

Fans



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Axial Fans

General characteristics

Noise data

Acoustic measurements made at a distance of 1.0 metre from the surface of the fan (inner side) and 45° radially off the fan axis.

Air flow performance data

The performance data were determined in accordance with AMCA standard 210-74 on a double chamber test set up with measurement on the suction side.

Overload

All Crouzet fans have integrated protection against locked rotor condition to avoid damage to windings and electronic components. Restarting is automatic as soon as any constraints on running have been removed.

Bearing systems

All Crouzet fans have specially designed and precision lubricated sleeve bearings for long, maintenance-free performance at low noise level. Ball bearing on request.

Safety

All fans are designed and manufactured in conformance with the requirements of UL, CSA and VDE.

Life

AC fans

Bearings sleeve

∅ 120 x 38 mm	100 000 hours at 25 °C 25 000 hours at 55 °C 10 000 hours at 70 °C
∅ 92 x 25 mm 80 x 38 mm 80 x 25 mm	80 000 hours at 25 °C 20 000 hours at 55 °C 10 000 hours at 70 °C

AC fans

Ball bearings

∅ 120 x 38 mm	100 000 hours at 25 °C 25 000 hours at 55 °C 10 000 hours at 70 °C
∅ 92 x 25 mm 80 x 38 mm 80 x 25 mm	80 000 hours at 25 °C 25 000 hours at 55 °C 10 000 hours at 80 °C

DC fans

Bearings sleeve

∅ 120 x 38 mm 92 x 25 mm 80 x 25 mm	100 000 hours at 25 °C 80 000 hours at 25 °C 80 000 hours at 25 °C
∅ 60 x 25 mm	65 000 hours at 25 °C 30 000 hours at 55 °C 20 000 hours at 65 °C

Operating temperature

AC :	-10 °C at + 70 °C
DC :	0 °C at + 70 °C

Storage temperature

AC :	-30 °C at + 75 °C
DC :	-30 °C at + 75 °C

Operating voltage

AC :	115 V : 85 V - 125 V 220 V : 185 V - 245 V
DC :	12 V : 10.2 V - 13.8 V 24 V : 20.4 V - 27.6 V

Dielectric strength

AC :	1500 V ~ for one minute
DC :	600 V ~ for 2 seconds

Insulation resistance

AC :	500 V ≡ 100 M
DC :	250 V ≡ 10 M

Flow conversion table

	CFM	m³/h	m³/min	l/min	l/s
1 CFM	1	1.7	0.028	28.3	0.47
1 m³/h	0.588	1	0.017	16.67	0.28
1 m³/min	35.28	60	1	1000	16.67
1 l/min	0.035	0.06	0.001	1	0.017
1 l/s	2.12	3.6	0.06	60	1

The new KDE range

Self-commutated DC fans

The range of DC fans have the advantage of a new, patented design referred to as "single winding".

This new range, the KDE range, forms a useful replacement for the MD range and provides the following improvements:

- higher air flow thanks to smaller motor diameter,
- quieter (gain of at least 2 dB),
- longer life,
- greater dielectric strength.

The new range offers upward compatibility (1) with the MD range (see table below) and allows us to offer fans even more compact than the 0 x 0, 0 x 0, 0 x 0, and 0 x 0 models.

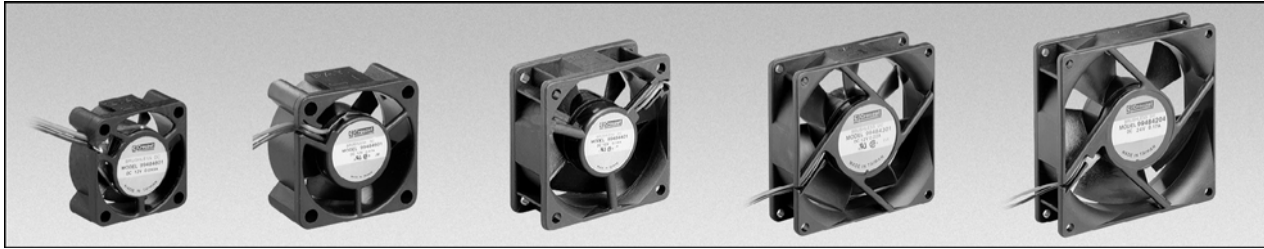
(1) Current consumption should be checked however, as it may be higher in some cases.

Old part no	New part no	Old part no	New part no
∅ 60		∅ 120	
99 486 177	99 484 401	99 487 477	99 484 001
99 486 179	99 484 403	99 487 478	99 484 003
99 486 179	99 484 404	99 487 479	99 484 004
∅ 80		99 487 487	99 484 005
99 486 277	99 484 301	99 487 488	99 484 007
99 486 279	99 484 303	99 487 489	99 484 008
99 486 287	99 484 304	99 487 377	99 484 101
99 489 287	99 484 354	99 487 378	99 484 102
99 486 289	99 484 306	99 487 379	99 484 103
∅ 92		99 487 387	99 484 104
99 486 377	99 484 201	99 487 388	99 484 105
99 489 377	99 484 251	99 487 389	99 484 106
99 486 379	99 484 203		
99 486 387	99 484 204		
99 486 389	99 484 206		

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Brushless DC Axial Fans



General Specifications		Part Number	Voltage (V)	Current (A)	Speed (RPM)	Power (W)	Airflow (CFM)	Max. Air Pressure (Inch-H2O)	Noise (dBA)	Weight (g)	Bearing Type
Material: Body PBT UL 94V-0 Fan PBT UL 94V-0		120 x 120 x 38mm (4 3/4 x 1 1/2")									
Insulation Class E		99484002	12	0.59	3000	7	105	0.31	45.0	323	Sleeve
Approvals UL, cUL Recognized E118509		99484004	12	0.27	2300	3.2	83	0.18	36.0	323	Sleeve
Box Count: 120 x 38 40 pieces 120 x 25 40 pieces 92 x 25 50 pieces 80 x 25 50 pieces 60 x 25 100 pieces 60 x 15 200 pieces 40 x 20 200 pieces 40 x 10 400 pieces 25 x 10 500 pieces		99484006	24	0.25	3000	6	105	0.31	45.0	323	Sleeve
		99484051	12	0.65	3150	7.8	120	0.34	48.0	323	Ball
		99484052	12	0.59	3100	7	106	0.32	46.5	323	Ball
		99484053	12	0.42	2850	5	93	0.23	42.0	323	Ball
		99484055	24	0.33	3150	7.9	120	0.34	48.0	323	Ball
		99484056	24	0.25	3100	6	106	0.31	46.5	323	Ball
		99484057	24	0.23	2850	5.5	93	0.23	42.0	323	Ball

120 x 120 x 25mm (4 3/4 x 1")											
99484101	12	0.42	3000	5	84	0.25	44.0	250	Sleeve		
99484102	12	0.26	2700	3.1	77	0.20	40.0	250	Sleeve		
99484104	24	0.25	3000	6	84	0.25	44.0	250	Sleeve		
99484105	24	0.22	2700	5.3	77	0.20	40.0	250	Sleeve		
99484106	24	0.17	2300	4.1	65	0.16	35.0	250	Sleeve		
99484151	12	0.42	3100	5	85	0.26	44.5	250	Ball		
99484152	12	0.26	2800	3.1	78	0.21	41.0	250	Ball		
99484153	12	0.23	2400	2.8	66	0.17	35.5	250	Ball		
99484154	24	0.25	3100	6	85	0.26	44.5	250	Ball		
99484155	24	0.22	2800	5.3	78	0.21	41.0	250	Ball		
99484156	24	0.17	2400	4.1	66	0.17	35.5	250	Ball		

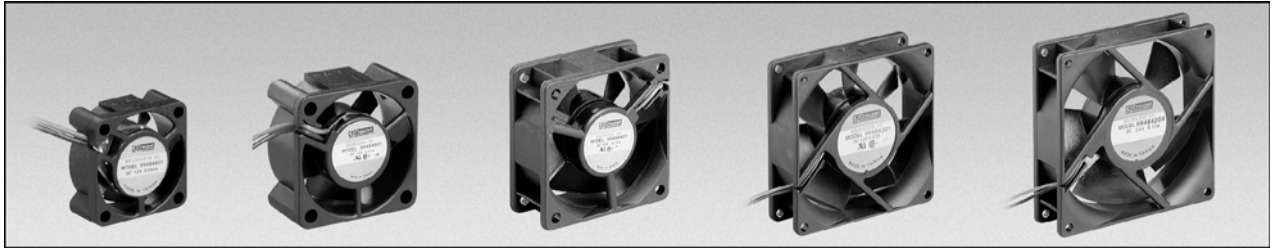
92 x 92 x 25mm (3 9/16 x 1")											
99484201	12	0.22	3200	2.6	50	0.19	33.0	135	Sleeve		
99484202	12	0.16	2700	2	44	0.17	27.0	135	Sleeve		
99484203	12	0.12	2400	1.4	42	0.15	25.5	135	Sleeve		
99484204	24	0.15	3200	3.6	50	0.19	33.0	135	Sleeve		
99484205	24	0.12	2700	2.2	44	0.17	27.0	135	Sleeve		
99484206	24	0.10	2400	1.7	42	0.15	25.5	135	Sleeve		
99484251	12	0.22	3400	2.6	51	0.19	34.0	135	Ball		
99484252	12	0.16	2800	2	45	0.17	28.0	135	Ball		
99484253	12	0.12	2500	1.4	42.5	0.15	26.0	135	Ball		
99484254	24	0.22	3400	3.6	51	0.19	34.0	135	Ball		
99484256	24	0.12	2500	1.7	42.5	0.15	26.0	135	Ball		

Other Information	To Order, Specify:				
For dimensions and air flow performance see pages 150-151. All DC fans are supplied with Lead wires only.	<table border="0"> <tr> <td style="background-color: #cccccc;">99484002</td> <td>Standard, normally stocked products</td> </tr> <tr> <td style="background-color: #cccccc;">99484003</td> <td>Products produced to order - minimum quantities may apply</td> </tr> </table>	99484002	Standard, normally stocked products	99484003	Products produced to order - minimum quantities may apply
99484002	Standard, normally stocked products				
99484003	Products produced to order - minimum quantities may apply				

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Brushless DC Axial Fans



General Specifications

Material:
 Body PBT UL 94V-0
 Fan PBT UL 94V-0

Insulation Class E

Approvals UL, cUL Recognized E118509

Box Count:
 120 x 38 40 pieces
 120 x 25 40 pieces
 92 x 25 50 pieces
 80 x 25 50 pieces
 60 x 25 100 pieces
 60 x 15 200 pieces
 40 x 20 200 pieces
 40 x 10 400 pieces
 25 x 10 500 pieces

Part Number	Voltage (V)	Current (A)	Speed (RPM)	Power (W)	Airflow (CFM)	Max. Air Pressure (Inch-H2O)	Noise (dBA)	Weight (g)	Bearing Type
80 x 80 x 25mm (3 1/8 x 1 1/2)									
99484301	12	0.22	3000	2.6	41.7	0.19	33.0	120	Sleeve
99484303	12	0.12	2200	1.4	29.4	0.15	24.5	120	Sleeve
99484304	24	0.15	3000	3.6	41.7	0.19	33.0	120	Sleeve
99484305	24	0.12	2650	2.9	34.4	0.17	28.0	120	Sleeve
99484306	24	0.10	2200	2.4	29.4	0.15	24.5	120	Sleeve
99484351	12	0.22	3200	2.6	42.5	0.23	33.5	120	Ball
99484353	12	0.12	2500	1.4	30	0.14	25.0	120	Ball
99484354	24	0.22	3100	2.6	38	0.23	33.5	120	Ball
99484356	24	0.12	2350	1.4	27	0.14	25.0	120	Ball
60 x 60 x 25 (mm)									
99484401	12	0.19	4500	2.2	21.7	0.20	34.0	60	Sleeve
99484402	12	0.13	3800	1.6	17.6	0.14	31.0	60	Sleeve
99484403	12	0.09	3300	1.2	15.9	0.10	26.7	60	Sleeve
99484404	24	0.11	4500	2.6	21.7	0.20	34.0	60	Sleeve
99484406	24	0.06	3300	1.4	15.9	0.10	26.7	60	Sleeve
99484451	12	0.19	4700	2.2	22.1	0.22	34.3	60	Ball
99484454	24	0.11	4500	2.6	21.7	0.20	34.0	60	Ball
60 x 60 x 15 (mm)									
99484501	12	0.16	4000	1.9	17.8	0.14	31.0	45	Sleeve
99484502	12	0.09	3300	1.2	14.8	0.11	26.0	45	Sleeve
40 x 40 x 20 (mm)									
99484601	12	0.07	6000	0.9	6.5	0.12	25.5	35	Sleeve
99484602	12	0.50	4500	0.6	5.2	0.08	22.8	35	Sleeve
99484603	24	0.07	6500	1.6	7.8	0.16	29.0	35	Sleeve
99484604	24	0.05	6000	1.2	6.5	0.12	25.5	35	Sleeve
40 x 40 x 10 (mm)									
99484701	12	0.09	5500	1.1	5.8	0.11	25.0	15.3	Sleeve
99484751	12	0.09	6600	1.1	6.5	0.15	27.0	15.3	Ball
25 x 25 x 10 (mm)									
99484801	12	0.10	10000	1.1	1.5	0.10	23.0	7	Sleeve

Other Information	To Order, Specify:
For dimensions and air flow performance see page 154. All DC fans are supplied with Lead wires only.	<p>99484002 Standard, normally stocked products</p> <p>99484003 Products produced to order D minimum quantities may apply</p>

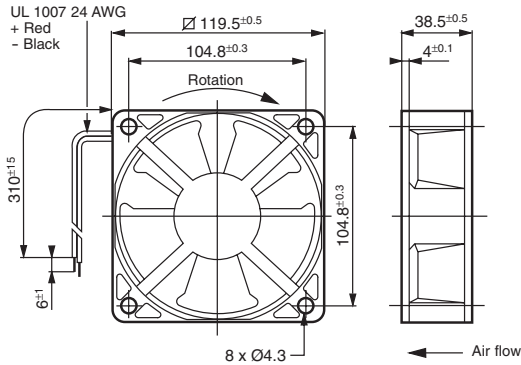
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Brushless DC Axial Fans - Dimensions and Performance

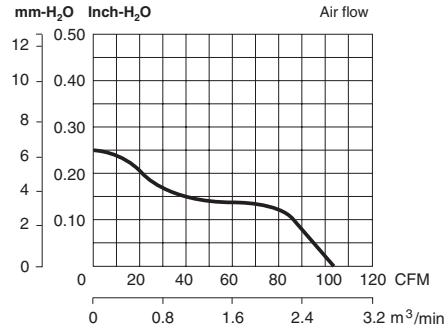
Dimensions

□ 120 x 38
120 x 25

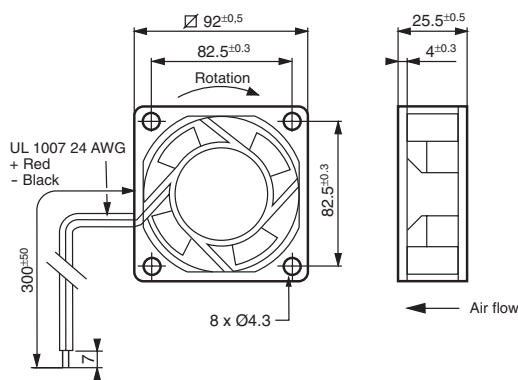


Air performance

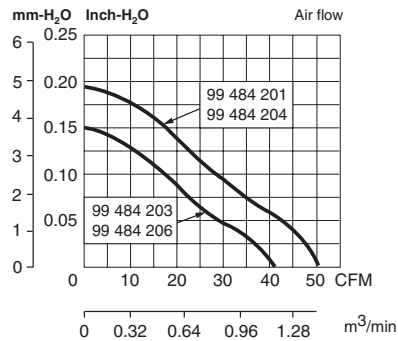
99 484 002 - 99 484 006



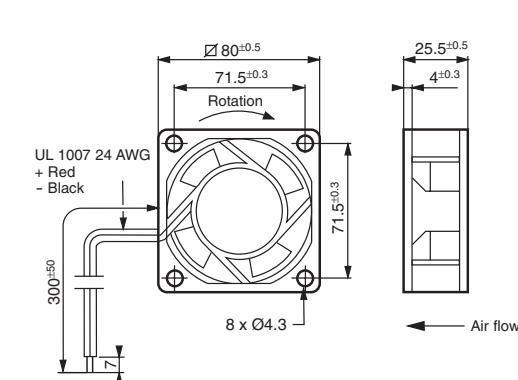
□ 92 x 25



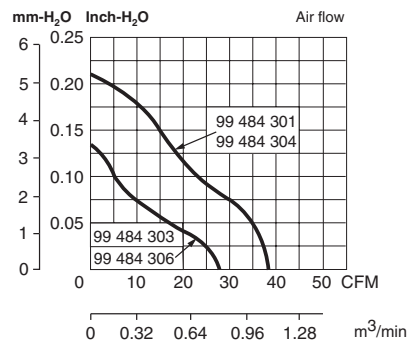
99 484 201 / 204 - 99 484 203 / 206



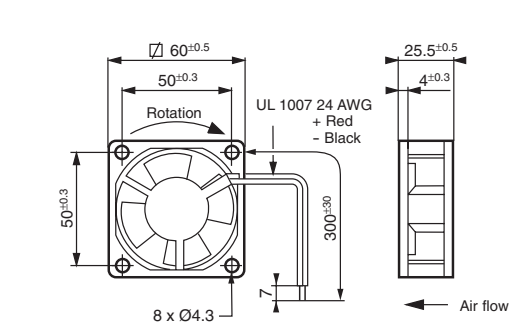
□ 80 x 25



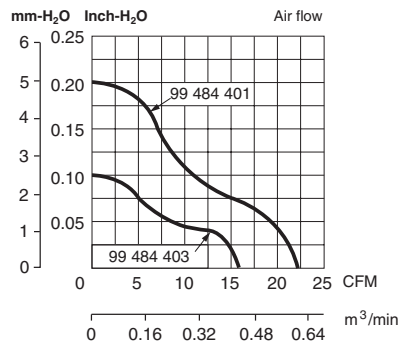
99 484 301 / 304 - 99 484 303 / 306



□ 60 x 25



99 484 401 - 99 484 403



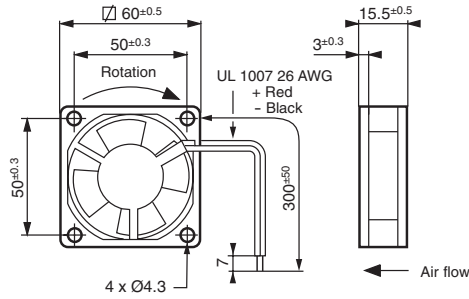
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Brushless DC Axial Fans - Dimensions and Performance

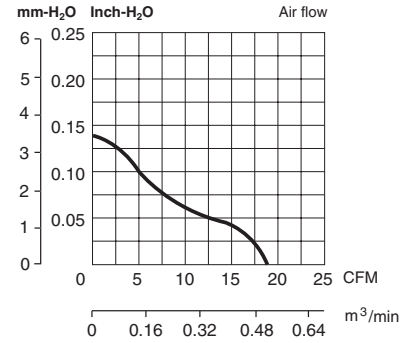
Dimensions

∅ 60 x 15



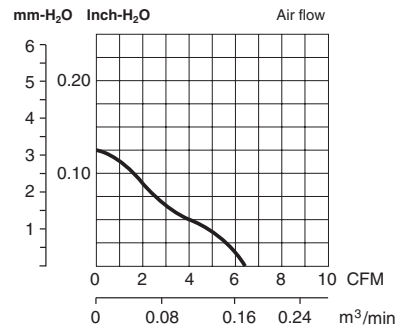
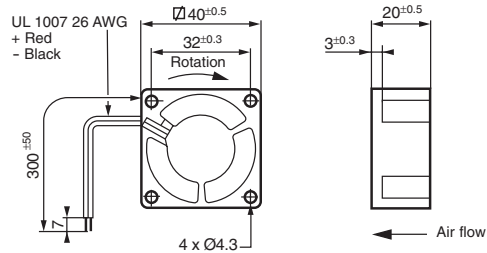
Air performance

99 484 501



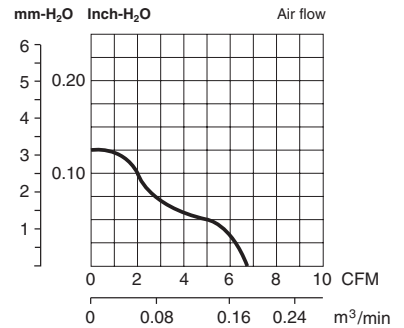
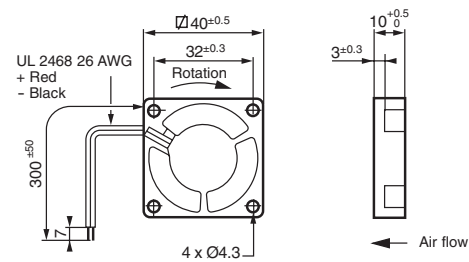
∅ 40 x 20

99 484 601



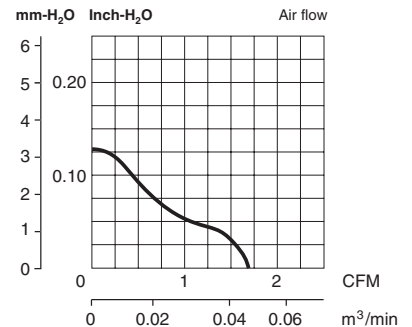
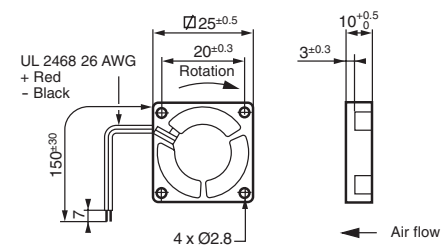
∅ 40 x 10

99 484 701



∅ 25 x 10

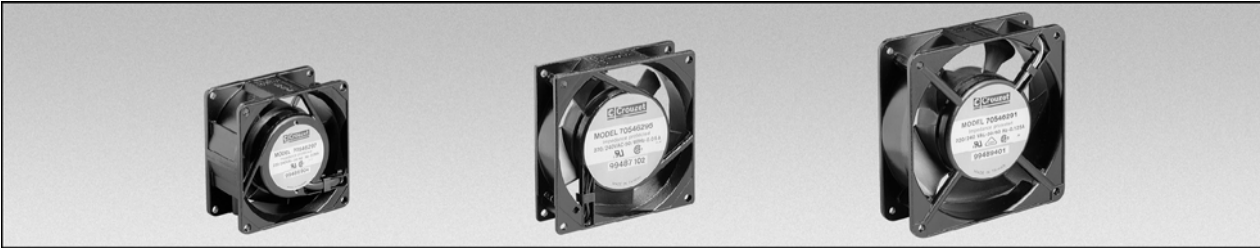
99 484 801



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AC Axial Fans



General Specifications		Part Number	Voltage (V)	Frequency (Hz)	Current (A) [50/60 Hz]	Speed (RPM) [50/60 Hz]	Power (W) [50/60 Hz]	Airflow (CFM) [50/60 Hz]	Maximum Air Pressure (Inch-H2O) [50/60 Hz]	Noise (dBA) [50/60 Hz]	Weight (g)	Connection	Bearing Type
Material: Body Aluminum Fan PBT UL 94V-0		172 x 151 x 51mm (6 3/4 x 6 x 2")											
Insulation Class B		99489701	115	50/60	0.60/0.55	2800/3200	49/45	180/200	0.48/0.48	52/55	942	Terminals	Ball
Approvals UL, cUL Recognized VDE pending E118509		99489702	220/240	50/60	0.25/0.22	2600/2800	39/35	178/192	0.38/0.44	52/54	942	Terminals	Ball
Box Count: 172 x 51 12 pieces 120 x 38 40 pieces 120 x 25 40 pieces 92 x 25 50 pieces 80 x 38 50 pieces 80 x 25 50 pieces		99489703	115	50/60	0.60/0.55	2650/2950	49/45	180/200	0.48/0.48	52/55	942	Leads	Ball
		99489704	220/240	50/60	0.25/0.22	2600/2800	39/35	178/192	0.38/0.44	52/54	942	Leads	Ball
		120 x 120 x 38mm (4 3/4 x 1 1/2")											
		99487421	220/240	50/60	0.14/0.12	2700/3100	22/21	95/115	0.33/0.38	44/49	550	Leads	Sleeve
		99487420	220/240	50/60	0.14/0.12	2700/3100	22/21	95/115	0.33/0.38	44/49	550	Terminals	Sleeve
		99487400	220/240	50/60	0.13/0.11	2550/2900	20/19	85/105	0.25/0.30	43/48	550	Leads	Sleeve
		99487401	220/240	50/60	0.13/0.11	2550/2900	20/19	85/105	0.25/0.30	43/48	550	Terminals	Sleeve
		99487405	220/240	50/60	0.08/0.06	2000/2200	10/10	70/76	0.08/0.12	36/38	550	Leads	Sleeve
		99487403	220/240	50/60	0.08/0.06	2000/2200	10/10	70/76	0.08/0.12	36/38	550	Terminals	Sleeve
		99487410	115	50/60	0.12/0.18	2550/2900	20/18	85/105	0.25/0.30	43/48	550	Leads	Sleeve
		99487411	115	50/60	0.12/0.18	2550/2900	20/18	85/105	0.25/0.30	43/48	550	Terminals	Sleeve
		99487415	115	50/60	0.13/0.11	2000/2200	11/11	70/76	0.08/0.12	36/38	550	Leads	Sleeve
		99487413	115	50/60	0.13/0.11	2000/2200	11/11	70/76	0.08/0.12	36/38	550	Terminals	Sleeve
		99489421	220/240	50/60	0.14/0.12	2850/3150	22/21	97/117	0.34/0.39	45/50	550	Leads	Ball
		99489420	220/240	50/60	0.14/0.12	2850/3150	22/21	97/117	0.34/0.39	45/50	550	Terminals	Ball
		99489400	220/240	50/60	0.12/0.18	2750/3050	20/19	87/107	0.26/0.32	45/50	550	Leads	Ball
		99489401	220/240	50/60	0.12/0.18	2750/3050	20/19	87/107	0.26/0.32	45/50	550	Terminals	Ball
		99489405	220/240	50/60	0.08/0.06	2150/2300	10/10	72/78	0.09/0.13	37/39	550	Leads	Ball
		99489403	220/240	50/60	0.08/0.06	2150/2300	10/10	72/78	0.09/0.13	37/39	550	Terminals	Ball
		99489431	115	50/60	0.26/0.24	2850/3150	22/20	97/117	0.34/0.39	45/50	550	Leads	Ball
		99489430	115	50/60	0.26/0.24	2850/3150	22/20	97/117	0.34/0.39	45/50	550	Terminals	Ball
		99489410	115	50/60	0.12/0.18	2750/3050	20/18	87/107	0.26/0.32	45/50	550	Leads	Ball
		99489411	115	50/60	0.12/0.18	3750/3050	20/18	87/107	0.26/0.32	45/50	550	Terminals	Ball
		99489415	115	50/60	0.13/0.11	2150/2300	11/11	72/78	0.09/0.13	37/39	550	Leads	Ball
		99489413	115	50/60	0.13/0.11	2150/2300	11/11	72/78	0.09/0.13	37/39	550	Terminals	Ball
		120 x 120 x 25mm (4 3/4 x 1")											
		99489301	220/240	50/60	0.09/0.09	2150/2300	19/18	66/78	0.14/0.16	44/46	330	Terminals	Ball
		92 x 92 x 25mm (3 9/16 x 1")											
		99487104	220/240	50/60	0.07/0.06	2250/2750	14.5/14	29/36	0.12/0.18	36/39	280	Leads	Sleeve
		99487102	220/240	50/60	0.07/0.06	2250/2750	14.5/14	29/36	0.12/0.18	36/39	280	Terminals	Sleeve
		99487114	115	50/60	0.12/0.11	2250/2750	13/12	29/36	0.12/0.18	36/39	280	Leads	Sleeve
		99487112	115	50/60	0.12/0.11	2250/2750	13/12	29/36	0.12/0.18	36/39	280	Terminals	Sleeve
		99489102	220/240	50/60	0.07/0.06	2350/2850	14.5/14	30/37	0.13/0.19	37/40	280	Terminals	Ball

Other Information	To Order, Specify:
For dimensions and air flow performance see page 154.	99484002 Standard, normally stocked products
	99484003 Products produced to order - minimum quantities may apply

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AC Axial Fans



General Specifications

Material:
 Body Aluminum
 Fan PBT UL 94V-0

Insulation Class B

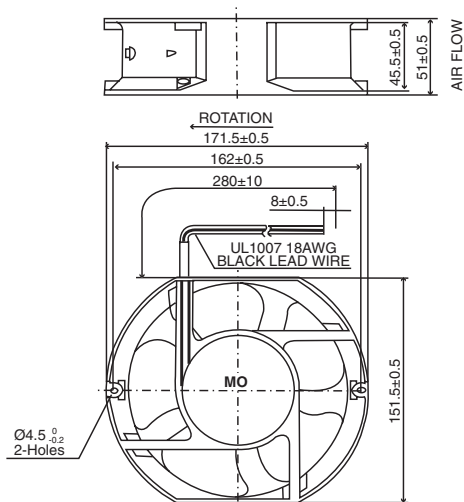
Approvals UL, cUL
 Recognized
 VDE pending
 E118509

Box Count:
 172 x 51 12 pieces
 120 x 38 40 pieces
 120 x 25 40 pieces
 92 x 25 50 pieces
 80 x 38 50 pieces
 80 x 25 50 pieces

Part Number	Voltage (V)	Frequency (Hz)	Current (A) [50/60 Hz]	Speed (RPM) [50/60 Hz]	Power (W) [50/60 Hz]	Airflow (CFM) [50/60 Hz]	Maximum Air Pressure (Inch-H2O) [50/60 Hz]	Noise (dBA) [50/60 Hz]	Weight (g)	Connection	Bearing Type
80 x 80 x 38mm (3 1/8 x 1 1/2")											
99486904	220/240	50/60	0.07/0.06	2300/2750	14/12	23/30	0.12/0.18	31/35	340	Leads	Sleeve
99486914	115	50/60	0.17/0.13	2300/2750	14/12	23/30	0.12/0.18	31/35	340	Leads	Sleeve
99488905	220/240	50/60	0.07/0.06	2400/2850	14/13.5	24/31	0.13/0.19	32/36.5	340	Leads	Ball
80 x 80 x 25mm (3 1/8 x 1")											
99486804	220/240	50/60	0.07/0.07	2300/2750	14/13.5	17/21	0.12/0.18	29/33	260	Leads	Sleeve
99486814	115	50/60	0.12/0.10	2300/2750	12/11	17/21	0.12/0.18	29/33	260	Leads	Sleeve
99489804	220/240	50/60	0.07/0.07	2450/2900	14/13.5	18/22	0.13/0.19	30/34.5	260	Leads	Ball

Dimensions

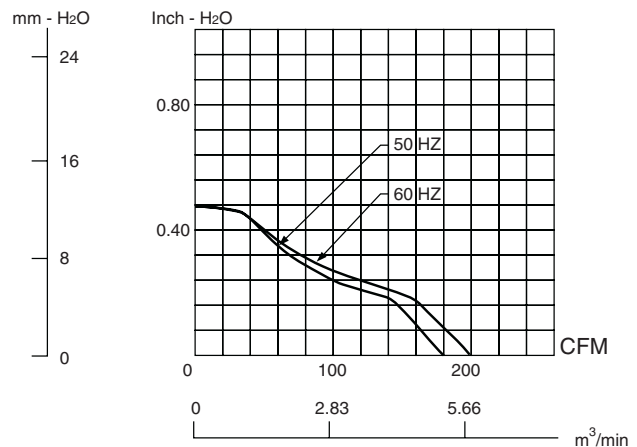
172 x 51



Air performance

994897

STATIC PRESSURE



Other Information	To Order, Specify:
For dimensions and air flow performance see pages 154.	99484002 Standard, normally stocked products
	99484003 Products produced to order - minimum quantities may apply

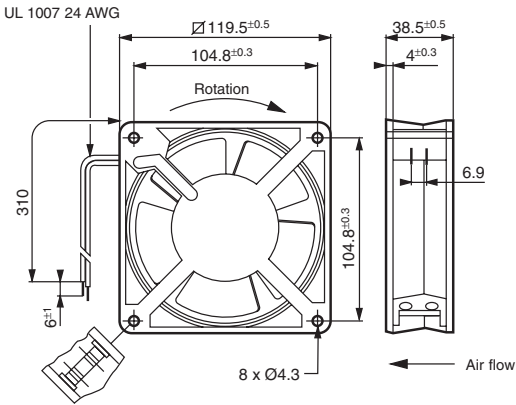
Products and specifications subject to change without notice.

Order/Technical Support - Tel: (800) 677-5311 / FAX: (800) 677-3865 / www.crouzet-usa.com

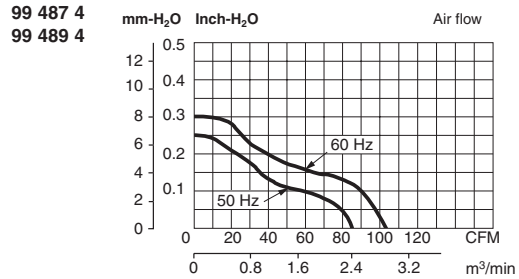
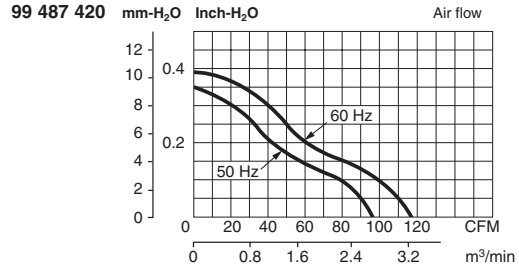
AC Axial Fans - Dimensions and Performance

Dimensions

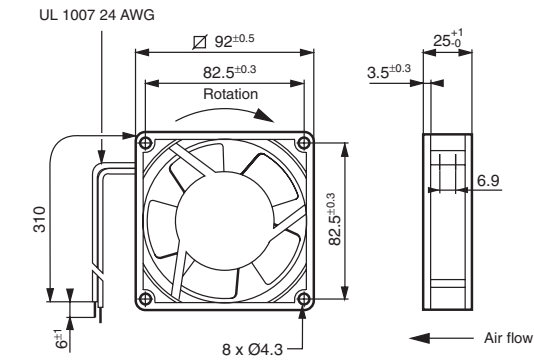
∅ 120 x 38



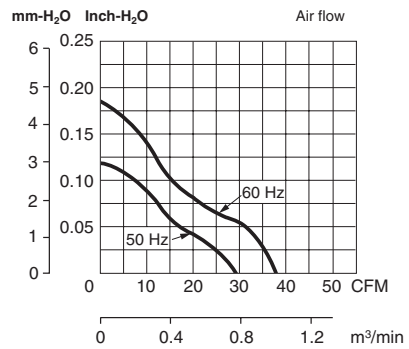
Air performance



∅ 92 x 25

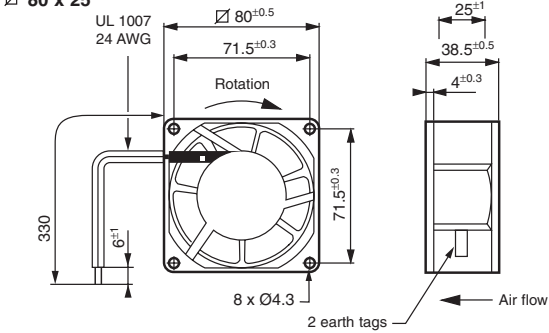


99 487 1



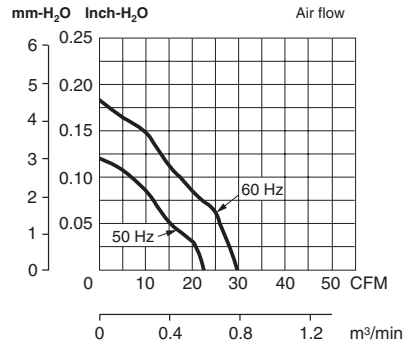
∅ 80 x 38

∅ 80 x 25



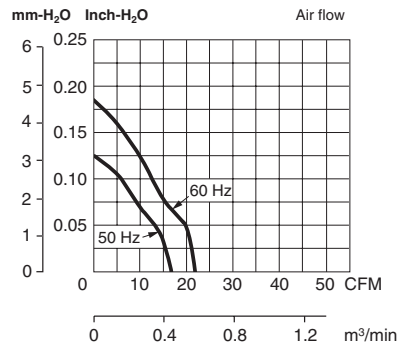
99 486 914

99 486 904



99 486 814

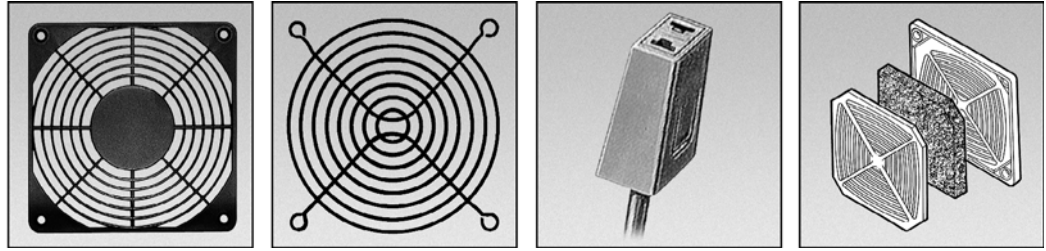
99 486 804



Products and specifications subject to change without notice.

Order/Technical Support - Tel: (800) 677-5311 / FAX: (800) 677-3865 / www.crouzet-usa.com

Accessories for Fans



Part numbers

Fingerguard	plastic	metal	
□ 40 mm			99 485 910
□ 60 mm	99 485 923		99 485 900
□ 80 mm	99 485 922		99 485 901
□ 92 mm	99 485 921		99 485 904
□ 120 mm	99 485 920		99 485 902
T-type cord	Length 300 mm		99 485 903
	Length 600 mm		99 485 905
	Length 1000 mm		99 485 906
	Length 2000 mm		99 485 907
	Length 3000 mm		99 485 908

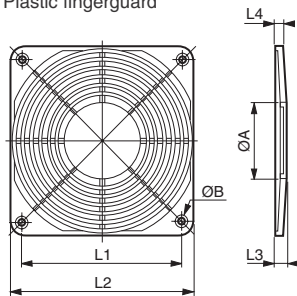
Filter for fan - Protection + Filter + Cover	120 x 120	99 485 909
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Characteristics

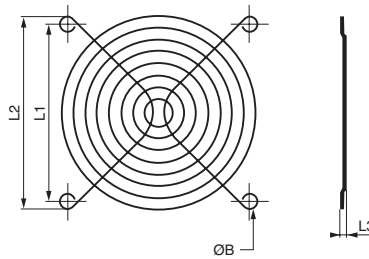
Products in conformity with UL - CSA - VDE	—	—	—	—
Material	—	—	—	UL 94V-0

Dimensions

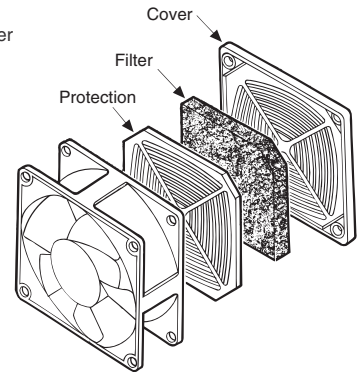
Plastic fingerguard



Metal fingerguard

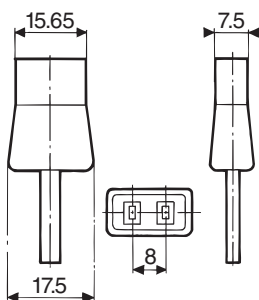


Filter

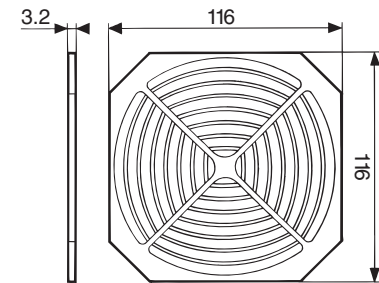


	L1		L2		L3		L4	ØA	ØB
	plastic	metal	plastic	metal	plastic	metal			
□ 40 mm	—	—	—	32	—	5±0.35	—	—	4±0.05
□ 60 mm	50	48	60	53.5	7.3	5	3.8	25	4.5
□ 80 mm	71.5	71.4	80	76.4	7.3	5	3.8	34	4.5
□ 92 mm	82.5	82.5	92	89.4	7.3	5.5	3.8	34	4.5
□ 120 mm	105	104.5	120	115.5	7	5.5	3.7	49	4.5

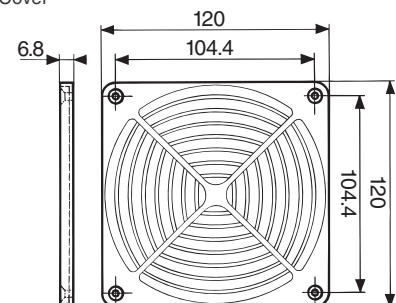
Cord



Protection



Cover



To order, specify :

Standard products	1 Part number Example : Fingerguard - 99 485 922
Made to order products, available on request	

Products and specifications subject to change without notice.

Order/Technical Support - Tel: (800) 677-5311 / FAX: (800) 677-3865 / www.crouzet-usa.com

Crouzet Fans - Cross Reference

Comair Rotron	Crouzet	Etri	Crouzet w/Terminals	Crouzet w/Leads	Etri	Crouzet w/Terminals	Crouzet w/Leads	Multicomp	Crouzet	Multicomp	Crouzet	Sunon	Crouzet
027117	99487413							MC1123HST	99487411	MC1092HSL	99487114	DP200A2123XBL	99489421
027119	99487411	125DH-1LP11-000		99484052	144L-2281-010	99487403	99487405	MC1123HBT	99489411	MC2092HST	99487102	DP200A2123XBT	99489420
028021	99487411	125DH-1LP31-000		99484052	144L-2282-010	99487413	99487415	MC1123HSL	99487410	MC2092HSL	99487104	DP200A2123XBT(S)	99489422
028023	99487401	125DH-1TP11-000		99484052	144L-0281-010	99489403	99489405	MC2123HST	99487401	MC1093HSL	99489414	DP200A2123XSL	99487421
028027	99489411	125DH-1TP31-000		99484052	144L-0282-010	99489413	99489415	MC2123HBT	99489401	MCKD1204PFB2	99484751	DP200A2123XST	99487420
028029	99489401	125DH-2LP11-000		99484056	144L-2281-010	99487403	99487405	MC1123HSL	99487400	MCKDE1208PBTB-6	99484352	DP200A2123XST(S)	99487422
028171	99487403	125DH-2LP31-000		99484056	144L-2282-010	99487413	99487415	MC1123LST	99487413	MCKDE2408PBTB-6	99484305	DP201A2123HBL	99489400
028245	99489701	125DH-2TP11-000		99484056	146DF-0181-000		99486804*	MC1123LST	99487415	MCKDE1208PBTB-6	99484255	DP201A2123HBT	99489401
028291	99487413	125DH-2TP31-000		99484056	146DF-0182-004		99486814*	MC2123LST	99487403	MCKDE2408PBTB-6	99484255	DP201A2123HSL	99487400
028309	99489702	125DL-1LP11-000		99484054	146DF-2181-000		99486804*	MC2123LST	99487405	MCKDE1212PBTB-6A	99484152	DP201A2123HST	99487401
028516	99487401	125DL-1LP31-000		99484054	146DF-2182-004		99486814*	MC1092HST	99487112	MCKDE2412PBTB-6A	99484155	DP203A2123LBL	99489405
EBM-Pabst	Crouzet	125DL-1TP11-000		99484054	146DH-1LP31-000		99484302	NMB	Crouzet	125DL-1TP31-000		DP203A2123LBT	99489403
612	99484401*	125DL-1TP13-000		99484054	146DH-2LP31-000		99484305	2410ML-04W-B10	99484403*	3610NL-05W-B10	99484255	DP203A2123LST	99487405
614	99484404*	125DL-2LP11-000		99484058	146DJ-0182-004		99486814*	2410ML-04W-B20	99484403*	3610NL-05W-B20	99484255	DP203A2123LST	99487403
3412	99484251	125DL-2LP31-000		99484058	146DJ-2182-030		99489814	2410ML-04W-B30	99484401*	3610NL-05W-B30	99484255	KDE1202PFS2	99484801
3412G	99484201	125DL-2TP11-000		99484058	146DL-1LP31-000		99484303	2410ML-04W-B40	99484401*	3610NL-05W-B40	99484254	KDE1204PFS2	99484701
3412GL	99484203	125DL-2TP31-000		99484058	146DL-2LP31-000		99484306	2410ML-05W-B10	99484404*	3610PS-12T-B10	99487112*	KDE1204PKS2	99484601
3412GM	99484205	125DM-1LP11-000		99484054	146DM-2LP31-000		99484306	2410ML-05W-B20	99484404*	3610PS-12T-B20	99487112*	KDE1204PKS3	99484602
3412L	99484253	125DM-1LP31-000		99484054	146DM-2LP31-000		99484306	2410ML-05W-B30	99484404*	3610PS-12T-B30	99487112*	KDE1206PHS2	99484501
3412M	99484253	125DM-2LP11-000		99484058	154DA-0282-030	99489701	99489702	2410ML-05W-B40	99484404*	4710NL-04W-B10	99484153	KDE1206PHS3	99484502
3414	99484254	125DM-2LP31-000		99484058	154DC-0281-030	99489702	99489703	2410ML-05W-B50	99484404*	4710NL-04W-B20	99484153	KDE1206PST1	99484401
3414G	99484204	125L-G-0281-010	99489403	99489405	154DC-0282-030	99489702	99489703	2410ML-05W-B60	99484404*	4710NL-04W-B30	99484152	KDE1206PST2	99484403
3414GL	99484206	125L-G-0282-010	99489413	99489415	154DC-0282-030	99489701	99489703	2410NL-04W-B10	99484403*	4710NL-04W-B40	99484152	KDE1206PST3	99484403
3414GM	99484205	125L-G-2281-090	99487403	99487405	154DC-0281-030	99489702	99489703	2410NL-04W-B20	99484403*	4710NL-04W-B50	99484151	KDE1208PBT1-6	99484351
3414L	99484256	125L-G-2282-010	99487413	99487415	154DC-0282-030	99489701	99489703	2410NL-04W-B30	99484403*	4710NL-05W-B10	99484156	KDE1208PBT2-6	99484352
3414M	99484256	125L-G-2281-010	99489403	99489405	180DH-1LP31-000		99484602	2410NL-04W-B40	99484401*	4710NL-05W-B20	99484156	KDE1208PBT3-6	99484353
3906	99487112*	125XL-0282-010	99489413	99489415	180DL-1LP31-000		99484602	2410NL-04W-B50	99484401*	4710NL-05W-B30	99484155	KDE1208PST1-6	99484301
3906L	99487112*	125XL-2281-030	99487403	99487405	180DM-1LP31-000		99484602	2410NL-05W-B10	99484404*	4710NL-05W-B40	99484155	KDE1208PST2-6	99484302
3906M	99487112*	125XL-2282-090	99487413	99487415	181DH-1LP31-000		99484403	2410NL-05W-B20	99484404*	4710NL-05W-B50	99484154	KDE1208PST3-6	99484303
3956	99489102	125XR-0281-010	99489401	99489403	181DH-2LP31-000		99484404	2410NL-05W-B30	99484404*	4715FS-12T-B0	99489413	KDE1209PBT1-6	99484251
3956L	99489102	125XR-0282-010	99489411	99489413	181DL-1LP31-000		99484403	2410NL-05W-B40	99484404*	4715FS-12T-B10	99489413	KDE1209PBT2-6	99484252
3956M	99489102	125XR-2281-010	99487401	99487403	181DM-1LP31-000		99484403	2410NL-05W-B50	99484404*	4715FS-12T-B20	99489413	KDE1209PBT3-6	99484253
4212	99484052	125XR-2282-010	99487411	99487413	181DM-2LP31-000		99484404	3110NL-04W-B10	99484353	4715FS-12T-B30	99489411	KDE1209PST1-6	99484201
4212GM	99484004	126L-F-0181-000	99486904*		225DH-1LP11-000		99484055	3110NL-04W-B20	99484353	4715FS-12T-B40	99489411	KDE1209PST2-6	99484202
4212L	99484054	126L-F-0182-000		99486914*	225DL-2LP11-000		99484055	3110NL-04W-B30	99484352	4715FS-12T-B50	99489411	KDE1209PST3-6	99484203
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4500AX	99487411	126LH-2181-000	99486904		280DH-1LP11-000		99484601*	3110NL-05W-B50	99484354	4715ML-05W-B30	99484056	KDE1212PMS3-6A	99484004
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4580AX	99487401	129L-G-2281-010	99487403	99487405	98DH-1LP31-000		99484106	3115PS-12T-B30	99486914*	4715PL-04W-B30	99484053	KDE2408PST1-6	99484404
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4580Z	99487403	129XL-0281-010	99489403	99489405	98DL-1LP31-000		99484106	3610NL-04W-B20	99484253	4715PL-05W-B30	99484057	KDE2408PST3-6	99484305
4580ZW	99487405	129XL-0282-010	99489413	99489415	98DL-2LP31-000		99484106	3610NL-04W-B30	99484252	4715PS-12T-B10	99489413	KDE2408PST4-6	99484306
4600AX	99487411	129XL-2281-010	99487403	99487405	98DM-1LP31-000		99484106	3610NL-04W-B40	99484251	4715PS-12T-B20	99487490	KDE2409PBT1-6	99484254
4600N	99487411	129XL-2282-010	99487413	99487415	98DM-2LP31-000		99484106	3610NL-04W-B50	99484251	4715PS-12T-B30	99487490	KDE2409PBT2-6	99484255
4600VX	99487411	129XR-0281-010	99489401	99489403	98XC-0181-000		99489301	3610NL-04W-B50	99484254			KDE2409PBT3-6	99484256
4600X	99487411	129XR-0282-010	99489411	99489413	98XC-2181-000		99489301	Toyo	Crouzet	Toyo		KDE2409PST1-6	99484204
4600XP	99487411	129XR-2181-010	99487401	99487403	98XH-0181-000		99489301	TAC12025230HT	99484301	USTF1203812HW	99484051	KDE2409PST2-6	99484205
4600Z	99487411	129XR-2282-010	99487411	99487413	98XH-2181-000		99489301	TAC12025230MT	99484301	USTF1203812LW	99484054	KDE2409PST3-6	99484206
4600ZX	99487410	141LS-0281-010	99489401										