



 MARSHAL®

FRESH AIR PACKAGE UNIT

AIR CONDITIONERS

Capacity 7.5-35TR

3RTH - 50Hz

R407C



MAKING LIFE COOL

SALIENT FEATURES



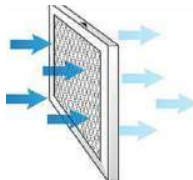
Applications: Hospitals, Smoke lounges & Restaurant Kitchens



High Efficiency Scroll Compressors



3 Stage In House Leak Testing



High Air Filtration Efficiency (70~80% efficiency)



Powder Coated weather proof cabinet with Salt Spray Test resistance of 1000 hours as per ASTM B117

STANDARD FEATURES



Backward Curve Blower
Can withstand High ESP requirements



Electric Heater
High efficiency electric heaters with nickel-chromium + ferrous composition



Hi Efficiency Scroll Compressors
Efficient scroll compressors with internal protection



HGBP
To handle low load conditions effectively



Thermal Expansion Valve
Efficient refrigerant expansion for DX system



Filter Drier
Effective moisture absorbing capacity



High Pressure & Low Pressure Switch
Safety cut off at high & low refrigerant pressures



Sight Glass
Indication for moisture presence in the system



Phase Loss Protector
Protection from phase loss/reversal



Anti Ice
Protection from frosting on cooling coil



Sand Trap Louver
To restrict sand particles movement prior to air filter



PUFF Insulation for Double Skin Panels
High density PUFF insulation for effective insulation of cooling section



Aluminum Pre Filter
Air filtration "G-2" grade as per EN 779



Anti Corrosion Black Paint for Drain Pan
Can withstand salt spray up to 1500 hours as per ASTM B117



Bag Filter
Air filtration "F-6" grade as per BS 6540

OPTIONAL FEATURES



Microprocessor Controller
Multiple control features with BMS compatibility



Heresite Coating for Condenser Fins
Beneficial high corrosion resistance



Thermostat
LCD display to control & monitor temperature w.r.t. mode of operation



Copper Fins for Condenser Coil
Improved heat transfer & long durability



VFD
Flexibility to operate at different airflow



Hydrophilic Fins for Evaporator Coil
Prevention of water accumulation on fins



PCB
Offering basic controls & safety features to the units



Differential Pressure Switch
Efficient monitoring of air filters



Hepa Filter
For high filtration efficiency of 99.9%



Pressure Gauge
To keep a check on system pressure on low & high side



UV-Light
Clean & sterilized conditioned air for health safety



SS Drain Pan
Enhanced corrosion resistance

Note: Optional features are not limited to above & for further options can be offered based on customer request.
Pictures above are for resemblance of features & actual product & image may differ from it.

FRESH AIR ROOF TOP PACKAGE - R407C PRODUCT DATA BOOK

PERFORMANCE CHART DATA

48/29°C - Table 1

Model Name	Nominal Capacity (TR)	Airflow (CFM)	ESP (Pa)	TC(KW)	SC(KW)	TC(TR)	SC(TR)	Cooling Capacity @ 48/29°C (118.4/84.2°F)
								TR
3RTH090GE1L	7.5	1130	250	29.67	20.79	8.4	5.9	8.4
3RTH120GE2L	10	1500	250	34.69	24.48	9.9	7.0	9.9
3RTH150GE2L	12.5	1770	250	39.54	29.01	11.2	8.2	11.2
3RTH180GE2L	15	2250	250	51.92	36.91	14.8	10.5	14.8
3RTH216GE2L	18	2700	250	51.38	49.16	14.6	14.0	14.6
3RTH240GE2L	20	2940	250	70.49	49.45	20.0	14.1	20.0
3RTH300GE2L	25	3750	250	93.78	65.87	26.7	18.7	26.7
3RTH360GE2L	30	4500	250	110.5	77.99	31.4	22.2	31.4
3RTH420GE2L	35	5250	250	120.45	86.76	34.2	24.7	34.2

48/24.4°C - Table 2

Model Name	Nominal Capacity (TR)	Airflow (CFM)	ESP (Pa)	TC(KW)	SC(KW)	TC(TR)	SC(TR)	Cooling Capacity @ 48/29°C (118.4/75.9°F)
								TR
3RTH090GE1L	7.5	1130	250	25.41	23.67	7.2	6.7	7.2
3RTH120GE2L	10	1500	250	29.87	28.25	8.5	8.0	8.5
3RTH150GE2L	12.5	1770	250	35.2	33.81	10.0	9.6	10.0
3RTH180GE2L	15	2250	250	44.86	42.62	12.8	12.1	12.8
3RTH216GE2L	18	2700	250	51.38	49.16	14.6	14.0	14.6
3RTH240GE2L	20	2940	250	60.8	57.06	17.3	16.2	17.3
3RTH300GE2L	25	3750	250	80.68	75.86	22.9	21.6	22.9
3RTH360GE2L	30	4500	250	95.03	89.03	27.0	25.3	27.0
3RTH420GE2L	35	5250	250	103.84	100.17	29.5	28.5	29.5

- Evaporator entering Temperature 48/29 ° C dry bulb/wet bulb. (Table-1)
- Evaporator entering Temperature 48/24.4 ° C dry bulb/wet bulb. (Table-2)
- Power Supply :380~415V/3 Ph/50 Hz
- Power Input is Compressor power Input (remaining power to be added for Total Power input)
- ESP Considered 250 Pascal as Standard
- Backward Curve Blower as a Standard to handle Airflow & ESP conditions
- Pre Filter + Bag Filter as a Standard for Air Filtration
- HGBP & Anti Ice as a Standard to Handle Low Ambient Conditions

DIMENSIONAL DETAILS

Model Name	UNIT DIMENSIONS(mm)			PLENUM	
				(PRE+BAG FILTER+SANDTRAP LOUVER)	(PRE+BAG+HEPA FILTER+SANDTRAP LOUVER)
	WIDTH	DEPTH	HEIGHT	DEPTH	DEPTH
3RTH090GE1L	1024	2028	1161	940	1400
3RTH120GE2L	1505	2265	1383	970	1470
3RTH150GE2L	1900	2126	1400	940	1240
3RTH180GE2L	1900	2126	1400		
3RTH216GE2L	2150	2550	1931	940	1240
3RTH240GE2L	2150	2550	1931		
3RTH300GE2L	2150	2550	1931		
3RTH360GE2L	2150	3210	2100	860	1350
3RTH420GE2L	2150	3210	2100	860	1350

Notes:

1. Plenum with Pre Filter+ Bag Filter+ Sand Trap Louver is (Standard)
2. Plenum with Pre Filter+ Bag Filter + HEPA Filter (optional) + Sand Trap Louver (Motor Also to be Re -Selected in case of HEPA Filter)

