



# Ecoer RTi Specifications

Up to 18.5 SEER2 / 9.2 HSPF2  
 R-410A VARIABLE SPEED  
 IoT TECHNOLOGY

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### ■ Features

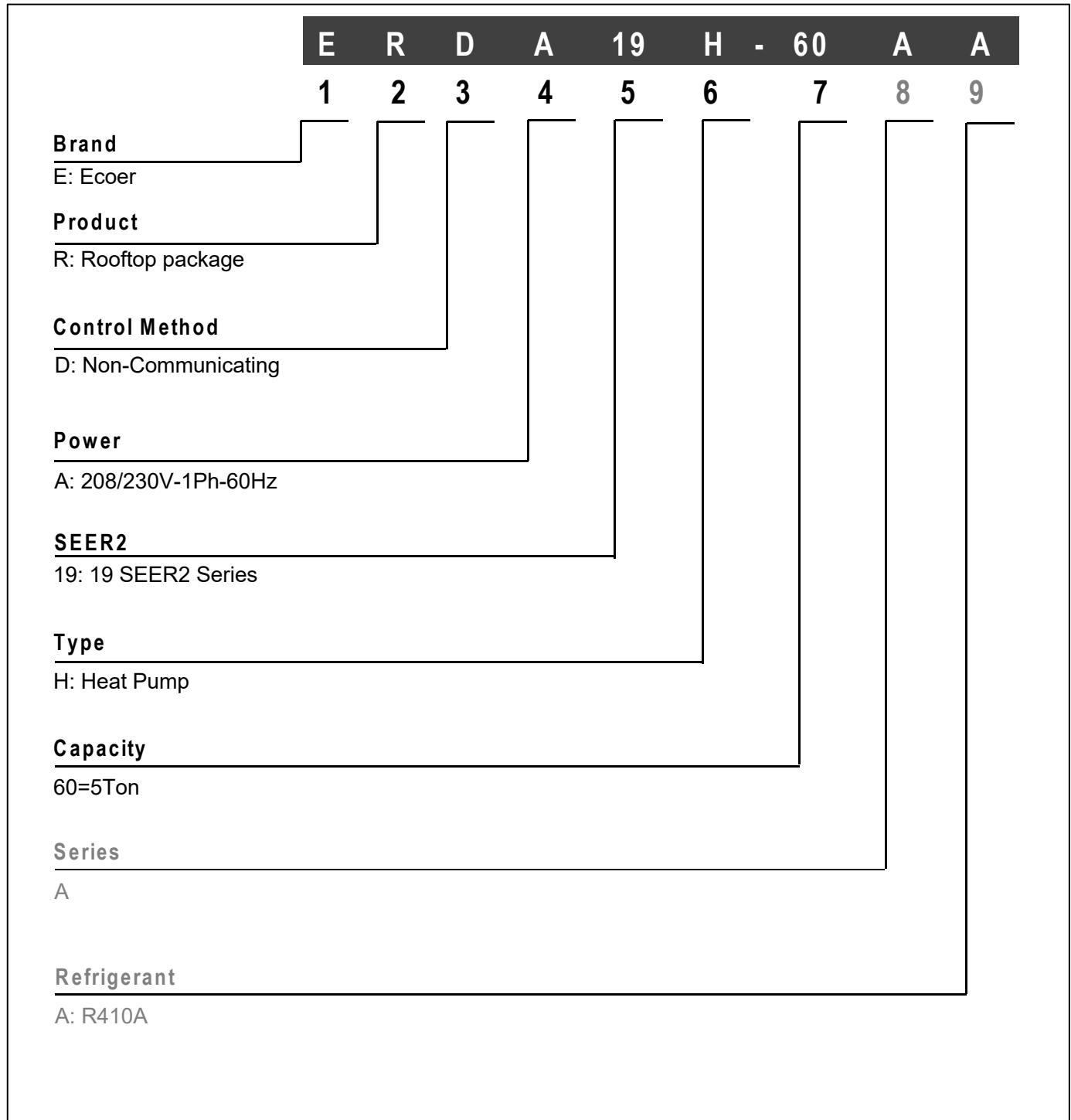
1. High Efficiency - Up to 18.5 SEER2 / 9.2 HSPF2.
2. Fully modulating inverter drive.
3. Wide cooling operational range from 20°F to 125°F .
4. Backup running technology to keep the system working even with malfunctioning sensors.
5. With Ecoer Smart IoT Gateway, the system can automatically monitor and diagnose the operation data to predict possible faults and send alerts to service providers.
6. Sound level as low as 65 dB (A).

### ■ Ecoer IoT Features

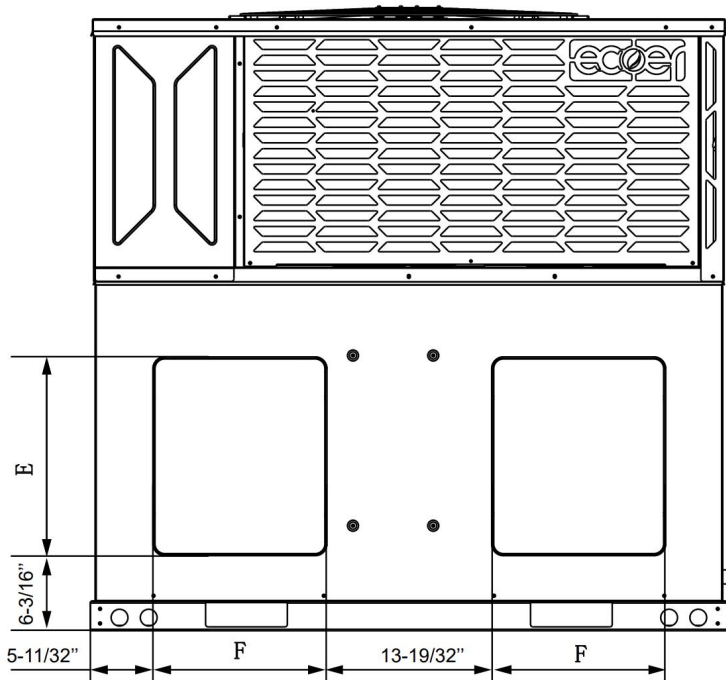
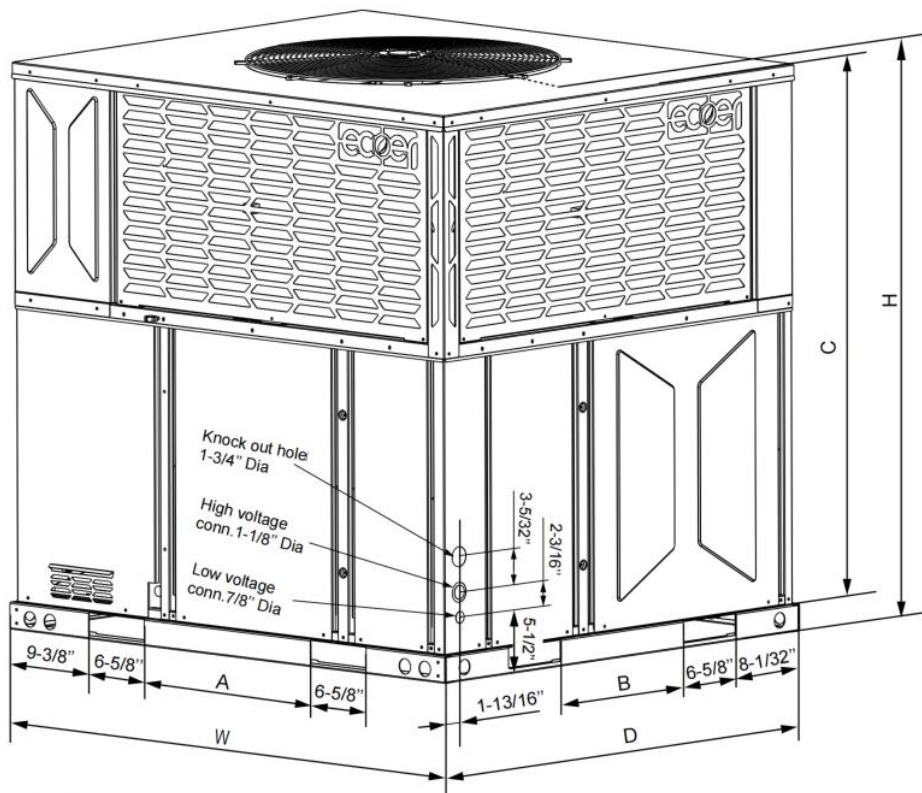
1. 24/7 monitoring service (Up to 2 months history data on ESS Pro App).
2. Diagnostic and alerts service.
3. ESS Pro App reminds dealers and homeowners of valuable service such as refrigerant leakage or shortage etc.



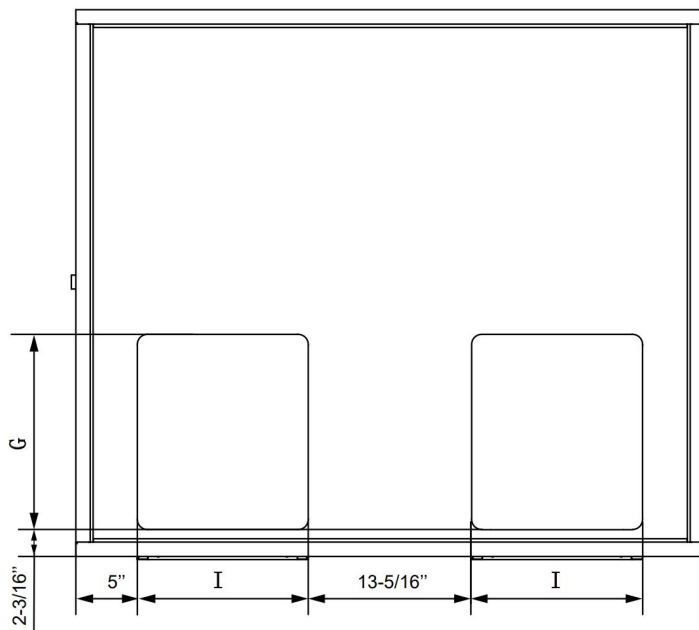
# 1. Nomenclature



## 2. Dimensions

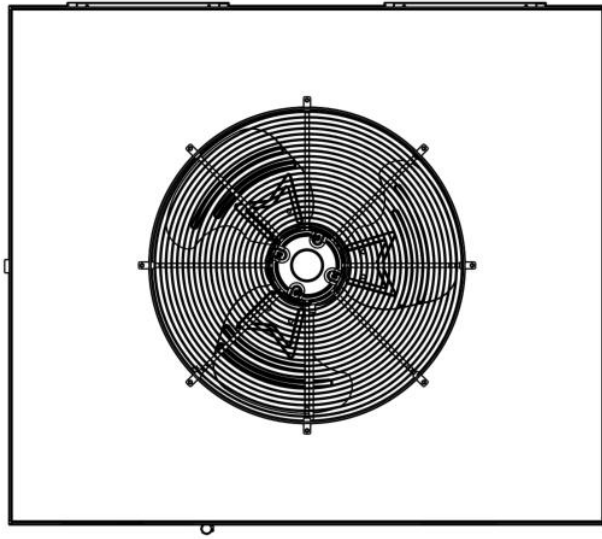


**Back view**

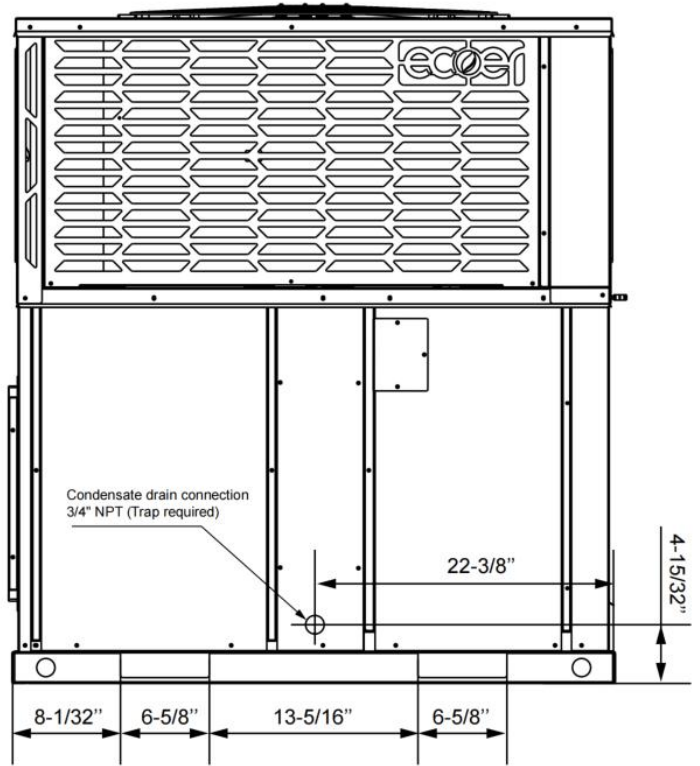


**Bottom view**

Model	Dimensions (In. [mm])									
	H	W	D	A	B	C	E	F	G	I
60	50-19/32 [1285]	51-19/32 [1310]	44-7/8 [1140]	19-11/16 [500]	15-1/2 [394]	47-11/64 [1198]	15-27/32 [402]	13-13/16 [352]	16-3/32 [409]	14-3/32 [358]

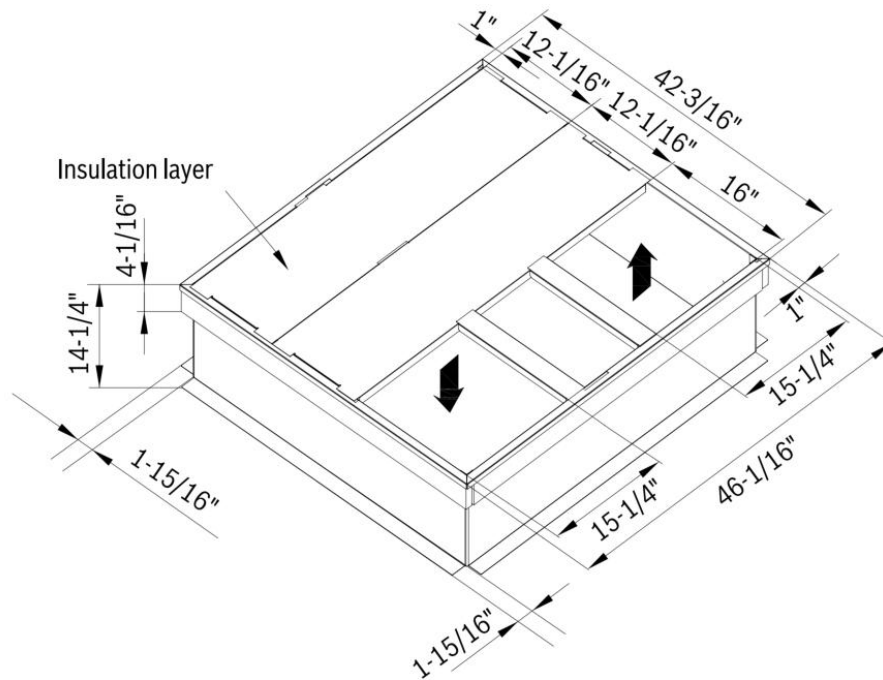


**Top view**



**Left side view**

The manufacturer does not supply roof curbs, they must be field supplied. Ecoer recommended 5T roof curb dimensions are shown below:



**5T Roof Curb Dimensions**

### 3. Product Data

Model	ERDA19H-60AA
<b>Capacity</b> <sup>1</sup>	
Cooling (BTU/h)	55000
Heating (BTU/h)	55000
<b>Operation limit</b>	
Cooling operation range <sup>2</sup>	20~125°F
Heating operation range <sup>3</sup>	-22~86°F
<b>Compressor</b>	
RLA	24.0
LRA	58.1
<b>Outdoor Fan Motor</b>	
Horsepower (HP)	1/3
FLA	2.5
Motor speed (RPM)	1050
Fan airflow (CFM)	3700
<b>Indoor Fan Motor</b>	
Horsepower (HP)	3/4
FLA	6
Motor speed (RPM)	1050
Fan airflow (CFM)	1700
<b>Metering Device</b>	EEV
<b>Electrical Data</b>	
Voltage-Phase-Hz	208/230-1-60
Minimum Circuit Ampacity <sup>4</sup>	38.5
Max. Over-current Protection <sup>5</sup>	50
Allowed Volts Range	187~253
<b>Condenser Decibels (dB)</b> <sup>6</sup>	65~75
<b>Dimension</b>	
Dimension ( W*H*D ) (in.)	51-19/32 X 50-19/32 X 44-7/8
packing ( W*H*D ) (in.)	52-3/8 X 51-19/32 X 45-11/16
<b>Weight</b>	
Net Weight (lbs)	606
Ship Weight (lbs) <sup>7</sup>	639

#### REMARKS:

1. Tested and rated in accordance with AHRI Standard 210/240-2023.
2. It's not recommended to run cooling when the ambient temperature is below 20°F .
3. The heating operating range can lower down to -22°F by field setting.
4. Wire size should be determined in accordance with National Electrical Codes.
5. Must use time-delay fuses or HACR-type circuit breakers of the same size as noted.
6. It may vary based on the actual installation status.
7. Weight shown includes packaging.

## 4. Blower Data

Indoor airflow data is based on cooling performance at 230V with no electric heater and no filter. Airflow at 208V is approximately the same as 230V because the multi-tap ECM motor is a constant torque motor. The torque doesn't drop off at the speeds in which the motor operates.

Check the performance table for appropriate unit size selection. External static pressure should stay within the minimum and maximum limits shown in the table below in order to ensure proper airflow.

Model	Motor Speed		SCFM / Watts								
			External Static Pressure-Inches W.C.[KPa]								
			0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
			[0]	[.02]	[.05]	[.07]	[.10]	[.12]	[.15]	[.17]	[.20]
60	Tap (5)	SCFM	2075	2014	1970	1925	1884	1841	1784	1723	1673
		Watts	581	585	592	604	615	618	621	623	625
	Tap (4)- factory- High	SCFM	1874	1832	1792	1748	1705	1660	1617	1570	1516
		Watts	432	440	453	459	471	478	493	508	514
	Tap (3)	SCFM	1694	1618	1571	1515	1474	1423	1373	1318	1255
		Watts	311	321	332	338	349	354	368	381	391
	Tap (2) - factory-Low	SCFM	1424	1372	1317	1262	1206	1147	1066	983	916
		Watts	194	199	223	232	236	240	251	263	277
	Tap (1)	SCFM	1186	1125	1062	1002	921	826	755	687	620
		Watts	118	123	133	141	150	159	168	174	180

\* Shaded boxes represent airflow outside the required 300-450 CFM/ton when full loaded(Y2).

\* The motor speed in the factory corresponds to Y2/Y1 signal of the thermostat.

## 5. Electric Heater Kit

Kit Model	AHU Model	Electric Heater (kW)	MIN. Circuit Ampacity		MAX. Fuse or Breaker (HACR) Ampacity		Fan Speed				
			240	208	240	208	1	2	3	4	5
EHK-05J	60	5	27	23	30	25	×	×	●	●	●
EHK-08J		7.5	40	34	40	35	×	×	●	●	●
EHK-10J		10	53	46	60	50	×	×	●	●	●
EHK-15J		10+5	53+27	46+23	60+30	50+25	×	×	●	●	●
EHK-20J		10+10	53+53	46+46	60+60	50+50	×	×	×	●	●

● means available    × means unavailable

Electric heat kits are suitable for package unit multiple position installation.







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