

YA29K1E-TFD

HFO, R-454B, 60 Hz, 3 - Phase, 460 V , [Also Available with Variable Frequency Drives](#)

Air Conditioning

Production Status: Available for sale to all U.S. customers. Please check with your local Copeland Representative for international availability.

Summary

Performance		
Evaporator Temp. (°F)	45.00	50
Condensing Temp. (°F)	130.00	100
Return Gas Temp. (°F)	65.00	70
Liquid Temp. (°F)	115.00	85
Capacity (BTU/hr)	29700	39500
Power (W):	2750	1770
Current (Amps):	4.8	3.1
EER(BTU/Wh):	10.8	22.35
Mass Flow (lbs/hr):	351	401
Sound Data @ 50 / 115		
Sound Power (dBA):	71 Avg	76 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2026-01-30	
Mechanical		
Displacement (in ³ /Rev):	1.78	
Displacement (ft ³ /Hr):		
Overall Length (in):	9.00	
Overall Width (in):	9.00	
Overall Height (in):	15.50	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	
Mounting Height (in):	16.30	

Suction Size (in),Type:	3 / 4 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	25
Oil Recharge (oz):	21
Oil Type:	3MA
Net Weight (lbs):	50.8

Internal Free Volume (in³):

*Overall compressor height on Copeland Brand Product's specified mounting grommets.

Electrical

LRA High* (Amps):	44.3
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	8
Max Operating Current (Amps):	5.0
RLA, MCC/1.4(use for contactor selection)(Amps):	5.7
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	5.1
RPM:	3500
Box IP :	21
UL File No:	SA2337- 20200323
UL File Date:	2020-03-23

*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.

Capacitors

Type	Part No	Low MFD	High MFD	Volts	User Description
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No data available in table

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
R-454B HFO	380/420	3	50	Air Conditioning

Nomenclature

YA29K1E-TFD

Family Series

Y: Scroll A2L/A3

Application Range/Envelope

A: AC (High Pressure) R454B/R452B

Nominal Capacity at Rating Condition

29K: Capacity Multiplier-1,000

Model Variation

1: Model Variation

Oil Type

E: POE Oil – 3MAF

Motor Type

T: 3 Phase

Motor Protection

F: Internal Inherent Protection

Voltage

D: 60Hz (460-3) 50Hz (380/420-3)