

AGA - AGC

SELF-PRIMING ELECTRIC PUMPS

in cast iron



Cast iron self-priming electric pumps.

APPLICATIONS

- Domestic pressure boosting
- Small-scale garden irrigation
- Washing of vehicles
- Pumping clean water in general

TECHNICAL DETAILS

- Available with brass impeller (AGA 0.60 M GO, AGA 0.75 M GO, AGA 1.00 M GO, AGA 1.00 T GO)

PUMP TECHNICAL DATA

- Maximum working pressure:
 - 6 bar for AGA 0.60-0.75-1.00
 - 10 bar for the rest of the range
- Maximum temperature of the liquid: 45°C
- Maximum suction depth: 8 m
- G1 suction connection for AGA 0.60-0.75-1.00, G1½ for the rest of the range
- G1 discharge connection

MOTOR TECHNICAL DATA

- IE2 and IE3 high energy-efficiency motors starting from 0.75kW
- Self-ventilated 2 pole asynchronous motor
- Class of insulation F
- IP44 Protection degree
- 230V ±10% 50Hz single phase voltage, 230/400V ±10% 50Hz three phase voltage
- Permanent capacitor inserted and thermo-amperometric protection with automatic rearm incorporated for the single phase motor
- Protection under user's responsibility for the three phase version

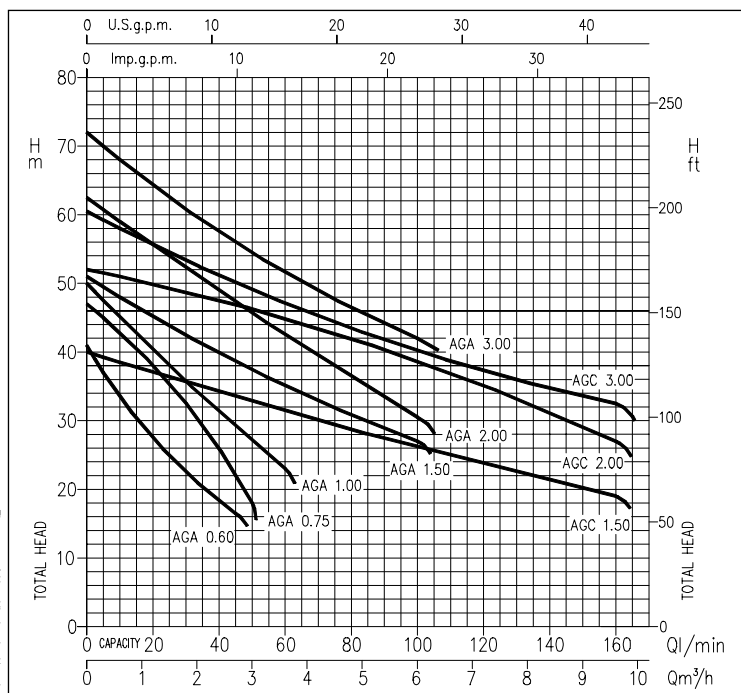
MATERIALS

- Cast iron pump casing
- Seal housing disc in AISI 304 for AGA 0.60-0.75-1.00, in cast iron integrated in motor bracket for the rest of the range
- Shaft in AISI 303 (part in contact with the liquid)
- Impeller in PPE+PS reinforced with fibreglass for AGA 0.60-0.75-1.00, in brass for the rest of the range
- Mechanical seal in Ceramic/Carbon/NBR
- Ejector and nozzle in PPE+PS reinforced with fibreglass

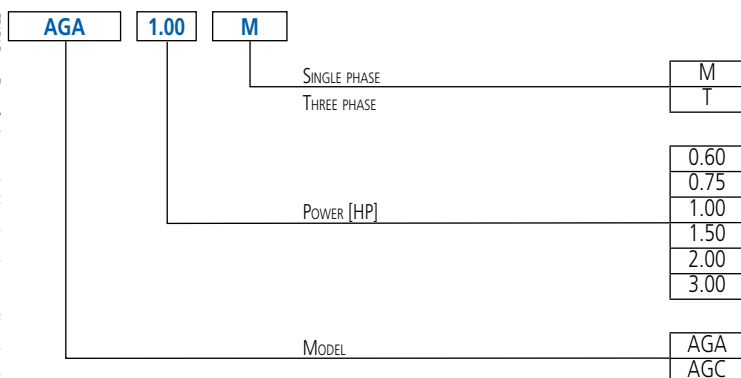
ACCESSORIES (On request)

- Electric panels
- Vessels
- Floats
- Pressure switches
- Presscomfort - Pressure regulator
- E-power - Variable speed control system
- E-drive - Frequency converter

PERFORMANCE CURVES (according to ISO 9906 Attachment A)



IDENTIFICATION CODE



The content of this publication should not be considered mandatory. EBARA Pumps Europa S.p.A. reserves the right to change the content without prior notice.

AGA - AGC

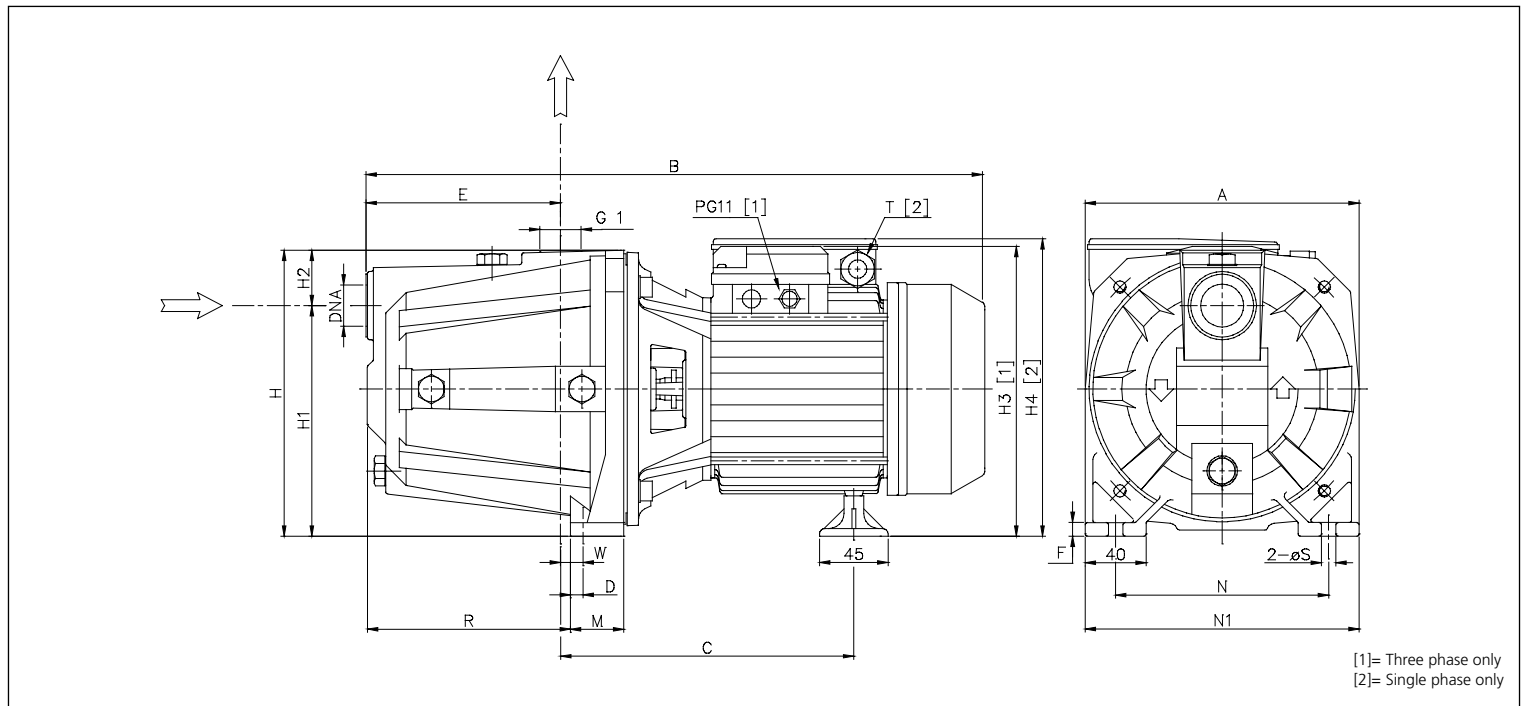
SELF-PRIMING ELECTRIC PUMPS

in cast iron

PERFORMANCE CHART

Model		P ₂		Q = Flow Rate												
Single phase 230V	Three phase 230/400V	[HP]	[kW]	l/min m ³ /h	5 0.3	10 0.6	20 1.2	30 1.8	45 2.7	50 3	60 3.6	80 4.8	100 6	130 7.8	160 9.6	
				H=Head [m]												
AGA 0.60 M	AGA 0.60 T	0.6	0.44	37.0	33.4	27.1	22.0	16.5	-	-	-	-	-	-	-	-
AGA 0.75 M	AGA 0.75 T	0.75	0.55	45.0	42.8	37.9	32.0	21.9	18.0	-	-	-	-	-	-	-
AGA 1.00 M	AGA 1.00 T	1	0.75	47.5	45.0	40.3	35.7	29.1	27.0	23.0	-	-	-	-	-	-
AGA 1.50 M	AGA 1.50 T	1.5	1.1	-	48.0	45.1	42.4	38.6	37.4	35.1	30.8	27.0	-	-	-	-
AGA 2.00 M	AGA 2.00 T	2	1.5	-	59.0	55.6	52.2	47.3	45.7	42.5	36.4	30.5	-	-	-	-
-	AGA 3.00 T	3	2.2	-	68.0	64.3	60.8	55.9	54.4	51.6	46.4	42.0	-	-	-	-
AGC 1.50 M	AGC 1.50 T	1.5	1.1	-	38.5	37.0	35.6	33.5	32.7	31.4	28.7	26.1	22.4	19.0	-	-
AGC 2.00 M	AGC 2.00 T	2	1.5	-	51.0	49.9	48.8	46.9	46.3	44.9	42.0	38.7	33.2	27.0	-	-
-	AGC 3.00 T	3	2.2	-	58.0	55.6	53.3	50.1	49.1	47.1	43.4	40.2	35.9	32.5	-	-

DIMENSIONS



DIMENSIONS TABLE

Model	A	B	C	D	E	F	H	H1	H2	Dimensions [mm]				N	N1	R	T	V	W	S	DNA	Weight [kg]		
										H3 [1]	H4 [2]	M												
AGA 0.60 M	180	405	-	195	103	127	9	185	152	33	-	199	40	140	180	128.5	PG11	-	-	11.8	9.5	G1	12.0	-
AGA 0.60 T	180	405	-	195	103	127	9	185	152	33	1.975	-	40	140	180	128.5	-	PG11	11.8	9.5	G1	12.0	-	
AGA 0.75 M	180	405	-	195	103	127	9	185	152	33	-	199	40	140	180	128.5	PG11	-	-	11.8	9.5	G1	12.5	-
AGA 0.75 T	180	405	-	195	103	127	9	185	152	33	1.975	-	40	140	180	128.5	-	PG11	11.8	9.5	G1	12.3	-	
AGA 1.00 M	180	405	-	195	103	127	9	185	152	33	-	199	40	140	180	128.5	PG11	-	-	11.8	9.5	G1	13.8	-
AGA 1.00 T	180	405	405	195	103	127	9	185	152	33	1.975	-	40	140	180	128.5	-	M16x1.5	PG11	11.8	9.5	G1	14.8	14.8
AGA 1.50 M	220	508	-	244	10	157	10	223	170	53	-	247	48	180	220	167.5	PG13.5	-	-	15.5	9	G1½	25.5	-
AGA 1.50 T	220	495	520	244	10	157	10	223	170	53	229	-	48	180	220	167.5	-	M20x1.5	PG11	15.5	9	G1½	25.6	26.5
AGA 2.00 M	220	508	-	244	10	157	10	223	170	53	-	247	48	180	220	167.5	PG13.5	-	-	15.5	9	G1½	26.6	-
AGA 2.00 T	220	495	520	244	10	157	10	223	170	53	229	-	48	180	220	167.5	-	M20x1.5	PG11	15.5	9	G1½	27.7	28.6
AGA 3.00 T	220	508	521	244	10	157	10	223	170	53	229	-	48	180	220	167.5	-	M20x1.5	PG11	15.5	9	G1½	29.0	29.9
AGC 1.50 M	220	508	-	244	10	157	10	223	170	53	-	247	48	180	220	167.5	PG13.5	-	-	15.5	9	G1½	25.5	-
AGC 1.50 T	220	495	520	244	10	157	10	223	170	53	229	-	48	180	220	167.5	-	M20x1.5	PG11	15.5	9	G1½	27.4	28.3
AGC 2.00 M	220	508	-	244	10	157	10	223	170	53	-	247	48	180	220	167.5	PG13.5	-	-	15.5	9	G1½	26.6	-
AGC 2.00 T	220	508	521	244	10	157	10	223	170	53	229	-	48	180	220	167.5	-	M20x1.5	PG11	15.5	9	G1½	28.6	29.5
AGC 3.00 T	220	508	521	244	10	157	10	223	170	53	229	-	48	180	220	167.5	-	M20x1.5	PG11	15.5	9	G1½	29.0	29.9

[1]= Three phase only
[2]= Single phase only

* Models with IE3 motor only

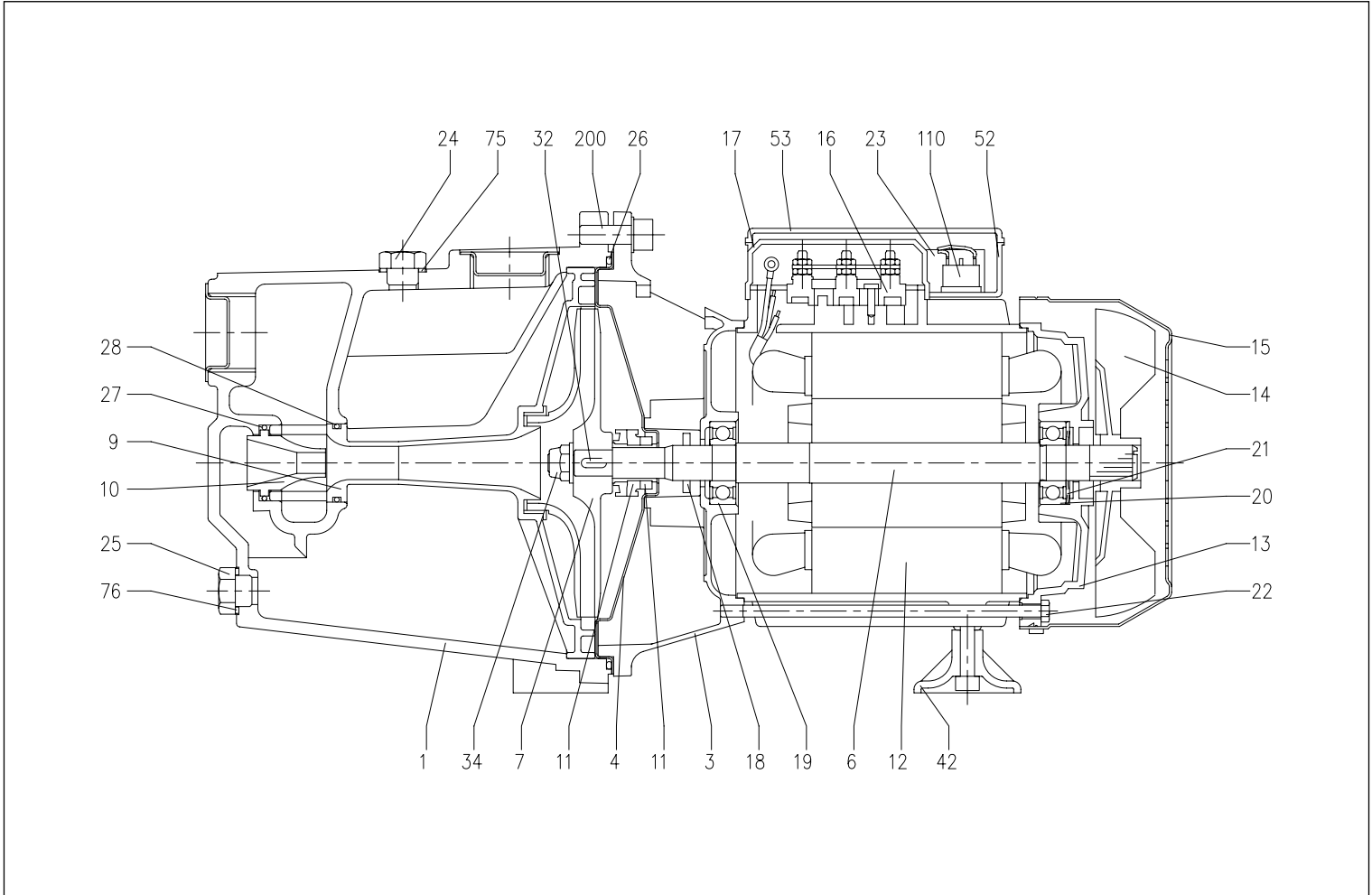
The content of this publication should not be considered mandatory. EBARA Pumps Europe S.p.A. reserves the right to change the content without prior notice.

AGA - AGC

SELF-PRIMING ELECTRIC PUMPS

in cast iron

SECTIONAL VIEW



MATERIALS TABLE

Ref.	Name	Material	Ref.	Name	Material
1	Pump body	Cast iron	21	Adjustment ring	Steel C70
3	Motor support	[7]	22	Tie-rod	Galvanised Fe 42
4	Seal housing disc	[6]	23	Capacitor [1]	-
6	Rotor shaft	AISI 303 (part in contact with the liquid)	24	Filler cap	Brass
7	Impeller	[4]	25	Drain plug	Brass
9	Nozzle + Venturi pipe	PPE+PS reinforced with fibreglass	26	O-Ring	NBR
10	Venturi Nozzle	PPE+PS reinforced with fibreglass	27	O-Ring	NBR
11	Mechanical seal	Ceramic/Carbon/NBR	28	O-Ring	NBR
12	Motor casing with stator	-	32	Key	AISI 316
13	Motor cover	Aluminium	34	Impeller nut [3]	AISI 304
14	Fan	PA6	42	Foot	PP
15	Fan cover	Galvanised Fe P04	52	Box for terminal box [1]	ABS
16	Terminal Box	-	53	Terminal box cover [8]	ABS
17	Terminal Box cover [2]	Aluminium	75	Washer	Aluminium
18	Spray protector ring	NBR	76	Washer	Aluminium
19	Bearing (pump side)	-	110	Motor protector [5]	-
20	Bearing (motor side)	-	200	Screw (pump body)	Zn. stainless steel Cl. 8.8 ISO 89 8-1

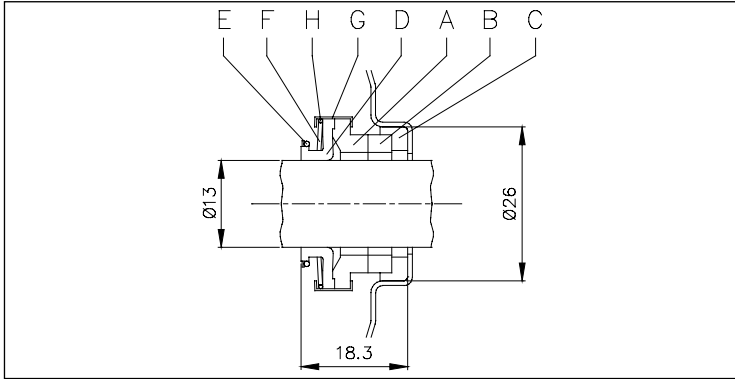
[1]= For single phase only
 [2]= For three phase only
 [3]= For the version with brass impeller only
 [4]= PPE+PS reinforced with fibreglass for AGA 0.60 - 0.75 - 1.00, brass for the rest of the range
 [5]= For single phase only AGA - AGC 1.50 - 2.00
 [6]= AISI 304 per AGA 0.60 - 0.75 - 1.00, in cast iron integrated on motor support for the rest of the range
 [7]= Cast iron for AGA - AGC 1.50 - 2.00 - 3.00, aluminium for AGA 0.60 - 0.75 - 1.00
 [8]= With gasket in NBR for AGA 0.60 - 0.75 - 1.00 single phase models

The content of this publication should not be considered mandatory. EBARA Pumps Europe S.p.A. reserves the right to change the content without prior notice.

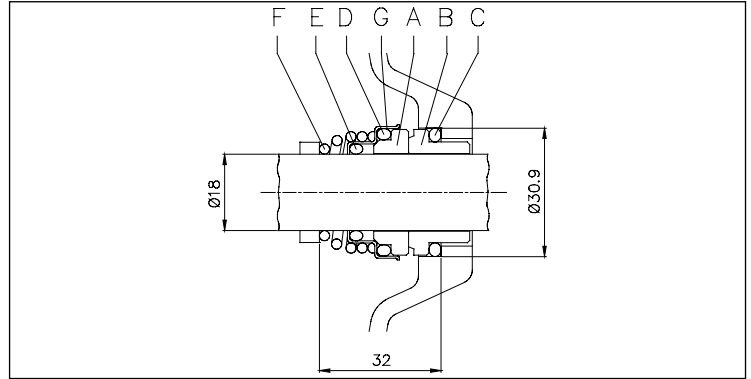
AGA - AGC

SELF-PRIMING ELECTRIC PUMPS in cast iron

MECHANICAL SEAL for AGA 0.60 - 0.75 - 1.00



MECHANICAL SEAL for AGA - AGC 1.50 - 2.00 - 3.00



MATERIALS TABLE for AGA 0.60 - 0.75 - 1.00

Ref.	Name	Material
A	Rotating part	Carbon
B	Fixed part	Ceramic
C	Gasket	NBR
D	Diaphragm	NBR
E	Ring	AISI 304
F	Spring	AISI 304
G	Structure/frame	AISI 304
H	Retainer ring	AISI 304

MATERIALS TABLE for AGA - AGC 1.50 - 2.00 - 3.00

Ref.	Name	Material
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

ELECTRIC DATA TABLE

Model Single phase 230V	Model Three phase 230/400V	P ₂		Efficiency		Capacitor		Efficiency (%)			P ₁		Absorbed Current [A]		
		[HP]	[kW]	Single phase	Three phase	Single phase μF	V _c	50%	75%	100%	Single phase [kW]	Three phase [kW]	Single phase 230V	Three phase 230V 400V	
AGA 0.60 M	AGA 0.60 T	0.6	0.45	-	-	12.5	450	-	-	-	0.70	0.65	3.1	2.1	1.2
AGA 0.75 M	AGA 0.75 T	0.75	0.55	-	-	14	450	-	-	-	0.92	0.84	4.0	2.8	1.6
AGA 1.00 M	AGA 1.00 T	1	0.75	-	IE2	20	450	77.2	80.9	81.3	1.15	0.92	5.5	2.9	1.7
-	-	1	0.75	-	IE3	-	-	80.9	82.3	82.1	-	0.91	-	3.0	1.7
AGA 1.50 M	AGA 1.50 T	1.5	1.1	-	IE2	40	450	79.7	82.5	83.0	1.65	1.80	8.1	5.5	3.2
-	-	1.5	1.1	-	IE3	-	-	83.0	85.8	85.6	-	1.77	-	5.8	3.3
AGA 2.00 M	AGA 2.00 T	2	1.5	-	IE2	40	450	79.7	82.5	83.0	2.10	2.05	9.8	6.0	3.5
-	-	2	1.5	-	IE3	-	-	83.0	85.8	85.6	-	1.77	-	5.8	3.3
-	AGA 3.00 T	3	2.2	-	IE2	-	-	83.0	84.4	83.8	-	2.63	-	8.1	4.7
-	-	3	2.2	-	IE3	-	-	86.2	87.0	86.0	-	2.55	-	8.2	4.7
AGC 1.50 M	AGC 1.50 T	1.5	1.1	-	IE2	40	450	79.7	82.5	83.0	1.80	1.80	8.6	5.5	3.2
-	-	1.5	1.1	-	IE3	-	-	83.0	85.8	85.6	-	1.77	-	5.8	3.3
AGC 2.00 M	AGC 2.00 T	2	1.5	-	IE2	40	450	80.3	83.4	83.8	2.30	2.23	10.5	7.4	4.3
-	-	2	1.5	-	IE3	-	-	84.2	86.8	86.9	-	2.01	-	7.1	4.1
-	AGC 3.00 T	3	2.2	-	IE2	-	-	83.0	84.4	83.8	-	2.63	-	8.1	4.7
-	-	3	2.2	-	IE3	-	-	86.2	87.0	86.0	-	2.55	-	8.2	4.7

NOISE DATA TABLE

Model Single phase 230V	Model Three phase 230/400V	P ₂		L _{pa} - dB(A)*
		[HP]	[kW]	
AGA 0.60 M	AGA 0.60 T	0.6	0.45	71
AGA 0.75 M	AGA 0.75 T	0.75	0.55	71
AGA 1.00 M	AGA 1.00 T	1	0.75	71
AGA 1.50 M	AGA 1.50 T	1.5	1.1	76
AGA 2.00 M	AGA 2.00 T	2	1.5	76
-	AGA 3.00 T	3	2.2	76
AGC 1.50 M	AGC 1.50 T	1.5	1.1	76
AGC 2.00 M	AGC 2.00 T	2	1.5	76
-	AGC 3.00 T	3	2.2	76

* Average noise level measured at 1 m from the motor pump.
Tolerance ± 2.5 dB.