

Diaphragm



2107 SERIES

115v/110v/220v

MODELS

Standard models

2107CA20

2107CEF20

2107CD20

2107CH20

*Other models based
on availability and
minimum purchase.*

2107CA14

2107CA18

2107CEF14

2107CEF18

2107CD14

2107CD18

2107CH14

2107CH18

2107VA20

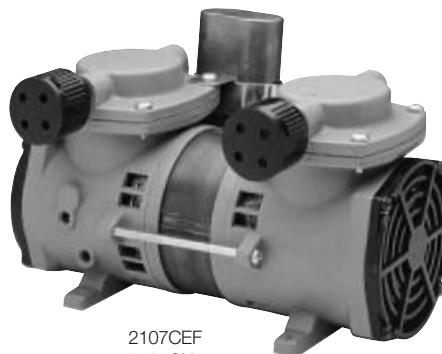
2107VD20



2107CA
2107CD



2107VA
2107VD



2107CEF
2107CH

FEATURES

- Oil-less operation
- Permanently lubricated bearings
- Stainless steel valves and lapped aluminum valve plates
- Die-cast aluminum heads and diaphragm hold down plates
- Balanced for smooth, low vibration operation
- Long-life diaphragms
- Field service capability
- Dichromate conversion treated aluminum
- 115v, UL recognized motor and thermal protector
- Inlet filter
- Consult factory for non-standard models
- Service Kit 650126
- Dichromate conversion treated aluminum
- 115v, UL recognized motor and thermal protector
- CE approval on all standard 220-240/50hz models
(Consult factory for non-standard models)

Consult factory for custom applications

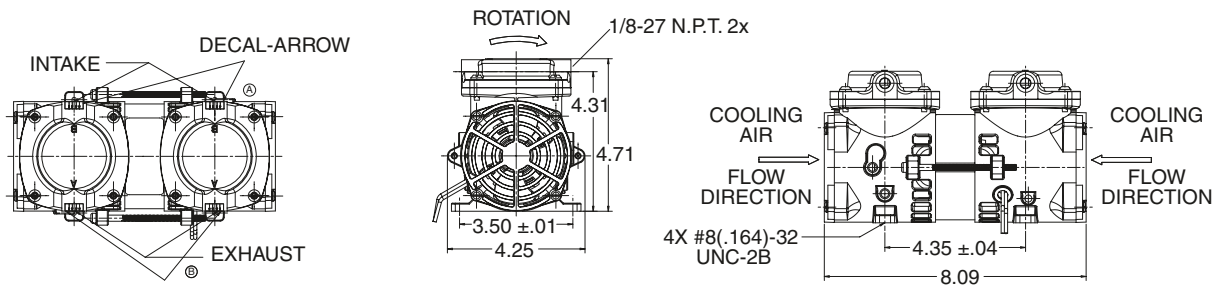
ISO 9001
CERTIFIED

THOMAS
A Gardner Denver Product

2107 Series Performance Data

				Standard			
MODEL NUMBER		2107CA14		2107CA18		2107CA20	
HEAD CONFIGURATION		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum	
STROKE		.140 Inches		.180 Inches		.200 Inches	
PRESSURE		Flow @ 115v		Flow @ 115v		Flow @ 115v	
CFM @ PSI	LPM @ bar						
PSI	bar	CFM	LPM	CFM	LPM	CFM	LPM
0	0	1.10	31.1	1.60	45.3	1.65	46.7
5	.5	.84	20.2	1.25	31.6	1.33	33.6
10	1.0	.56	8.5	.95	19.2		
15	1.5	.27					
20	2.0	.09					
25	3.0						
30							
35							
MAX. CONTINUOUS PRESSURE		20 PSI	1.4 bar	5 PSI	.3 bar	5 PSI	.3 bar
MAX. INTERMITTENT PRESSURE		20 PSI	1.4 bar	10 PSI	.7 bar	5 PSI	.3 bar
VACUUM		Flow @ 115v		Flow @ 115v		Flow @ 115v	
CFM @ IN. hg	LPM @ mbar (gauge)						
IN. hg	mbar (gauge)	CFM	LPM	CFM	LPM	CFM	LPM
0	0	1.10	31.1	1.60	45.3	1.65	46.7
5	-100	.86	27.1	1.10	37.0	1.15	38.4
10	-200	.55	22.8	.74	29.3	.77	30.6
15	-400	.24	12.4	.43	17.8	.47	18.7
20	-600		2.0	.14	7.7	.17	8.7
25	-800						
MAX. VACUUM		20.0" hg	-677 mbar	22.7" hg	-769 mbar	23.2" hg	-786 mbar
MAX. AMBIENT AIR TEMP.		104° F	40°C	104° F	40°C	104° F	40°C
MIN. AMBIENT START TEMP.		50° F	10°C	50° F	10°C	50° F	10°C
MAX. RESTART PRESSURE		0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar
MAX. RESTART VACUUM		0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar
MOTOR VOLTAGE/FREQUENCY		115/60/1		115/60/1		115/60/1	
MOTOR TYPE		Shaded Pole		Shaded Pole		Shaded Pole	
CURRENT AT RATED LOAD (AMPS)		1.5		1.6		1.6	
POWER AT RATED LOAD (WATTS)		100		114		123	
STARTING CURRENT (LOCKED ROTOR, AMPS)		2.6		2.6		2.6	
CAPACITOR VALUE							
MIN. FULL LOAD SPEED (RPM)		1675		1575		1524	
THERMAL PROTECTOR		Yes		Yes		Yes	
NET WEIGHT		6 lbs.	2.7 Kg	6 lbs.	2.7 Kg	6 lbs.	2.7 Kg

2107CA

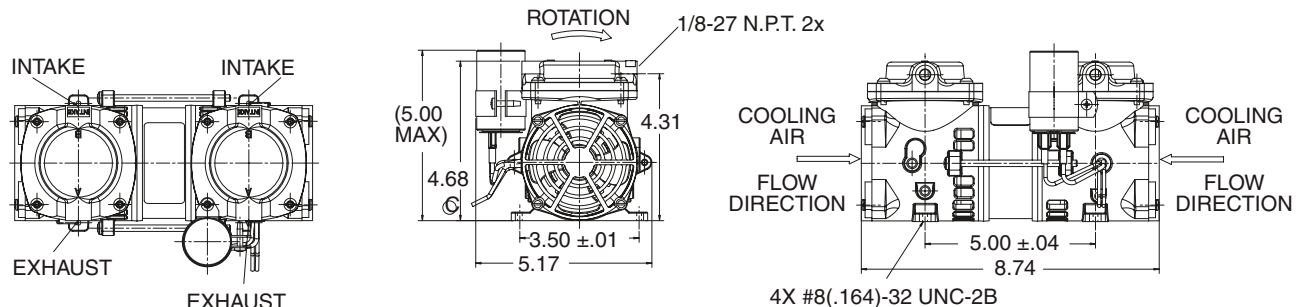


NOTE: ALL TAPPED PORTS ARE 1/8-27 NPT

2107 Series Performance Data

						Standard	
MODEL NUMBER		2107CEF14		2107CEF18		2107CEF20	
HEAD CONFIGURATION		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum	
STROKE		.140 Inches		.180 Inches		.200 Inches	
PRESSURE		Flow @ 115/110v		Flow @ 115/110v		Flow @ 115/110v	
CFM @ PSI	LPM @ bar						
PSI	bar	CFM	LPM	CFM	LPM	CFM	LPM
0	0	1.10/.92	31.1/26.1	1.50/1.29	42.5/36.5	1.65/1.40	46.7/39.6
5	.5	.97/.81	23.5/19.0	1.24/1.07	32.7/27.5	1.40/1.20	36.5/31.4
10	1.0	.66/.50	13.8/9.6	1.05/.85	24.9/19.0	1.15/1.00	26.2/23.2
15	1.5	.47/.32	4.9/4.1	.86/.65	17.5/12.5		
20	2.0	.25/.19		.68/.50	10.1/6.8		
25	3.0			.50/.33			
30				.32/.22			
35							
MAX. CONTINUOUS PRESSURE		20 PSI	1.4 bar	20 PSI	1.4 bar	10 PSI	.7 bar
MAX. INTERMITTENT PRESSURE		20 PSI	1.4 bar	30 PSI	2.1 bar	10 PSI	.7 bar
VACUUM		Flow @ 115/110v		Flow @ 115/110v		Flow @ 115/110v	
CFM @ IN. hg	LPM @ mbar (gauge)						
IN. hg	mbar (gauge)	CFM	LPM	CFM	LPM	CFM	LPM
0	0	1.10/.92	31.1/26.1	1.50/1.29	42.5/36.5	1.65/1.40	46.7/39.6
5	-100	.86/.72	27.1/22.7	1.10/.91	35.8/30.2	1.19/1.00	39.0/33.0
10	-200	.52/.45	22.6/19.0	.75/.62	29.4/24.3	.85/.70	32.0/26.8
15	-400	.25/.20	12.0/10.2	.41/.34	17.7/14.7	.49/.40	20.4/16.7
20	-600		3.0/1.8	.13/.10	7.3/6.0	.18/.14	9.1/7.3
25	-800						
MAX. VACUUM		20.0" hg	-677 mbar	22.6" hg	-766 mbar	23.3" hg	-789 mbar
MAX. AMBIENT AIR TEMP.		104° F	40°C	104° F	40°C	104° F	40°C
MIN. AMBIENT START TEMP.		50° F	10°C	50° F	10°C	50° F	10°C
MAX. RESTART PRESSURE		0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar
MAX. RESTART VACUUM		0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar
MOTOR VOLTAGE/FREQUENCY		115/60/1-110/50/1		115/60/1-110/50/1		115/60/1-110/50/1	
MOTOR TYPE		Permanent Split Capacitor		Permanent Split Capacitor		Permanent Split Capacitor	
CURRENT AT RATED LOAD (AMPS)		.9/1.1		1.1/1.2		1.1/1.2	
POWER AT RATED LOAD (WATTS)		85/80		108/100		108/105	
STARTING CURRENT (LOCKED ROTOR, AMPS)		1.6/1.9		1.6/1.9		1.6/1.9	
CAPACITOR VALUE		5 mfd		5 mfd		5 mfd	
MIN. FULL LOAD SPEED (RPM)		1650/1375		1550/1285		1500/1245	
THERMAL PROTECTOR		Yes		Yes		Yes	
NET WEIGHT		7 lbs.	3.1 Kg	7 lbs.	3.1 Kg	7 lbs.	3.1 Kg

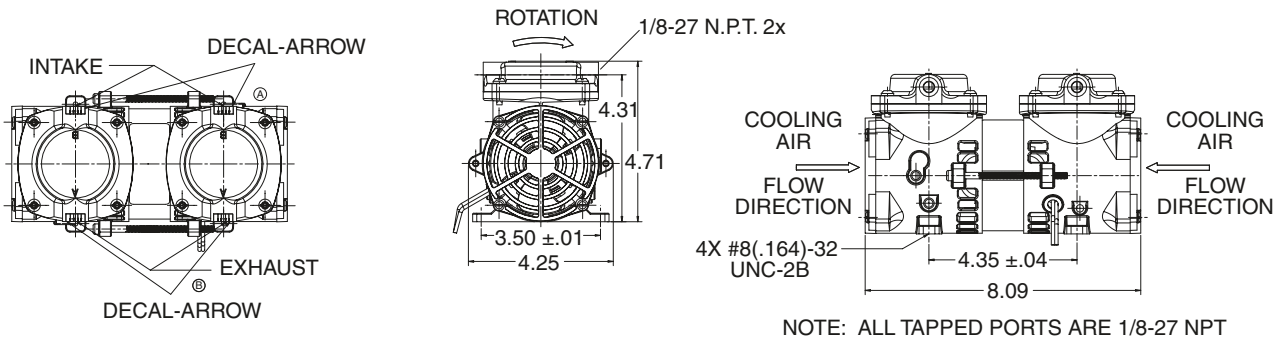
2107CEF



2107 Series Performance Data

				Standard			
MODEL NUMBER		2107CD14		2107CD18		2107CD20	
HEAD CONFIGURATION		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum	
STROKE		.140 Inches		.180 Inches		.200 Inches	
PRESSURE		Flow @ 220v		Flow @ 220v		Flow @ 220v	
CFM @ PSI	LPM @ bar						
PSI	bar	CFM	LPM	CFM	LPM	CFM	LPM
0	0	1.01	28.6	1.25	35.4	1.37	38.8
5	.5	.73	17.5	1.00	25.1	1.00	23.6
10	1.0	.48	8.5				
15	1.5	.28	3.5				
20	2.0	.12	4.0				
25	3.0	.13					
30							
35							
MAX. CONTINUOUS PRESSURE		20 PSI	1.4 bar	5 PSI	.3 bar	5 PSI	.3 bar
MAX. INTERMITTENT PRESSURE		25 PSI	1.7 bar	5 PSI	.3 bar	5 PSI	.3 bar
VACUUM		Flow @ 220v		Flow @ 220v		Flow @ 220v	
CFM @ IN. hg	LPM @ mbar (gauge)						
IN. hg	mbar (gauge)	CFM	LPM	CFM	LPM	CFM	LPM
0	0	1.01	28.6	1.25	35.4	1.37	39.0
5	-100	.66	22.7	.88	29.2	.96	31.9
10	-200	.37	17.2	.58	23.4	.64	25.5
15	-400	.17	8.4	.31	13.7	.38	15.5
20	-600		1.7		4.6		6.8
25	-800						
MAX. VACUUM		19.3" hg	-653 mbar	22.4" hg	-758 mbar	23.5" hg	-787 mbar
MAX. AMBIENT AIR TEMP.		104° F	40°C	104° F	40°C	104° F	40°C
MIN. AMBIENT START TEMP.		50° F	10°C	50° F	10°C	50° F	10°C
MAX. RESTART PRESSURE		0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar
MAX. RESTART VACUUM		0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar
MOTOR VOLTAGE/FREQUENCY		220/50/1		220/50/1		220/50/1	
MOTOR TYPE		Shaded Pole		Shaded Pole		Shaded Pole	
CURRENT AT RATED LOAD (AMPS)		.7		.7		.8	
POWER AT RATED LOAD (WATTS)		88		94		113	
STARTING CURRENT (LOCKED ROTOR, AMPS)		1.3		1.3		1.3	
CAPACITOR VALUE							
MIN. FULL LOAD SPEED (RPM)		1275		1150		1200	
THERMAL PROTECTOR		Yes		Yes		Yes	
NET WEIGHT		6 lbs.	2.7 Kg	6 lbs.	2.7 Kg	6 lbs.	2.7 Kg

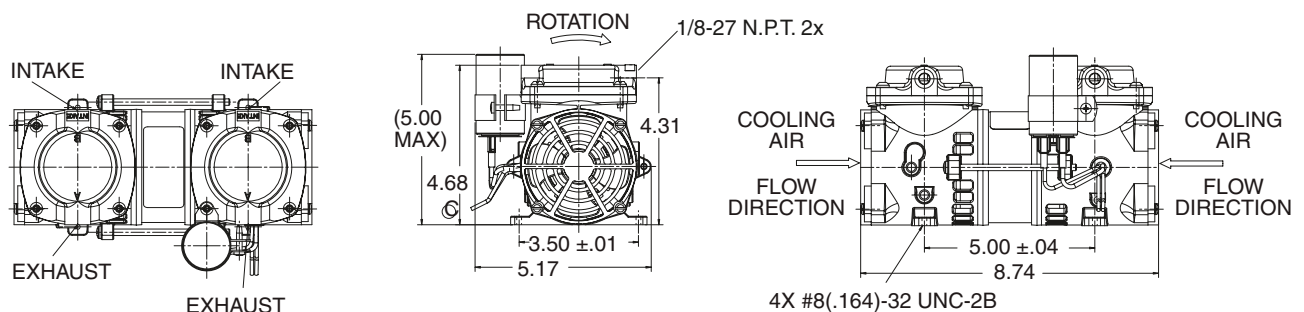
2107CD



2107 Series Performance Data

				Standard			
MODEL NUMBER		2107CH14		2107CH18		2107CH20	
HEAD CONFIGURATION		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum	
STROKE		.140 Inches		.180 Inches		.200 Inches	
PRESSURE		Flow @ 220v		Flow @ 220v		Flow @ 220v	
CFM @ PSI	LPM @ bar						
PSI	bar	CFM	LPM	CFM	LPM	CFM	LPM
0	0	.91	25.8	1.30	36.8	1.40	39.6
5	.5	.77	18.4	1.10	28.6	1.20	31.4
10	1.0	.50	9.1	.90	19.1	1.00	23.7
15	1.5	.30	3.5	.65	12.1	.82	17.0
20	2.0	.17		.48	6.6	.65	12.2
25	3.0			.33		.51	
30				.21		.41	
35							
MAX. CONTINUOUS PRESSURE		15 PSI	1.0 bar	20 PSI	1.4 bar	20 PSI	1.4 bar
MAX. INTERMITTENT PRESSURE		20 PSI	1.4 bar	30 PSI	2.1 bar	30 PSI	2.1 bar
VACUUM		Flow @ 220v		Flow @ 220v		Flow @ 220v	
CFM @ IN. hg	LPM @ mbar (gauge)						
IN. hg	mbar (gauge)	CFM	LPM	CFM	LPM	CFM	LPM
0	0	.91	25.8	1.30	36.8	1.40	39.6
5	-100	.69	22.1	.92	30.5	1.00	33.0
10	-200	.42	18.2	.62	24.5	.71	26.8
15	-400	.18	9.4	.34	14.7	.42	17.1
20	-600		1.4	.11	6.1	.17	8.0
25	-800						
MAX. VACUUM		19.7" hg	-667 mbar	21.6" hg	-732 mbar	23.9" hg	-809 mbar
MAX. AMBIENT AIR TEMP.		104° F	40°C	104° F	40°C	104° F	40°C
MIN. AMBIENT START TEMP.		50° F	10°C	50° F	10°C	50° F	10°C
MAX. RESTART PRESSURE		0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar
MAX. RESTART VACUUM		0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar
MOTOR VOLTAGE/FREQUENCY		220/50/1		220/50/1		220/50/1	
MOTOR TYPE		Permanent Split Capacitor		Permanent Split Capacitor		Permanent Split Capacitor	
CURRENT AT RATED LOAD (AMPS)		.5		.6		.6	
POWER AT RATED LOAD (WATTS)		95		111		125	
STARTING CURRENT (LOCKED ROTOR, AMPS)		.8		.8		.8	
CAPACITOR VALUE		7 mfd		7 mfd		7 mfd	
MIN. FULL LOAD SPEED (RPM)		1375		1275		1225	
THERMAL PROTECTOR		Yes		Yes		Yes	
NET WEIGHT		7 lbs.	3.1 Kg	7 lbs.	3.1 Kg	7 lbs.	3.1 Kg

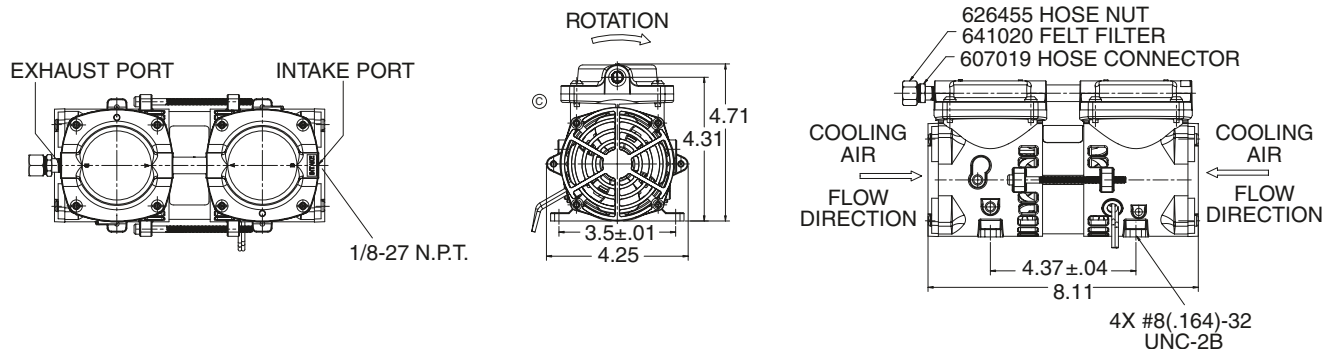
2107CH



2107 Series Performance Data

MODEL NUMBER		2107VA20		2107VD20	
HEAD CONFIGURATION		Vacuum		Vacuum	
STROKE		.200 inches		.200 inches	
VACUUM		Flow @ 115v		Flow @ 220v	
CFM @ IN. hg	LPM @ mbar (gauge)				
IN. hg	mbar (gauge)	CFM	LPM	CFM	LPM
0	0	.85	24.1	.72	20.4
5	-100	.65	20.7	.56	17.7
10	-200	.49	17.6	.42	15.1
15	-400	.33	12.2	.29	10.6
20	-600	.20	7.3	.17	6.4
25	-800		3.0		2.4
MAX. VACUUM		28.2" hg	-956 mbar	28.3" hg	-959 mbar
MAX. AMBIENT AIR TEMP.		104° F	40°C	104° F	40°C
MIN. AMBIENT START TEMP.		50° F	10°C	50° F	10°C
MAX. RESTART VACUUM		0" hg	0 mbar	0" hg	0 mbar
MOTOR VOLTAGE/FREQUENCY		115/60/1		220/50/1	
MOTOR TYPE		Shaded Pole		Shaded Pole	
CURRENT AT RATED LOAD (AMPS)		2.2		.7	
POWER AT RATED LOAD (WATTS)		142		91	
STARTING CURRENT (LOCKED ROTOR, AMPS)		4.0		1.3	
MIN. FULL LOAD SPEED (RPM)		1700		1420	
THERMAL PROTECTOR		Yes		Yes	
NET WEIGHT		6.3 lbs.	2.8 kg	6.3 lbs.	2.8 kg

2107VA20



The information presented in this material is based on technical data and test results of nominal units. It is believed to be accurate and reliable and is offered as an aid to help in the selection of Thomas products. It is the responsibility of the user to determine the suitability of the product for his intended use and the user assumes all risk and liability whatsoever in connection therewith. Thomas Industries does not warrant, guarantee or assume any obligation or liability in connection with this information.

NOTE: Models pictured are representative of the series and do not represent a specific model number. Consult factory for detailed physical description.

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THOMAS
A Gardner Denver Product

Thomas Products Division
1419 Illinois Ave
Sheboygan, WI 53082 USA
Phone: (920) 457-4891
Fax: (920) 451-4276
www.gd-thomas.com