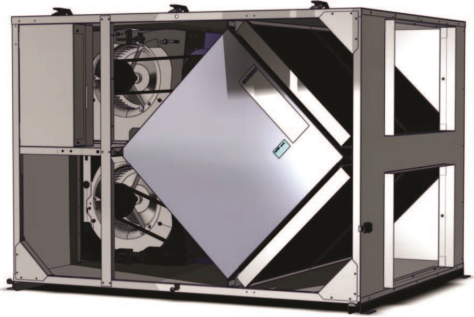




MODEL TRC

TOTAL RECOVERY FOR ALL CLIMATES -
COMMERCIAL APPLICATIONS



MODEL FEATURES

- MERV-8 filters
- Transformer/relay package allowing simple on/off control
- Access doors for easy access to blowers, core and filters
- Fully insulated case
- Large cores for high efficiency
- No condensate pan or drain required

10-YEAR
Core Warranty

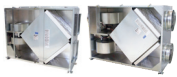
MODEL OVERVIEW

With S&P's TRC (total recovery for commercial applications) Series for all climates, stale room air is exhausted and fresh outdoor air is brought back into the building. With this line of ERVs (Energy Recovery Ventilators) these two air streams are directed through a highly developed "air-to-air" energy exchange core. The air streams are physically separated by many layers of "plates" so there is no mixing or contamination of the fresh air. The plates are made of an engineered "resin" material that simultaneously transfers heat by conduction and humidity by attracting and moving water vapor from one air stream to the other.

S&P's TRCs moderate extremes in both temperature and humidity, creating a comfortable indoor environment. The unique moisture transfer capability of the S&P core also eliminates condensation and frost build up in most applications. Unlike other ERVs on the market no mechanical or electrical defrost systems are needed, which means higher heat recovery efficiencies, easier installation and more reliable operation.

10-year industry best core warranty. 2-year warranty on balance of unit.

All specifications are subject to change without notice unless approved in submittal by Soler & Palau.



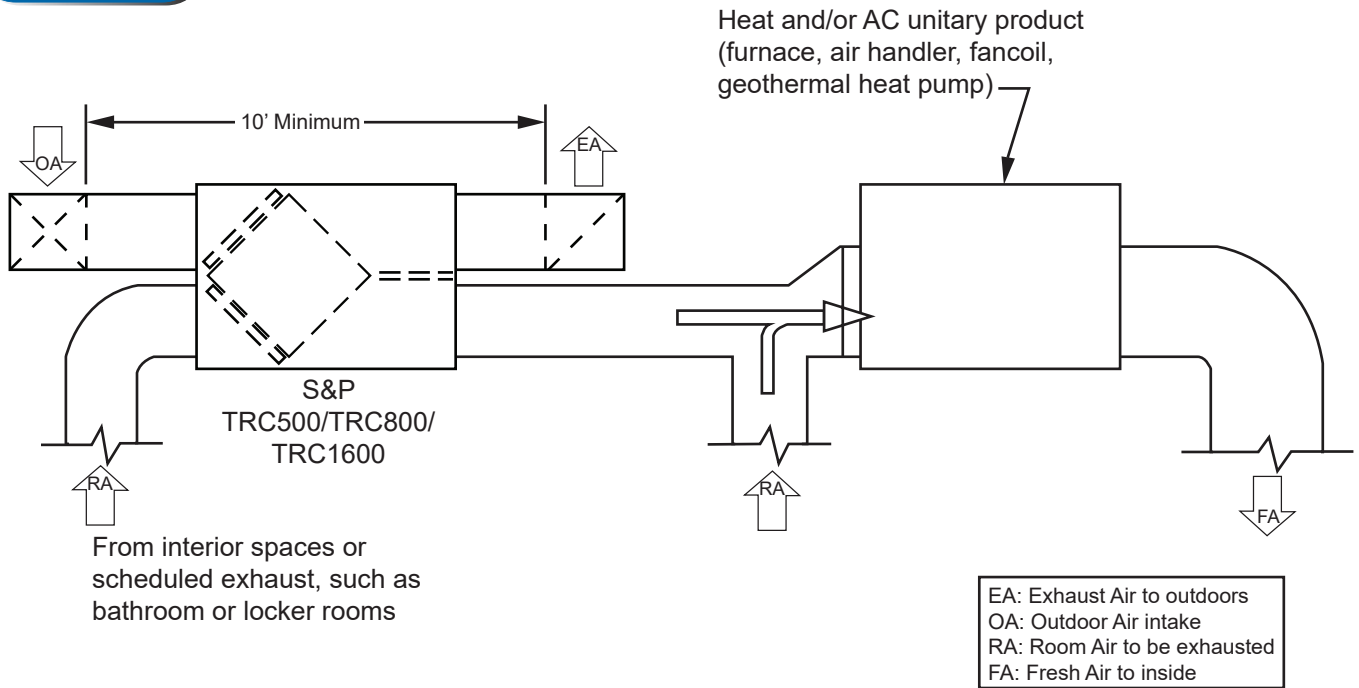
MODEL TRC

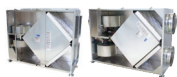
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS



STANDARD SPECIFICATIONS AND FEATURES

- AHRI certified performance data for efficiency and cross leakage.
- UL tested flammability and smoke generation that meets NFPA 90A and 90B test standards for commercial applications.
- Easy installation and service.
- Easiest maintenance of any ERV
- MERV-8 filters (2 in the TRC500 & TRC800, 4 in the TRC1200 & TRC1600)
- Transformer/relay package allowing simple on/off control
- Access doors for easy access to blowers, core and filters
- TRC500 & TRC800 have integral mounting flange and hanging bracket system
- TRC1200 & TRC1600 have mounting feet for installation at floor level
- 2 Direct Drive, TEFC, Premium Efficient blower motors in the TRC500, TRC800, & TRC1200
- 2 Belt Drive, TEFC, Premium Efficient blower motors in the TRC1600
- Fully insulated case
- Large cores for high efficiency
- No condensate pan or drain required
- **10-year** industry best core warranty
- 2-year warranty on balance of unit





CONTROLS

These controls are intended to turn S&P commercial energy recovery ventilation systems on and off at appropriate times. Specification, installation and set-up is an easy process. The TRC units come standard with a 24 volt transformer/relay package for easy interface with all controls.

It is not necessary that S&P controls be used to operate S&P units. A wide range of controls or building automation systems may be used.

The S&P residential (TR) units have their own line of compatible controls that are not intended to operate S&P commercial (TRC) units.

STC7D-W - Digital Time Clock - Wall Mount



- Up to 8 on/off cycles per day or 56 per week
- 24 VAC power requirement
- Battery back-up
- Fits any 4" x 4" electrical box

SMC-C - Motion (Occupancy) Control - Ceiling Mount



- Passive infrared sensor
- Adjustable time-off delay to 30 minutes
- 24 VAC power requirement
- Covers up to 1500 sq. ft. floor space
walking motion coverage up to 22 foot radius

SCO2-W - Carbon Dioxide Control - Wall Mount

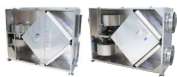


- Adjustable control from 600-2000 PPM
- Digital display
- 24 VAC power requirement
- Computer/BAS interface for information and control
- Self calibrates during periods of low occupancy

SHW-20 - Dehumidistat



- Rotary dial dehumidistat
- Turn the dial to set desired humidity level
- Designed for convenient installation in bathrooms, kitchen or laundry room
- Dehumidifies when inside air is more humid than the set point
- **Caution:** the outside air must be less humid than the indoor air for this to work.



MODEL TRC

TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS



TRC500



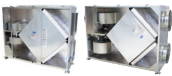
Performance

| Airflow CFM | ESP in H ₂ O | Watts | Temp EFF% | Total EFF% Winter/Summer* |
|-------------|-------------------------|-------|-----------|---------------------------|
| 225 | 1.25 | 335 | 81 | 76/66 |
| 338 | 1.00 | 420 | 77 | 71/61 |
| 380 | 0.90 | 470 | 75 | 69/59 |
| 450 | 0.65 | 550 | 73 | 66/56 |
| 540 | 0.25 | 640 | 70 | 62/52 |
| 575 | 0.00 | 690 | 69 | 61/51 |
| 600 | -0.25 | 735 | 68 | 60/50 |

* At AHRI 1060 standard conditions
(see certified data on page 69 for core components.)
Note: Watts is for the entire unit.

Specifications

| Ventilation Type: Static Plate, Heat and Humidity Transfer | | | | | |
|---|----|--------|-----|----------------|------------------------------------|
| Typical Airflow Range: 200-540 CFM | | | | | |
| AHRI 1060 Certified Core: One L85 | | | | | |
| Airflow Rating Points (for AHRI): 450 CFM and 338 CFM | | | | | |
| Motors: One, 0.6 hp (Single Phase) | | | | | |
| V | Hz | Phase | FLA | Min. Cir. Amps | Max. Overcurrent Protection Device |
| 115 | 60 | Single | 7.0 | 8.8 | 15 |
| 208-230 | 60 | Single | 3.5 | 4.4 | 15 |
| Standard Features: 24 VAC Transformer/Relay Package | | | | | |
| Filters: Two total, MERV 8, 2" pleated, 14" x 20" nominal size | | | | | |
| Weight: 141 lbs (unit), 160 lbs (in carton) 200 lbs (on pallet), up to 3 units on 40 lb pallet | | | | | |
| Shipping Dimensions: 48" L x 41" W x 18" H (in carton) 55" L x 42" W x 22" H (on pallet) | | | | | |



MODEL TRC

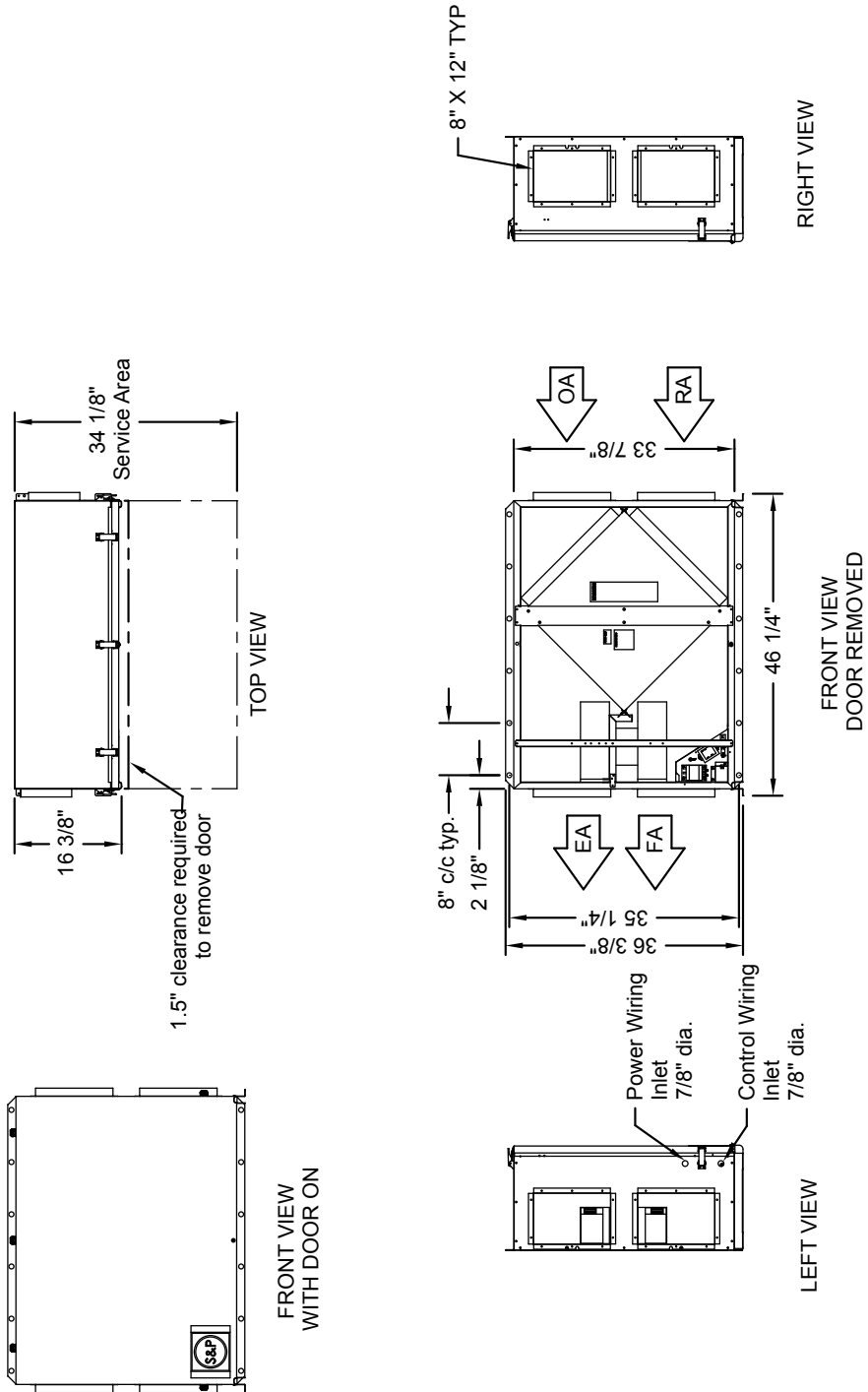
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS

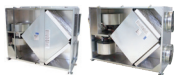


TRC500

Dimensions

EA: Exhaust Air to outdoors
 OA: Outdoor Air intake
 RA: Room Air to be exhausted
 FA: Fresh Air to inside





MODEL TRC

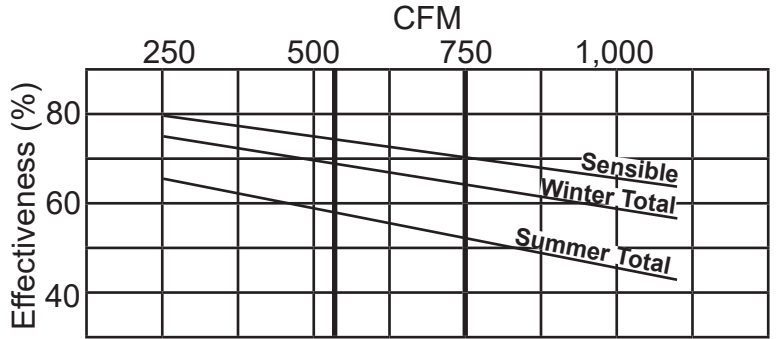
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS



TRC800



Performance



* At AHRI 1060 standard conditions
(see certified data on page 69 for core components.)

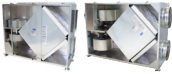
Specifications

| Ventilation Type: Static Plate, Heat and Humidity Transfer | | | | | |
|--|----|--------|-----------------|----------------|------------------------------------|
| Typical Airflow Range: 250-925 CFM | | | | | |
| AHRI 1060 Certified Core: One L125-00 | | | | | |
| Airflow Rating Points (for AHRI): 750 CFM and 563 CFM | | | | | |
| Number Motors: Two direct drive blower/motor packages | | | | | |
| V | Hz | Phase | FLA (per motor) | Min. Cir. Amps | Max. Overcurrent Protection Device |
| 115 | 60 | Single | 9.0 | 20.3 | 25 |
| 208-230 | 60 | Single | 4.5 | 10.1 | 15 |
| Standard Features: 24 VAC Transformer/Relay Package | | | | | |
| Filters: Two total, MERV 8, 2" pleated, 20" x 20" nominal size | | | | | |
| Weight: 211 lbs (unit), 300 lbs (shipping weight, on pallet) | | | | | |
| Shipping Dimensions: 62" L x 48" W x 40" H | | | | | |

Airflow Performance

| Motor HP Phase | External Static Pressure (Inches Water Column) | | | | | | |
|-------------------|--|-------------|-------------|-------------|-------------|-----------|-----------|
| | 0.0 | 0.25 | 0.5 | 0.75 | 0.9 | 1.25 | 1.5 |
| 0.75 | 970 CFM | 925 CFM | 860 CFM | 795 CFM | 750 CFM | 635 CFM | 480 CFM |
| Single Phase | 1,490 Watts | 1,375 Watts | 1,270 Watts | 1,160 Watts | 1,090 Watts | 950 Watts | 825 Watts |

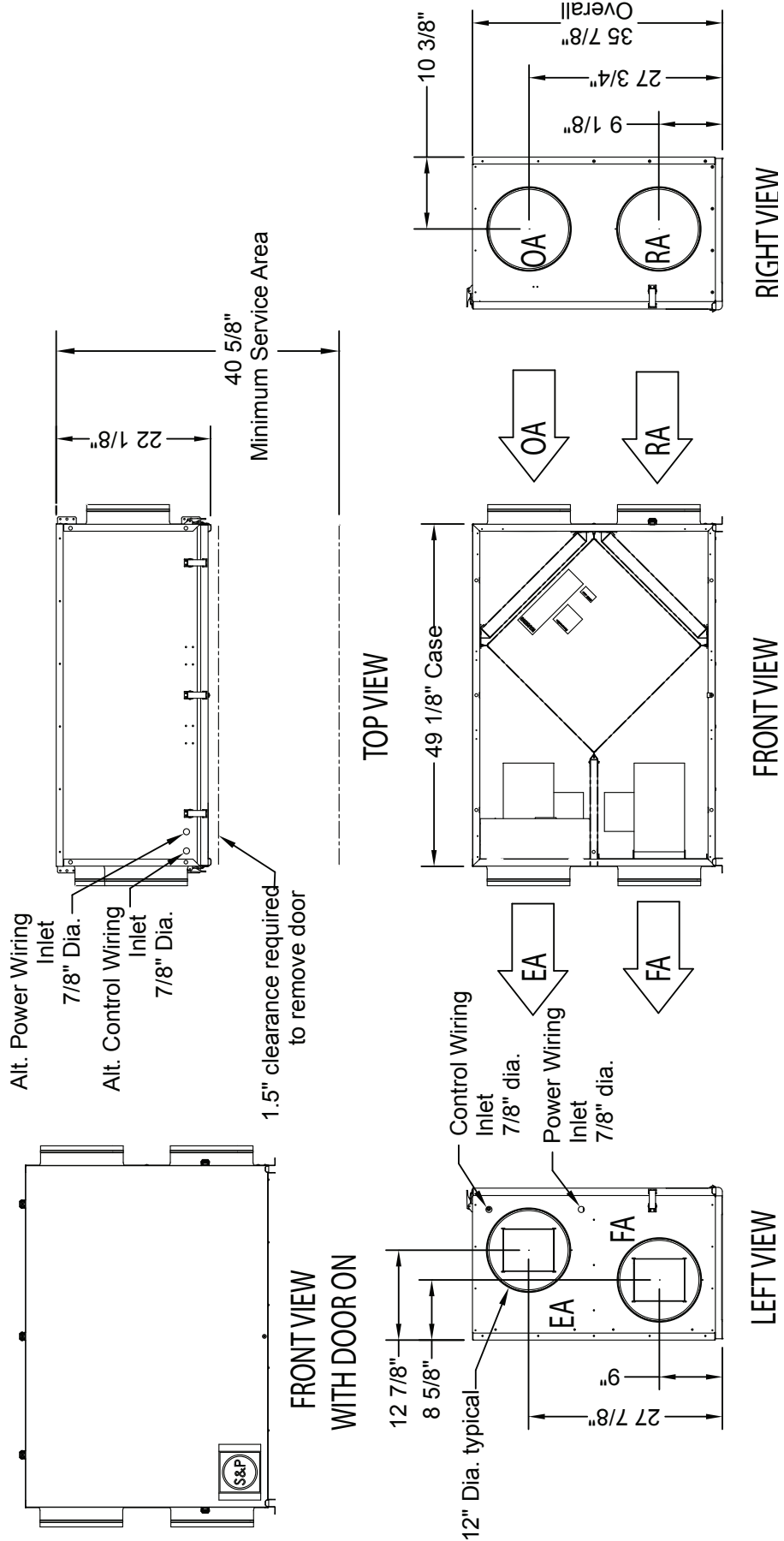
Note: Watts is for the entire unit (two motors).

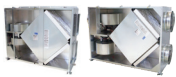


TRC800

Dimensions

EA: Exhaust Air to outdoors
 OA: Outdoor Air intake
 RA: Room Air to be exhausted
 FA: Fresh Air to inside





MODEL TRC

TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS



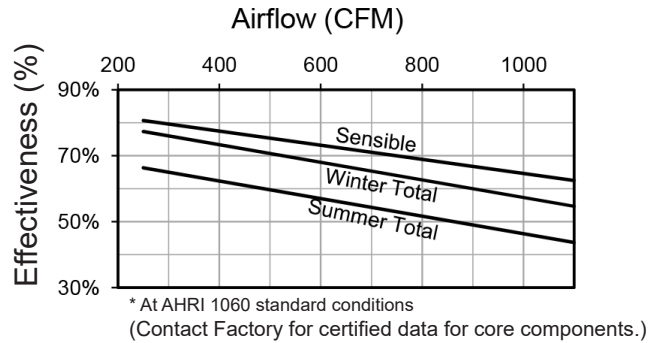
TRC800V



Specifications

| Ventilation Type: Static Plate, Heat and Humidity Transfer | | | | | |
|---|----|--------|-----------------|----------------|------------------------------------|
| Typical Airflow Range: 250-925 CFM | | | | | |
| AHRI 1060 Certified Core: One L125-G5 | | | | | |
| Airflow Rating Points (for AHRI): 750 CFM and 563 CFM | | | | | |
| Number Motors: Two direct drive blower/motor packages | | | | | |
| V | Hz | Phase | FLA (per motor) | Min. Cir. Amps | Max. Overcurrent Protection Device |
| 120 | 60 | Single | 9.0 | 20.3 | 25 |
| 208-230 | 60 | Single | 4.5 | 10.1 | 15 |
| Standard Features: Non-Fused Disconnect 24 VAC Transformer/Relay Package | | | | | |
| Filters: Two total, MERV 8, 2" pleated, 20" x 20" nominal size | | | | | |
| Weight: 207 lbs (unit), 325 lbs (shipping weight, on pallet) | | | | | |
| Shipping Dimensions: 30" L x 42" W x 71" H | | | | | |

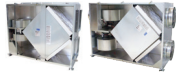
Performance



Airflow Performance

| Motor HP Phase | External Static Pressure (Inches Water Column) | | | | | | |
|-------------------|--|-------------|-------------|-------------|-------------|-----------|-----------|
| | 0.0 | 0.25 | 0.5 | 0.75 | 0.9 | 1.25 | 1.5 |
| 0.75 | 970 CFM | 925 CFM | 860 CFM | 795 CFM | 750 CFM | 635 CFM | 480 CFM |
| Single Phase | 1,490 Watts | 1,375 Watts | 1,270 Watts | 1,160 Watts | 1,090 Watts | 950 Watts | 825 Watts |

Note: Watts is for the entire unit (two motors).



TRC800V

Dimensions

ABBREVIATIONS

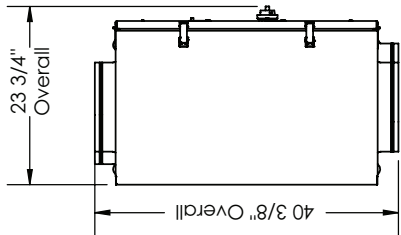
- EA: Exhaust Air to Outside
- OA: Outside Air Intake
- RA: Room Air to be Exhausted
- FA: Fresh Air to Inside

INSTALLATION ORIENTATION

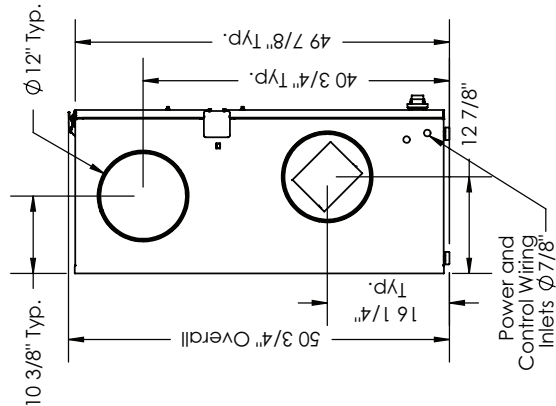
Unit may be installed in any orientation.

NOTE

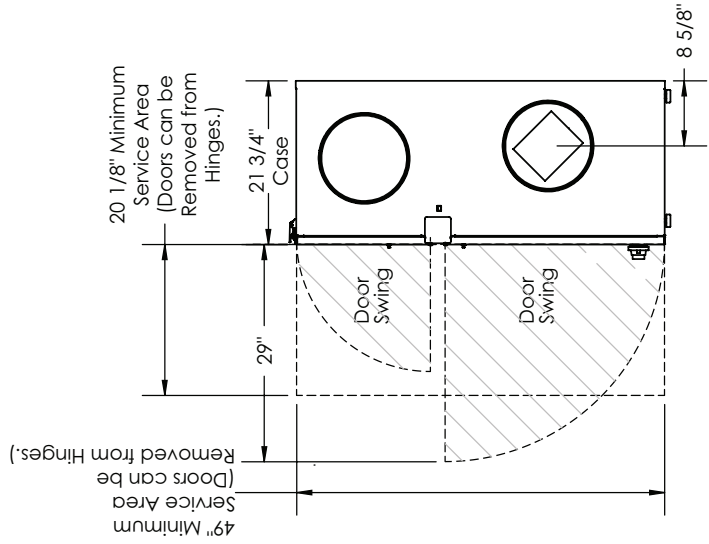
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.



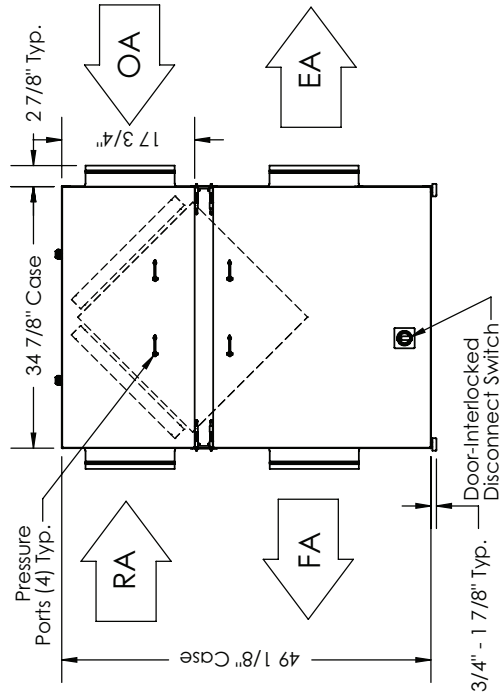
TOP VIEW



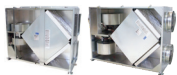
LEFT VIEW



RIGHT VIEW



FRONT VIEW



MODEL TRC

TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS



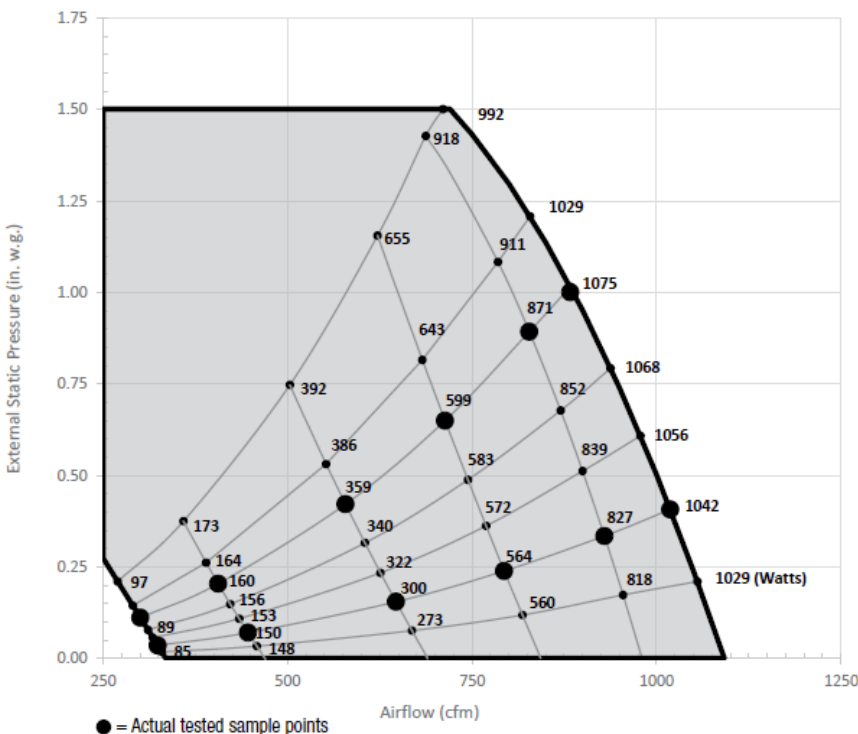
TRCe800V



Specifications

| Ventilation Type: Static Plate, Heat and Humidity Transfer | | | | | |
|---|----|--------|-----------------|----------------|------------------------------------|
| Typical Airflow Range: 250-1,100 CFM | | | | | |
| AHRI 1060 Certified Core: One L125-G5 | | | | | |
| Airflow Rating Points (for AHRI): 750 CFM and 563 CFM | | | | | |
| Motors: Two, 0.5 HP, Direct Drive EC blower/motor package | | | | | |
| V | Hz | Phase | FLA (per motor) | Min. Cir. Amps | Max. Overcurrent Protection Device |
| 120 | 60 | Single | 8.1 | 18.2 | 25 |
| 208-230 | 60 | Single | 4.8 | 10.8 | 15 |
| Standard Features: Non-Fused Disconnect 24 VAC Transformer/Relay Package | | | | | |
| Filters: Two total, MERV 8, 2" pleated, 20" x 20" nominal size | | | | | |
| Weight: 207 lbs (unit), 325 lbs (shipping weight, on pallet) | | | | | |
| Shipping Dimensions: 30" L x 42" W x 71" H | | | | | |

Performance

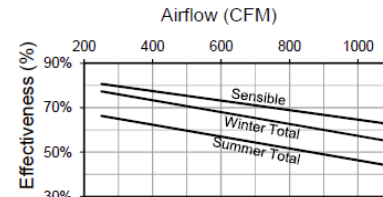


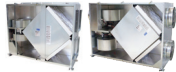
Core Performance

| Airflow CFM | ESP in H ₂ O | Watts |
|-------------|-------------------------|-------|
| 324 | 0.04 | 86 |
| 446 | 0.07 | 150 |
| 647 | 0.15 | 300 |
| 794 | 0.24 | 564 |
| 929 | 0.33 | 827 |
| 1019 | 0.41 | 1042 |
| 300 | 0.11 | 91 |
| 406 | 0.20 | 160 |
| 579 | 0.42 | 359 |
| 713 | 0.65 | 599 |
| 828 | 0.89 | 871 |
| 883 | 1.00 | 1075 |

Note: Watts is for the entire unit.

Note: Airflow performance includes effect of clean, standard filter supplied with unit.





TRCe800V

Dimensions

ABBREVIATIONS

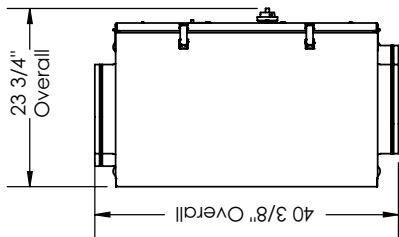
- EA: Exhaust Air to Outside
- OA: Outside Air Intake
- RA: Room Air to be Exhausted
- FA: Fresh Air to Inside

INSTALLATION ORIENTATION

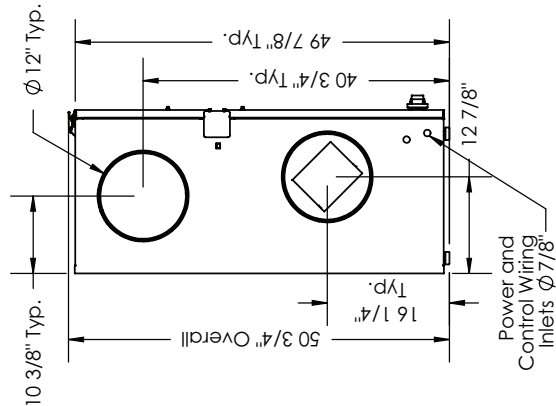
Unit may be installed in any orientation.

NOTE

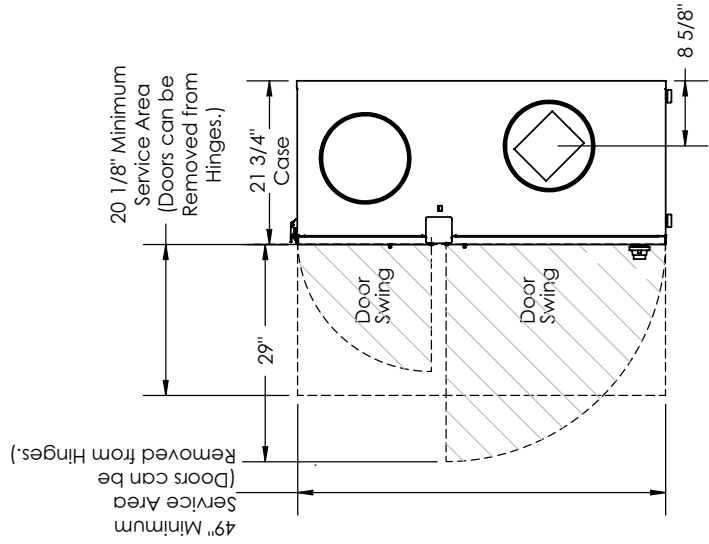
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE ROUNDED TO THE NEAREST EIGHTH OF AN INCH.



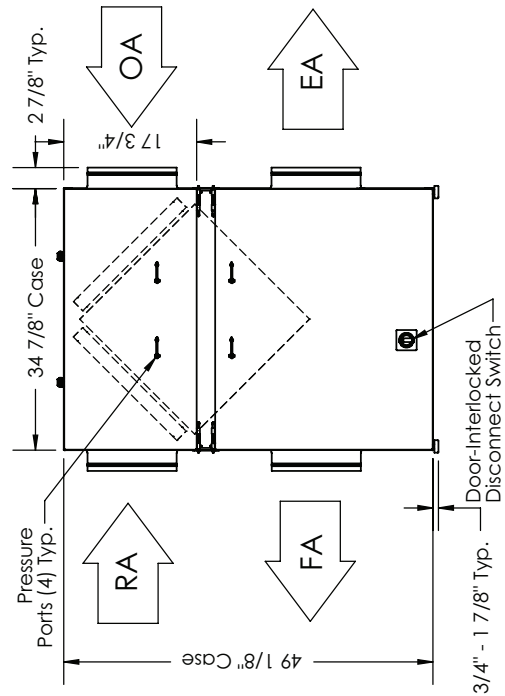
TOP VIEW



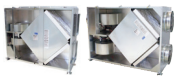
LEFT VIEW



RIGHT VIEW



FRONT VIEW

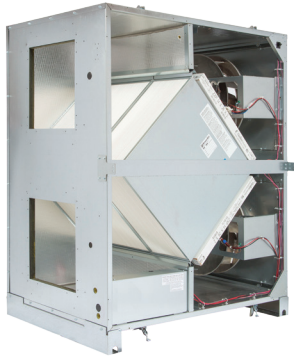


MODEL TRC

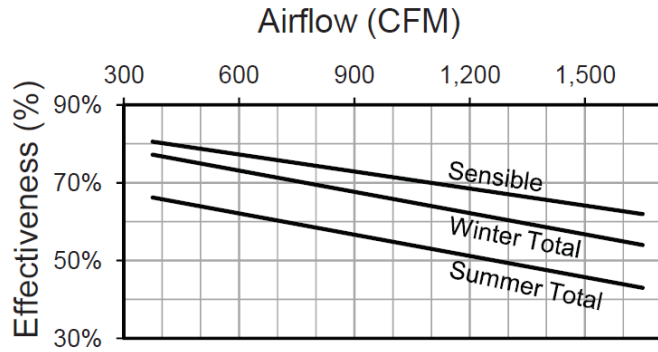
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS



TRC1200



Performance



* At AHRI 1060 standard conditions. See all AHRI certified ratings at www.ahrinet.org.

Specifications

| Ventilation Type: Static Plate, Heat and Humidity Transfer | | | | | | |
|---|---------|----|--------|-----------------|----------------|------------------------------------|
| Typical Airflow Range: 375-1,575 CFM | | | | | | |
| AHRI 1060 Certified Cores: One L62-G5 and one L125-G5 | | | | | | |
| Motors: Qty 2, 1.0 HP ea., Direct Drive motorized impeller packages | | | | | | |
| Drive HP | V | Hz | Phase | FLA (per motor) | Min. Cir. Amps | Max. Overcurrent Protection Device |
| 1.0 | 120 | 60 | Single | 6.5 | 14.6 | 20 |
| | 208-230 | 60 | Single | 3.3-3.4 | 7.7 | 15 |
| | 208-230 | 60 | Three | 2.2-2.2 | 5.0 | 15 |
| | 460 | 60 | Three | 1.1 | 2.5 | 15 |
| Standard Features: 24 VAC Transformer/Relay Package | | | | | | |
| Filters: Total Qty. 4, MERV 8: (2) 14" x 20" x 2" and (2) 16" x 20" x 2" | | | | | | |
| Dimensions & Weight: 45 1/8" L x 33 1/2" W x 53 5/8" H, 337 lbs. | | | | | | |
| Shipping Dimensions & Weight (on pallet): 70" L x 47" W x 58 5/8" H, 403 lbs. | | | | | | |

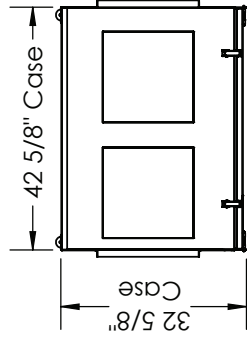
Airflow Performance

| Motor HP Phase | External Static Pressure (Inches Water Column) | | | | | | |
|---------------------|--|-------------|-------------|-------------|-------------|-------------|-------------|
| | 0.0 | 0.25 | 0.50 | 0.75 | 1.00 | 1.25 | 1.50 |
| 1.0 Single Phase | 1,575 CFM | 1,470 CFM | 1,350 CFM | 1,225 CFM | 1,090 CFM | 950 CFM | 795 CFM |
| | 1,545 Watts | 1,525 Watts | 1,500 Watts | 1,475 Watts | 1,435 Watts | 1,380 Watts | 1,300 Watts |
| 1.0 Three Phase | 1,675 CFM | 1,570 CFM | 1,435 CFM | 1,280 CFM | 1,115 CFM | 940 CFM | 760 CFM |
| | 1,410 Watts | 1,400 Watts | 1,380 Watts | 1,340 Watts | 1,280 Watts | 1,210 Watts | 1,135 Watts |

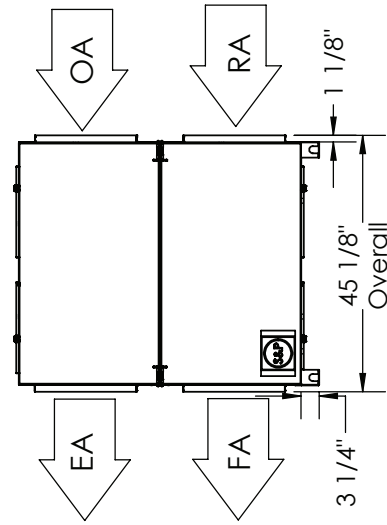
TRC1200

Dimensions

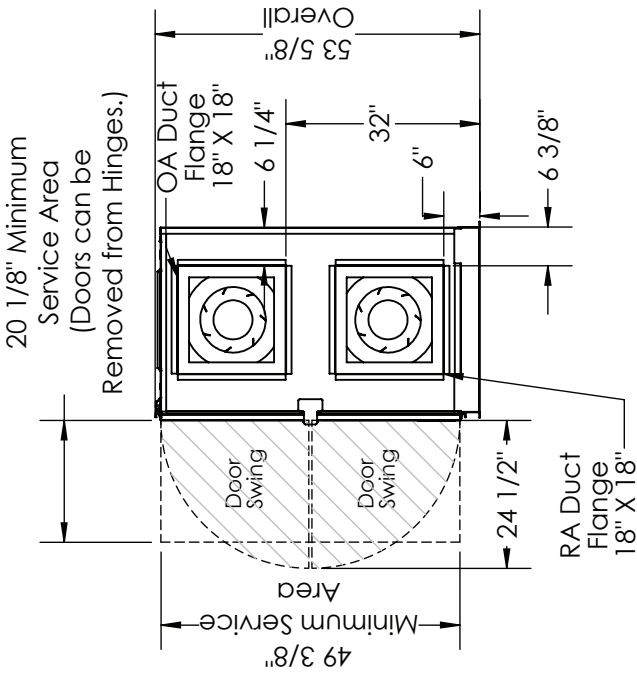
EA: Exhaust Air to outdoors
 OA: Outdoor Air intake
 RA: Room Air to be exhausted
 FA: Fresh Air to inside



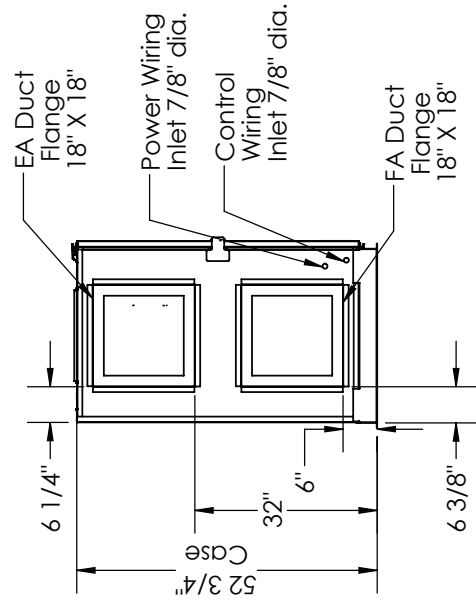
TOP VIEW



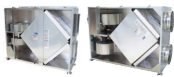
FRONT VIEW



RIGHT VIEW



LEFT VIEW

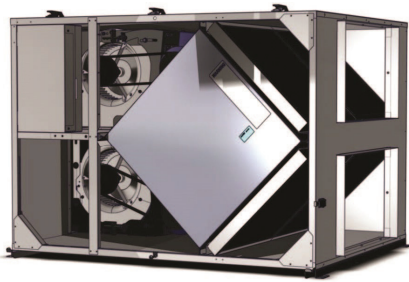


MODEL TRC

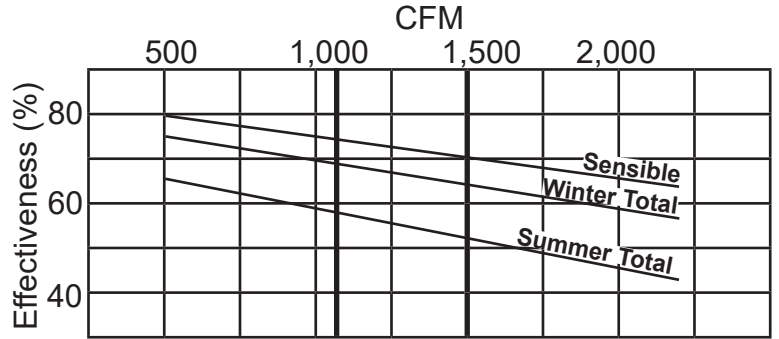
TOTAL RECOVERY FOR ALL CLIMATES - COMMERCIAL APPLICATIONS



TRC1600



Performance



* At AHRI 1060 standard conditions
(see certified data on page 69 for core components.)

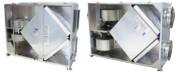
Specifications

| Ventilation Type: Static Plate, Heat and Humidity Transfer | | | | | | |
|---|---------|----|--------|-----------------|----------------|------------------------------------|
| Typical Airflow Range: 500-2,025 CFM | | | | | | |
| AHRI 1060 Certified Core: Two L125-00 | | | | | | |
| Airflow Rating Points (for AHRI): 1,500 CFM and 1,126 CFM | | | | | | |
| Number Motors: Two belt drive blower/motor packages with adjustable sheaves | | | | | | |
| Drive HP | V | Hz | Phase | FLA (per motor) | Min. Cir. Amps | Max. Overcurrent Protection Device |
| 1.5 | 115 | 60 | Single | 15.2 | 34.2 | 45 |
| | 208-230 | 60 | Single | 8.2-7.6 | 18.5 | 25 |
| | 208-230 | 60 | Three | 4.6-4.8 | 10.8 | 15 |
| | 460 | 60 | Three | 2.4 | 5.4 | 15 |
| Standard Features: Totally Enclosed Premium Efficiency Motors Motor Starters, 24 VAC Transformer/Relay Package | | | | | | |
| Filters: Four total, MERV 8, 2" pleated, 20" x 20" nominal size | | | | | | |
| Weight: 414 lbs (unit), 505 lbs (shipping weight, on pallet) | | | | | | |
| Shipping Dimensions: 72" L x 48" W x 40" H | | | | | | |

Airflow Performance

| Motor HP | Blower RPM | Turns Open | External Static Pressure (in w.g.) | | | | | | | | | | | | | |
|----------|------------|------------|------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| | | | 0.0 | | 0.25 | | 0.5 | | 0.75 | | 0.9 | | 1.25 | | 1.5 | |
| | | | SCFM | BHP | SCFM | BHP | SCFM | BHP | SCFM | BHP | SCFM | BHP | SCFM | BHP | SCFM | BHP |
| 1.5 | 1148 | 4 | 1592 | 0.7 | 1480 | 0.7 | 1320 | 0.6 | 1120 | 0.5 | 800 | 0.4 | - | - | - | - |
| | 1304 | 2 | 1809 | 1.0 | 1720 | 1.0 | 1600 | 0.9 | 1410 | 0.8 | 1250 | 0.7 | 975 | 0.6 | 630 | 0.4 |
| | 1460 | 0 | 2025 | 1.5 | 1950 | 1.4 | 1845 | 1.3 | 1715 | 1.2 | 1540 | 1.1 | 1400 | 1.0 | 1165 | 0.8 |

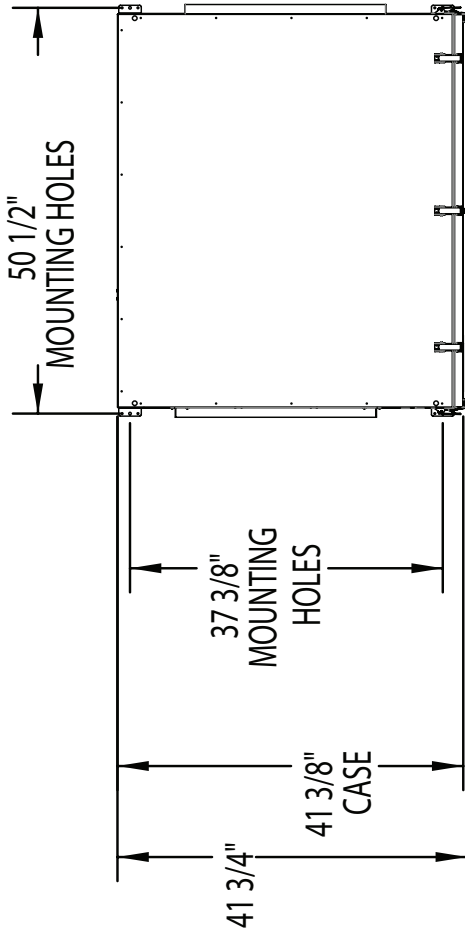
Note: Brake Horse Power (BHP) is for one blower motor package only.



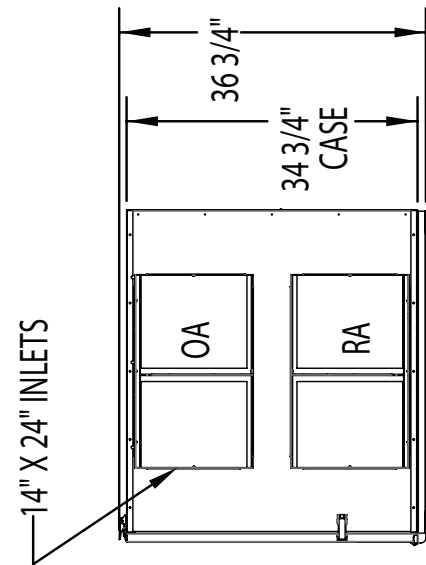
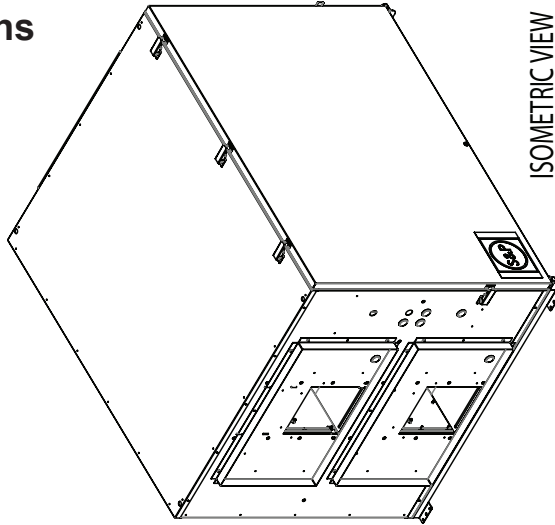
TRC1600

Dimensions

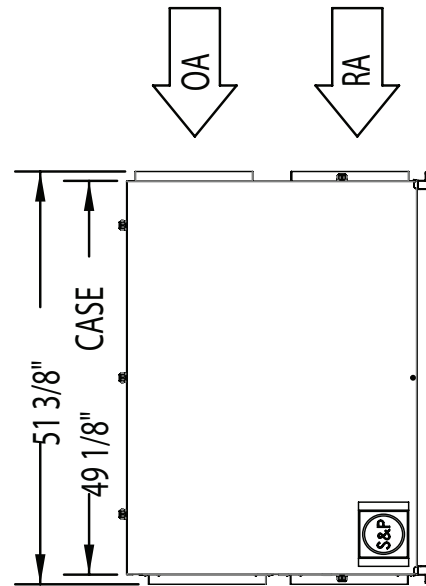
EA: Exhaust Air to outdoors
 OA: Outdoor Air intake
 RA: Room Air to be exhausted
 FA: Fresh Air to inside



TOP VIEW



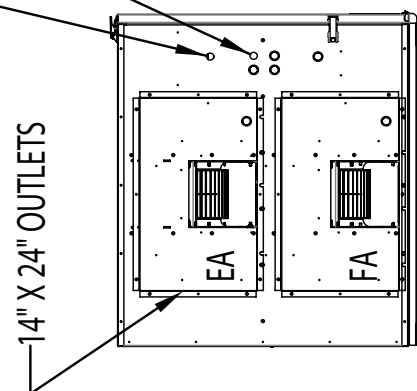
RIGHT VIEW



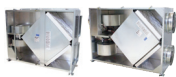
FRONT VIEW

Ø 7/8" CONTROL WIRING

Ø 7/8" POWER WIRING



LEFT VIEW



AHRI 1060-2005 - CERTIFIED PERFORMANCE

| AHRI-1060 Certified Performance - Model Number L85-G5 (used in TRC500) | | | | | | | | | | | | | |
|--|--|------------|--|--|--|-----------------------------------|--|--|--|--|--|--|--|
| Type | | Tilt Angle | | | | Nominal Airflow | | | | Pressure Drop | | | |
| Plate | | N/A | | | | 100% - 450 SCFM 75% - 338 SCFM | | | | 0.6 in. H ₂ O 0.5 in. H ₂ O | | | |

| Leakage Ratings | | | | | Thermal Effectiveness Ratings at 0" Pressure Differential | | | | | | | | |
|-----------------|-------------------------|------|------|------------------------|---|---------|----------|--------|-------|-------------|--------------|------------|-----------|
| | Pressure Differential | EATR | OACF | Purge Angle or Setting | Nominal Airflow | | Sensible | Latent | Total | Net Airflow | Net Sensible | Net Latent | Net Total |
| Test 1 | -1 in. H ₂ O | 1.0% | 1.00 | N/A | 450 CFM | Heating | 73% | 53% | 66% | 450 CFM | 73% | 53% | 66% |
| | | | | | | Cooling | 73% | 46% | 56% | | 73% | 46% | 56% |
| Test 2 | 0 in. H ₂ O | 0.0% | 1.02 | N/A | 338 CFM | Heating | 77% | 60% | 71% | 338 CFM | 77% | 60% | 71% |
| | | | | | | Cooling | 77% | 52% | 61% | | 77% | 52% | 61% |

| AHRI-1060 Certified Performance - Model Number L125-G5 (used in TRC800, TRC1200 & TRC1600) | | | | | | | | | | | | | |
|--|--|------------|--|--|--|-----------------------------------|--|--|--|--|--|--|--|
| Type | | Tilt Angle | | | | Nominal Airflow | | | | Pressure Drop | | | |
| Plate | | N/A | | | | 100% - 750 SCFM 75% - 563 SCFM | | | | 0.65 in. H ₂ O 0.45 in. H ₂ O | | | |

| Leakage Ratings | | | | | Thermal Effectiveness Ratings at 0" Pressure Differential | | | | | | | | |
|-----------------|-------------------------|------|------|------------------------|---|---------|----------|--------|-------|-------------|--------------|------------|-----------|
| | Pressure Differential | EATR | OACF | Purge Angle or Setting | Nominal Airflow | | Sensible | Latent | Total | Net Airflow | Net Sensible | Net Latent | Net Total |
| Test 1 | -1 in. H ₂ O | 1.0% | 1.00 | N/A | 750 CFM | Heating | 71% | 52% | 64% | 750 CFM | 71% | 52% | 64% |
| | | | | | | Cooling | 71% | 43% | 53% | | 71% | 43% | 53% |
| Test 2 | 0 in. H ₂ O | 0.0% | 1.02 | N/A | 563 CFM | Heating | 75% | 59% | 69% | 563 CFM | 75% | 59% | 69% |
| | | | | | | Cooling | 75% | 50% | 59% | | 75% | 50% | 59% |

NOTE: SCFM = Standard Cubic Feet per Minute OACF = Outdoor Air Correction Factor EATR = Exhaust Air Transfer Ratio N/A = Not Applicable

Energy recovery components certified in accordance with AHRI Standard 1060-2005. Actual Performance in packaged equipment may vary.

