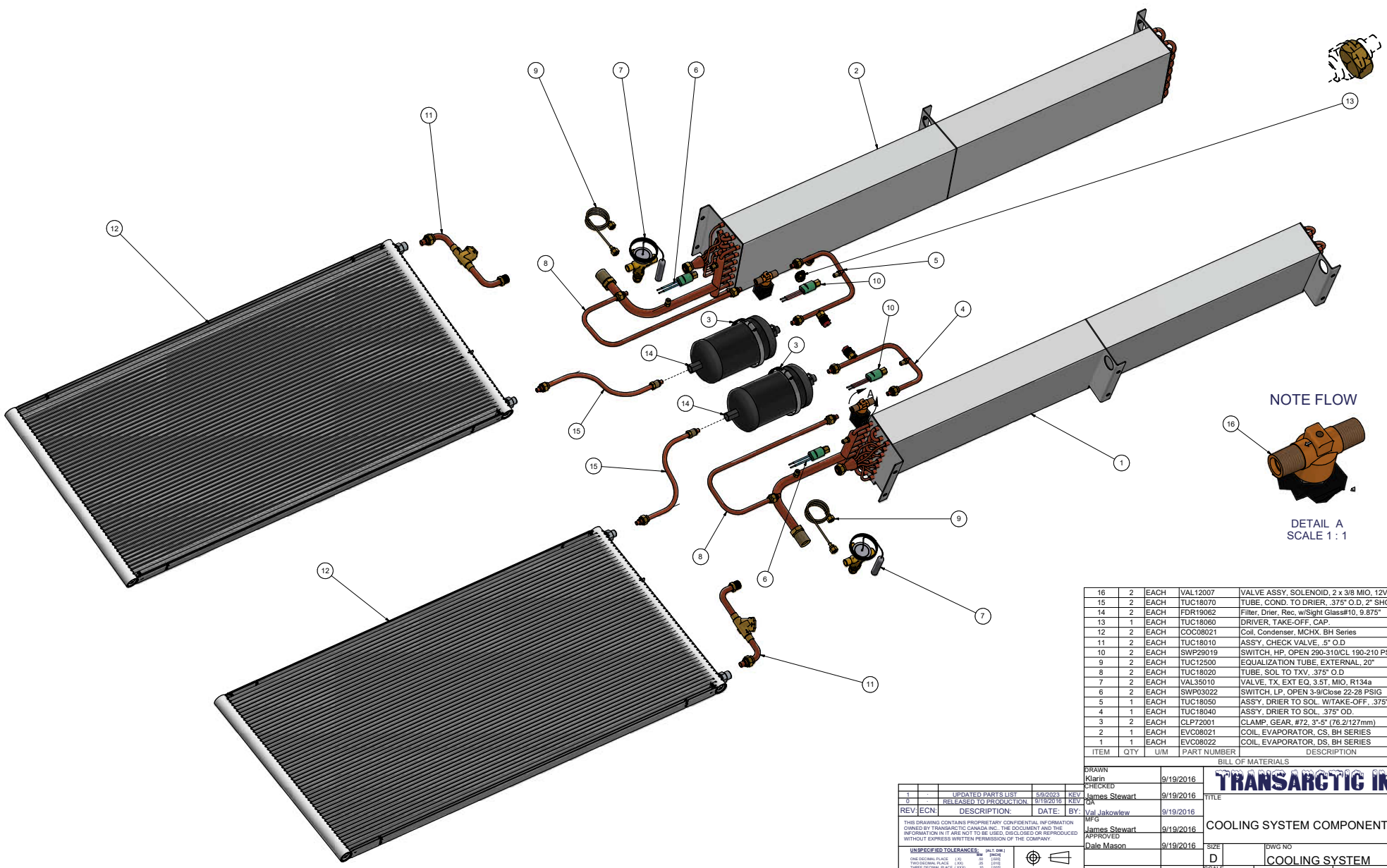
DRAWING UNIT OF MEASURE: MM [INCH]

TRANSARCTIC INC.

TITLE: EVAPORATOR BASE, KRT18030

SIZE: F | DWG NO: KRT18030 BASE | REV: 0

SCALE: 1 :5 | SHEET 1 OF 1



ITEM	QTY	U/M	PART NUMBER	DESCRIPTION
16	2	EACH	VAL12007	VALVE ASSY, SOLENOID, 2 x 3/8 MIO, 12V
15	2	EACH	TUC18070	TUBE, COND. TO DRIER, .375" O.D, 2" SHORTER
14	2	EACH	FDR19062	Filter, Drier, Rec, w/Sight Glass#10, 9.875"
13	1	EACH	TUC18060	DRIVER, TAKE-OFF, CAP.
12	2	EACH	COC08021	Coil, Condenser, MCHX. BH Series
11	2	EACH	TUC18010	ASS'Y, CHECK VALVE, .5" O.D
10	2	EACH	SWP29019	SWITCH, HP, OPEN 290-310/CL 190-210 PSIG
9	2	EACH	TUC12500	EQUALIZATION TUBE, EXTERNAL, 20"
8	2	EACH	TUC18020	TUBE, SOL TO TXV, .375" O.D
7	2	EACH	VAL35010	VALVE, TX, EXT EQ, 3.5T, MIO, R134a
6	2	EACH	SWP03022	SWITCH, LP, OPEN 3-9/Close 22-28 PSIG
5	1	EACH	TUC18050	ASS'Y, DRIER TO SOL. W/TAKE-OFF, .375" OD
4	1	EACH	TUC18040	ASS'Y, DRIER TO SOL, .375" OD.
3	2	EACH	CLP72001	CLAMP, GEAR, #72, 3"-5" (76.2/127mm)
2	1	EACH	EVC08021	COIL, EVAPORATOR, CS, BH SERIES
1	1	EACH	EVC08022	COIL, EVAPORATOR, DS, BH SERIES

BILL OF MATERIALS

REV:	ECN:	DESCRIPTION:	DATE:	BY:
1	-	UPDATED PARTS LIST	5/9/2023	KEV
0	-	RELEASED TO PRODUCTION.	9/19/2016	KEV

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UNSPECIFIED TOLERANCES: [ALT. DIM.] INCH [MM]
ONE DECIMAL PLACE (.X) .50 [12.0]
TWO DECIMAL PLACE (.XX) .25 [6.0]
THREE DECIMAL PLACE (.XXX) .10 [3.0]
FRACTIONAL +/- 1/32" ANGULAR +/- .50

THIRD ANGLE PROJECTION

DRAWN	Klarin	9/19/2016
CHECKED	James Stewart	9/19/2016
QA	Val Jakowlew	9/19/2016
MFG	James Stewart	9/19/2016
APPROVED	Dale Mason	9/19/2016

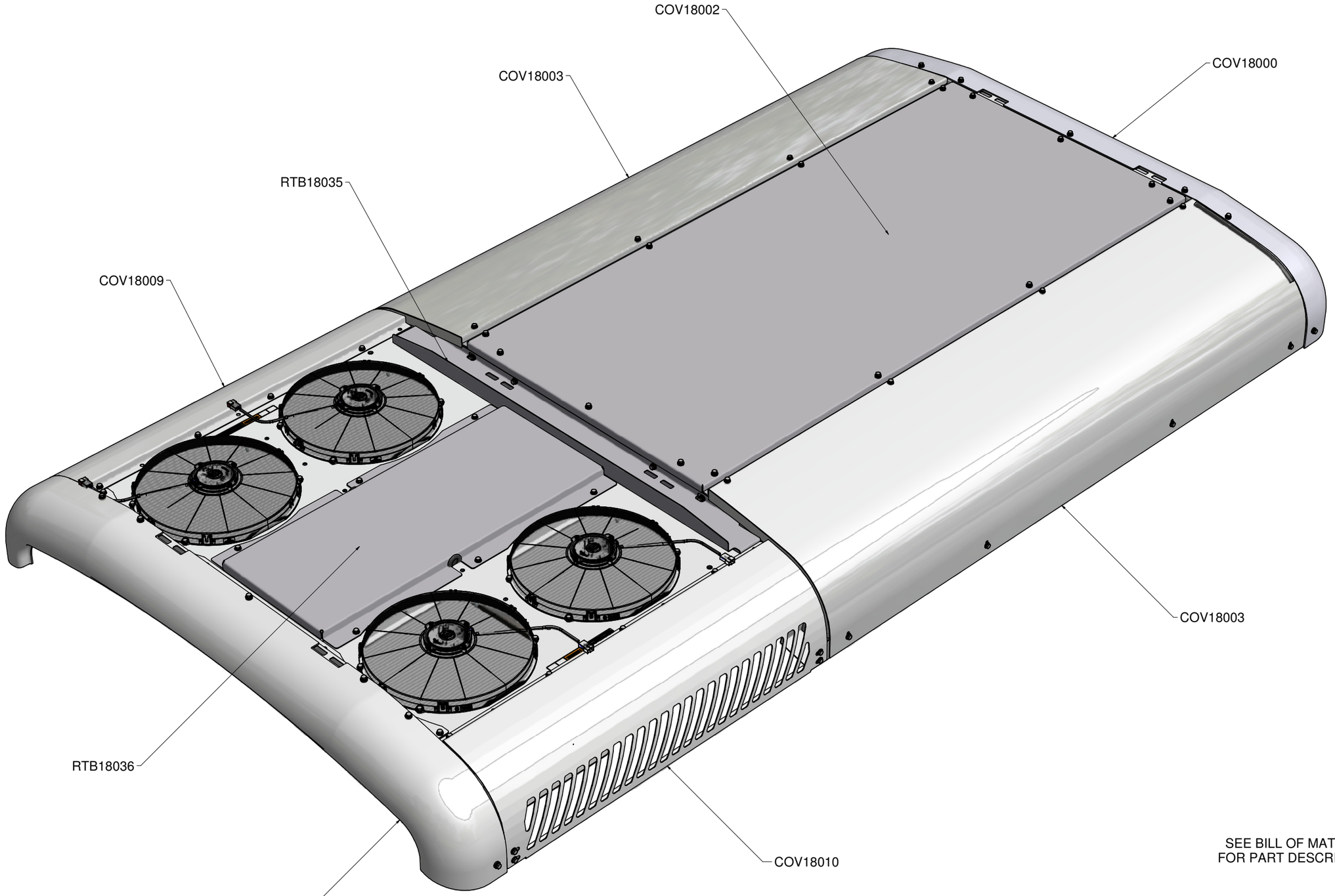
TRANSARCTIC INC.

TITLE: COOLING SYSTEM COMPONENTS

SIZE: D | DWG NO: COOLING SYSTEM | REV: 1

SCALE: 1 : 4 | SHEET 1 OF 1

DRAWING UNIT OF MEASURE: MM [INCH]



SEE BILL OF MATERIALS
FOR PART DESCRIPTIONS.

REV.	ECN:	DESCRIPTION:	DATE:	BY:
0	-	RELEASED TO PRODUCTION.	3/17/2016	KEV

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UNSPECIFIED TOLERANCES:

	MM	(ALT. DIM.) (INCH)
ONE DECIMAL PLACE (.X)	.50	[.020]
TWO DECIMAL PLACE (.XX)	.25	[.010]
THREE DECIMAL PLACE (.XXX)	.13	[.005]
FRACTIONAL +/- 1/32"	ANGULAR +/- 30'	

THIRD ANGLE PROJECTION

DRAWN	Klarin	3/8/2016
CHECKED	James Stewart	3/8/2016
QA	Val Jakowlew	3/8/2016
MFG	James Stewart	3/8/2016
APPROVED	Dale Mason	3/8/2016

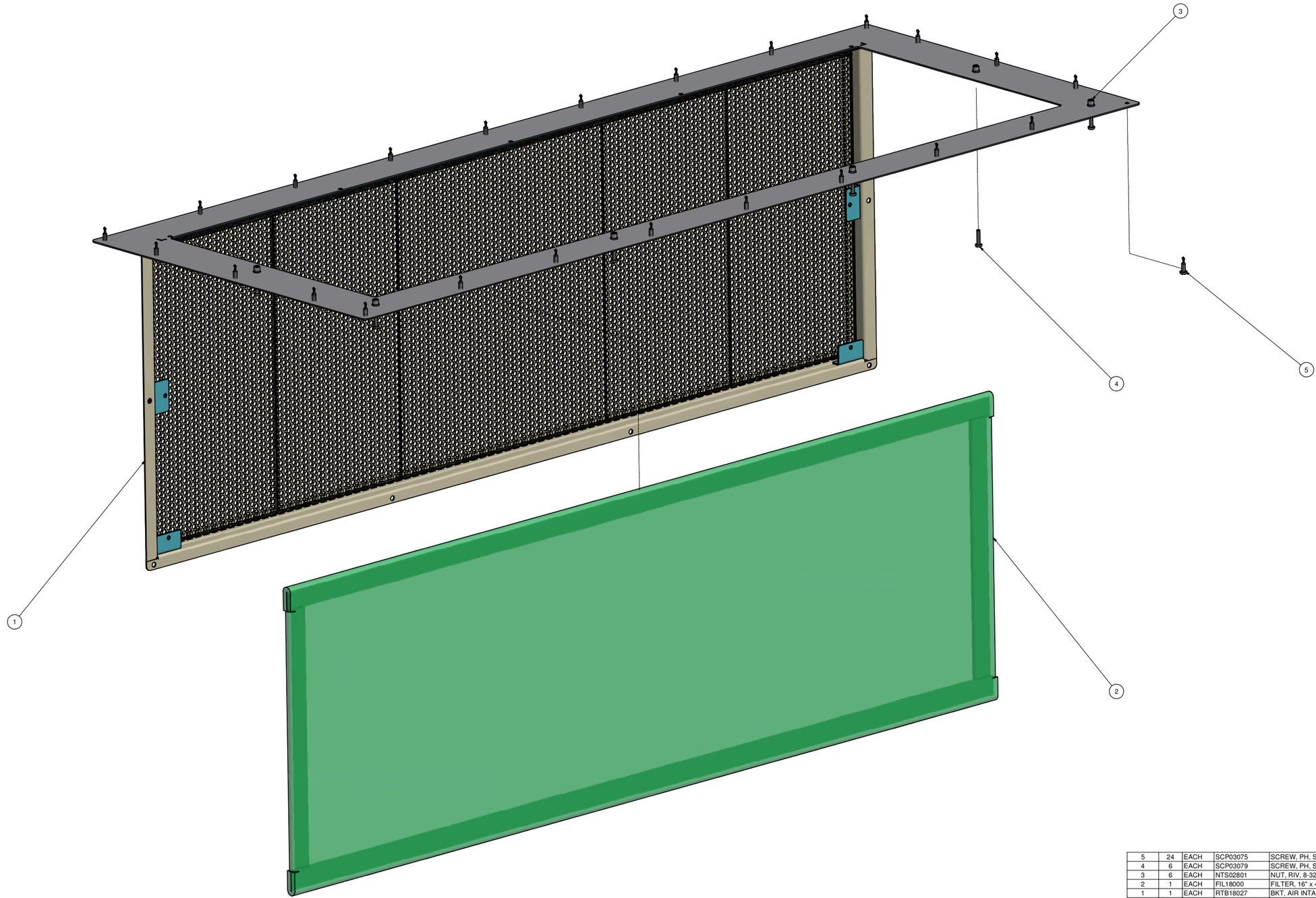
DRAWING UNIT OF MEASURE: MM [INCH]

TRANSARCTIC INC.

TITLE: KRT18030 COVERS

SIZE: F | DWG NO: KRT18030 | REV: 0

SCALE: 1:10 | SHEET 1 OF 1



ITEM	QTY	U/M	PART NUMBER	DESCRIPTION
1	1	EACH	RTB18027	BKT, AIR INTAKE, WELDMT
2	1	EACH	FIL18000	FILTER, 16" x 48", POLYWIRE, P604, WASHABLE.
3	6	EACH	NTS02801	NUT, RIV, 8-32 UNF
4	6	EACH	SCP03079	SCREW, PH, SDT, 8-32 X .75, 18.8, SS
5	24	EACH	SCP03075	SCREW, PH, SDT, #10-16 x .75, ST, PLT

Parts List

REV.	ECN:	DESCRIPTION:	DATE:	BY:
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UNSPECIFIED TOLERANCES: [ALT. DIM.] MM [INCH]
ONE DECIMAL PLACE (.X) .50 [.020]
TWO DECIMAL PLACE (.XX) .25 [.010]
THREE DECIMAL PLACE (.XXX) .10 [.005]
FRACTIONAL +/- 1/32" ANGULAR +/- 30'

THIRD ANGLE PROJECTION

DRAWN	Klarin	9/20/2016
CHECKED	James Stewart	9/20/2016
QA	Val Jakowlew	9/20/2016
MFG		9/20/2016
APPROVED	Dale Mason	9/20/2016

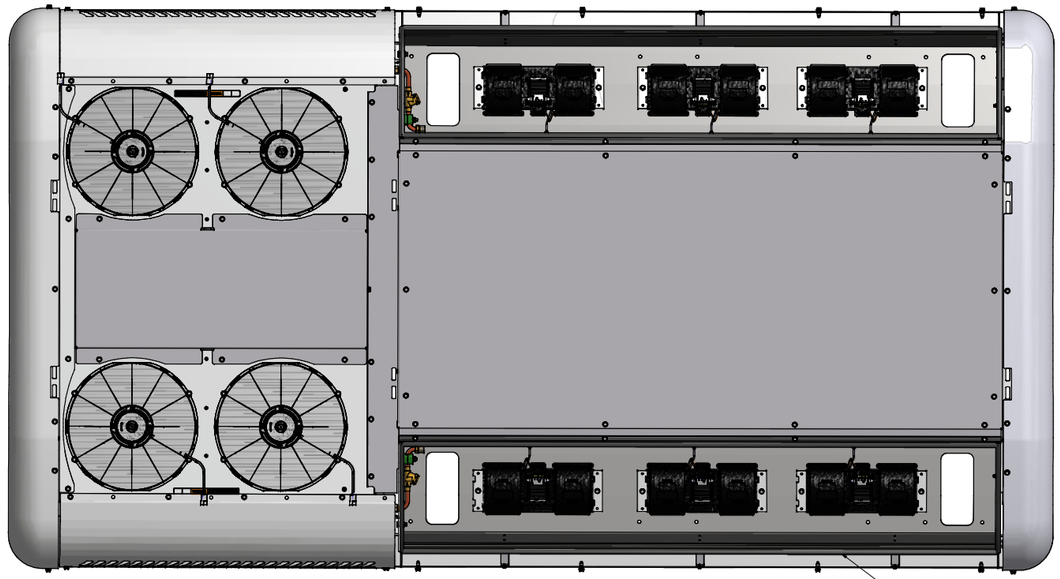
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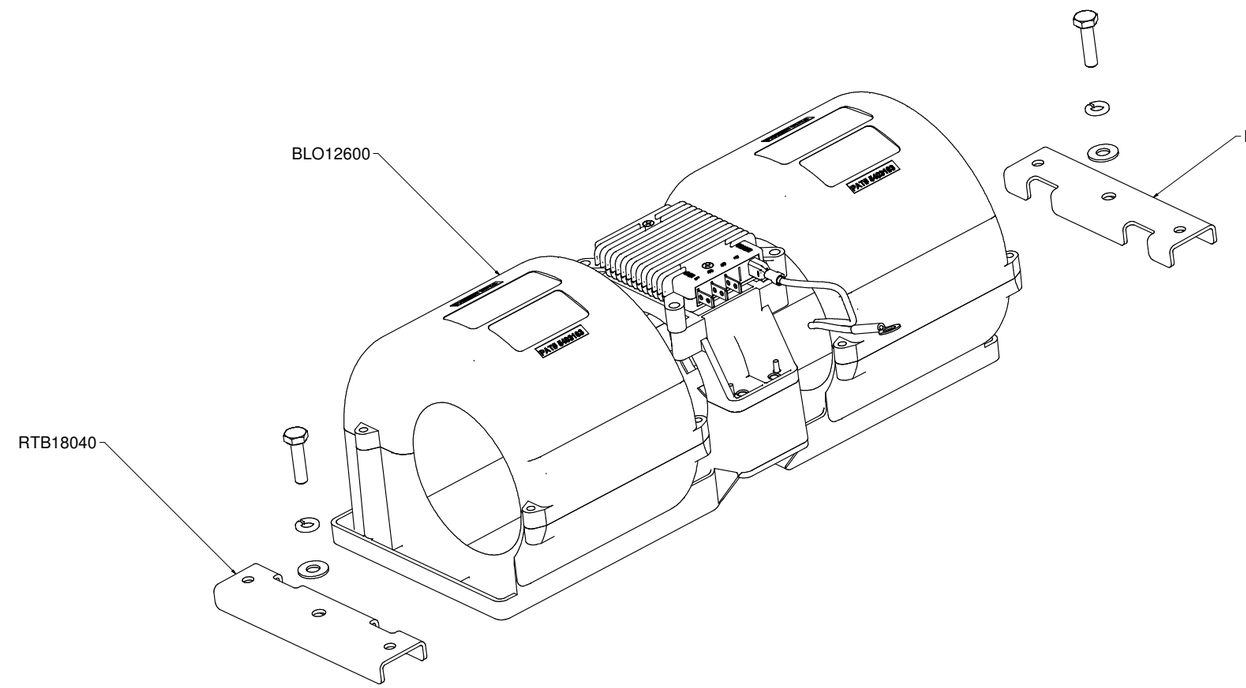
TITLE: KIT, AIR INTAKE, FILTER

DRAWING UNIT OF MEASURE: MM [INCH]

SIZE: F | DWG NO: KAF18050 | REV: 0

SCALE: 1 : 2 | SHEET 1 OF 1







SBU58010
BULB SEAL

SEE BILL OF MATERIALS
FOR PART DESCRIPTIONS.

REV	ECN	DESCRIPTION:	DATE:	BY:
0		RELEASED TO PRODUCTION.	9/16/2016	REV.

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UNSPECIFIED TOLERANCES (INCH) (MM)
ONE DECIMAL PLACE (.X) .10 [2.5]
TWO DECIMAL PLACE (.XX) .03 [0.8]
THREE DECIMAL PLACE (.XXX) .010 [0.25]
FRACTIONAL +/- 1/32" ANGULAR +/- 1/2°

THIRD ANGLE PROJECTION

DRAWN	Klarin	9/16/2016
CHECKED	James Stewart	9/16/2016
QA	Val Jakowiew	9-16/2016
MFG	James Stewart	9/16/2016
APPROVED	Dale Mason	9/16/2016

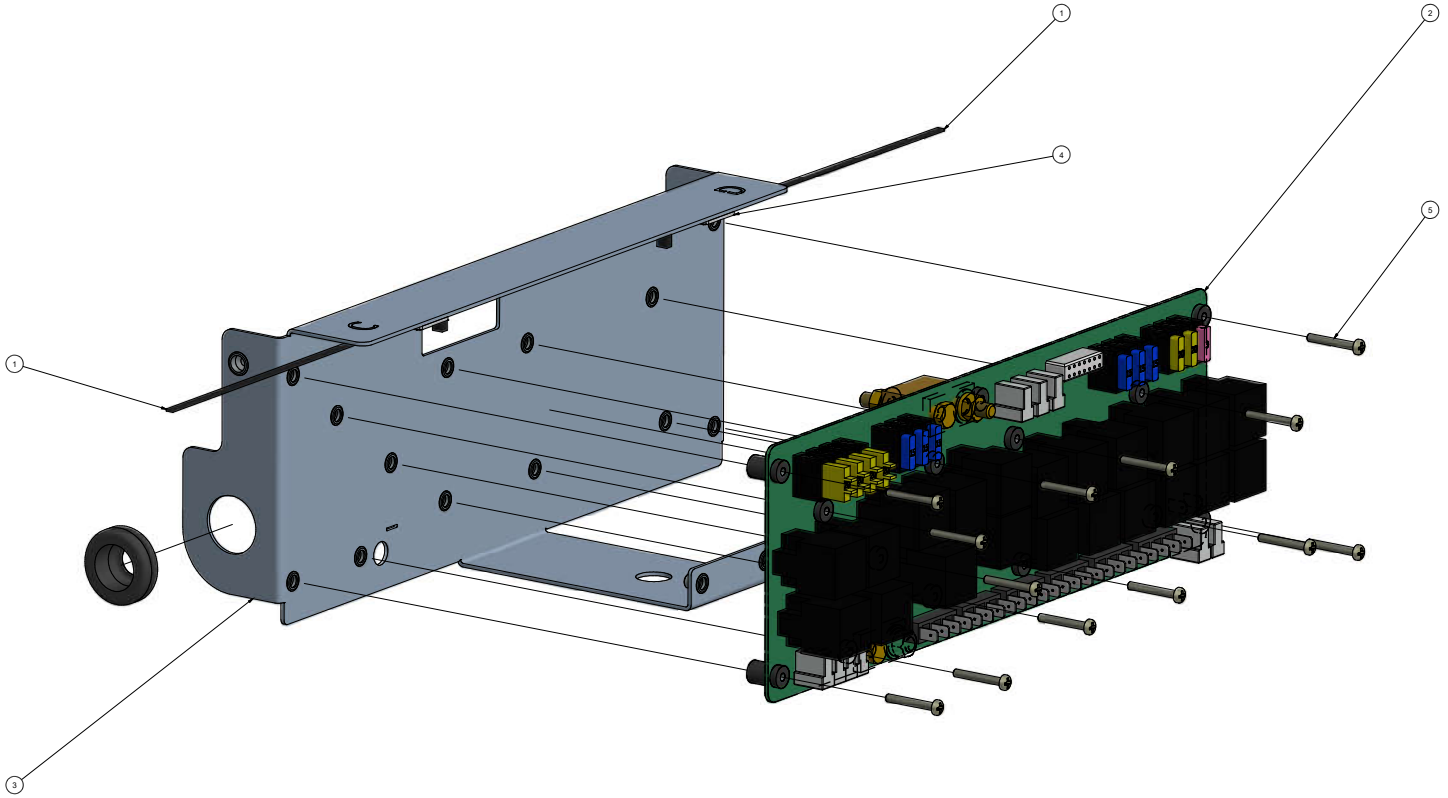
DRAWING UNIT OF MEASURE: MM [INCH]

TRANSARCTIC INC.

TITLE: EVAPORATOR BLOWERS

SIZE: E | DWG NO: KRT18030-T3 | REV: 0

SCALE: 1 : 4 | SHEET 1 OF 1



SUB ASSEMBLY

ITEM	QTY	U/M	PART NUMBER	DESCRIPTION
5	13	EACH	SCP03081	SCREW, PH, PD, 8-32 X 1.25, ST, PLT
4	2	EACH	SAH21040	CABLE TIE MOUNT, SELF AD, 1"x1", SQ
3	1	EACH	RTB18071	BKT, ASSEMY, RELAY PANEL BASE
2	1	EACH	EPA04610	PANEL, ASSY,12V RELAY PANEL,4 CON,6 EVAP
1	2	EACH	21046	CABLE TIE, 14", UV RESISTANT, BLACK

BILL OF MATERIALS

REV	ECN	DESCRIPTION:	DATE:	BY:
0		RELEASED TO PRODUCTION	10/04/2022	KEV

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UNSPECIFIED TOLERANCES: [ALT. DIM.] INCH [MM]
ONE DECIMAL PLACE (.X) 25 [.X]
TWO DECIMAL PLACE (.XX) .25 [.XX]
THREE DECIMAL PLACE (.XXX) .13 [.XXX]
FRACTIONAL +/- 1/32" ANGULAR +/- 30'

THIRD ANGLE PROJECTION

DRAWING UNIT OF MEASURE: MM [INCH]

DRAWN	Klarin	3/17/2016
CHECKED	James Stewart	3/17/2016
QA	Val Jakowlew	3/17/2016
MFG	James Stewart	3/17/2016
APPROVED	Dale Mason	3/17/2016

TRANSARCTIC INC.

TITLE: ASSEMBLY, RELAY PANEL.

SIZE: E | DWG NO: RTB18047 | REV: 0

SCALE: 1 : 1 | SHEET 1 OF 1

ELECTRONIC CONTROLLER FOR AIR CONDITIONING SYSTEM

GL-P0HTT001 – THERMOSTAT

April, 2018
Revision 03E
Software Version 1.5

SUMMARY

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1) INTRODUCTION

The electronic controller of air conditioning system, **GL-P0HTT001** is a microprocessed device, developed to control and supervise air conditioning systems for buses. It acts on ventilators, condensers and compressors to get the temperature level desired inside the vehicle. It receives information of temperature and system pressure.



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globus@globus.com.br www.globus.com.br

2) SYSTEM OPERATION

2.1) Control Panel



The control panel installed in the driver's panel has a main CPU composed by an operational programming keyboard of the air conditioning system and of a numerical display for the parameters visualization, operational status and temperature.

2.2) Power / Stand by

When supplying the panel in 12/24VDC, the display will indicate software version and after the display will turn off, indicating that the panel is in "stand by" mode. To exit of stand by mode you should follow the item **2.2.1** or **2.2.2**.

2.2.1) Turning ON the panel in "Automatic Mode"

To turn ON the panel in automatic mode, press , it will show the temperature on the display. The control will be done according to the item **2.7**.

To turn OFF the panel you should press for 3s.

2.2.2) Turning ON the panel in "Manual Ventilation"

To turn ON the panel in manual ventilation mode, press (vent up) or (vent down), it will show **u0** on the display (ventilation OFF) and to change the speed, press (vent_up) or (vent_down) as the item **2.6**.

To turn OFF the panel you should press for 3s.

2.3) Numerical Display

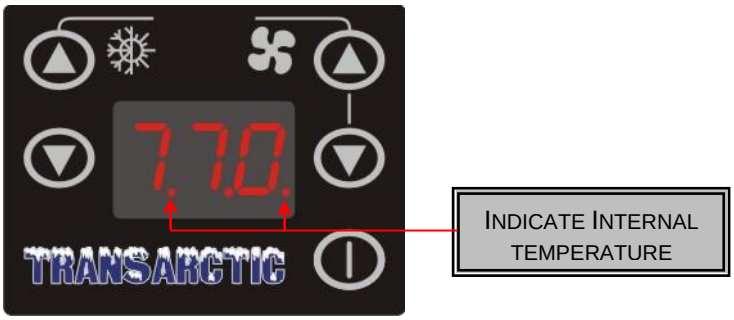
In automatic mode, besides show the programmed setpoint, the display will show the internal temperature to the driver, as well as system failures, access to the parameters and programmed speed.

In manual ventilation mode, the display will indicate the programmed speed, internal temperature, setpoint and system failure.

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2.4) Internal Temperature Sensor

When the parameter **SL** will be equal to **1**, the display will show the setpoint value. If the parameter **SL** will be **0**, the display will show the internal temperature. With **SL** equal to **1**, to visualize the temperature, press , and 2 dots will keep blinking alternately on the display, what indicate that the display will keep showing the temperature and not the setpoint. Posteriorly the panel will return indicating the setpoint and the dots will stop blinking.



2.5) Setpoint

Setpoint is the temperature desired inside the vehicle. To regulate it, press (up) or (down). The setpoint temperature will show blinking on the display, so press again one of the buttons until you reach the temperature desired.



2.6) Manual Ventilation Mode

After enter in manual ventilation mode (as the item **2.2.2**) the display will indicate **u0** (ventilation OFF). To change the speeds, you should press the buttons (vent_up) or (vent_down) as the table below:

Visualization on the panel	Speed
u0	Ventilation OFF
u1	Ventilation Low Speed
u2	Ventilation Medium Speed
u3	Ventilation High Speed

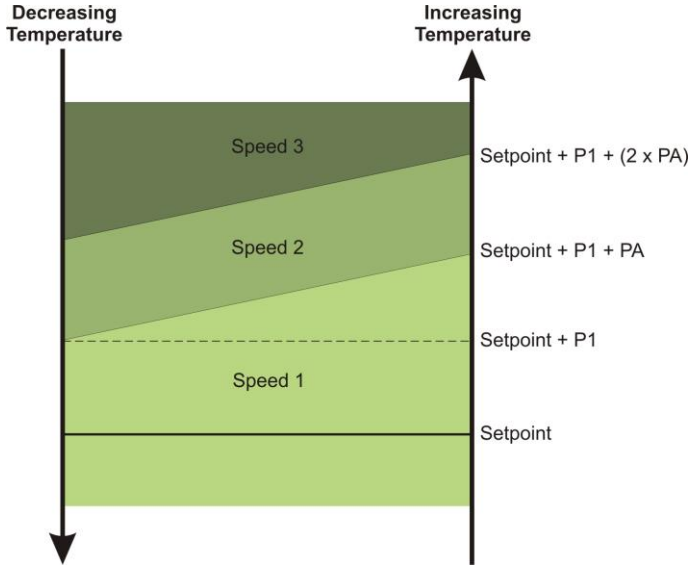
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2.7) Automatic Mode

After enter in automatic mode (according to the item **2.2.1**), the control will be done through the setpoint and parameters **P1**, **PA** e **dC**, as described on items **2.7.1** and **2.7.2**:

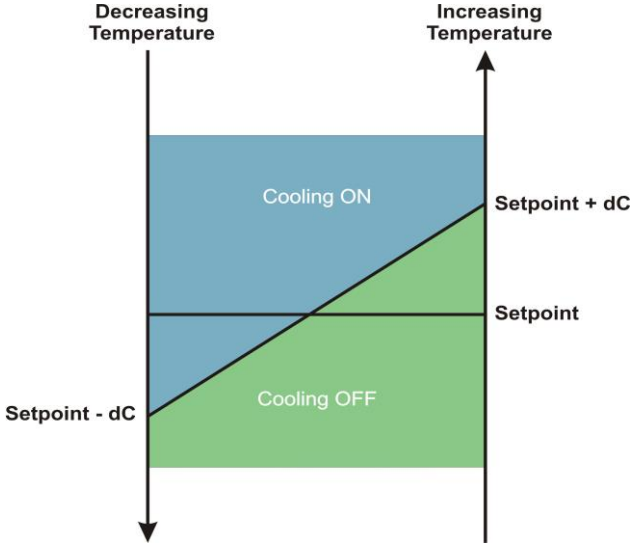
2.7.1) Automatic Ventilation

When entered in automatic mode, the panel will activate an automatic ventilation according to the setpoint and the parameters **P1** and **PA**, as shows the graph below:



2.7.2) Cooling

When entered in automatic mode, the cooling will be controlled by the setpoint and parameter **dC**, as shows the graph below:



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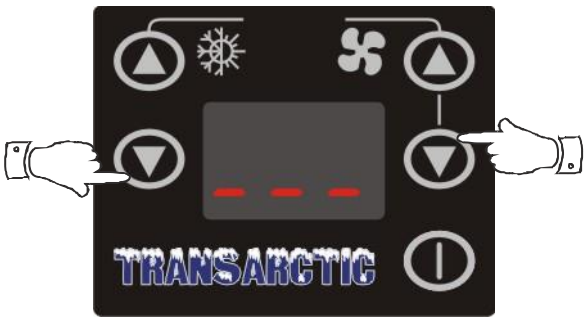
The compressor **2** will be turn ON 5s after the compressor **1** turn ON. The condenser just turn off if an failure occurred on both pressure switches, or by automatic control. There is a hysteresis of 30s when the condenser restarts.

2.8) Gas Charge

It allows to turn ON the air conditioning independent of the temperature sensor. Turn ON the condenser and the ventilation in low speed, respecting the pressure switch input. It has by function the gas charge and could only be activated in test mode by the system.

3) SYSTEM PARAMETER

- To access the parameters, press simultaneously the buttons (down) and (vent_down) for 3s;



- 3 lines will show on the display, which the password **053** should be entered on the display;
- To enter the password, use (up) to increase and (down) to decrease. To change the digit, press , after digit the password **053**, press again to enter on the parameters;
- The first parameter is **P0**, to navigate on the parameters, press (up) or (down);
- To visualize the parameter value, press .
- To change the value, press (up) or (down) and confirm again the value, pressing ;
- To exit, press (vent_up).

Adjustable Parameters

Parameter	Function	Def	Min	Max
P0	Off-set sensor temperature	0°C	-5°C	+5°C

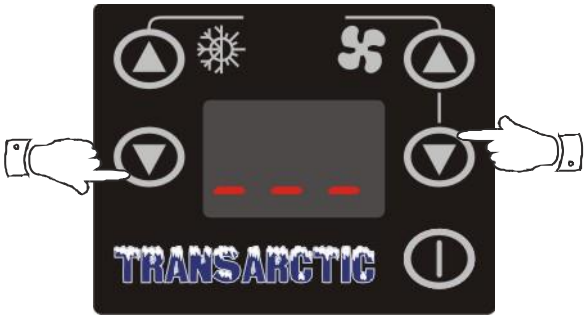
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P1	Temperature above the setpoint to change blowers speed	1°C	1°C	5°C
PA	Hysteresis temperature to change blowers' speed	1°C	1°C	5°C
dC	Hysteresis temperature to activate the cooling	1°C	1°C	4°C
SL	Standard visualization on display (**0** = temperature; **1** = setpoint)	1	0	1
Pr	Auto Start Up (**0** = disable; **1** = enable)	0	0	1
BL	Block de setpoint (**0** = disable; **1** = enable)	0	0	1
Lt	Minimum value of setpoint	15°C	-40°C	35°C
Ht	Maximum value of setpoint	32°C	-40°C	35°C
CF	Temperature scale (**0** = Celsius; **1** = Fahrenheit)	1	0	1

4) INPUTS AND OUTPUTS VISUALIZATIONS

This panel allows the visualization of inputs and outputs in order to know if they are activated or deactivated.

- To access this mode, press simultaneously the buttons (down) and (vent_down) for 3s;



- 3 lines will show on the display which the password **011** should be entered;
- To enter the password, use (up) to increase and (down) to decrease. To change the digit, press , after digit the password **011**, press again to enter in visualizations;
- The first visualization is **SP1**. To navigate through the visualizations, press (up) or (down);
- To exit, press (vent_up).
  - **Led ON** = input with signal or activated output;
  - **Led blinking** = input without signal or output OFF;

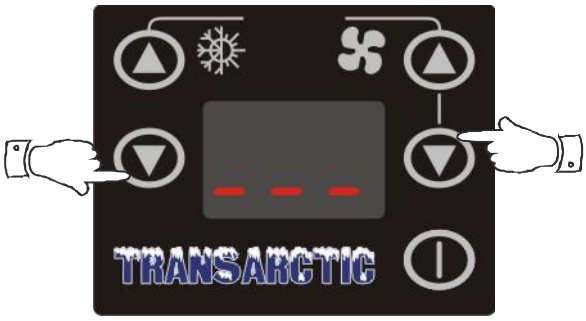
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Indication	Description
SP1	Ventilation - Low Speed
SP2	Ventilation - Medium Speed
SP3	Ventilation - High Speed
CL1	Compressor 1
CL2	Compressor 2
CdS	Condenser
Pr1	Pressure Switch 1
Pr2	Pressure Switch 2

5) TEST MODE

Use this test mode to test inputs and outputs, which is possible to change its states.

- To access this mode, press simultaneously the buttons (down) and (vent_down) for 3s;



- 3 lines will show on the display, which the password **086** should be entered;
- To enter the password, use (up) to increase and (down) to decrease. To change the digit, press , after form the password **086**, press again to enter in visualization;
- The first test is **PS1**, to navigate through the visualizations, press (up) or (down);
- To exit, press (vent_up).
  - **Led ON** = input with signal or output activated;
  - **Led blinking** = input without signal and output OFF;

Indication	Description
PS1	Pressure Switch 1
PS2	Pressure Switch 2
SP1	Ventilation - Low Speed

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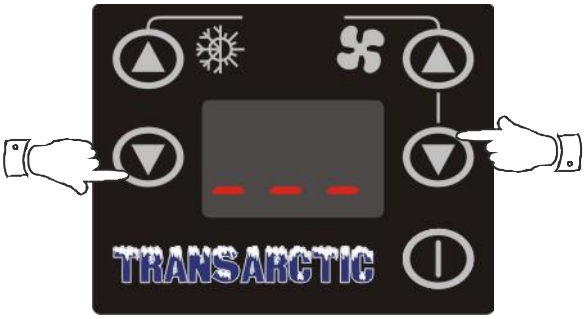
SP2	Ventilation - Medium Speed
SP3	Ventilation - High Speed
CG1	Gas Charge 1 (Condenser + Compressor 1+ Ventilation – High Speed)
CG2	Gas Charge 2 (Condenser + Compressor 2+ Ventilation – High Speed)
CdS	Condenser
dY	Display

6) HOURMETERS

This panel has four hourmeters for visualization:

- Compressor 1 or 2 hourmeter;
- Unit total hourmeter;
- Compressor 1 hourmeter;
- Compressor 2 hourmeter.

- To access this mode, press simultaneously the buttons (down) and (vent_down) for 3s;



- After the display show the 3 lines on the display, put the password **046** (according descrebd below);
- To enter the password, use (up) to increase and (down) to decrease. To change the digit, press , after form the password **046**, press again to enter in visualization;
- The first visualization is the compressor hourmeter, as shown in the following table:

Indication	Description
Cxx	Compressors Hourmeter (compressor **1** or Compressor **2**)
Uxx	Unit Total Hourmeter
Axx	Compressor **1** Hourmeter
bxx	Compressor **2** Hourmeter

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Note: the visualization format will be given as follows: for example **C18** and after **362**, it will correspond to 18362h.

- To exit, press  (vent_up).

7) FAILURES

Failure	Description	Action
FP1	Pressure Switch Failure 1	When occurr a pressure switch failure (1 or 2), the corresponding compressor output will be turned off immediately and after 3 minutes the display will be indicate the respective. After the failure fixed the corresponding compressor output will turn on in 1 minute.
FP2	Pressure Switch Failure 2	
F1	Failure of Internal Temperature Sensor	Shows only the failure code

Obs[1].: If it will be in **CG** mode (gas charge) the display will show **CG** changing with **FP**, the condenser will be OFF, returning to be ON only after the failure, i.e., after 30 seconds of the re-establishment, the condenser will be OFF.

Obs[2].: If it happens 10 or more pressure switch failures in 1 hour, the display will show code **FS1** (for pressure switch 1) and **FS2** (for pressure switch 2).

8) PROTECTIONS

- The control panel has protected outputs against short circuit which actuates in a thermal circuit.
- The maximum output current per pin is 180mA.

9) OPERABILITY

- This controller should operate in a maximum temperature range from -10°C to 70°C.
- This controller should operate in ideal conditions of humidity and temperature;
- This controller operates with nominal voltage of 12V$_{DC}$ and 24V$_{DC}$.
- In a continuous basis, it should operate with voltage 10 V$_{DC}$ to 29V$_{DC}$, with integrity of all functions.
- The electronic system should support 32V$_{DC}$, during 5 minutes, without any permanent damages.
- The circuit control should support -12V$_{DC}$ / -24V$_{DC}$ (polarity reversion) indefinitely, without any damage.

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10) REVISION RECORD

Revision	Date	Author	Description
A	02/27/2014	FK	Original file.
02	05/11/2017	FK	Changed the description of item 2.2; Changed the description of item 2.7.2; Changed default of parameters **SL** and **Pr**; Included item 6 - Hourmeters; Changed the description of item 7.
03	04/03/2018	FK	Included separate hourmeter for each compressor.

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COMPANY

Globus is a company that develops, manufactures, and markets Electronic Control equipment.

It has two divisions:

- Automotive: Customized OEM Products.
- Automation Systems: equipment for the automation of refrigeration and air conditioning systems.

MISSION

Provide electro-electronic solutions, adding value to our customers' products and services.

AIM:

To be a world reference in technological solutions.

QUALITY

Ever since December 2000 the company has been ISO 9001 certified for the process of DEVELOPMENT, INDUSTRIALIZATION, AND TECHNICAL ASSISTANCE OF ELECTRONIC PRODUCTS FOR AUTOMOTIVE APPLICATION AND AUTOMATION SYSTEMS.

POLICY QUALITY

To improve our products and processes on a continuous basis, aiming at the satisfaction of Customers, Coworkers, and Shareholders.

OBJECTIVES OF QUALITY:

Improvement of product quality

New Technologies

Customer Satisfaction

Coworkers' Satisfaction

RESEARCH AND DEVELOPMENT

Our Engineering Team is ready to analyze, suggest, specify, and implement complete solutions in temperature and humidity control systems. With a highly qualified and experienced technical team, we will identify the best product for your application. Through our know-how we can design equipment within your needs and specifications. Our key features are versatility, flexibility, and quickness in developing new projects and products, allied to a high technology and quality standard. Bring your ideas to our Engineering Team. We will certainly have the solution at the right measure.



WIRE HARNESSES

HAR18101……Driver Control

HAR18201……Solenoid Loop

HAR18301……Evap Blowers

HAR18401……Condensers

HAR18501……DS Safety Loop

HAR18601……CS Safety Loop

See Bill of Materials for full Harness descriptions.



COMPRESSOR 1–(DS)

14AWG BRN

(HIGH IDLE ROCKER SWITCH)

IGNITION. LIVE

CLOSED

18AWG BLACK

18AWG GREEN

PN–31572–T–TAP TERMINAL

PN–31572–T–TAP TERMINAL

14AWG PINK

DIODE–70061751(6Amp.400V)

14AWG BRN

30

RELAY
HIGH
IDLE
(PN-75302)

86

85

14AWG GREEN

DIODE–70061751(6Amp.400V)

14AWG BLU

87

14AWG TAN

COMPRESSOR – 2(CS)

14AWG BLU

A/C ELEC. PANEL

REV:	ECN:	DESCRIPTION:	DATE:	BY:
A	.	RELEASED TO PRODUCTION	9/8/2016	KEV

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UNSPECIFIED TOLERANCES: [ALT. DIM.]

		MM	[INCH]
ONE DECIMAL PLACE	(.X)	.50	[.020]
TWO DECIMAL PLACE	(.XX)	.25	[.010]
THREE DECIMAL PLACE	(.XXX)	.10	[.005]
FRACTIONAL +/- 1/32"	ANGULAR	+/- .50°	

THIRD ANGLE PROJECTION

DRAWN	KLarin	9/8/2016
CHECKED	JAMES STEWART	9/8/2016
QA	James Stewart	9/8/2016
MFG	JAMES STEWART	9/8/2016
APPROVED	DALE MASON	9/8/2016
DRAWING UNIT OF MEASURE:	MM [INCH]	

TRANSARCTIC INC.

TITLE

WIRING DIAGRAM, KHI00002, DUAL COMPRESSOR, HIGH IDLE. KIT.

SIZE	DWG NO	REV
C	ELS00002	C

SCALE

SHEET 1 OF 1

(BIG HOSS KRT18020 EVAPORATOR BOX)

(CIRCUIT BOARD GL - R1HTT001-C)
EPN04610 - REV 0

(CONDENSERS / SHROUD AND FANS)

TO FRAME RAIL
GROUND (6AWG BLK)

NOTES:
1) USE 2 PLUG BLACK WEATHER PACK CONNECTORS ON CONDENSER FANS.
2) TEMPERATURE SENSOR RUNS TO CENTER OF EVAP. INTAKE WHERE IT HANGS IN AIR FLOW.
3) 8 WIRE CONDENSER HARNESS RUNS INTO PASSTHRU HEAT SHRINK GROMMET INTO EVAP. BOX

LED (G) = OK
LED (R) = PROBLEM

REV:	ECN:	DESCRIPTION:	DATE:	BY:
C	.	UPDATE WIRING FOR NEW BOARD	7/12/2016	KEV
B	.	COND. RELAYS FROM 20 TO 30AMP	2/04/2015	KEV
A	.	RELEASED TO PROTOTYPE	7/09/2014	KEV

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MFG	JAMES STEWART	7/09/2014
APPROVED	DALE MASON	7/09/2014
DRAWING UNIT OF MEASURE:	MM [INCH]	

TRANSARCTIC INC.

TITLE
WIRING DIAGRAM, KRT18001

SIZE	DWG NO	REV
C	ELS18001	C

SCALE | SHEET 1 OF 1

Product Number / Line	Qty	Component Prod#	Rev#	Description / Location	Uof M / Unit	Weight	Yield
RTC34030		**03/13/18**	**0**	**Kit, Rooftop, BB, DL, 12V, Electronic**		**87005.72**	**0**
10	40	21046		Cable Tie, 14", UV Resistant, Black			
20	17	21371		Cable Tie Mounting Base&Fir Tree	each		
30	6	BLO12600	0	Blower, Dual Scroll, 3 SP, 12V	each		
35	1	BMZ01066	0	Bkt, Bezel, Drivers Control	each		
50	6.00	CLP20016		Clamp, "P" type, #16, 1/2"w, 1", PC	Each		
80	2	CLS00500		1/2, Stauff Clamp, Polypropylene	each		
90	2	COC08021	0	Coil, Condenser, MCHX, BH Series	each		
100	1	COV18000	0	Cover, Fiberglass, T3 End Cap	each		
110	1	COV18001	0	Cover, Fiberglass, T3 Condenser Inlet	each		
120	1	COV18002	0	Bkt, Main Evap Coil Cover, AL	each		
130	2	COV18003	2	Cover, T3 Evaporator Box, AL	each		
140	1	COV18009	1	Cover, CS,T3 Condenser Side Inlet, AL	each		
150	1	COV18010	1	Cover, DS,T3 Condenser Side Inlet, AL	each		
160	1	DPA18030	0	BB, Drain Pan, Sub Ass'y	each		
200	1	FOA18000	1	Foam, AS, T3 Front Flange .	each		
210	1	FOA18001	1	Foam, AS, T3 Rear Flange .	each		
220	1	FOA18002	A	Foam, AS, Evap, Coil Cover .	each		
230	2	FOA18003	A	Foam, AS, Evap, Blower Box, Cover .	each		
240	2	FOA18004	B	Foam, Anti-Sweat, Blower Box Side .	each		
250	31.00	FOA18008	A	Gasket, Evap, Neoprene, 1/2" x 1/16". .	Feet		
290	8	FOA18012	A	Gasket, Tape, Neoprene, 2" x 1/16" .	feet		
310	1	FOA37532	A	Evap, Cover, Rear, Seal, 3/4"x3/8"x32" .	each		
315	2	FTS08075		Ftg, Plastic Cap W/Rubber Seal, #8 MIO	each		
320	2	FTS10602	0	Evap, Nut, Pass-Thru,1-1/16"-14-Unf	each		
325	2	FTS12106		Ftg, Plastic Cap W/Rubber Seal, #12 MIO	each		

Product Number / Line	Qty	Component Prod#	Rev#	Description / Location	Uof M / Unit	Weight	Yield
330	1	GRO00019		Heatshrink, Gland, 19mm	each		
340	4	GSK18000	0	Gasket, U-Channel, 5/8" x 1-1/4" x 40"	each		
350	1	HAR18101	2	Harness, Drivers Control	each		
360	1	HAR18201	0	Harness, Solenoid Circuit, 1/4" Spade	each		
370	2	HAR18301	0	Harness, 3 Evaporator Blower, 1/4" Spade	each		
380	1	HAR18401	0	Harness, Condenser, WP & 1/4" Spade	each		
390	1	HAR18501	0	DS, Safety Loop, 2 Wire, 16AWG	Each		
400	1	HAR18601	0	CS, Safety Loop, 2 Wire, 16AWG	each		
420	1	JEP18010	1	Sub Kit, Electrical Panel, Roof Top	each		
430	1	KAF18050	3	Kit, Air Intake, Filter.	each		
460	5	ORS20737		O Ring, Seal, 3/8" OD, R-134 #6 Bump	Each		
470	4	ORS20738		O Ring, Seal, 1/2" OD, R-134, #8 Bump	each		
490	6	RTB18014	0	Bkt, Gusset, Evap Box, AL	each		
510	1	RTB18032	3	Bkt, T3 Condenser, CS Inner, AL	each		
520	1	RTB18033	3	Bkt, T3 Condenser, DS Inner, AL	each		
530	1	RTB18035	0	Bkt, Condenser Close Out, Rear, AL	each		
540	12	RTB18040	0	Bkt, Blower, Tie Down, AL.	each		
550	4	RTB18043	0	Bkt, Plate, Suction Fitting, Close out	each		
560	2	RTB18045	0	Bkt, Support, Relay Panel Base, AL			
570	2	COA18030		Condenser, Rooftop, BB, C2, HDX, Ass'y	each		
580	1	RTB18055	0	Bkt, Assem'y, Condenser Main Cover	each		
590	1	RTB18056	0	Bkt, Assem'y, T3 Condenser, CS Outer,	Each		
600	1	RTB18057	0	Bkt, Assem'y, T3 Condenser, DS Outer	each		
610	2	RTB18058	0	Bkt, Assem'y, Condenser Shroud Strut	Each		
620	1	RTB18059	1	Bkt, Assem'y, T3 Evap Front Flange	Each		
630	1	RTB18060	0	Bkt, Assem'y, T3 Evap Rear Flange	each		

Product Number / Line	Qty	Component Prod#	Rev#	Description / Location	Uof M / Unit	Weight	Yield
640	1	RTB18061	0	Bkt, Assem'y, T3 Blower Base, DS	each		
650	1	RTB18062	0	Bkt, Assem'y, T3 Blower Base, CS	each		
660	2	RTB18063	0	Bkt, Assem'y, Evap, Outer Channel	each		
670	1	RTB18064	0	Bkt, Assem'y, Evap Coil CloseOut,Rear DS	each		
680	1	RTB18065	0	Bkt, Assem'y, Evap Coil CloseOut,Rear CS	each		
690	1	RTB18066	0	Bkt, Assem'y,Evap Coil Close Out,FrontCS	each		
700	1	RTB18067	0	Bkt, Assem'y,Evap Coil Close Out,FrontDS	each		
710	1	RTB18068	0	Bkt, Assem'y, Front Condenser Inlet	each		
720	1	RTB18069	1	Bkt, Assem'y,Evap Cover Support,w/L Eyes	each		
730	2	RTB18070	0	Bkt, Assem'y, Evap Rain Channel, Weldm't	each		
745	1	RTB18076	0	Bkt, Support, Brace, F-D	each		
750	8	SAH21040		Cable Tie Mount, Self AD, 1" x 1" SQ.	each		
760	29.50	SBU58010		Trim, 5/8" bulb x 9/16" x 1/8" grip.	feet		
830	2	TUC18010	4	Ass'y, Check Valve, .5" OD	Each		
880	2	TUC18070	2	Tube, Cond. to Drier, .375" O.D,2" Short	each		
910	137	BTS04076		Bolt, Hex, 1/4-28unf, .75", SS	each		
920	14	BTS04104		Bolt, Hex, 1/4-28UNF x 1.00, SS	each		
930	4	BTS04201		Bolt, Hex, 1/4-28 UNF, 2.00", 18-8, SS	each		
950	4	NTM04001		Nut, Hex, 1/4-28unf, 18-8, SS	each		
970	102.00	RIV03029		Rivet, Closed End, 3/16" .188-.25, AL/ST	each		
975	12	SCP03075		Screw, PH, PD, SDT, #10-16 x .75, ST,Plt	each		
980	2	SCP03079		Screw, PH, PD, 8-32 x .75, 18.8, SS	each		
1,000	175	WFS04001		Washer, Flat, 1/4", 18-8, SS	each		
1,010	56	WFS04075		Washer, Flat, 1/4", .75" O.D, Nylon 6.6	each		
1,020	160	WLS04000		Washer, Lock, 1/4", 18-8, SS	each		

Product Number / Line	Qty	Component Prod#	Rev#	Description / Location	Typ / Typ	Uof M / Unit	Weight	Yield
DPA18030		**8/11/2021**	**0**	**BB, Drain Pan, Sub Assy**	**Ma**		**47.95**	**0**
10	4	BTS04201		Bolt, Hex, 1/4-28 UNF,2", 18-8, SS	No	each		
20	2	BTS05008		BOLT, HEX, FLG, 5mm x 0.8 x 8mm, BLK	No	each		
30	2	CLP72001		Clamp, Gear, #72, 3- 5 (105/127mm)	No	each		
40	2	CLS00375		3/8 Stauff Clamp, Polypropylene	No	each		
50	1	ECA18021		Evap Coil Ass'y, EVC08021	Ma	Each		
51	1	ECA18022		Evap Coil Ass'y, EVC08022	Ma	Each		
70	2	FDR19062		Filter Drier Receiver, w/SG, #10, Large	No	each		
80	2	FOA18009	A	Foam, Anti Spla, 15ppi, 1/2"x2.5"x48"	Ma	each		
90	2	FOA18010	A	Foam, Anti Spla, 15ppi, 1/2"x7"x9"	Ma	each		
100	2	FOA18011	A	Foam, Anti Spla, 15ppi, 1/2"x7"x15.75"	Ma	each		
120	2	LAB18000	A	Label, Danger Warning, .75" x 8" x 006"	No	each		
130	1	LAB18001	A	Label, R134a, 1.25" x 2.5" x 006"	No	each		
140	8	ORS20737		O Ring, Seal, 3/8" OD, R-134 , #6 Bump	No	each		
160	2	NTM04001		Nut, Hex, 1/4-28unf, 18-8, SS	No	each		
180	8	RIV03029		Rivet, Closed End, 3/16" .188-.25, AL/ST	No	each		
190	1	RTB18013	1	Bkt, Dual Filter Drier Receiver, AL	No	each		
200	1	RTB18621	0	Bkt, Weldment, Drain Pan	No	each		
210	2	RTB18045	0	Bkt, Support, Relay Panel Base, AL	No	each		
220	1	RTB18073	1	Bkt, Assem'y, Solenoid, Peened	Ma	each		
230	2	SWF18685		Thermostat, Freeze Out, 18" Non- Adj	Ma	each		
240	2	SWP36029		Switch, HP, Open 350-370/CL 270-300 PSIG	No	each		
251	1	SBU00018		Trim, 5/8" bulb x 9/16" x 1/8" x 18"L	Ma	each		
280	2	TUC18020	3	Tube, Sol to TXV, .375" O.D	No	each		
290	1	TUC18040	0	Assy, Drier to Sol., .375" OD.	No	each		
300	1	TUC18050	0	Assy, Drier to Sol. W/Take-Off, .37 OD.	No	each		

Product Number / Line	Qty	Component Prod#	Rev#	Description / Description	Location	Typ / Typ	Uof M / Unit	Weight	Yield
310	1	TUC18060	0	Plug, Take-Off, #8 FOR		No	each		
330	2	VAL12007		Valve Assy, Solenoid, 2 x 3/8 MIO, 12V		No	each		
350	4	WFS04001		Washer, Flat, 1/4", 18-8, SS		No	each		
360	2	WLS04000		Washer, Lock, 1/4", 18-8, SS		No	each		
370	2	21373		Cable Tie Mounting Base&Fir Tree		No	each		
400	4	3-520106-2		Connector, Tab Assy, .250, 16-14 GA,Male		No	each		
410	2	CLP20006		Clamp, "P" type, #6, 1/2"w, 3/8", PC		No	each		
420	2	LAB18004	0	Label, ,Solenoid, Recovery & Evacuation,		No	each		

Bill of Materials Listing

TransArctic Canada Inc.

Product Number / Line	Qty	Component Prod#	Date / Rev#	Description / Location	Typ / Typ	Uof M / Unit	Weight	Yield
JEP18010			**4/24/2018** **1**	**Sub Kit, Electrical Panel, Roof Top**	**Ma**		**5.77**	**0**
5	1	PAC17909		Box, 17 x 9 x 9	Pr	Each		
10	1	EDC03010	1.5	Drivers Control, Electronic, 3 Speed	Pr	each		
30	1	ETS10720	0	Temperaure Sensor, Electronic 10K, 72"	No	each		
40	1	RTB18047	5	Assembly, Relay Panel	Ma	each		
80	2	SCP03079		Screw, PH, PD, 8-32 x .75, 18.8, SS	No	each		
90	0.2500	LABOR - ASSEMBLY		Assembly/Factory Labor	No	hours		