



BTM **Generation D** Two-Way Evaporator

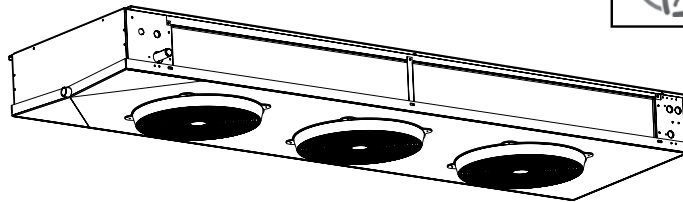
PRODUCT DATA & INSTALLATION

Part # 1109301

	PRODUCT SUPPORT	scan:
	web: www.b-rp.ca/btm	
	email: evaps@b-rp.ca	
	call: 1-844-893-3222 x520	

**Air, Electric or Hot Gas
(Reverse Cycle) Defrost**

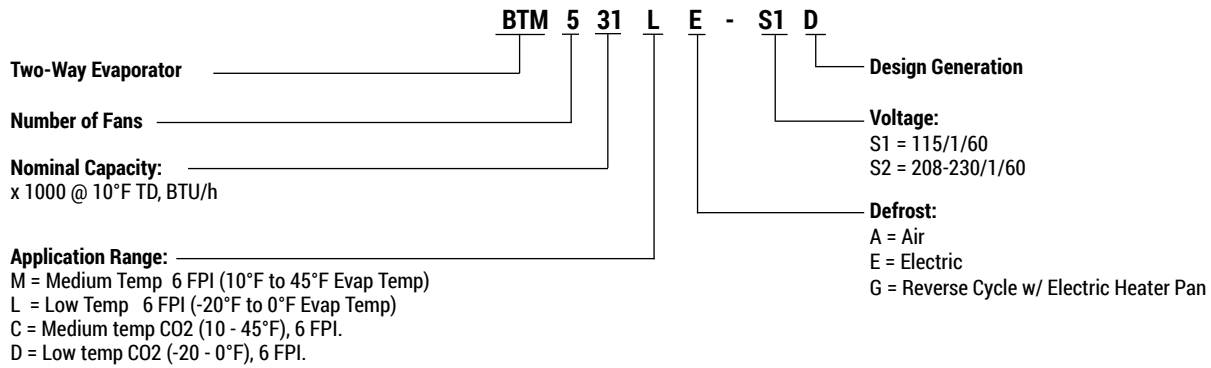
Electrical Power:
115/1/60, 208-230/1/60



INCLUDES MODELS FOR DOE & NRCAN
AWEF-COMPLIANT APPLICATIONS

CONTENTS

	Page
Nomenclature	2
Features & Options	2
Selection Data	3
Electrical Data	4-5
Wiring Diagrams - Models with standard SMARTSPEED ™ EC Motors	6-9
Wiring Diagrams - Models with SMARTVAP	10-13
Annual Walk-In Energy Factor (AWEF) Ratings/ Specifications	14
Dimensional Data	15
Recommended Installation Clearances	16
Recommended Expansion Valve Selections	17
Expansion Valve Selections - Models with SMARTVAP	18
CO2 Models	
Selection Data	19
Electrical Data	20-21
Annual Walk-In Energy Factor (AWEF) Ratings	21
Dimensional Data	22
Factory Installed Distributor Valves/ Specifications	23
Installation Instructions	24-25
Hot Gas Piping Schematics	26
Defrost Kit and Fuse Package Selections / Details	27-29
Project Information	30
Product Support Resources: Service Parts, Troubleshooting, Warranty, etc	31
"As Built" Service Parts	BACK



STANDARD FEATURES

- EC motors with patented SmartSpeed® Technology.
- Compatible with Low GWP Refrigerants.
- Heavy gauge textured aluminum cabinet construction resists scratches/corrosion and minimizes weight for shipment, installation and service.
- Dual refrigeration coils with two-way air distribution reduces air velocities to minimize product dehydration.
- Air enters through fan and discharges two ways out of each coil side.
- Low height compact size usable storage space.
- Internally enhanced tube.
- Attractive and durable high-density polyethylene fan guards.
- Hinged drain pan provides convenient access for cleaning.
- Terminal board allows for easy electrical connections.
- Reduced operating charge with 3/8" OD tubing.
- CO2 coils certified for 650 PSI (45 Bar)

AVAILABLE OPTIONS

- **SmartVap+ Intuitive Evaporator Control Technology.** (not available on models 207M, 209M, 313M, 204L, 206L, 309L)
- Factory mounted solenoid valve, TXV and thermostat on air and electric defrost models.
- Corrosion protection: alternate fin materials and coatings.
- 90 Bar (1300PSI) CO2 models available, Please contact factory
- Transducer schrader with service isolation valve.
- Additional options available, please consult factory.

R407A - R407C - R448A - R449A

Medium Temperature - 6 FPI Models

Model BTM	Qty. Fans	Evaporator Temperature Selection Capacity BTU/h			Air Flow		Refrig. Charge R448A	
		20/25°F (-4/-7°C)	15°F (-9°C)	10°F (-12°C)	CFM	L/S	LB.	KG
108M	1	9080	8950	8890	1070	505	1.4	0.6
110M	1	10800	10700	10600	1010	477	1.8	0.8
213M	2	12900	12800	12700	2020	953	2.3	1
215M	2	15400	15200	15100	1900	897	3.1	1.4
318M	3	18300	18100	17900	3030	1430	3.4	1.5
321M	3	20700	20500	20300	2850	1345	4.6	2.1
426M	4	26000	25700	25500	3780	1784	5.7	2.6
531M	5	31300	31000	30700	4630	2185	5.7	2.6

Capacities rated using 10°F (5.6°C) TD & 100°F (38°C) liquid temperature. Capacities at other TD within a range of 8 to 15 °F (4.4 to 8.3°C) are directly proportional to TD, or use formula: Capacity = Rated capacity ÷ 10 x TD.

For capacities at TD outside of range 8 to 15 °F (4.4 to 8.3°C), or liquid temperature lower than 75°F (24°), consult factory.
For R448A / R449A Multiply R407A Refrigerant Charge by 0.96

R404A - R507

Medium Temperature - 6 FPI Models

Model BTM	Qty. Fans	Evaporator Temperature Selection Capacity BTU/h			Air Flow		Refrig. Charge R404A	
		20/25°F (-4/-7°C)	15°F (-9°C)	10°F (-12°C)	CFM	L/S	LB.	KG
108M	1	7360	7270	7220	1070	505	1.3	0.6
110M	1	8780	8680	8610	1010	477	1.7	0.8
213M	2	10500	10400	10300	2020	953	2.2	1
215M	2	12500	12400	12300	1900	897	2.9	1.3
318M	3	14800	14700	14500	3030	1430	3.1	1.4
321M	3	16800	16600	16500	2850	1345	4.2	1.9
426M	4	21100	20900	20700	3780	1784	5.2	2.4
531M	5	25400	25100	24900	4630	2185	5.2	2.4

Capacities rated using 10°F (5.6°C) TD & 100°F (38°C) liquid temperature. Capacities at other TD within a range of 8 to 15 °F (4.4 to 8.3°C) are directly proportional to TD, or use formula: Capacity = Rated capacity ÷ 10 x TD.

For capacities at TD outside of range 8 to 15 °F (4.4 to 8.3°C), or liquid temperature lower than 75°F (24°), consult factory.

R407A - R448A - R449A

Low Temperature - 6 FPI Models

Model BTM	Qty. Fans	Evaporator Temperature Selection Capacity BTU/h			Air Flow		Refrig. Charge R448A	
		0°F (-18°C)	-10°F (-23°C)	-20°F (-29°C)	CFM	L/S	LB.	KG
105L	1	5330	5170	5040	1070	505	1.4	0.6
107L	1	7470	7270	7000	1010	477	1.8	0.8
210L	2	10660	10350	10080	2020	953	2.3	1
212L	2	12900	12600	12200	1900	897	3.1	1.4
315L	3	16100	15700	15200	3030	1430	3.4	1.5
318L	3	19200	18600	18100	2850	1345	4.6	2.1
422L	4	23300	22700	22000	3780	1784	5.7	2.6
526L	5	27500	26700	25900	4630	2185	5.7	2.6

Capacities rated using 10°F (5.6°C) TD & 100°F (38°C) liquid temperature. Capacities at other TD within a range of 8 to 15 °F (4.4 to 8.3°C) are directly proportional to TD, or use formula: Capacity = Rated capacity ÷ 10 x TD.

For capacities at TD outside of range 8 to 15 °F (4.4 to 8.3°C), or liquid temperature lower than 75°F (24°), consult factory.
For R448A / R449A Multiply R407A Refrigerant Charge by 0.96

R404A - R507

Low Temperature - 6 FPI Models

Model BTM	Qty. Fans	Evaporator Temperature Selection Capacity BTU/h			Air Flow		Refrig. Charge R404A	
		0°F (-18°C)	-10°F (-23°C)	-20°F (-29°C)	CFM	L/S	LB.	KG
105L	1	4340	4200	4100	1070	505	1.3	0.6
107L	1	6080	5900	5700	1010	477	1.7	0.8
210L	2	8680	8400	8200	2020	953	2.2	1
212L	2	10500	10200	9920	1900	897	2.9	1.3
315L	3	13100	12800	12400	3030	1430	3.1	1.4
318L	3	15600	15100	14700	2850	1345	4.2	1.9
422L	4	19000	18400	17900	3780	1784	5.2	2.4
526L	5	22400	21700	21100	4630	2185	5.2	2.4

Capacities rated using 10°F (5.6°C) TD & 100°F (38°C) liquid temperature. Capacities at other TD within a range of 8 to 15 °F (4.4 to 8.3°C) are directly proportional to TD, or use formula: Capacity = Rated capacity ÷ 10 x TD.

For capacities at TD outside of range 8 to 15 °F (4.4 to 8.3°C), or liquid temperature lower than 75°F (24°), consult factory.

115/1/60: Air Defrost

Model BTM	FAN MOTORS				
	Qty.	Standard SMARTSPEED [®] EC Motors			
		FLA Total	Watts	MCA (A)	MOP (A)
108MA-S1D	1	1.5	52	1.9	15
110MA-S1D	1	1.5	52	1.9	15
213MA-S1D	2	3	104	3.4	15
215MA-S1D	2	3	104	3.4	15
318MA-S1D	3	4.5	156	4.9	15
321MA-S1D	3	4.5	156	4.9	15
426MA-S1D	4	6	208	6.4	15
531MA-S1D	5	7.5	260	6.4	15

208-230/1/60: Air Defrost

Model BTM	FAN MOTORS				
	Qty.	Standard SMARTSPEED [®] EC Motors			
		FLA Total	Watts	MCA (A)	MOP (A)
108MA-S2D	1	1	52	1.3	15
110MA-S2D	1	1	52	1.3	15
213MA-S2D	2	2	104	2.3	15
215MA-S2D	2	2	104	2.3	15
318MA-S2D	3	3	156	3.3	15
321MA-S2D	3	3	156	3.3	15
426MA-S2D	4	4	208	4.3	15
531MA-S2D	5	5	260	5.3	15

115/1/60: Electric Defrost

Model BTM	FAN MOTORS					DRAIN PAN HEATERS			
	Qty.	Standard SMARTSPEED [®] EC Motors				Total WATTS	Total AMPS	MCA (A)	MOP (A)
		FLA Total	Watts	MCA (A)	MOP (A)				
108ME-S1D	1	1.5	52	1.9	15	1540	13.4	16.8	20
110ME-S1D	1	1.5	52	1.9	15	1540	13.4	16.8	20
213ME-S1D	2	3	104	3.4	15	2600	22.6	28.3	30
215ME-S1D	2	3	104	3.4	15	2600	22.6	28.3	30
105LE-S1D	1	1.5	52	1.9	15	1580	13.7	17.2	20
107LE-S1D	1	1.5	52	1.9	15	1580	13.7	17.2	20
210LE-S1D	2	3	104	3.4	15	2600	22.6	28.3	30
212LE-S1D	2	3	104	3.4	15	2600	22.6	28.3	30

208-230/1/60: Electric Defrost

Model BTM	FAN MOTORS					DEFROST HEATERS			
	Qty.	Standard SMARTSPEED [®] EC Motors				Total WATTS	Total AMPS	MCA (A)	MOP (A)
		FLA Total	Watts	MCA (A)	MOP (A)				
108ME-S2D	1	1	52	1.3	15	1540	6.7	8.4	15
110ME-S2D	1	1	52	1.3	15	1540	6.7	8.4	15
213ME-S2D	2	2	104	2.3	15	2600	11.3	14.1	15
215ME-S2D	2	2	104	2.3	15	2600	11.3	14.1	15
318ME-S2D	3	3	156	3.3	15	3720	16.2	20.3	25
321ME-S2D	3	3	156	3.3	15	3720	16.2	20.3	25
426ME-S2D	4	4	208	4.3	15	3720	16.2	20.3	25
531ME-S2D	5	5	260	5.3	15	4560	19.8	24.8	25
105LE-S2D	1	1	52	1.3	15	1540	6.7	8.4	15
107LE-S2D	1	1	52	1.3	15	1540	6.7	8.4	15
210LE-S2D	2	2	104	2.3	15	2600	11.3	14.1	15
212LE-S2D	2	2	104	2.3	15	2600	11.3	14.1	15
315LE-S2D	3	3	156	3.3	15	3720	16.2	20.3	25
318LE-S2D	3	3	156	3.3	15	3720	16.2	20.3	25
422LE-S2D	4	4	208	4.3	15	3720	16.2	20.3	25
526LE-S2D	5	5	260	5.3	15	4560	19.8	24.8	25

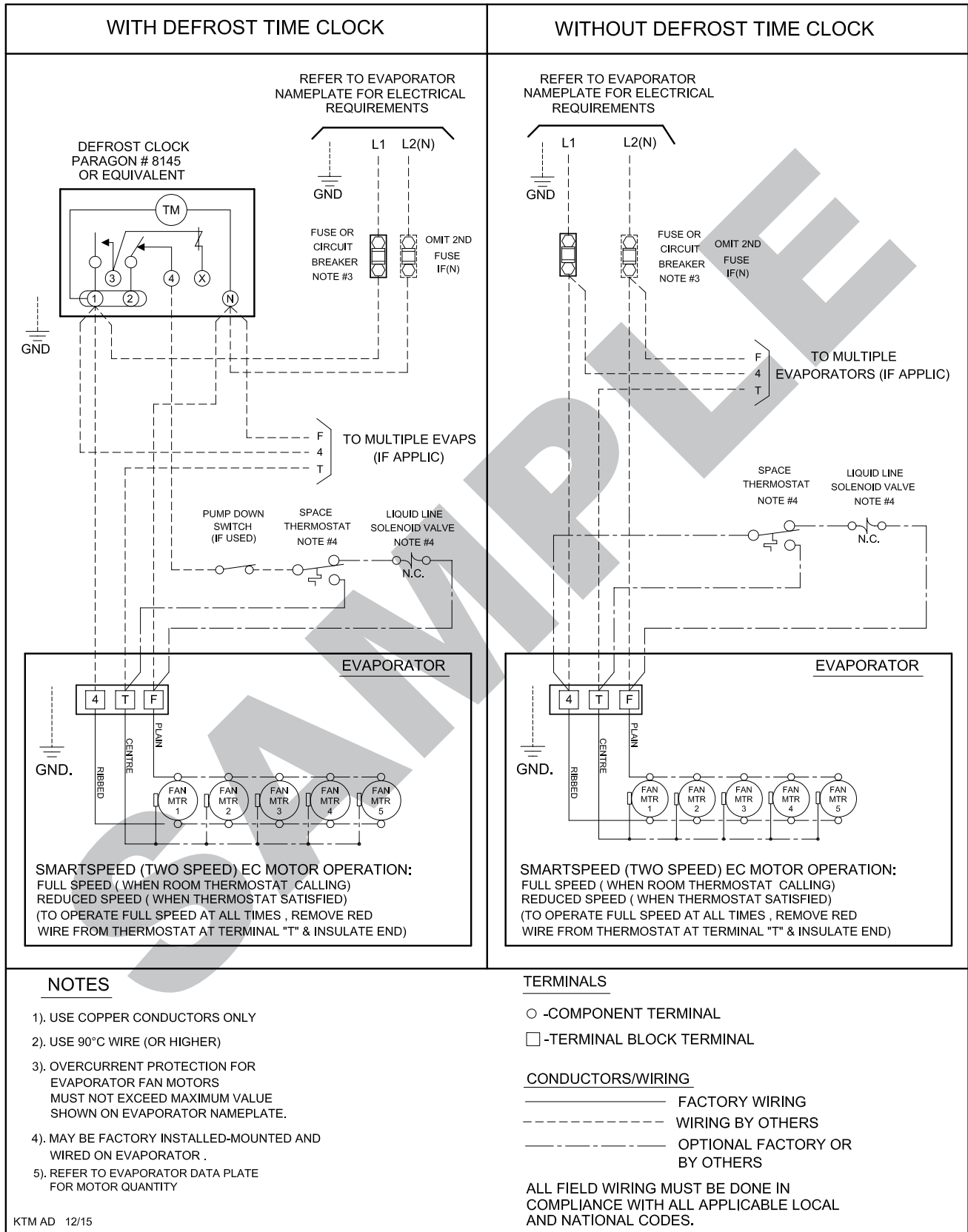
115/1/60: Hot Gas Defrost

Model BTM	FAN MOTORS					DRAIN PAN HEATERS			
	Qty.	Standard SMARTSPEED [®] EC Motors				Total WATTS	Total AMPS	MCA (A)	MOP (A)
		FLA Total	Watts	MCA (A)	MOP (A)				
108ME-S1D	1	1.5	52	1.9	15	1540	13.4	16.8	20
110ME-S1D	1	1.5	52	1.9	15	1540	13.4	16.8	20
213ME-S1D	2	3	104	3.4	15	2600	22.6	28.3	30
215ME-S1D	2	3	104	3.4	15	2600	22.6	28.3	30
105LE-S1D	1	1.5	52	1.9	15	1580	13.7	17.2	20
107LE-S1D	1	1.5	52	1.9	15	1580	13.7	17.2	20
210LE-S1D	2	3	104	3.4	15	2600	22.6	28.3	30
212LE-S1D	2	3	104	3.4	15	2600	22.6	28.3	30

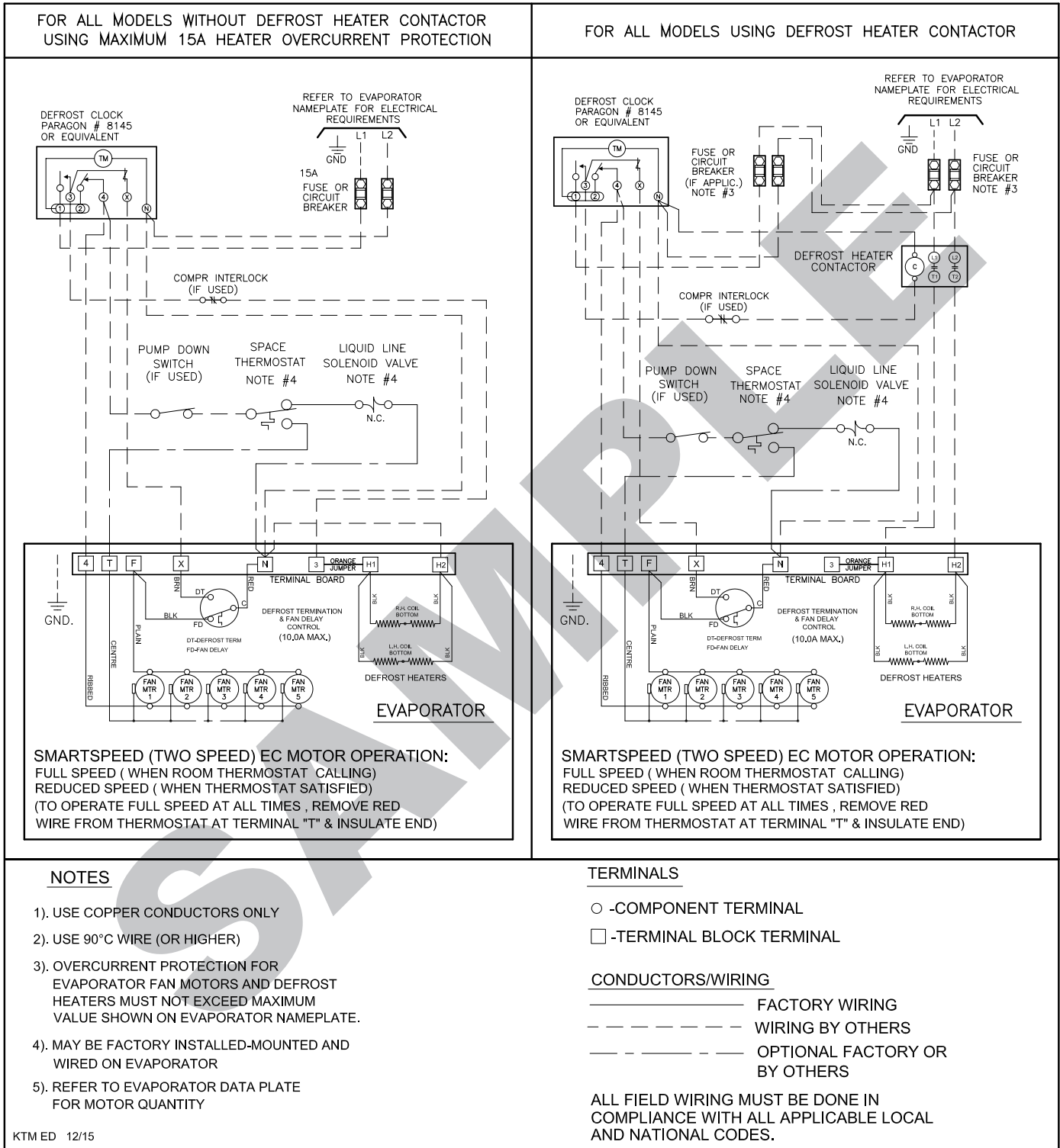
208-230/1/60: Hot Gas Defrost

Model BTM	FAN MOTORS					DEFROST HEATERS			
	Qty.	Standard SMARTSPEED [®] EC Motors				Total WATTS	Total AMPS	MCA (A)	MOP (A)
		FLA Total	Watts	MCA (A)	MOP (A)				
108MA-S2D	1	1	52	1.3	15	1100	4.8	6	15
110MA-S2D	1	1	52	1.3	15	1100	4.8	6	15
213MA-S2D	2	2	104	2.3	15	1300	5.7	7.1	15
215MA-S2D	2	2	104	2.3	15	1300	5.7	7.1	15
318MA-S2D	3	3	156	3.3	15	1860	8.1	10.1	15
321MA-S2D	3	3	156	3.3	15	1860	8.1	10.1	15
426MA-S2D	4	4	208	4.3	15	1860	8.1	10.1	15
531MA-S2D	5	5	260	5.3	15	2280	9.9	12.4	15

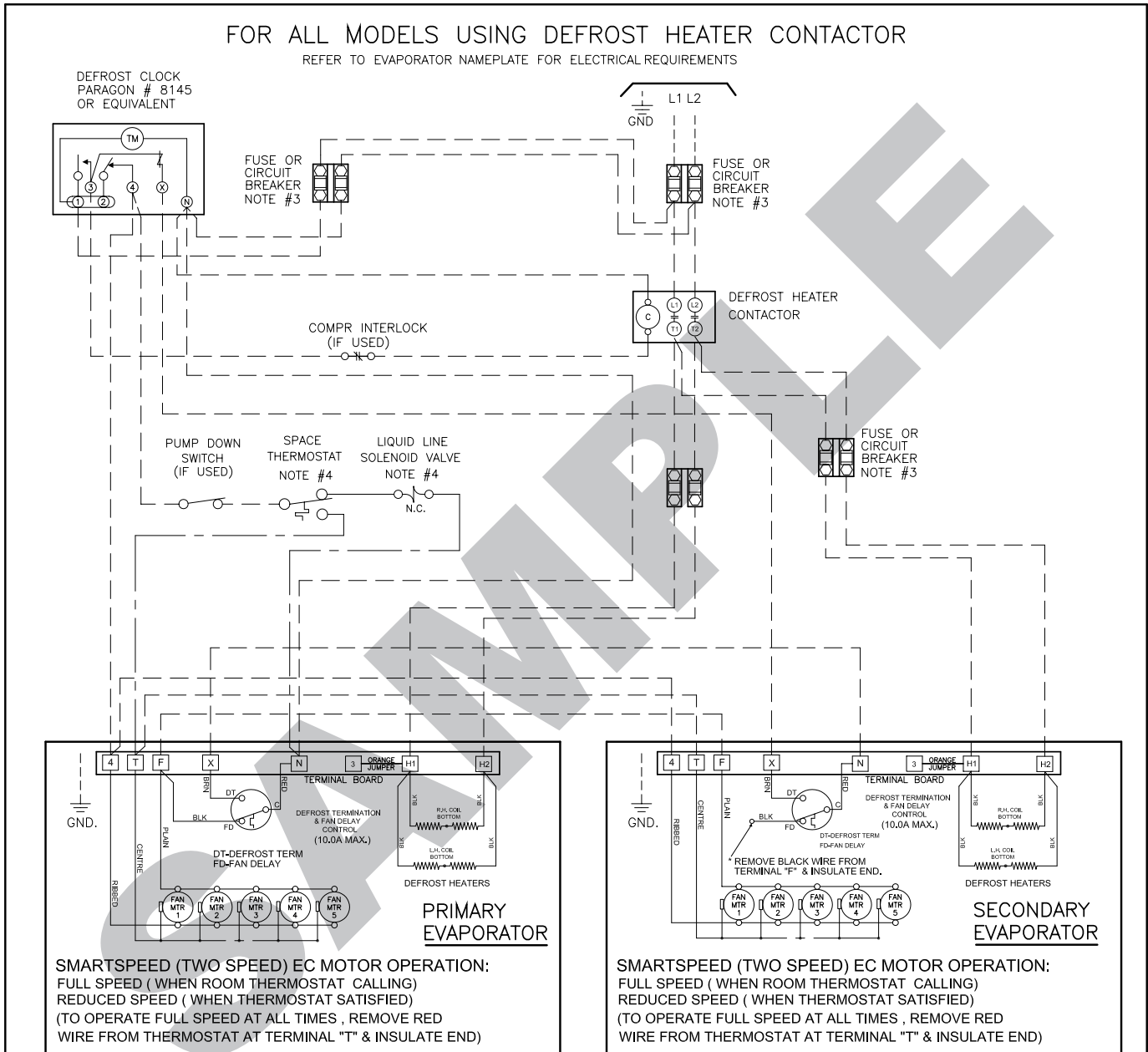
115/1/60, 208-230/1/60: Air Defrost Models



208-230/1/60: Electric Defrost Models - Single Evaporator



208-230/1/60: Electric Defrost Models - Multiple Evaporators



NOTES

- 1). USE COPPER CONDUCTORS ONLY
- 2). USE 90°C WIRE (OR HIGHER)
- 3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.
- 4). MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR
- 5). REFER TO EVAPORATOR DATA PLATE FOR MOTOR QUANTITY

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TERMINALS

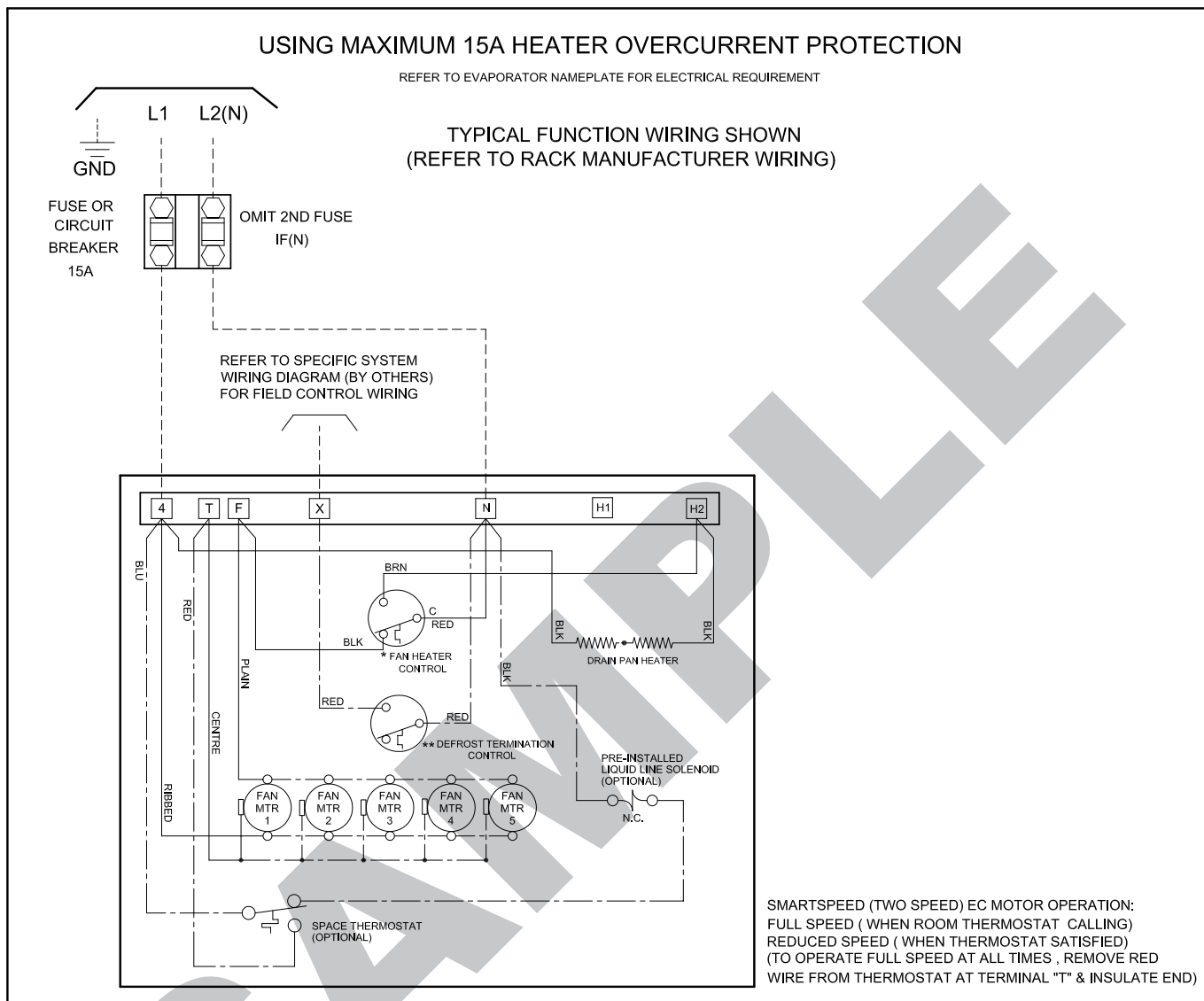
- -COMPONENT TERMINAL
- -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

- FACTORY WIRING
- - - - - WIRING BY OTHERS
- OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

208-230/1/60: Hot Gas Defrost Models



* FAN HEATER CONTROL ON REVERSE CYCLE LOCATED AT SUCTION LINE.

** DEFROST TERMINATION CONTROL OPTIONAL FACTORY WIRED OR BY OTHERS LOCATED ON TUBE END SHEET THE CONTROL CLOSURES WHEN REACHES 55° F (20 F DIFF)

NOTE: DURING THE HOT GAS DEFROST CYCLE THE FAN/HEATER CONTROL DE-ENERGIZES THE EVAPORATOR FANS AND ENERGIZES THE DRAIN PAN HEATER. (ANYTIME THE TEMPERATURE OF THE INCOMING REFRIGERANT GAS IS ABOVE 50° F).

NOTES

- 1). USE COPPER CONDUCTORS ONLY
- 2). USE 90°C WIRE (OR HIGHER)
- 3). OVERCURRENT PROTECTION FOR EVAPORATOR FAN MOTORS AND DEFROST HEATERS MUST NOT EXCEED MAXIMUM VALUE SHOWN ON EVAPORATOR NAMEPLATE.
- 4). MAY BE FACTORY INSTALLED-MOUNTED AND WIRED ON EVAPORATOR
- 5). REFER TO EVAPORATOR DATA PLATE FOR MOTOR QUANTITY

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TERMINALS

- -COMPONENT TERMINAL
- -TERMINAL BLOCK TERMINAL

CONDUCTORS/WIRING

- FACTORY WIRING
- - - - - WIRING BY OTHERS
- · - · - · - OPTIONAL FACTORY OR BY OTHERS

ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.

SMARTVAP INTUITIVE EVAPORATOR CONTROL TECHNOLOGY

(not available on models 207M, 209M, 313M, 204L, 206L, 309L)

What is SmartVap+?

Bally Refrigeration's SmartVap+ intuitive evaporator control technology is designed to replace traditional electro-mechanical refrigeration controls typically used on medium and low temperature applications. By combining award winning adaptive technology along with an electronic expansion valve, installing an evaporator utilizing the SmartVap+ intuitive evaporator control technology is simple. Two pipes, two wires and you're done. No interconnecting control wiring between the evaporator and the condensing unit is required.

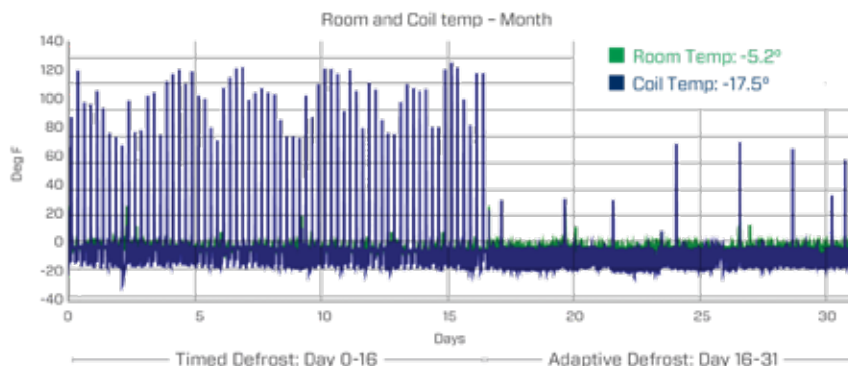
- Quick simple installation
- Improved evaporator performance by minimizing excessive frost on the evaporator
 - Eliminates ice build up on surfaces and product
 - Energy savings through evaporator fan management
- Energy savings with reduction in the number of defrost cycles
 - Defrost heater management
- Improved system diagnostics and service through advanced alarm notification text/email
 - Remote monitoring & system control
 - User friendly interface
- Precise temperature control for prolonged product shelf life
- Improved product integrity with less potential for spoilage
- Downloadable data provides system history for prior 30 days
- Remotely view and change system parameters and alarm settings
 - Manually control system
 - Easily troubleshoot issues

SmartVap+ controls:

- Box Temperature
- Superheat
- Liquid Line Solenoid
- Defrost Initiation
- Defrost Termination
- Fan Motors
- Defrost Heater (Electric Defrost Models)

Plus - User can access operating data directly from the system interface

15-20% System Energy Savings over a Properly Commissioned System!



86% Fewer Defrost Cycles*

- Enhanced system performance
- Energy Savings
- Improved product integrity

* Data may vary depending on application

Visit www.b-rp.ca/svp for details

Annual Walk-In Energy Factor Ratings - High/Medium Temperature

If a numerical value is listed in the table below, the following statement applies to that corresponding model: " This refrigeration system is designed and certified for use in walk-in cooler applications."

Model BTM	R404A R507	R407A	R448A R449A
108M	9	9	9
110M	9	9	9
213M	9	9	9
215M	9	9	9
318M	9	9	9
321M	9	9	9
426M	9	9	9
531M	9	9	9

Annual Walk-In Energy Factor Ratings - Low Temperature

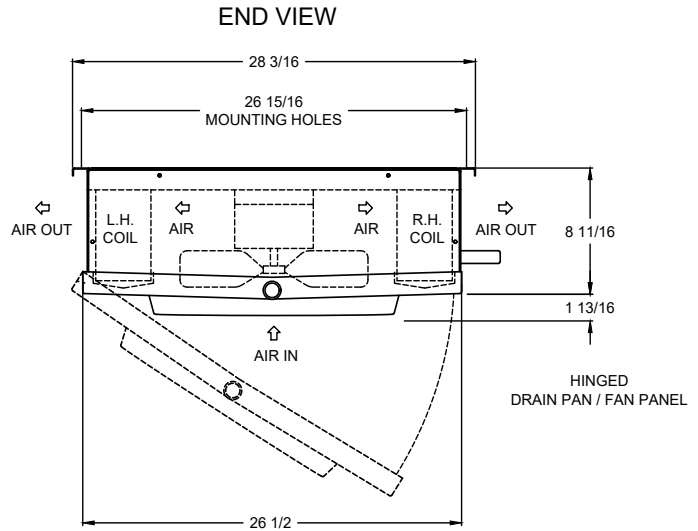
If a numerical value is listed in the table below, the following statement applies to that corresponding model: " This refrigeration system is designed and certified for use in walk-in freezer applications."

Model BTM	R404A R507	R407A	R448A R449A
105L	3.97	3.97	3.97
107L	3.99	3.99	3.99
210L	4.03	4.03	4.03
212L	4.05	4.05	4.05
315L	4.09	4.09	4.09
318L	4.12	4.12	4.12
422L	4.15	4.15	4.15
526L	4.15	4.15	4.15

SPECIFICATIONS

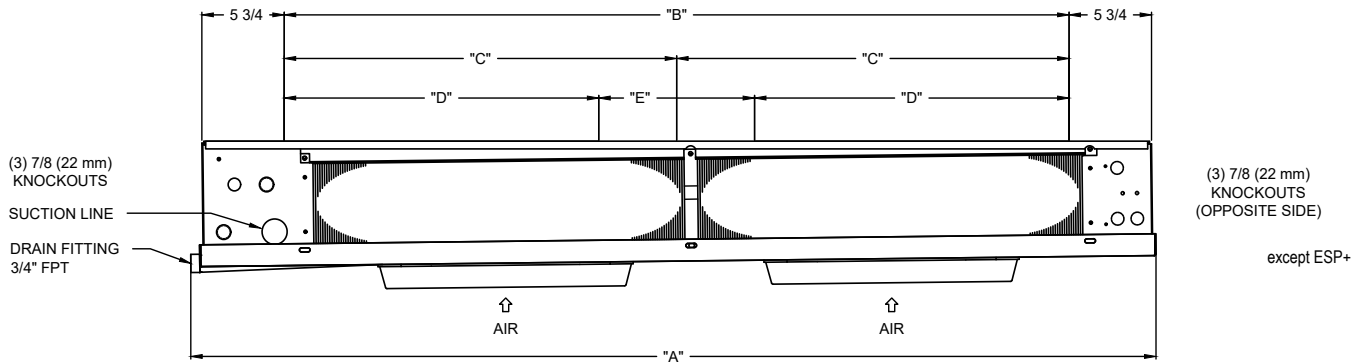
MODEL BTM	# Fans	TUBE CONNECTIONS						SHIPPING WEIGHT	
		SUCTION (OD)		DISTRIBUTOR INLET		HOT GAS SIDE		lbs.	kg
		Inches	mm	Inches	mm	Inches	mm		
108M	1	5/8	16	1/2	13	1/2	13	54	24
110M		7/8	22	1/2	13	1/2	13	56	25
213M	2	7/8	22	1/2	13	1/2	13	98	44
215M		7/8	22	1/2	13	1/2	13	104	47
318M	3	7/8	22	1/2	13	1/2	13	150	68
321M		1 1/8	29	1/2	13	1/2	13	157	71
426M	4	1 1/8	29	1/2	13	1/2	13	164	74
531M	5	1 1/8	29	7/8	22	5/8	16	198	90
105L	1	5/8	16	1/2	13	1/2	13	54	24
107L		7/8	22	1/2	13	1/2	13	56	25
210L	2	7/8	22	1/2	13	1/2	13	98	44
212L		7/8	22	1/2	13	1/2	13	98	44
315L	3	1 1/8	29	1/2	13	1/2	13	150	68
318L		1 1/8	29	7/8	22	5/8	16	157	71
422L	4	1 1/8	29	7/8	22	5/8	16	164	74
526L	5	1 3/8	35	7/8	22	5/8	16	198	90

- NOTES:
- 1) DIMENSIONS SHOWN ARE TYPICAL FOR AIR, ELECTRIC, AND HOT GAS DEFROST
 - 2) ELECTRICAL CONNECTION END IS OPPOSITE TO THE PIPING END ON ALL MODELS
 - 3) 1/4" O.D. EXTERNAL EQUALIZER LINE AND SERVICE ACCESS FITTING INCLUDED ON ALL SUCTION HEADERS INSIDE END COMPARTMENT.



**SIDE VIEW
MOUNTING HOLE (3/8" DIA.) & PIPING CONNECTION**

UNIT COOLER IS TO BE SUPPORTED AT ALL MOUNTING POINTS

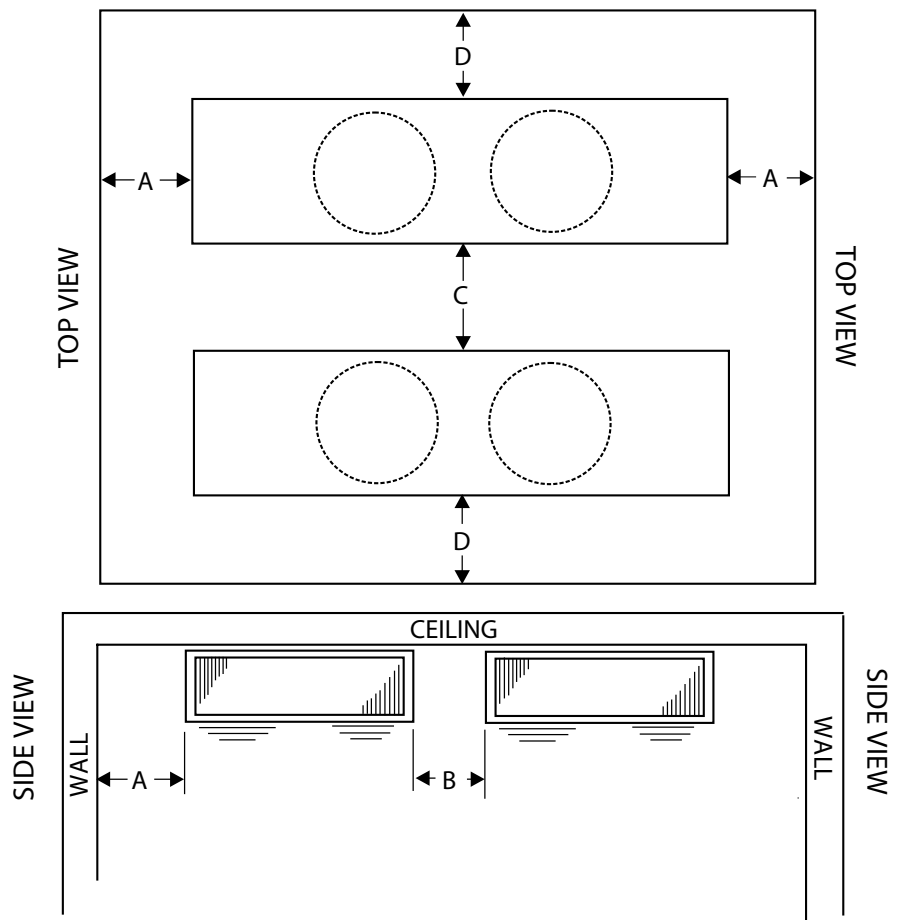


MODEL BTM	# FANS	A		B		C		D		E	
		in	mm	in	mm	in	mm	in	mm	in	mm
108M	1	45.5	1156	33	838	-	-	-	-	-	-
110M											
213M	2	67.5	1715	55	1397	27.5	699	-	-	-	-
215M											
318M	3	93.5	2375	81	2057	40.5	1029	-	-	-	-
321M											
426M	4										
531M	5	113.5	2883	101	2565	-	-	40.5	1029	20	508
105L	1	45.5	1156	33	838	-	-	-	-	-	-
107L											
210L	2	67.5	1715	55	1397	27.5	699	-	-	-	-
212L											
315L	3	93.5	2375	81	2057	40.5	1029	-	-	-	-
318L											
422L	4										
526L	5	113.5	2883	101	2565	-	-	40.5	1029	20	508

RECOMMENDED INSTALLATION CLEARANCES

BTM - TWO-WAY EVAPORATORS

All Other Models (excludes Models 207M, 209M, 313M, 204L, 206L, 309L)



DIMENSION		A	B	C	D
MINIMUM	ft.	2	2	6	3
	cm.	61	61	183	92
Maximum	ft.	-	7	40	20
	cm.	-	210	1200	600

**Medium Temperature
R448A - R449A - R407A
Air or Electric Defrost**

Model BTM	FACTORY INSTALLED NOZZLE	EXPANSION VALVE
108M***	L3/4	SBQVE-A-C
110M***	L1	SBQVE-A-C
213M***	L1	SBQVE-A-C
215M***	L1-1/2	SBQVE-B-C
318M***	L1-1/2	SBQVE-B-C
321M***	L2	SBQVE-B-C
426M***	G2-1/2	SBQVE-C-C
531M***	G3	SBQVE-C-C

*** INSERT defrost type, see nomenclature for details

**Medium Temperature
R404A - R507A
Air or Electric Defrost**

Model BTM	FACTORY INSTALLED NOZZLE	EXPANSION VALVE
108M***	L3/4	SBQSE-A-C
110M***	L1	SBQSE-A-C
213M***	L1	SBQSE-B-C
215M***	L1-1/2	SBQSE-B-C
318M***	L1-1/2	SBQSE-B-C
321M***	L2	SBQSE-C-C
426M***	G2-1/2	SBQSE-C-C
531M***	G3	SBQSE-C-C

*** INSERT defrost type, see nomenclature for details

**Low Temperature
R448A - R449A - R407A
Electric Defrost**

MODEL BTM	FACTORY INSTALLED NOZZLE	EXPANSION VALVE		
		0°F Evap	-10°F Evap	-20°F Evap
105L	L1	SBQVE-AA-C	SBQVE-AA-ZP	SBQVE-A-ZP
107L	L1	SBQVE-AA-C	SBQVE-A-ZP	SBQVE-A-ZP
210L	L1-1/2	SBQVE-A-C	SBQVE-A-ZP	SBQVE-A-ZP
212L	L2	SBQVE-A-C	SBQVE-B-ZP	SBQVE-B-ZP
315L	J2-1/2	SBQVE-B-ZP	SBQVE-B-ZP	SBQVE-B-ZP
318L	G-21/2	SBQVE-C-ZP	SBQVE-C-ZP	SBQVE-C-ZP
422L	G3	SBQVE-C-ZP	SBQVE-C-ZP	SBQVE-C-ZP
526L	E4	SBQVE-C-ZP	SBQVE-C-ZP	SBQVE-C-ZP

**Low Temperature
R404A - R507A
Air or Electric Defrost**

MODEL BTM	FACTORY INSTALLED NOZZLE	EXPANSION VALVE		
		0°F Evap	-10°F Evap	-20°F Evap
105L	L1	SBQSE-AA-C	SBQSE-AA-ZP	SBQSE-A-ZP
107L	L1	SBQSE-AA-C	SBQSE-A-ZP	SBQSE-A-ZP
210L	L1-1/2	SBQSE-A-C	SBQSE-A-ZP	SBQSE-A-ZP
212L	L2	SBQSE-A-C	SBQSE-B-ZP	SBQSE-B-ZP
315L	J2-1/2	SBQSE-B-ZP	SBQSE-B-ZP	SBQSE-B-ZP
318L	G2-1/2	SBQSE-C-ZP	SBQSE-C-ZP	SBQSE-C-ZP
422L	G3	SBQSE-C-ZP	SBQSE-C-ZP	SBQSE-C-ZP
526L	E4	SBQSE-C-ZP	SBQSE-C-ZP	SBQSE-C-ZP

Models with SMARTVAP 

**Medium Temperature
R407A - R407C - R448A - R449A
Air or Electric Defrost**

Model BTM	FACTORY INSTALLED NOZZLE	EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE
108M***	L3/4	E2V14	3
110M***	L1	E2V14	3
213M***	L1	E2V14	3
215M***	L1-1/2	E2V18	5
318M***	L1-1/2	E2V18	5
321M***	L2	E2V18	5
426M***	G2-1/2	E2V24	5
531M***	G3	E2V24	6

*** INSERT defrost type, see nomenclature for details

**Medium Temperature
R404A - R507
Air or Electric Defrost**

MODEL BTM	FACTORY INSTALLED NOZZLE	EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE
108M***	L3/4	E2V14	3
110M***	L1	E2V14	3
213M***	L1	E2V14	3
215M***	L1-1/2	E2V18	5
318M***	L1-1/2	E2V18	5
321M***	L2	E2V18	6
426M***	G2-1/2	E2V24	6
531M***	G3	E2V24	6

*** INSERT defrost type, see nomenclature for details

**Low Temperature
R407A - R407C - R448A - R449A
Air or Electric Defrost**

Model BTM	FACTORY INSTALLED NOZZLE	EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE
105L	L1	E2V11	3
107L	L1	E2V11	3
210L	L1-1/2	E2V11	3
212L	L2	E2V11	3
315L	J2-1/2	E2V14	5
318L	G2-1/2	E2V14	5
422L	G3	E2V18	5
526L	E4	E2V18	6

**Low Temperature
R404A - R507
Air or Electric Defrost**

MODEL BTM	FACTORY INSTALLED NOZZLE	EXPANSION VALVE	FACTORY INSTALLED LIQUID LINE SOLENOID VALVE
105L	L1	E2V11	3
107L	L1	E2V11	3
210L	L1-1/2	E2V11	3
212L	L2	E2V11	3
315L	J2-1/2	E2V14	3
318L	G2-1/2	E2V14	5
422L	G3	E2V14	5
526L	E4	E2V18	6



Visit
www.b-rp.ca/svp
for Quick Start Guide, Operation Manual, etc

Medium Temperature - 6 FPI Models

Model BTM	Qty Fans	Evaporator Temperature Selection Capacity BTU/H			Air Flow		Refrig. Charge CO2	
		20/25°F (-4/-7°C)	15°F (-9°C)	10°F (-12°C)	CFM	L/S	LB.	KG
108C	1	7360	7270	7220	1070	505	1.2	0.6
110C	1	8780	8680	8610	1010	477	1.6	0.7
213C	2	10500	10400	10300	2020	953	2.1	0.9
215C	2	12500	12400	12300	2020	953	2.7	1.2
318C	3	14800	14700	14500	3030	1430	3	1.3
321C	3	16800	16600	16500	2850	1345	4	1.8
426C	4	21100	20900	20700	3700	1746	5	2.3
531C	5	25400	25100	24900	4630	2185	5	2.3

MEDIUM TEMP

Capacities are rated based on nominal 10°F TD, 38°F Liquid Temperature

Maximum Suction Temperature 30°F (Liquid temperature must be higher than the lowest suction temperature)

Capacities at other TD within a range of 8 to 15 °F (4.4 to 8.3°C) are directly proportional to TD, or use formula:

Capacity = Rated capacity ÷ 10 x TD.

Low Temperature - 6 FPI Models

Model BTM	Qty Fans	Evaporator Temperature Selection Capacity BTU/H			Air Flow		Refrig. Charge CO2	
		20/25°F (-4/-7°C)	15°F (-9°C)	10°F (-12°C)	CFM	L/S	LB.	KG
105D	1	4340	4200	4100	1070	505	1.2	0.6
107D	1	6080	5900	5700	1010	477	1.6	0.7
210D	2	8680	8400	8200	2020	953	2.1	0.9
212D	2	10500	10200	9920	2020	953	2.7	1.2
315D	3	13100	12800	12400	3030	1430	4	1.8
318D	3	15600	15100	14700	2850	1345	4	1.8
422D	4	19000	18400	17900	3700	1746	5	2.3
526D	5	22400	21700	21100	4630	2185	5	2.3

LOW TEMP

Capacities are rated based on nominal 10°F TD, 20°F Liquid Temperature Capacities at other TD within a range

of 8 to 15°F (4.4 to 8.3°C) are directly proportional to TD, or use formula: Capacity = Rated capacity ÷ 10 x TD.

115/60: Air Defrost

Model BTM	FAN MOTORS				
	Qty.	Standard SMARTSPEED [®] EC Motors			
		FLA Total	Watts	MCA (A)	MOP (A)
108CA-S1D	1	1.5	52	1.9	15
110CA-S1D	1	1.5	52	1.9	15
213CA-S1D	2	3	104	3.4	15
215CA-S1D	2	3	104	3.4	15
318CA-S1D	3	4.5	156	4.9	15
321CA-S1D	3	4.5	156	4.9	15
426CA-S1D	4	6	208	6.4	15
531CA-S1D	5	7.5	260	7.9	15

208-230/1/60: Air Defrost

Model BTM	FAN MOTORS				
	Qty.	Standard SMARTSPEED [®] EC Motors			
		FLA Total	Watts	MCA (A)	MOP (A)
108CA-S2D	1	1	52	1.3	15
110CA-S2D	1	1	52	1.3	15
213CA-S2D	2	2	104	2.3	15
215CA-S2D	2	2	104	2.3	15
318CA-S2D	3	3	156	3.3	15
321CA-S2D	3	3	156	3.3	15
426CA-S2D	4	4	208	4.3	15
531CA-S2D	5	5	260	5.3	15

115/1/60: Electric Defrost

Model BTM	FAN MOTORS					DRAIN PAN HEATERS			
	Qty.	Standard SMARTSPEED [®] EC Motors				Total WATTS	Total AMPS	MCA (A)	MOP (A)
		FLA Total	Watts	MCA (A)	Max. Fuse (AMPS)				
108CE-S1D	1	1.5	52	1.9	15	1540	13.4	16.8	20
110CE-S1D	1	1.5	52	1.9	15	1540	13.4	16.8	20
213CE-S1D	2	3	104	3.4	15	2600	22.6	28.3	30
215CE-S1D	2	3	104	3.4	15	2600	22.6	28.3	30
105DE-S1D	1	1.5	52	1.9	15	1580	13.7	17.2	20
107DE-S1D	1	1.5	52	1.9	15	1580	13.7	17.2	20
210DE-S1D	2	3	104	3.4	15	2600	22.6	28.3	30
212DE-S1D	2	3	104	3.4	15	2600	22.6	28.3	30

208-230/1/60: Electric Defrost

Model BTM	FAN MOTORS					DEFROST HEATERS			
	Qty.	Standard SMARTSPEED [®] EC Motors				Total WATTS	Total AMPS	MCA (A)	MOP (A)
		FLA Total	Watts	Watts	MCA (A)				
108CE-S2D	1	1	60	1.3	15	1540	6.7	8.4	15
110CE-S2D	1	1	60	1.3	15	1540	6.7	8.4	15
213CE-S2D	2	2	90	2.3	15	2600	11.3	14.1	15
215CE-S2D	2	2	104	2.3	15	2600	11.3	14.1	15
318CE-S2D	3	3	156	3.3	15	3720	16.2	20.3	25
321CE-S2D	3	3	156	3.3	15	3720	16.2	20.3	25
426CE-S2D	4	4	208	4.3	15	3720	16.2	20.3	25
531CE-S2D	5	5	260	5.3	15	4560	19.8	24.8	25
105DE-S2D	1	1	60	1.3	15	1540	6.7	8.4	15
107DE-S2D	1	1	60	1.3	15	1540	6.7	8.4	15
210DE-S2D	2	2	90	2.3	15	2600	11.3	14.1	15
212DE-S2D	2	2	104	2.3	15	2600	11.3	14.1	15
315DE-S2D	3	3	156	3.3	15	3720	16.2	20.3	25
318DE-S2D	3	3	156	3.3	15	3720	16.2	20.3	25
422DE-S2D	4	4	208	4.3	15	3720	16.2	20.3	25
526DE-S2D	5	5	260	5.3	15	4560	19.8	24.8	25

115/1/60: Hot Gas Defrost

Model BTM	FAN MOTORS					DRAIN PAN HEATERS			
	Qty.	Standard SMARTSPEED [®] EC Motors				Total WATTS	Total AMPS	MCA (A)	MOP (A)
		FLA Total	Watts	MCA (A)	MOP (A)				
108CG-S1D	1	1.5	52	1.9	15	1100	9.6	12	15
110CG-S1D	1	1.5	52	1.9	15	1100	9.6	12	15
213MG-S1D	2	3	104	3.4	15	1300	11.3	14.1	15
215CG-S1D	2	3	104	3.375	15	1300	11.3	14.1	15
318CG-S1D	3	4.5	156	4.875	15	1860	16.2	20.3	25
321CG-S1D	3	4.5	156	4.875	15	1860	16.2	20.3	25
426CG-S1D	4	6	208	6.375	15	1860	16.2	20.3	25
531CG-S1D	5	7.5	260	7.875	15	2280	19.8	24.8	25

208-230/1/60: Hot Gas Defrost

Model BTM	FAN MOTORS					DRAIN PAN HEATERS			
	Qty.	Standard SMARTSPEED [®] EC Motors				Total WATTS	Total AMPS	MCA (A)	MOP (A)
		FLA Total	Watts	MCA (A)	MOP (A)				
108MA-S2D	1	1	52	1.3	15	1100	4.8	6	15
110MA-S2D	1	1	52	1.3	15	1100	4.8	6	15
213MA-S2D	2	2	104	2.3	15	1300	5.7	7.1	15
215CG-S2D	2	2	104	2.25	15	1300	5.7	7.1	15
318CG-S2D	3	3	156	3.25	15	1860	8.1	10.1	15
321CG-S2D	3	3	156	3.25	15	1860	8.1	10.1	15
426CG-S2D	4	4	208	4.25	15	1860	8.1	10.1	15
531CG-S2D	5	5	260	5.25	15	2280	9.9	12.4	15

Annual Walk-In Energy Factor (AWEF) Ratings

If a numerical value is listed in the table below, the following statement applies to that corresponding model: "This refrigeration system is designed and certified for use in walk-in cooler applications."

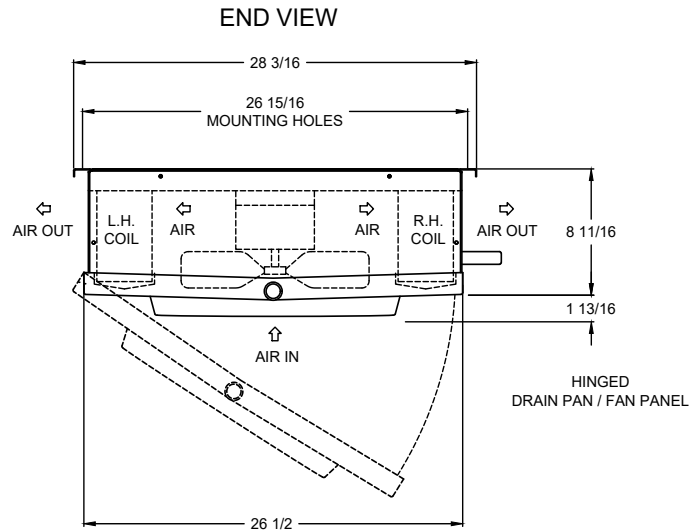
Medium Temperature

Model BTM	C02
108C	9
110C	9
213C	9
215C	9
318C	9
321C	9
426C	9
531C	9

Low Temperature

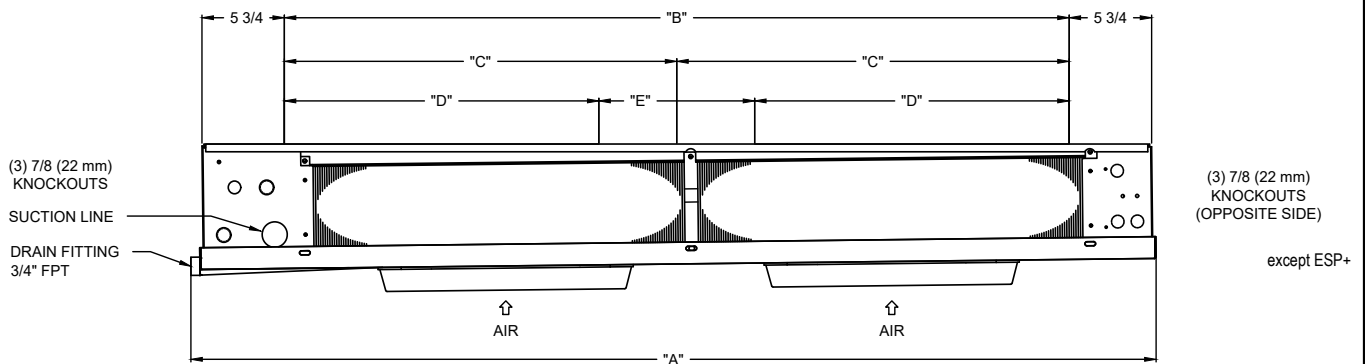
Model BTM	C02
105D	3.97
107D	3.99
210D	4.03
212D	4.05
315D	4.09
318D	4.12
422D	4.15
526D	4.15

- NOTES:
- 1) DIMENSIONS SHOWN ARE TYPICAL FOR AIR, ELECTRIC, AND HOT GAS DEFROST
 - 2) ELECTRICAL CONNECTION END IS OPPOSITE TO THE PIPING END ON ALL MODELS
 - 3) 1/4" O.D. EXTERNAL EQUALIZER LINE AND SERVICE ACCESS FITTING INCLUDED ON ALL SUCTION HEADERS INSIDE END COMPARTMENT.



**SIDE VIEW
MOUNTING HOLSE (3/8" DIA.) & PIPING CONNECTION**

UNIT COOLER IS TO BE SUPPORTED AT ALL MOUNTING POINTS



MODEL BTM	# FANS	A		B		C		D		E	
		in	mm	in	mm	in	mm	in	mm	in	mm
108*	1	45.5	1156	33	838	-	-	-	-	-	-
110*											
213*	2	67.5	1715	55	1397	27.5	699	-	-	-	-
215*											
318*	3	93.5	2375	81	2057	40.5	1029	-	-	-	-
321*											
426*	4										
531*	5	113.5	2883	101	2565	-	-	40.5	1029	20	508
105**	1	45.5	1156	33	838	-	-	-	-	-	-
107**											
210**	2	67.5	1715	55	1397	27.5	699	-	-	-	-
212**											
315**	3	93.5	2375	81	2057	40.5	1029	-	-	-	-
318**											
422**	4										
526**	5	113.5	2883	101	2565	-	-	40.5	1029	20	508

* = M(A1) or C(C02)
** = L(A1) or D(C02)

SPECIFICATIONS - CO2

BTM - TWO-WAY EVAPORATORS

MODEL BTM	TUBE CONNECTIONS						APPROX. SHIPPING WEIGHT	
	SUCTION (OD)		DISTRIBUTOR INLET		HOT GAS SIDE (OD)			
	Inches	mm	Inches	mm	Inches	mm	lbs.	kg
108C	3/8	10	3/8	10	1/2	13	54	24
110C	3/8	10	3/8	10	1/2	13	56	25
213C	3/8	10	3/8	10	1/2	13	98	44
215C	3/8	10	3/8	10	1/2	13	116	53
318C	3/8	10	3/8	10	1/2	13	150	68
321C	3/8	10	3/8	10	1/2	13	157	71
426C	1/2	13	3/8	10	1/2	13	164	74
531C	1/2	13	1/2	13	1/2	13	198	90
105D	3/8	10	3/8	10	-	-	54	24
107D	3/8	10	3/8	10	-	-	56	25
210D	3/8	10	3/8	10	-	-	98	44
212D	3/8	10	3/8	10	-	-	110	50
315D	3/8	10	3/8	10	-	-	150	68
318D	1/2	13	3/8	10	-	-	157	71
422D	1/2	13	3/8	10	-	-	164	74
526D	1/2	13	1/2	13	-	-	198	90

FACTORY INSTALLED DISTRIBUTOR NOZZLES - CO2

Medium Temperature

Model BTM	Nozzle CO2
108C	N/A
110C	N/A
213C	L 1/4
215C	L 1/4
318C	L 1/4
321C	L 1/3
426C	L 1/2
531C	L 1/2

Medium Temp

Capacities are rated based on nominal 10°F TD, 35°F Liquid Temperature Maximum Suction Temperature 30°F (Liquid temperature must be higher than the lowest suction temperature) Capacities at other TD within a range of 8 to 15°F (4.4 to 8.3°C) are directly proportional to TD, or use formula: Capacity = Rated capacity ÷ 10 x TD. Nozzle Selections for Medium Temperature DX application are based on 38F Liquid temperature and 25F suction temperature at 10F TD.

Low Temperature

Model BTM	Nozzle CO2
105D	N/A
107D	N/A
210D	L 1/4
212D	L 1/4
315D	L 1/3
318D	L 1/3
422D	L 1/2
526D	L 3/4

Low Temp

Capacities are rated based on nominal 10°F TD, 35°F Liquid Temperature Capacities at other TD within a range of 8 to 15°F (4.4 to 8.3°C) are directly proportional to TD, or use formula: Capacity = Rated capacity ÷ 10 x TD. Nozzle Selections for Low Temperature DX application are based on 20 F Liquid temperature and -20F suction temperature at 10F TD

INSTALLATION

The installation and start-up of Two-Way Evaporators should only be performed by qualified refrigeration mechanics.

This equipment should be installed in accordance with all applicable codes, ordinances and local by-laws.

INSPECTION

Inspect all equipment before unpacking for visible signs of damage or loss. Check shipping list against material received to ensure shipment is complete.

IMPORTANT: Remember, you, the consignee, must make any claim necessary against the transportation company. Shipping damage or missing parts, when discovered at the outset, will prevent later unnecessary and costly delays.

If damage or loss during transport is evident, make claim to carrier, as this will be their responsibility, not the manufacturer's.

Should carton be damaged, but damage to equipment is not obvious, a claim should be filed for "concealed damage" with the carrier.

IMPORTANT: The electrical characteristics of the unit should be checked at this time to make sure they correspond to those ordered and to electrical power available at the job site.

Save all shipping papers, tags and instruction sheets for reference by installer and owner.

APPLICATION

Two-Way Evaporators are designed for use in coolers and freezers such as reach in boxes, walk-in rooms and any other cooler applications where a low velocity, uniform air flow is required. The compact and low height unit provides maximum useable product storage space.

At room temperatures above 34°F (1.1°C) and evaporating temperatures no lower than 27°F (-2.8°C) the air flowing through the coil will accomplish the defrost (Air Defrost).

At room temperatures 34°F and below (to -10°F) positive defrosting is required (Electric defrost). These will require the use of:

1. *Time Clock* (to initiate and terminate the defrost cycle),
2. *Defrost termination thermostat* (to prevent unnecessary prolonged heating and steaming of the coil once all the frost and ice has melted). And if a freezer,
3. *Fan delay thermostat* (to prevent evaporator fans starting up right away and blowing water on to the fan blades, guards and floor).

This evaporator coil must not be exposed to any abnormal environments (acidic or caustic) that can result in coil corrosion and leaks. Consult factory for optional baked on phenolic protective coatings. These unit coolers are for use primarily on R407A, R407C, R404A/R507, R22 and R134a refrigerants and their approved alternatives / replacements.

LOCATION

The unit location in the room should be selected to ensure uniform air distribution throughout the entire space to be refrigerated. Be sure that the unit does not draw air in, or blow directly out, through an opened door and that the product does not obstruct the free circulation of air. Allow a minimum of 24" clearance at each end. Two-Way Evaporators draw air through the fans and discharge air through both coils.

Consideration should be given to the coil location in order to minimize the piping run length to the condensing unit and floor drain.

EXPANSION VALVE (TXV) SELECTION

All units require the use of an **externally equalized** expansion valve. (A 1/4" (6 mm) O.D. equalizer line has been provided on the coil) TX valves should **not** be selected strictly by their nominal ton rating. (This rating is based at a specific pressure differential and entering liquid temperature). Since applications will differ it is suggested the following selection procedure be followed.

1. Determine actual unit cooler BTUH or KW (thermal).
The nominal rating is based at 10°F T.D. (5.5°C) (Room Temp. minus Evap. Temp.). Note that a higher / lower operating T.D. will increase / decrease this capacity rating by their direct ratio.
2. Determine the pressure drop across the valve by subtracting the suction (evaporating) pressure from the high side liquid pressure. Note: Also subtract the distributor pressure loss (use approx. 25 psig (1.1 bar) for R134a and 35 psig (2.4 bar) for R404A/R507/R22/R407A/R448A).
3. Estimate entering liquid temperature. Temperatures lower than 100°F (37.7°C) increase valve capacity ratings. Refer to valve manufacturer's specs for details.
4. Select valve from the valve manufacturer selection charts for the appropriate refrigerant, evaporating temp and pressure drop.
5. After following the manufacturer's installation instructions and after the room has reached the desired temperature the valve superheat should be checked. This will confirm that the evaporator is operating properly and performing to maximum efficiency. The superheat should be around 5 to 8°F (2.7° to 4.4°C) for a 10 to 12°F (5.5 to 6.6°C) T.D. Too high or low a super heat will result in unsatisfactory system performance and possible compressor problems.

NOZZLE INSTALLATION

All Two-Way Evaporators have nozzles installed at factory. For nozzle selection refer to selection table. In case it is required to install the nozzle at some point in the future, the nozzle retainer clip (in distributor) must be removed before inserting nozzle. Re-install clip ensuring nozzle is properly in place.

MOUNTING

Refer to dimensional drawing for recommended mounting arrangements. Formed mounting channels are provided for flush mounting to the ceiling. Ensure adequate clearance (at least 24" (600 mm)) is provided at each end (to enable access to the electrical and refrigerant compartments).

Ensure that the ceiling is level since the drain pan has been sloped for drainage during the defrost cycle.

DRAIN LINE

The drain line should be run from the drain connection, sloping at least 1/4" (6 mm) per foot. A trap in a warm area outside the room will allow proper draining through the tubing. Connection should be made to proper drainage facilities that comply with local regulations.

DRAIN LINE (cont'd)

To prevent freeze-up when the temperature of the refrigerated

space is 35°F (1.7°C) or lower, the drain line should be heated along its run inside the cold room. The heated drain line should be insulated. It is recommended that the heater be energized at all times. A heat input of 20 watts per foot in a 28°F (-2.2°C) room, is satisfactory. Drain line heaters are not required for constant room temperature above 35°F (1.6°C).

Ensure that the drain line has sufficient slope for proper drainage (prevention of ice build up/blockage in pan).

PIPING

Refrigerant line sizes are important and **may not** be the same size as the coil connections. Consult "Recommended refrigerant line sizes" charts in any standard reference book for proper line sizing. Refrigerant piping and control system should be designed to prevent possible liquid slugging (from oil or refrigerant) of the compressors on start-up after the defrost cycle. On Hot Gas Defrost Systems the suction accumulator should be at least 2.5 times the coils operating charge.

See Dimensional data for line locations. Reverse Cycle models include a check valve (unmounted) packaged along with the nozzle in the refig. connection compartment end panel.

WIRING

Wire system in accordance with governing standards and local codes. See data and wiring diagrams on pages 7 to 12 for wiring arrangement. Electrical wiring is to be sized in accordance with minimum circuit ampacity rating (MCA).

For ease of identifying the proper wiring terminal, unit wiring is color coded and terminal block connections are identified.

SYSTEM CHECK

Before Start-Up:

1. All wiring should be in accordance with local codes.
2. Refrigerant lines should be properly sized.
3. Off cycle defrost and electric defrost systems preferably must include a liquid line solenoid valve and suction accumulator.
4. Thorough evacuation and, dehydration has been performed.
5. The suction, discharge, and receiver service valves must be open.
6. The system preferably must include a liquid line drier moisture indicator and suction filter.
7. Pour enough water into the drain pan to allow a good check on drainage and seal the trap.

After Start-Up:

1. Check the oil level to be sure the oil charge is correct.
2. On initial start up the fans do not start until coil

temperature is pulled down to approximately 35°F (1.7 °C) on the hot gas coil. Also, it is normal for the fans to cycle a few times until the room temperature is pulled down.

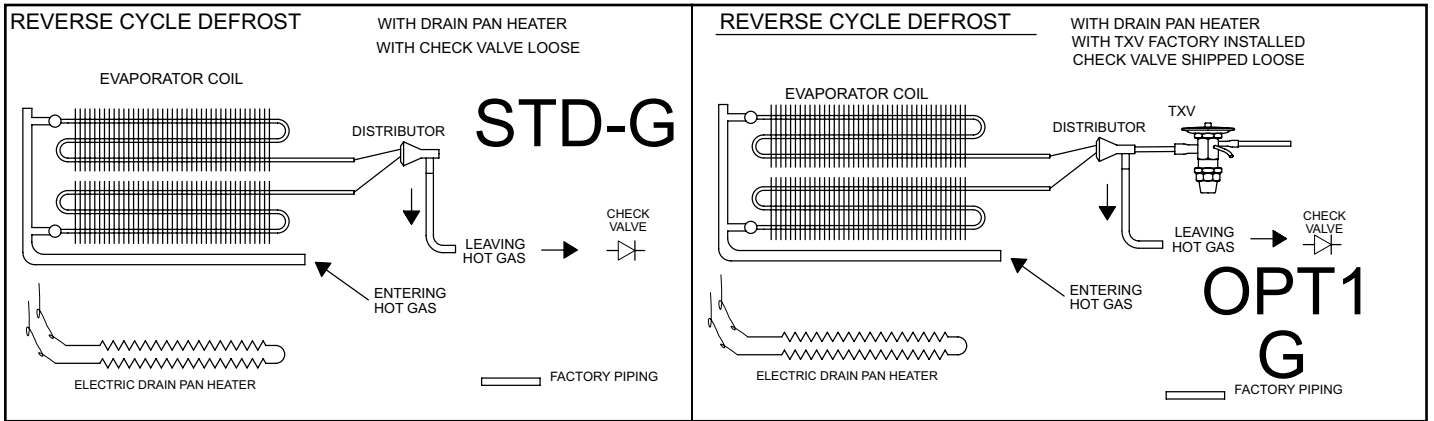
3. Fan/Heater control and defrost termination control is factory installed for reverse cycle defrost operation.
4. In general, evaporators running with a TD of 10°F should have a superheat reading of 5 to 8°F (2.7°C to 4.4°C). For evaporators with a higher TD, the superheat should be 8 to 12°F (4.4 to 6.6 °C).
5. Heavy moisture loads are usually encountered when starting the system for the first time. This will cause a rapid build-up of frost on the unit cooler. During the initial pull down, we suggest that the frost build-up be watched and defrosted manually as required. This may be done by rotating the inner dial on the timer until the pin in the outer dial is directly opposite the timer pointer. (Paragon 8145-20 Timer by others).
6. Observe that the system goes through at least one complete DEFROST CYCLE.

MAINTENANCE

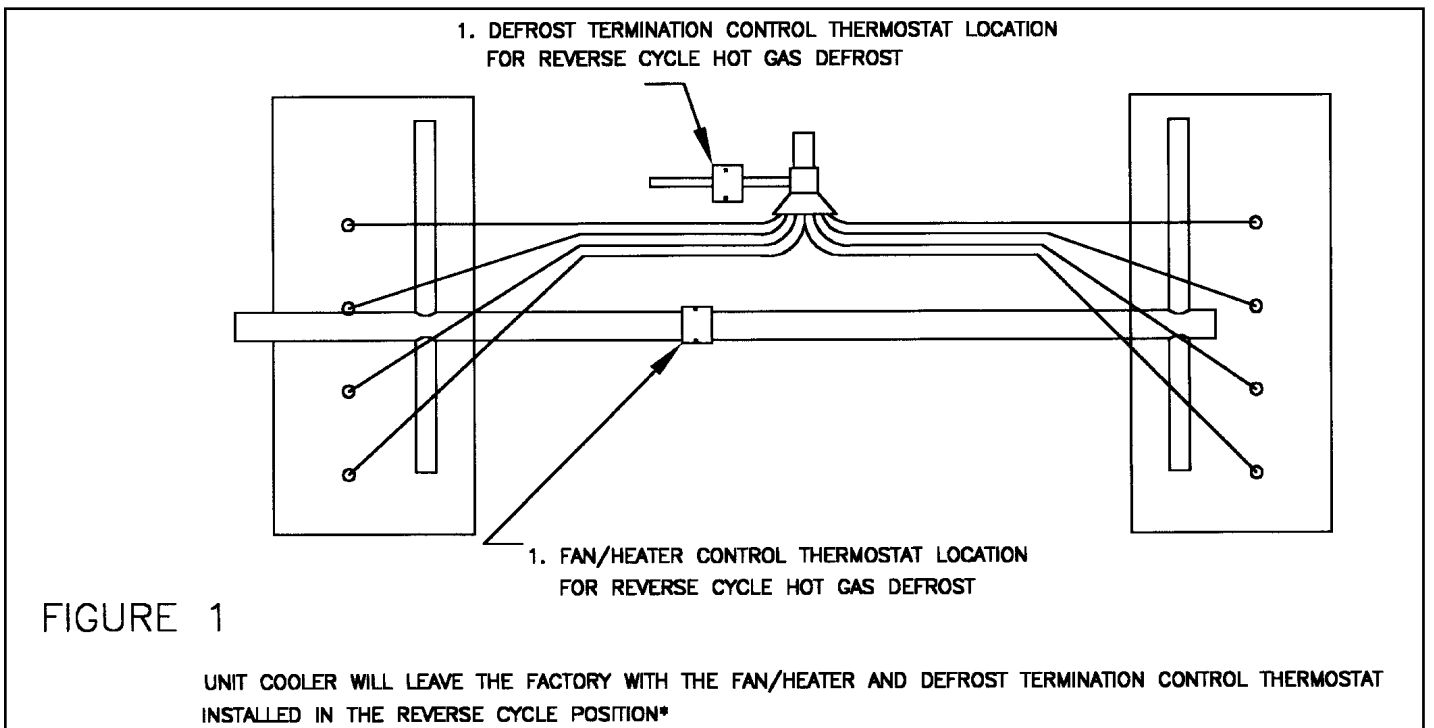
The unit should be periodically inspected for any dirt or build-up on the fin surface and cleaned if necessary with a soft whisk or brush. Also ensure coils inner and outer drain pans do not have any ice build-up from improper defrost operation. When replacing heater elements first remove heater retainer brackets and heater clips.



Visit
www.b-rp.ca/svp
 for Quick Start Guide, Operation Manual, etc



FAN/HEATER CONTROL AND DEFROST TERMINATION CONTROL POSITION



Medium Temperature

TEMP	FPI	# of Fans	Model BTM	Voltage	1 X EVAPORATOR		2 X EVAPORATOR	
					Defrost Kit	Fuse Package	Defrost Kit	Fuse Package
MEDIUM	6	1	108ME-S1D	115/1/60	DFK-01	FP-002	DFK-05	FP-006
			108ME-S2D	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			110ME-S1D	115/1/60	DFK-01	FP-002	DFK-05	FP-006
		2	110ME-S2D	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			213ME-S1D	115/1/60	DFK-01	FP-143	DFK-05	FP-020
			213ME-S2D	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
	3	215ME-S1D	115/1/60	DFK-01	FP-143	DFK-05	FP-020	
		215ME-S2D	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008	
		318ME-S2D	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010	
	4	321ME-S2D	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010	
		426ME-S2D	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010	
	5	531ME-S2D	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010	

Low Temperature

TEMP	FPI	# of Fans	Model BTM	Voltage	1 X EVAPORATOR		2 X EVAPORATOR	
					Defrost Kit	Fuse Package	Defrost Kit	Fuse Package
LOW	6	1	105LE-S1D	115/1/60	DFK-01	FP-002	DFK-05	FP-006
			105LE-S2D	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			107LE-S1D	115/1/60	DFK-01	FP-002	DFK-05	FP-006
		2	107LE-S2D	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
			210LE-S1D	115/1/60	DFK-01	FP-143	DFK-05	FP-020
			210LE-S2D	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008
	3	212LE-S1D	115/1/60	DFK-01	FP-143	DFK-05	FP-020	
		212LE-S2D	208-230/1/60	DFK-02	FP-004	DFK-06	FP-008	
		315LE-S2D	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010	
	4	318LE-S2D	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010	
		422LE-S2D	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010	
	5	526LE-S2D	208-230/1/60	DFK-02	FP-007	DFK-06	FP-010	

**For info on matched
Bally condensing units,
visit
www.b-rp.com/cu**

**Defrost Kit & Fuse Package
Online Selection Tool:
www.b-rp.ca/dfk**

Defrost Kits

Number of Evaps.	Kit Part Number	Description
1	DFK-01	Time Clock, HtrCont - 1x 40A (3P), FB 1x 30A (1P)
1	DFK-02	Time Clock, HtrCont - 1x 40A (3P), FB 1x 30A (2P)
1	DFK-03	Time Clock, HtrCont - 1x 40A (3P), FB 1x 30A (3P)
1	DFK-04	Time Clock, HtrCont - 1x 40A (3P), FB 1x 60A (2P)
2	DFK-05	Time Clock, HtrCont - 1x 40A (3P), FB 2x 30A (1P)
2	DFK-06	Time Clock, HtrCont - 1x 40A (3P), FB 2x 30A (2P)
2	DFK-07	Time Clock, HtrCont - 1x 40A (3P), FB 2x 30A (3P)
2	DFK-08	Time Clock, HtrCont - 1x 50A (3P), FB 2x 60A (2P)
2	DFK-09	Time Clock, HtrCont - 1x 50A (3P), FB 2x 30A (2P)
1	DFK-10	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P)
1	DFK-11	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (3P)
2	DFK-12	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 4x 30A (2P)
2	DFK-13	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 4x 30A (3P)
1	DFK-14	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (2P), FB 1x 30A (3P)
1	DFK-15	Time Clock, HtrCont - 1x40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (2P), FB 1x 60A (2P)
1	DFK-16	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (2P), FB 1x 60A (3P)
1	DFK-17	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (3P), FB 1x 60A (3P)
2	DFK-18	Time Clock, HtrCont - 1x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 2x 30A (3P)
2	DFK-19	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 4x 30A (2P)
2	DFK-20	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 4x 30A (3P)
1	DFK-21	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 1x 30A (2P), FB 1x 60A (2P)
1	DFK-22	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 1x 30A (3P), FB 1x 60A (3P)
2	DFK-23	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 2x 30A (3P)
2	DFK-24	Time Clock, HtrCont - 1x 50A (3P), FanCont - 1x 40A (3P), FB 2x 30A (3P), FB 2x 60A (3P)
1	DFK-25	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (2P), FB 2x 60A (2P)
1	DFK-26	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 40A (3P), FB 1x 30A (3P), FB 2x 60A (3P)
2	DFK-27	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 2x 60A (2P)
2	DFK-28	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 2x 60A (3P)
2	DFK-29	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (3P), FB 2x 60A (3P)
2	DFK-30	Time Clock, HtrCont - 2x 40A (3P), FanCont - 1x 50A (3P), FB 2x 30A (2P), FB 2x 60A (3P)
1	DFK-31	Time Clock, HtrCont - 2x 50A (3P), FanCont - 1x 40A (3P), FB 1x 30A (3P), FB 2x 60A (3P)
2	DFK-32	Time Clock, HtrCont - 2x 50A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 2x 60A (2P)
2	DFK-33	Time Clock, HtrCont - 2x 50A (3P), FanCont - 1x 40A (3P), FB 2x 30A (3P), FB 2x 60A (3P)
2	DFK-34	Time Clock, HtrCont - 4x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (2P), FB 4x 60A (2P)
2	DFK-35	Time Clock, HtrCont - 4x 40A (3P), FanCont - 1x 40A (3P), FB 2x 30A (3P), FB 4x 60A (3P)
2	DFK-36	Time Clock, HtrCont - 4x 40A (3P), FanCont - 1x 50A (3P), FB 2x 30A (2P), FB 4x 60A (2P)
2	DFK-37	Time Clock, HtrCont - 4x 40A (3P), FanCont - 1x 50A (3P), FB 2x 30A (3P), FB 4x 60A (3P)
2	DFK-38	Time Clock, HtrCont - 4x 50A (3P), FanCont - 1x 50A (3P), FB 2x 30A (3P), FB 4x 60A (3P)
1	DFK-39	Time Clock, HtrCont1 - 1x 40A (3P), HtrCont2 - 2x 50A (3P), FanCont - 1x 40A (3P), FB 4x 60A (3P)

NOTE: HtrCont = Heater Contactor, FanCont = Fan Contactor, FB = Fuse Block, (1P), (2P), (3P) = Number of Poles

Fuse Packages

Package Part Number	Description
FP-001	FUSES (1) 15AMP
FP-002	FUSES (1) 20AMP
FP-003	FUSES (1) 25AMP
FP-004	FUSES (2) 15AMP
FP-006	FUSES (2) 20AMP
FP-007	FUSES (2) 25AMP
FP-008	FUSES (4) 15AMP
FP-010	FUSES (4) 25AMP
FP-012	FUSES (2) 35AMP
FP-013	FUSES (3) 15AMP
FP-014	FUSES (3) 20AMP
FP-015	FUSES (4) 20AMP
FP-016	FUSES (4) 20AMP (6) 45AMP
FP-017	FUSES (4) 35AMP
FP-018	FUSES (6) 15AMP
FP-019	FUSES (6) 20AMP
FP-020	FUSES (2) 30AMP
FP-021	FUSES (4) 30AMP
FP-022	FUSES (8) 15AMP
FP-023	FUSES (2) 25AMP (3) 50AMP
FP-024	FUSES (2) 20AMP (3) 45AMP
FP-025	FUSES (6) 20AMP (6) 60AMP
FP-026	FUSES (6) 15AMP (12) 40AMP
FP-027	FUSES (6) 15AMP (6) 40AMP
FP-028	FUSES (6) 20AMP (12) 40AMP
FP-029	FUSES (6)15AMP (6) 50AMP
FP-030	FUSES (6) 15AMP (6) 45AMP
FP-031	FUSES (6) 15AMP (6) 35AMP
FP-032	FUSES (6) 15AMP (6) 30AMP
FP-033	FUSES (6) 25AMP (12) 50AMP
FP-034	FUSES (6) 20AMP (12) 35AMP
FP-035	FUSES (4) 25AMP (6) 50AMP
FP-036	FUSES (6) 25AMP (12) 60AMP
FP-037	FUSES (6) 20AMP (12) 60AMP
FP-038	FUSES (6) 20AMP (12) 50AMP
FP-039	FUSES (6) 20AMP (12) 45AMP
FP-040	FUSES (6) 15AMP (12) 45AMP
FP-041	FUSES (5) 15AMP
FP-042	FUSES (10) 15AMP
FP-043	FUSES (3) 25AMP (6) 60AMP
FP-044	FUSES (3) 20AMP (6) 60AMP
FP-045	FUSES (3) 20AMP (6) 50AMP
FP-046	FUSES (3) 25AMP (6) 45AMP
FP-047	FUSES (3) 15AMP (6) 45AMP
FP-048	FUSES (4) 15AMP (4) 45AMP
FP-049	FUSES (4) 15AMP (4) 40AMP
FP-050	FUSES (3) 15AMP (3) 60AMP
FP-051	FUSES (4) 20AMP (6) 50AMP
FP-052	FUSES (4) 15AMP (6) 45AMP
FP-053	FUSES (4) 15AMP (6) 30AMP


Package Part Number	Description
FP-054	FUSES (3)15AMP (6) 35AMP
FP-055	FUSES (2) 15AMP (2) 45AMP
FP-056	FUSES (2) 15AMP (2) 40AMP
FP-057	FUSES (2) 20AMP (3) 50AMP
FP-058	FUSES (2) 15AMP (3) 45AMP
FP-059	FUSES (2) 15AMP (3) 30AMP
FP-060	FUSES (2) 15AMP (2) 35AMP
FP-061	FUSES (2) 15AMP (2) 50AMP
FP-062	FUSES (2) 15AMP (2) 60AMP
FP-063	FUSES (2) 15AMP (3) 25AMP
FP-064	FUSES (2) 15AMP (3) 35AMP
FP-065	FUSES (2) 15AMP (3) 40AMP
FP-066	FUSES (2) 15AMP (3) 20AMP
FP-067	FUSES (4) 15AMP (4) 35AMP
FP-068	FUSES (4) 15AMP (4) 50AMP
FP-069	FUSES (4) 15AMP (4) 60AMP
FP-070	FUSES (4) 15AMP (6) 25AMP
FP-071	FUSES (4) 15AMP (6) 35AMP
FP-072	FUSES (4) 15AMP (6) 40AMP
FP-073	FUSES (4) 15AMP (6) 20AMP
FP-074	FUSES (3) 20AMP (3) 60AMP
FP-075	FUSES (3) 20AMP (6) 35AMP
FP-076	FUSES (3) 25AMP (6) 50AMP
FP-077	FUSES (3) 35AMP (9) 45AMP
FP-078	FUSES (3) 15AMP (3) 35AMP
FP-079	FUSES (3)15AMP (3) 45AMP
FP-080	FUSES (3) 15AMP (3) 50AMP
FP-081	FUSES (3) 20AMP (6) 40AMP
FP-082	FUSES (3) 15AMP (3) 40AMP
FP-083	FUSES (3) 15AMP (6) 40AMP
FP-084	FUSES (6) 15AMP (6) 60AMP
FP-085	FUSES (6) 15AMP (12) 35AMP
FP-086	FUSES (3) 35AMP (3) 45AMP (6) 60AMP
FP-087	FUSES (4) 20AMP (4) 40AMP (4) 50AMP
FP-088	FUSES (4) 15AMP (4) 35AMP (4) 40AMP
FP-089	FUSES (2) 20AMP (2) 40AMP (2) 50AMP
FP-090	FUSES (2) 15AMP (2) 35AMP (2) 40AMP
FP-091	FUSES (2) 20AMP (2) 35AMP (2) 40AMP
FP-092	FUSES (2) 25AMP (2) 40AMP (2) 50AMP
FP-093	FUSES (4) 20AMP (4) 35AMP (4) 40AMP
FP-094	FUSES (6) 15AMP (6) 25AMP
FP-095	FUSES (3) 15AMP (3) 25AMP
FP-096	FUSES (3) 15AMP (3) 30AMP
FP-097	FUSES (4) 15AMP (4) 30AMP
FP-098	FUSES (4) 15AMP (4) 25AMP
FP-099	FUSES (4) 15AMP (4) 20AMP
FP-100	FUSES (2) 15AMP (2) 20AMP
FP-101	FUSES (2) 15AMP (2) 25AMP
FP-102	FUSES (2) 15AMP (2) 30AMP
FP-103	FUSES (4) 25AMP (4) 40AMP (4) 50AMP

NOTE: FUSES 30AMP and Below - Class CC Type, FUSES 35AMP and Above - Class J Type

System	
Model Number	Date of Start-Up
Serial Number	Service Contractor
Refrigerant	Phone
Electrical Supply	E-mail


PRODUCT SUPPORT


web: www.b-rp.ca/btm
email: evaps@b-rp.ca
call: **1-844-893-3222 x520**


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Service Parts List Label To Be Attached *HERE*



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