

SYSTEM INFORMATION

The Vertical Rack Mount (VRM) Systems are designed to provide refrigerated air to medium-high temperature spaces.

VRM evaporators mount vertically and have multiple access panels to direct or re-direct the supply and return vents. These can be placed in a soffit, between ceiling joists, or on a wall. By far this is our most versatile system and our biggest seller.

VRM evaporators are available in standard capacities from 2,600 to 6,600 BTU per hour and are used with R134a refrigerant.

OPTIONS

- Triple evaporator systems for larger applications
- Eco-friendly water-cooled condensing units available
- Stainless steel cabinets for high-corrosive environments

FEATURES

- High-performance staggered coils with copper tubing mechanically expanded into aluminum fins
- Insulated rust-proof aluminum housing
- Thermally protected permanently lubricated motor
- Automatic expansion valve (standard) ensures constant coil temperature to promote "Humidity Balance"
- Pump-down solenoid valve (standard) protects compressor in the event of leaks
- Pre-installed valves eliminate additional wiring to thermostat
- Pressure tested by the manufacturer to ensure quality
- Factory wired for simple field installation
- ETL certified



BEST SELLERS

Vertical Rack Mount	VRM4600 TE	VRM6600 TE	VRM8600 TE	VRM10000 TE	VRM12000 TE
Max Cubic Feet	1000	1500	2000	2500	3000
BTUH	4600	6600	8600	10000	12000
Fan Coil	VRM25 x2	VRM35 x2	VRM35 x2	VRM50 x2	VRM65 x2
Length	11.378"	11.378"	11.378"	11.378"	11.378"
Width	11.188"	11.188"	11.188"	11.188"	11.188"
Height	41.500"	45.500"	45.500"	47.500"	51.500"
Weight	48 lbs	50 lbs	50 lbs	59 lbs	63 lbs
Volts	115 V	115 V	115 V	115 V	115 V
Amps	0.77 A	0.77 A	0.77 A	0.77 A	1.85 A
Condensing Unit	CU46	CU66	CU86	CU100	CU120
Length	16.30"	17.90"	17.50"	24.00"	24.30"
Width	13.10"	14.40"	14.30"	16.90"	17.90"
Height	11.80"	11.80"	12.00"	15.90"	13.40"
Weight	56 lbs	60 lbs	79 lbs	130 lbs	95 lbs
Volts	115 V	115 V	115 V	208/230-1ph	208/230-1ph
Amps MFS	12.5 A	15.5 A	20.7 A	14.8 A	9.9 A
System Line Set					
Suction	1/2"	1/2"	5/8"	5/8"	7/8"
Liquid	1/4"	1/4"	3/8"	3/8"	3/8"
Lines between coils for TE Systems					
Suction	3/8"	3/8"	3/8"	3/8"	3/8"
Liquid	1/4"	1/4"	1/4"	1/4"	1/4"

Due to continuing engineering improvements, specifications are subject to change without notice.

VRM TE SERIES

VRM Fan Coil Specifications

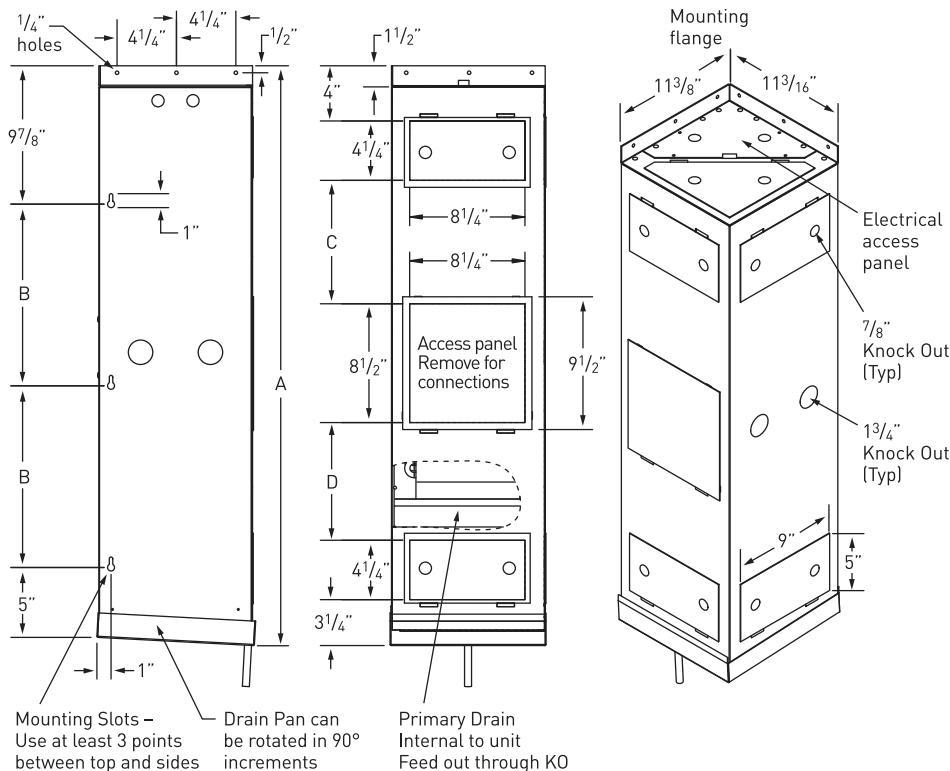
- It is best to use the larger coil whenever possible.
- If using a smaller coil a suction line accumulator must be used
- Smaller coils can cause the system to run a lower humidity
- Expansion valve and liquid line solenoid valve standard
- For air flow into and out of the unit, at least one access door must be removed from each end
- Connections at coil do not indicate refrigeration line size. See system information for line sizing

MODEL	CFM	AMPS 115 V	DIMENSIONS				CONNECTIONS			APPROX SHIP WT.
			A	B	C	D	LIQUID	SUCTION	DRAIN	
VRM 25	220	0.77	41.50"	13"	8.81"	8.44"	0.38"	0.38"	0.50"	48 lbs
VRM 35	260	0.77	45.50"	15"	9.31"	11.94"	0.38"	0.38"	0.50"	50 lbs
VRM 50	335	0.77	47.50"	16"	9.31"	13.94"	0.38"	0.50"	0.50"	59 lbs
VRM 65	420	1.85	51.50"	18"	N/A	N/A	0.38"	0.50"	0.50"	63 lbs

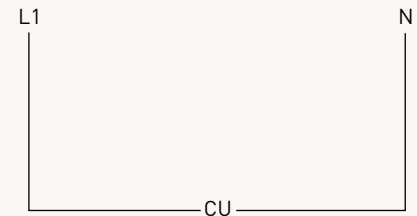
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Mounting Diagrams

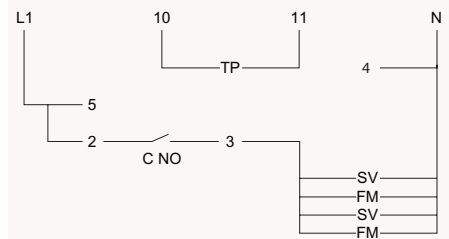
All measurements are in inches



Condensing Unit Wiring



TE Fan Coil Wiring



Field Wiring

- L1** 115 V Line Voltage
- N** Neutral
- SV** Solenoid Valve
- FM** Fan Motor
- TP** Temperature Probe

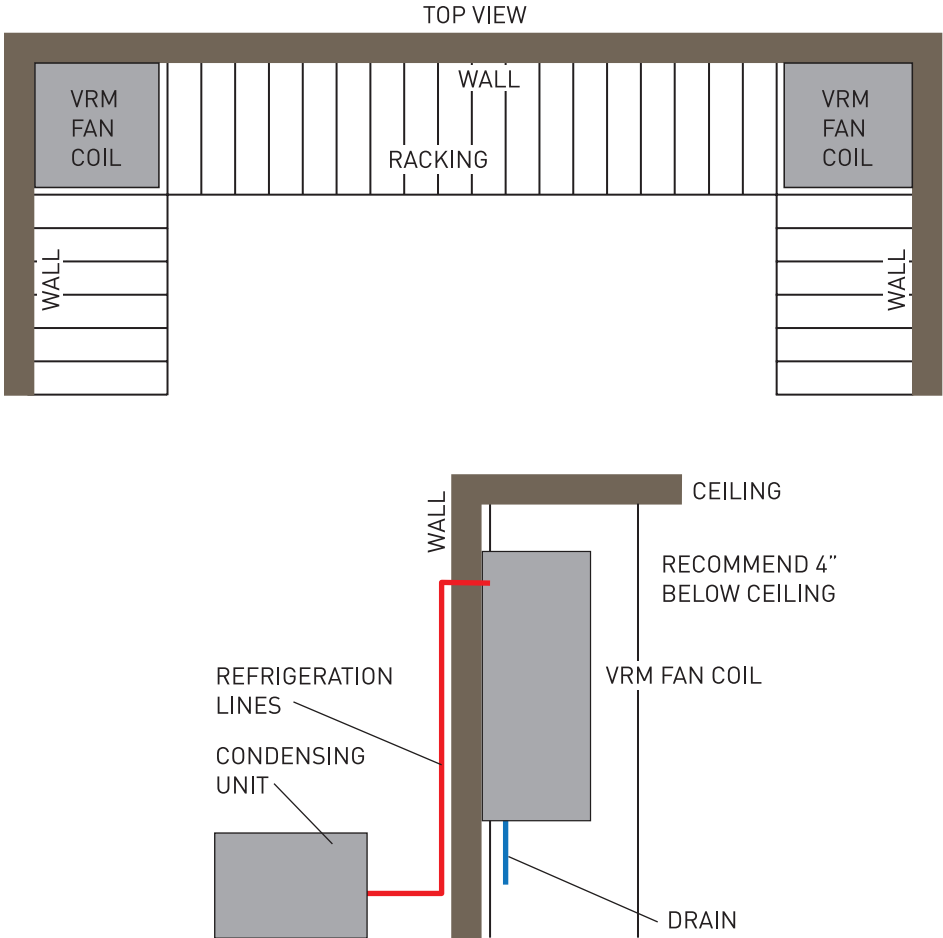
Back of Controller Connections

- 10** Temperature Probe
- 11** Temperature Probe
- 4** Neutral
- 5** 115V Line Voltage
- 2** Jumper from 5
- 3** Switch Leg to Fan Coil
- C NO** Internal normally open contact

VRM TE SERIES

VRM TE Cooling System Typical Installation

- Keep line sets as short as possible.
- Excessive number of turns will cause refrigerant flow problems. This could cause early compressor failure. Suction line accumulators are recommended. Required if working lower than the normal 55-65° operating range from wine cellar
- Drain line must always flow downhill to drain or pump
- The system is controlled by a pump down control system. There is no control wiring between thermostat and condensing unit
- The line connections at Fan Coil and Condensing Unit may not be the same as the required line sizes
- Standard line sets should be 50' or less. Extended runs may require larger line sizes and 3oz. oil must be added for every 10' over 35'



Ceiling Construction



EXTERIOR
 VAPOR BARRIER
 INSULATION –
 R19 OR BETTER
 INTERIOR

Wall Construction



EXTERIOR
 VAPOR BARRIER
 INSULATION –
 R12 OR BETTER
 INTERIOR