

# MOTOR DATA SHEET

## Motor data

Amacan P / Amacan S



Motor type : **1406UAG**  
 Material version : G [cast iron]  
also for motors -G1,-G2,-GH,-H  
 Nominal voltage : 575 [V]  
 Frequency : 60 [Hz]  
 Rated power : 165 [hp]  
 Service factor : 1.10  
 Rated current : 192 [A]  
 Nominal Speed : 1180 [rpm]  
 Starting/full load current : 5.5  
 Max. water temperature : 104 [°F]  
 Max. air temperature at the cable : 104 [°F]

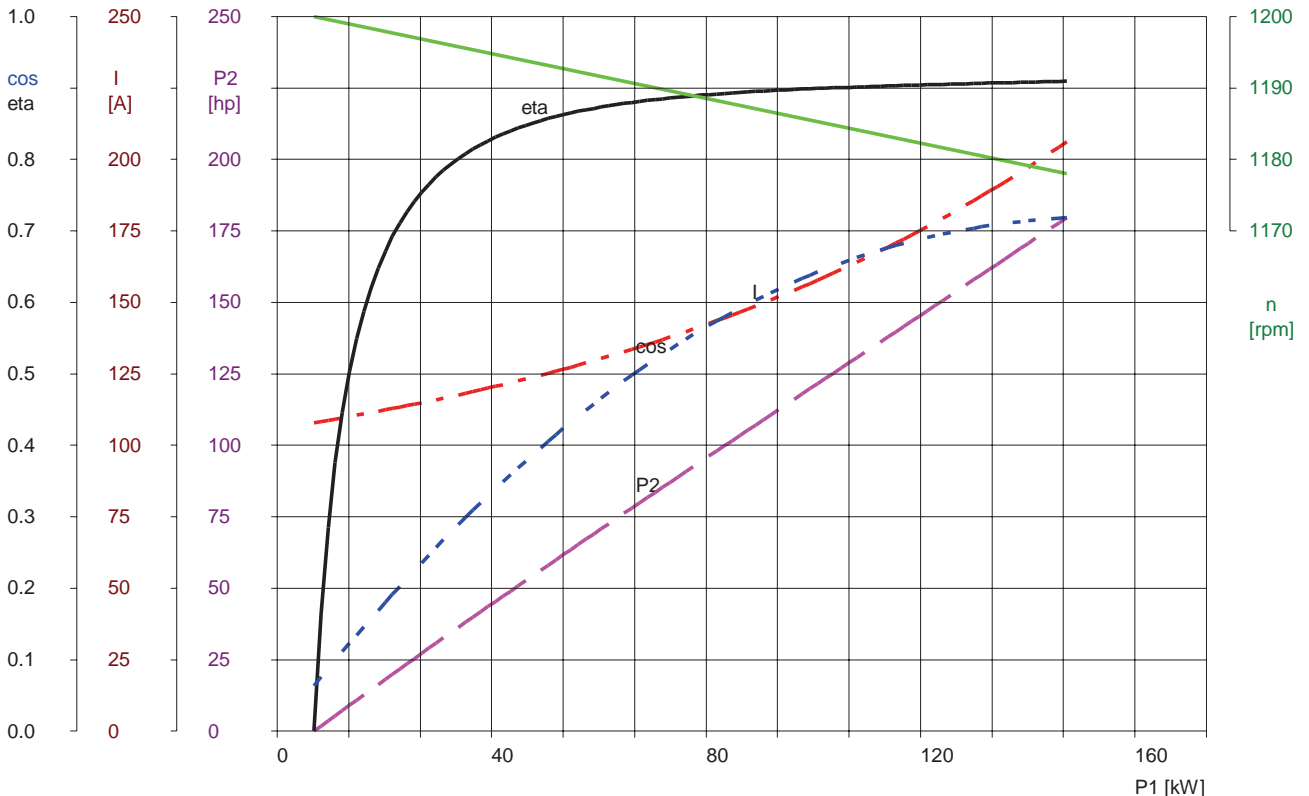
Load	n [rpm]	P1 [kW]	P2 [hp]	eta [%]	cos phi	I [A]
4/4	1180	135.5	165.00	90.8	0.71	192
3/4	1185	103.0	123.75	89.6	0.65	159
2/4	1190	69.0	82.50	89.2	0.51	136
1/4	1195	38.0	41.25	80.9	0.32	119

Maximum 10 starts per hour starting mode: direct

Cable norm/ Cable selection according to: CSA

3 Cables AWG 2-4 [4x35] Ø 34.5-38.5 mm  
 1 Control cable AWG 16-10 [10x1.5] Ø 18.5-21.0 mm

Descriptions : P1 [kW] ..... electric power P2 [hp] ..... mechanical power  
 eta [%] ..... Efficiency cos phi ..... Power factor  
 I [A] ..... Current n [rpm] ..... Speed



Tolerances of the electrical parameters according to IEC 60034-1.

CITY OF WINNIPEG Project # 66303  
 NEWPCC UV DISINFECTION PROJECT  
 KSB FILE SO5466

User: habefra  
 date: 2005-06-21

**PUMP DATA SHEET**



**Serial No. : 9970886438/000100**

**City of Winnipeg - NEWPCC  
KSB SO5466**

**Type: Amacan PB4 700-470/1406 UAG1**

**Units: 6 ( 5 installed pumps + 1 spare pump)**

**special tag numbers: U-010/P-1; U-020/P-2; U-030/P-3; U-040/P-4; U-050/P-5;**  
**no special tag for the spare pump !!!**

**spare parts: 2 x set of mech. Seals; 2 x set of bearings; 2 x set of gaskets; 2 x o-ring for discharge column; 2 x casing wear ring**  
**1 x propeller**

**\*\*\* OPERATIONAL DATA\*\*\***

**(1) specified design duty: 740 l/s @ 6m**  
**efficiency: 82%**  
\*\*\*\*\*  
**(2) min. capacity: 486 l/s @ 6m (47 KW)**  
**(3) max. capacity: 995 l/s @ 6m (89 KW)**  
**(4) special requirements see "tests" !!!**  
\*\*\*\*\*  
**pump power: 61.1 KW**  
**motor power: 123 KW**  
**rot. speed: 1180 1/min**  
**density: 1000 KG/M3**  
**viscosity: 1,002\*10-6 MM2/S**

**\*\*\*KIND OF INSTALLATION\*\*\***

**>>> BU**  
**medium: municipal raw sewage screend by fine bar screen of 20mm**

**\*\*\*PUMP DESIGN\*\*\***

**propeller diameter: \*470\***  
**free passage: 115mm**  
**disch. column diameter: 711mm**  
**14 degree pitch; imp. no. 470**

**\*\*\*COATING\*\*\***

**surface treatment: SA 2 1/2, SIS 055900;**  
**primer: iron oxid 35 to 40µm**  
**finish: alkyd-acrylate hydrovarnish appr. 70µm**  
**!!! Top coat must be 150micron !!!**

**\*\*\*MOTOR VERSION\*\*\***

**voltage: 575 V**  
**frequency: 60 HZ**  
**nominal current: 191 A**  
**starting current: 1050 A**  
**motor speed: 1180 1/min**  
**starting type: Direct**  
**protection: IP68**  
**insulation class: F**  
**thermal motor protection: PTC**  
**thermistor release devise:**  
**expl. proof: non.flameproof**

**cable entry: cast in longitud. watertight**  
**cable length: 12 M**  
**power cable: CSA 2-4x3 (min-max 34.5-38.5mm)**  
**control cable: CSA 16-10 (min-max 18.5-21.0mm)**  
**suitable for VFD operation !!!!**

**moisture protection: Yes**  
**bearing temp. sensor: 2xPT100**  
**leakage monitoring: float switch**

**\*\*\*MATERIALS\*\*\***

**difuser casing: A48Class30B CI**  
**inlet nozzle: A48Class30B CI**  
**propeller: A743 CD 4 MCU**  
**mech. seal / pump side: Standard**  
**mech. seal /motor side: Standard**  
  
**motor casing: A48Class30B CI**  
**shaft: A276Type420 SS**  
**sealing elements: NBR**  
**casing wearing (stand.design): A276Type420**

**bolts: SS**  
**cable sheat: NSSHou J 4x35+J10x1.5**

**\*\*\*ACCESSORIES\*\*\***  
**carrier cable incl. unit sections and carrier cable 10.3m**  
**eye and shackle: L = 12800mm >> 5 x !!!**  
**incl. lifting bail !!!**

**\*\*\*TESTS\*\*\***

**witnessed performance test acc. to H.I. standard ; Level A**

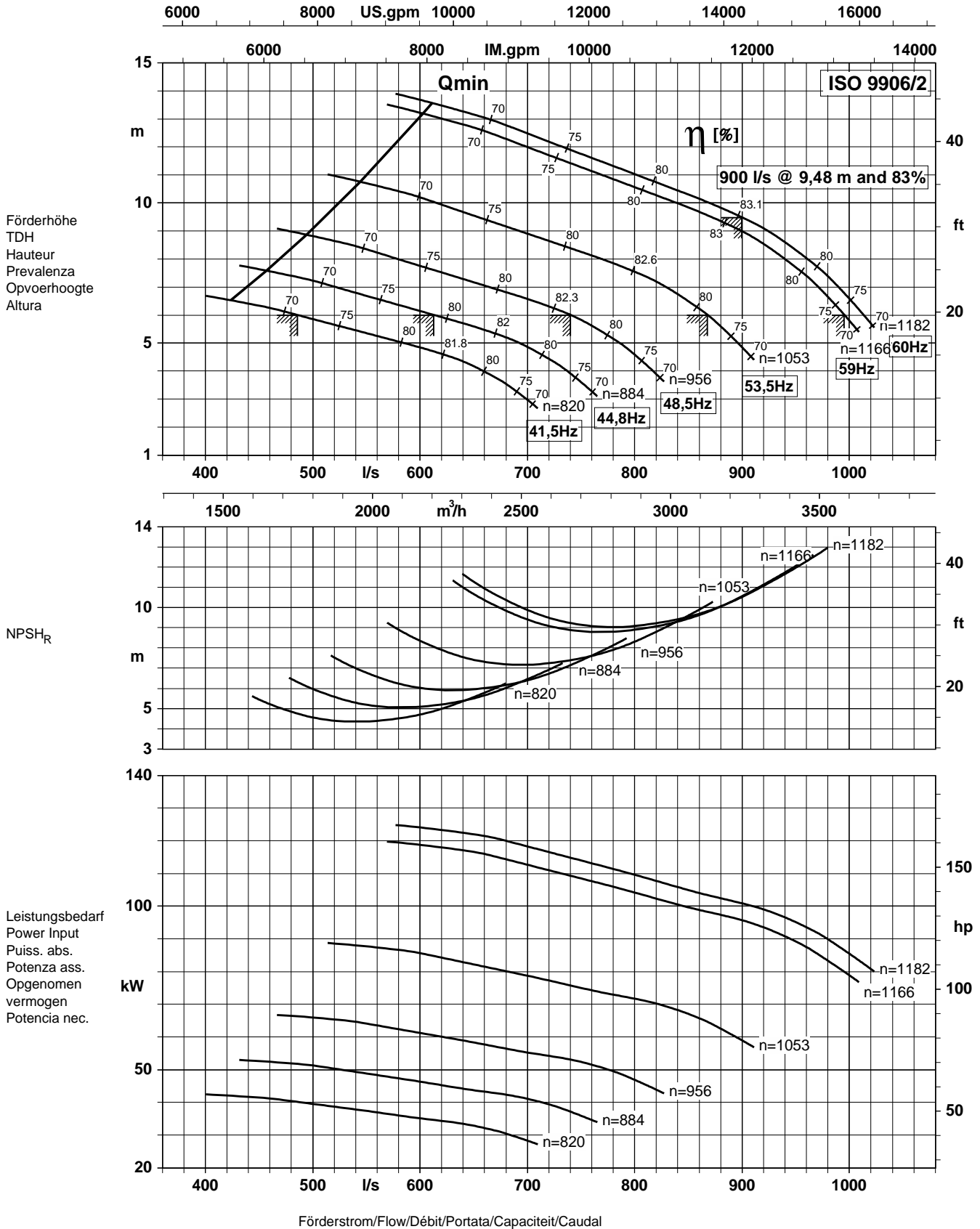
**\*\*\*DOCUMENTS\*\*\***

**o & m manual: qty./language 1/english**

**following points has to be meassured (vfd operation):**

- (1) 486.1 l/s @ 6m; see attached table !!!**
- (2) 613.4 l/s @ 6m; see attached table !!!**
- (3) 740.7 l/s @ 6m; see attached table !!!**
- (4) 868.1 l/s @ 6m; see attached table !!!**
- (5) 995.4 l/s @ 6m; see attached table !!!**

Baureihe-Größe Type-Size Modèle	Tipo Serie Tipo	Nennndrehzahl Nom. speed Vitesse nom.	Velocità di rotazione nom. Nominaal toerental Revoluciones nom.	Laufrad-ø Impeller Dia. Diamètre de roue	ø Girante ø Waaijer ø Rodete	 KSB Aktiengesellschaft Postfach 200743 06008 Halle (Saale) Turmstraße 92 06110 Halle (Saale)
Amacan P 700-470B4				470 mm		
Projekt Project Projet	Progetto Projekt Proyecto	Angebots-Nr. Project No. No. de l'offre	Offerta-No. Offertenr. Offerta-No.	Pos.-Nr. Item No. No. de pos.	Pos.-Nr. Positiennr. Pos.-Nr.	
City of Winnipeg		14 degree pitch		variable speed		



Kugeldurchgang/Free passage/Passage intégral  
 Passaggio libero/Kogeldoorgang/Paso libre

73-115 mm  
 73-115 mm

Aus Kurve K4200364/1\* gerechnet  
 H331-Ha, Hahn Ralf, 2005-04-27