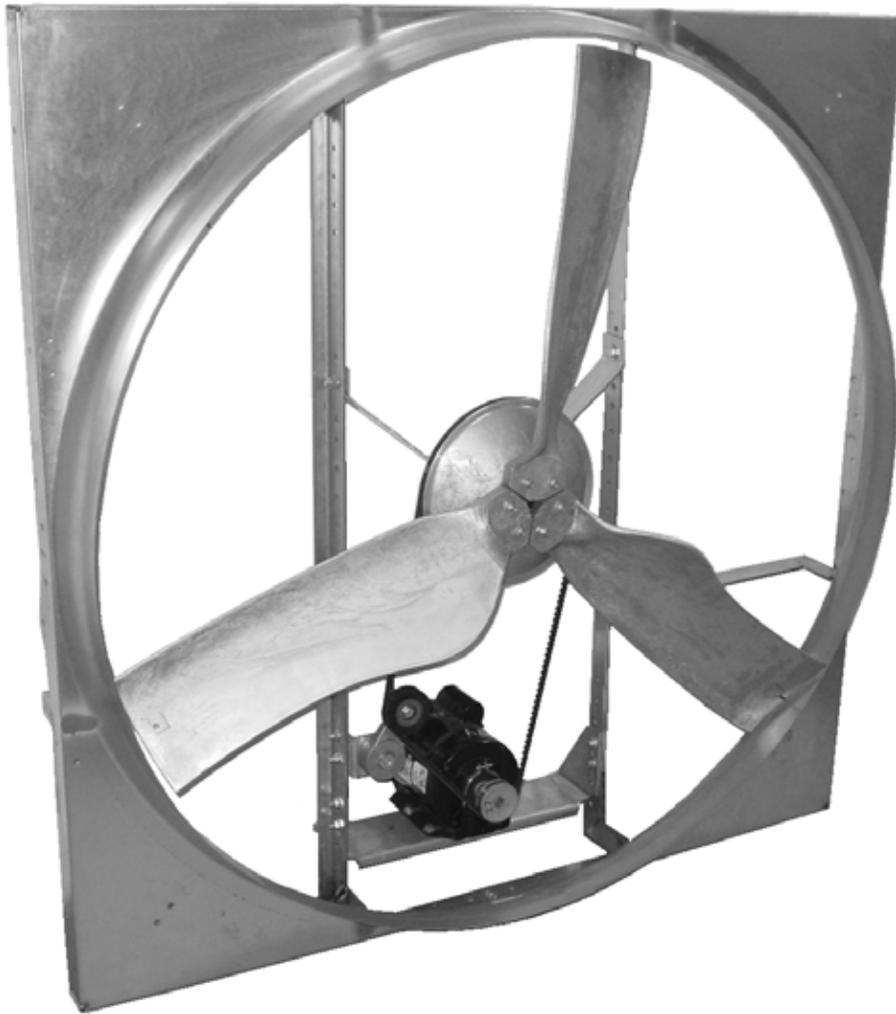


# CONTROLLED ENVIRONMENT SYSTEMS FOR FARM BUILDINGS



FARM  
BUILDING  
VENTILATION

TYPE  
**NBC**  
FANS



**FARM PRODUCTS DIVISION**

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# Coolair Means Performance with Cast Aluminum Airfoil NBC Fans



**NBC54**

Now you can buy Coolair quality and our unique blade design at a savings to you and your customers. Type NBC fans are the answer to your ventilation requirements. We utilize our innovative drive assembly which applies power through V-belts directly to the propeller. Blade load is concentrated directly over the bearings for more economical operation and longer bearing life. Type NBC fans feature cast aluminum airfoil blades secured to a cast aluminum hub. This unique blade assembly has been engineered to provide durability, corrosion resistance, and optimum efficiency.

Our use of quality materials and precise engineering techniques in constructing blade assemblies assures you of years of quiet, trouble-free service. When economy is measured in terms of cubic feet of air per minute per dollar invested, Coolair fans are today's best investment. Coolair uses only the most efficient ball bearing, totally enclosed motors available. Coolair provides

recommendations on your specific needs for confinement rearing of poultry, hogs, and other livestock. Contact us with your particulars.

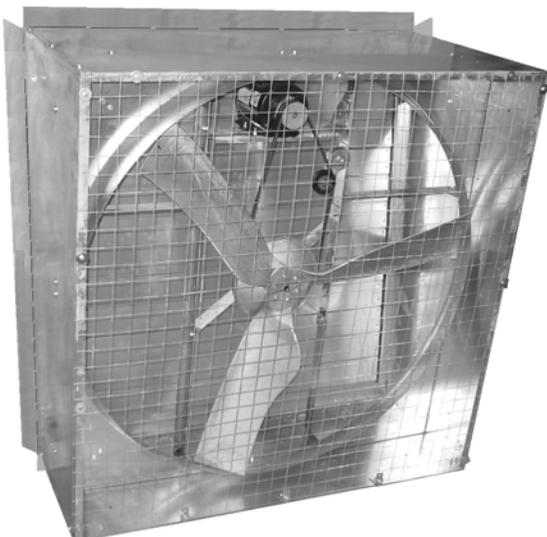
AMERICAN COOLAIR CORPORATION certifies that the performance data for the type NBC circulator fan models shown below is based on tests conducted in an accredited laboratory in accordance with ANSI/AMCA Standard 230-99.

## NBC Circulator Fan

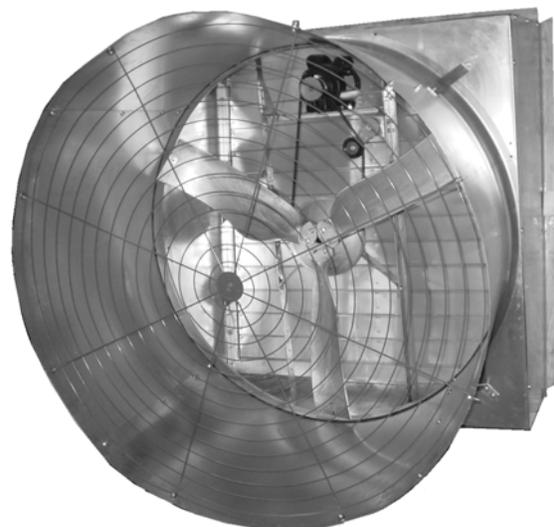
Fan Model	Fan Size	Motor HP	Fan RPM	CCFM	CCFM/Watt	Thrust, lbf	Thrust Eff., lbf/kW
NBCB52L	52	1	481	33,598	28.6	24.7	21.0
NBCB52M		1 1/2	553	38,890	22.8	33.3	19.5
NBCB52N Δ		2	589	42,148	21.4	38.6	19.6
NBC54L	54	1	452	38,014	32.3	27.8	23.6
NBC54M		1 1/2	485	40,657	29.4	31.8	23.0
NBC54N Δ		2	535	44,852	24.2	38.7	20.9

Δ - 3-Phase Motor

## MNBC



## MNBCC



# PERFORMANCE RATINGS

The performance ratings listed below were obtained through testing by the Bioenvironmental and Structural Systems Lab (BESS Lab) at the University of Illinois. All fans were tested with a shutter and discharge guard, and some may also include an optional discharge cone as noted in the fan description. The fan housing was mounted flush to the test chamber face, as in an actual building installation. Power measurements were taken on the fan/motor combination and include motor efficiency and drive losses.



## NBC Fan with Slope Wall Housing, Aluminum Inlet Shutter & Guard

Cubic Feet per Minute (CFM) at Static Pressure														
Fan Model	Fan Size	BESS Lab Test #	Motor HP	Fan RPM @ .05"	0" S.P.		.05" S.P.		.10" S.P.		.15" S.P.		.20" S.P.	
					CFM	CFM/Watt	CFM	CFM/Watt	CFM	CFM/Watt	CFM	CFM/Watt	CFM	CFM/Watt
MNBC36J	36	06190	1/2	759	10,916	22.4	10,039	20.5	8,997	18.4	7,770	16.0	4,366	9.0
MNBC36K		06194	3/4	885	12,722	17.4	11,931	16.1	11,132	15.1	10,305	14.0	9,367	12.8
MNBC36L		06196	1	1025	14,762	13.1	14,027	12.5	13,357	11.9	12,665	11.4	11,903	10.7
MNBC36J Δ		06191	1/2	765	11,022	21.0	10,117	19.2	9,102	17.3	7,958	15.2	5,085	9.8
MNBC36K Δ		06192	3/4	885	12,735	16.6	11,945	15.6	11,115	14.5	10,234	13.6	9,347	12.4
MNBC36L Δ		06197	1	1022	14,628	13.2	13,962	12.5	13,289	11.9	12,580	11.3	11,827	10.6
MNBC52LE	52	11412	1	477	24,000	21.6	22,400	19.9	20,700	18.1	18,400	16.2	12,900	11.6
MNBC52L		11413	1	502	25,200	19.3	23,800	17.8	22,000	16.4	20,100	14.9	17,200	13.0
MNBC52M		11414	1 1/2	549	27,900	17.0	26,400	15.9	24,900	14.8	23,200	13.8	21,300	12.7
MNBC52LE Δ		11411	1	487	24,500	23.3	23,000	21.5	21,200	19.7	19,100	17.7	15,500	14.6
MNBC52L Δ		11410	1	514	25,800	20.9	24,400	19.4	22,700	17.9	20,800	16.4	18,900	15.0
MNBC52M Δ		11409	1 1/2	560	28,200	18.0	26,900	17.0	25,400	15.8	23,800	14.8	21,900	13.6

## NBC Fan with Slope Wall Housing, Aluminum Inlet Shutter, Cone & Guard

MNBCC36J	36	06206	1/2	758	12,376	26.1	11,373	23.5	10,185	20.5	8,817	18.0	6,673	14.4
MNBCC36K		06201	3/4	886	14,346	19.7	13,572	18.3	12,665	15.4	11,624	15.4	10,479	14.0
MNBCC36L		06199	1	1025	16,560	15.2	15,943	14.5	15,188	13.7	14,289	12.8	13,385	11.9
MNBCC36J Δ		06204	1/2	765	12,343	23.6	11,416	21.3	10,178	18.3	8,908	16.6	7,046	13.5
MNBCC36K Δ		06203	3/4	886	14,283	19.7	13,586	18.0	12,568	16.5	11,551	15.0	10,383	13.2
MNBCC36L Δ		06198	1	1024	16,575	15.2	15,834	14.3	15,185	13.5	14,337	12.7	13,268	11.8
MNBCC52LE	52	11405	1	478	26,900	25.9	25,200	23.3	23,100	20.8	20,700	18.2	17,700	15.6
MNBCC52L		11404	1	505	28,700	23.6	26,900	21.4	25,000	19.2	22,700	17.1	20,000	14.9
MNBCC52M		11403	1 1/2	551	31,200	20.4	29,600	18.8	27,900	17.2	26,000	15.7	23,900	14.2
MNBCC52LE Δ		11406	1	488	27,500	28.2	25,700	25.2	23,700	22.5	21,500	19.9	18,700	17.3
MNBCC52L Δ		11407	1	514	29,200	25.5	27,400	23.0	25,400	20.8	23,500	18.8	21,000	16.6
MNBCC52M Δ		11408	1 1/2	561	31,800	21.7	30,200	20.2	28,500	18.6	26,800	17.0	24,800	15.5
MNBCC54L	54	10239	1	401	27,300	33.6	25,300	29.0	23,300	25.6	20,800	22.0	17,500	18.2
MNBCC54L		10238	1	430	29,300	29.6	26,900	25.6	25,600	23.0	23,200	20.2	20,600	17.5
MNBCC54M		10236	1-1/2	462	31,600	26.5	29,800	23.7	28,100	21.5	26,100	19.3	24,000	17.3
MNBCC54M		10237	1-1/2	485	33,100	24.5	31,600	22.4	29,800	20.2	28,000	18.4	25,900	16.5
MNBCC54L Δ		10240	1	405	27,600	35.8	25,600	31.0	23,700	27.2	21,200	23.6	18,100	19.8
MNBCC54L Δ		10241	1	436	29,700	31.2	27,900	27.6	26,000	24.3	24,100	21.8	21,400	18.9
MNBCC54M Δ		10242	1-1/2	466	31,800	28.3	30,200	25.3	28,400	22.7	26,500	20.4	24,500	18.4
MNBCC54M Δ		10243	1-1/2	491	33,500	25.7	31,900	23.2	30,200	21.0	28,600	19.2	26,600	17.5

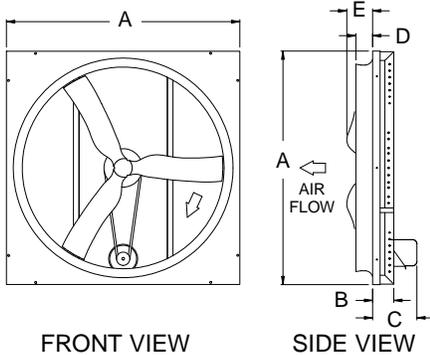
Δ -- 3-Phase Motor

**WARNING:** If these ventilation products are used in agricultural structures to support life where failure of the ventilation could result in loss or injury, the user must provide an adequate back-up ventilation system and a failure alarm system. The user must accept the risk of such loss or injury from failure of the ventilation system.

# DIMENSIONS AND DRAWINGS

## Type NBC Fans

Fan Model	A	B	C	D	E
NBC36	44	3 7/8	10 1/2	3 7/8	4 3/8
NBCB52	56		12 5/8		5 1/4
NBC54	58				

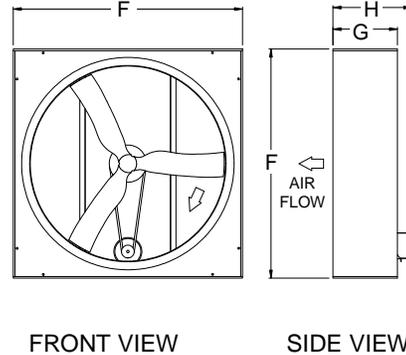


FRONT VIEW

SIDE VIEW

## Type NBC Fans in Waferwood

Fan Model	F	G	H
NBC36WW	44 7/8	11 7/8	15 1/2
NBCB52WW	56 7/8	15 3/4	22 3/4

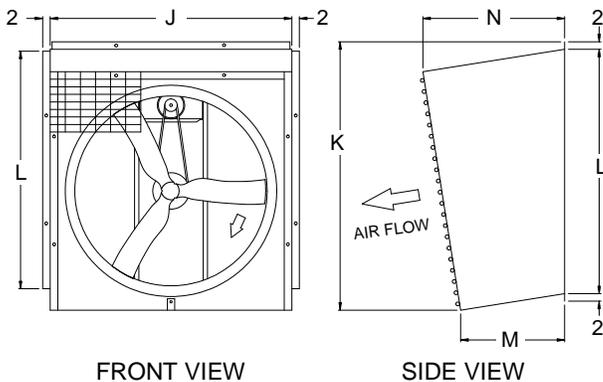


FRONT VIEW

SIDE VIEW

## Type NBC FANS In Slope Wall Housing

Fan Model	J	K	L	M	N
MNBC36	44 3/8	50 5/16	44 7/8	21 7/8	28 3/4
MNBC52	56 3/8	62 3/8	57	21 3/16	30

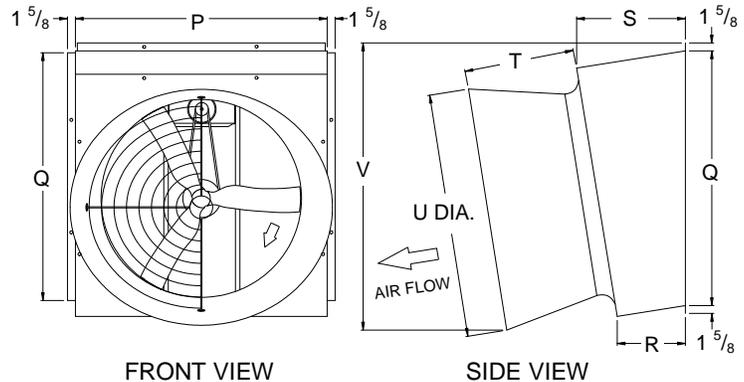


FRONT VIEW

SIDE VIEW

## Type NBC Fans in Slope Wall Housing with Cone

Fan Model	P	Q	R	S	T	U	V
MNBCC36	44 3/8	44 7/8	19 3/8	26 5/16	24 1/2	43 5/8	54 1/2
MNBCC52	56 3/8	57	16 5/16	25 1/8	35	64 3/4	70 7/8
MNBCC54	58 5/8	58 7/8	15	20 1/8	41 1/4	70 1/4	71 1/8



FRONT VIEW

SIDE VIEW

**Rough Opening:** Add 1/2" (1" for Size 54) To 'J' or 'P' for **Width**  
For 2" Wall: Add 3/4" (1" for Size 54) to 'L' or 'Q' for **Height**

For 4" Wall: Add 1 1/4" to 'L' or 'Q' For **Height**  
For 6" Wall: Add 1 1/2" to 'L' or 'Q' For **Height**

### WARNING

### CAUTION



**DO NOT** INSTALL FAN WITH MOVING PARTS WITHIN 8 FEET OF FLOOR OR GRADE LEVEL WITHOUT A GUARD THAT COMPLIES WITH OSHA REGULATIONS. **DO NOT** USE UNLESS ELECTRICAL WIRING COMPLIES WITH ALL APPLICABLE CODES. **DO NOT** WIRE WITHOUT PROVIDING FOR A POWER SOURCE DISCONNECT AT THE FAN ITSELF. **DO NOT** SERVICE EXCEPT BY A QUALIFIED MAINTENANCE TECHNICIAN AND ONLY AFTER DISCONNECTING THE POWER SOURCE. FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS INJURY OR DEATH.

### Limited Warranty

In the sale of its products American Coolair Corporation agrees to correct by repairs or replacement any defects in workmanship or material which may develop under proper or normal use during the period of one year from date of shipment from factory. Any product or part proving upon American Coolair's examination to be defective during limited warranty period will be replaced or repaired, at American Coolair's option. f.o.b. factory, without charge. Deterioration or wear caused by chemicals, abrasive action or excessive heat shall not constitute defects. Motors are guaranteed only to the extent of the manufacturer's warranty. American Coolair's limited warranty does not apply to any of its products or parts that have been subject to accidental damage, misuse by the user, unauthorized alterations, improper installation or electrical wiring, or lack of proper lubrication or other service requirements established by American Coolair. Repairs or replacements provided under the above terms shall constitute fulfillment of all American Coolair's obligations with respect to limited warranty. THE LIMITED WARRANTY STATED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, STATUTORY OR IMPLIED, INCLUDING WITHOUT LIMITATION THAT OF MERCHANTABILITY AND FITNESS. No liability for reinstatement cost or for any special, indirect or consequential damages of any nature is assumed or shall be imposed upon American Coolair.



FARM PRODUCTS DIVISION

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