4656 N-061

Customer specification: AGA Rangemaster
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Special features according to QMH 2-5.4.7 and company standard 1-23.00 have the following definitions:

"A" : Product features or process parameters which influence the safety of a product or the compliance of legal requirements. (Must not necessary verified and documented 100%. Standards and legal requirements must be considered.)

"FK" : Product features or process parameters which influence the fit and function of a product or which have to be controlled or documented for some other reasons (e.g. Customer requirements).

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1 General

Fan type	Fan	
Rotational direction looking at rotor	clockwise	**FK**
Airflow direction	Air intake over struts	**FK**
Bearing system	Ball bearing	
Lubrication	see sectional drawing of the bearing	
Mounting position Tolerance	any	
Balancing grade	2,5	**FK**
Impeller weight		

2 Mechanics

2.1 General

Width	119,0 mm	
Height	119,0 mm	
Depth	38,0 mm	
Diameter	0,0 mm	
Weight	0,550 kg	
Surface protection	see single part drawing of the housing, flange and impeller	
Housing material	Metal	
Impeller material	Metal	

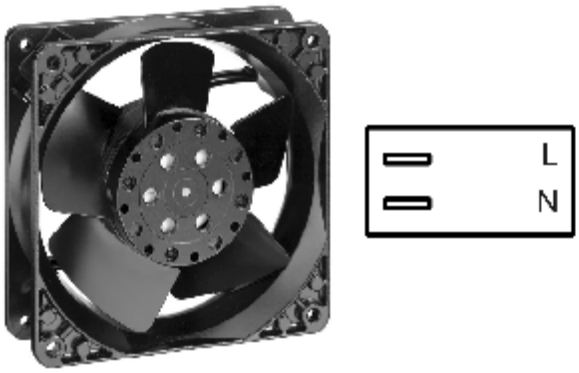
2.2 Motor

Type of motor	Shaded pole motor-extern rotor	
Diameter of the motor	40,0 mm	
Height of the motor	14,0 mm	
Operating mode	Continuous duty	
Insulation material class	F	

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2.3 Connections

Electrical connection	Plug	
Length of lead wire Tolerance		
Length of tube Tolerance		
Wire gauge (AWG)		
Insulation diameter		
Plug	see drawing	
Contact	see drawing	



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3 Operating Data

3.1 Electrical Operating Data

Measurement conditions:	Normal air density = 1,2 kg/m3; Temperature 23°C +/- 3°C; Motor axis horizontal;warm-up time before measuring 5 minutes (unless otherwise specified). In the intake and outlet area there may not be any solid obstruction within 0,5 m.

Δp = 0: corresp. to free air flow (see section 3.4)
I: corresp. to RMS line current

Features	Condition	Symbol	Values	
Frequency	Δp = 0	f	50 Hz	60 Hz
Nominal voltage Tolerance	Δp = 0	U_N	230,0 V + 6,0 % - 10,0 %	230,0 V + 6,0 % - 10,0 %
Power consumption Tolerance	Δp = 0	P	16,5 W + 5,0 % - 10,0 %	15,4 W + 5,0 % - 10,0 %
Current consumption Tolerance	Δp = 0	I	95 mA + 5,0 % - 10,0 %	90 mA + 5,0 % - 10,0 %
Speed Tolerance	Δp = 0	n	2.600 1/min +- 3,0 %	2.870 1/min +- 3,0 %

*) Attention: Marked values are "FK" features

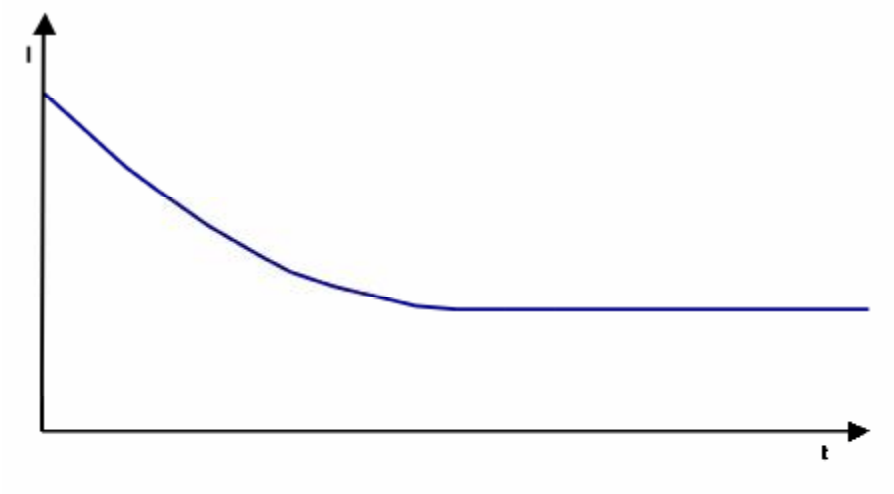
3.2 Operating Data - Electrical Interface -Output

Tacho type	None

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3.3 Electrical Features

Locked rotor protection	Impedance	**A**
Locked rotor current at Un		



3.4 Aerodynamic

Measurement conditions:
Measured with a double chamber intake rig acc. to DIN 24163 Part 3.
Normal air density = 1,2 kg/m3; Temperature 23°C +/- 3°C;
In the intake and outlet area there may not be any solid obstruction within 0,5 m.

a.) Operation condition:
2.600 1/min at free air flow Frequency:

b.) Operation condition:
2.870 1/min at free air flow Frequency:

3.5 Sound Data

Measurement conditions:
Sound pressure level: 1 Meter distance between microphone and the air intake.
Sound power level: Acc. to DIN 45635 part 38 (ISO 10302)
Measured in a semianchoic chamber with a background noise level of Lp(A) < 5 dB(A)
For further measurement conditions see section 3.4

a.) Operation condition:
2.600 1/min at free air flow Frequency:

b.) Operation condition:
2.870 1/min at free air flow Frequency:

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4 Environment

4.1 General

Min. permitted ambient temperature TU min.	-40 °C / 50 Hz -40 °C / 60 Hz	
Max. permitted ambient temperature TU max.	75 °C / 50 Hz 90 °C / 60 Hz	
Min. permitted storage temperature TL min.	-40 °C	
Max. permitted storage temperature TL max.	100 °C	

4.2 Climatic requirements*)

not specified

4.3 Mechanical requirements

not specified

4.4 EMC

not specified

5 Safety

5.1 Electrical Safety

Dielectric strength DIN EN 60950 (VDE 0805) and DIN EN 60335 (VDE 0700) A.) Type test Measuring conditions: After 48h of storage at 95% R.H. and 25°C. No arcing or breakdown is allowed! All connections together to ground. B.) Routine test Measuring conditions: At indoor climate. No arcing or breakdown is allowed! All connections together to ground.	1500 VAC / 1 Min. 1500 VAC / 1 Sec.	**A**
Insulation resistance Measuring conditions: After 48h of storage at 95% R.H. and 25°C measured with U=500 VDC for 1 min.	RI > 50 MOhm	
Air and leakage distances	2,0 mm / 1,8 mm	
Protection class	I	

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5.2 Approval Tests

CE	No
UL	No
VDE	No
CSA	No
CCC	No

The approval tests are observed to:
Maximal permitted operating voltage (see section 3.1) and max. permitted ambient temperature TU max.

6 Reliability

6.1 General

Life expectancy L10 at TU = 40 °C		
Life expectancy L10 at TU max.		

6.2 Additional Data

not specified

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