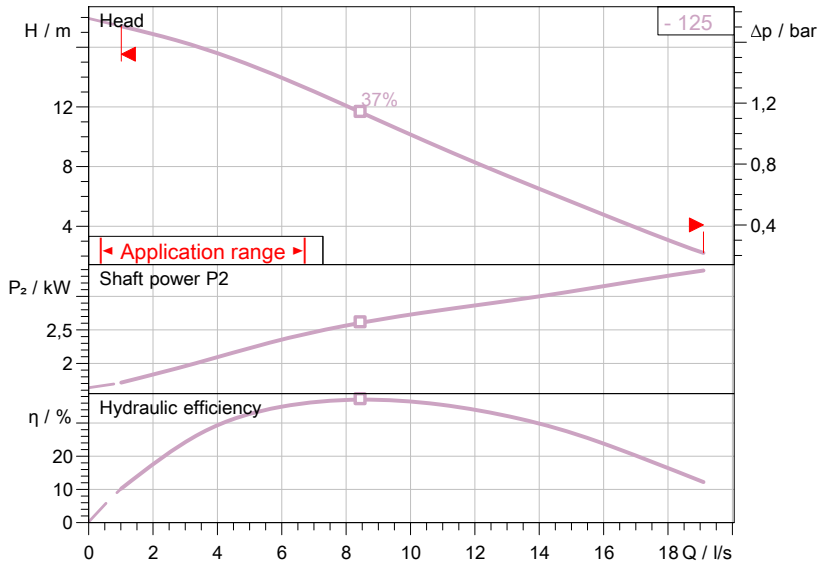
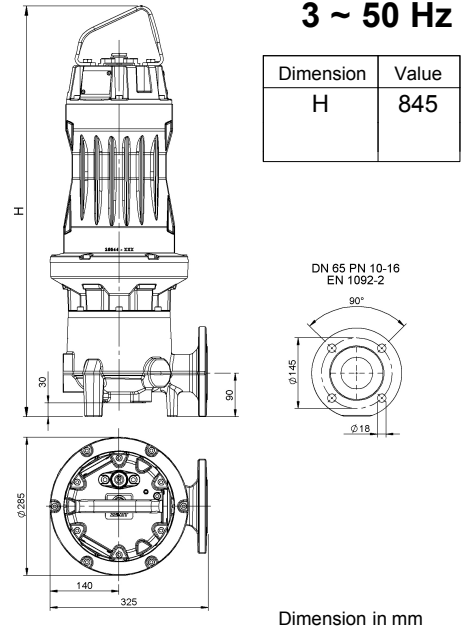


Technical specification



Characteristic curves according to UNI EN ISO 9906:2012



High efficiency submersible electric pumps designed for heavy-duty professional applications. They are used in civil and industrial wastewater treatment plants, lifting sewage, pumping industrial sludges and rainwater containing solids, and recycling raw or activated sludges and biological liquids. ZENIT UNIQA® series motors are designed with the aim of achieving the Premium Efficiency (IE3) class according to EN 60034-30.

Pump

Series	UNIQA
Pump name	ZUG V065A 4/2AW 125
Configuration	PAAABB104Y5T0EXNN
Standard	ATEX 94/9/CE
ATEX mark	II 2GD Ex db k IIB T4 Ex tb IIIC T135°C

Motor data

Rated voltage	400 V
Frequency	50 Hz
Motor phases	3
N. poles	2
Rated power P_2	4,0 kW
Incoming power P_1	4,5 kW
Rated current	7,7 A
rpm	2908 1/min
Efficiency	88,4 %
$\cos \phi$	0,85
Rated torque	13,1 Nm
Start	Star-delta
Starting current	23,9 A
Starting torque	15,4 Nm
Degree of protection	IP 68
Insulation class	H
Motor efficiency class ref	IE3

Hydraulic

Type	V 065A - 2p
Free passage	65 mm
Impeller type	Vortex impeller
N° of vanes	
Nominal impeller size	
Max. hydraulic efficiency	37,0 %
Suction	DN 65 UNDRILLED
Discharge	DN 65 EN 1092-2
Curve tolerance	UNI EN ISO 9906:2012

Operating limits (standard pumps)

Max. ambient temperature	40 °C
Max. density treated liquid	1100 kg/m ³
Max. immersion depth	20 m
pH treated liquid	6 ÷ 14
Max. start per hour	20 V
Wet/dry use	WET
Max. acoustic pressure level	70 dB
Operating mode	S1 - Continuous use

Construction materials

Case	Cast iron EN-GJL 250
Shaft	AISI 431
Hydraulic	Cast iron EN-GJL 250
Impeller	Cast iron EN-GJL 250
Painting	Bi-epoxy 120 μ m
Screws	Stainless steel A2-70
Gaskets	NBR

Construction features

Cooling jacket	-
Main cable	7G1,5 + 3x1
Cable length	10 m
Mechanical seals	n.2 in silicon carbide (SiC) in oil chamber
Flushing valve - drilling	-
Drilling variant	PA
Weight*	121,5 kg

* cable's weight not included

Monitoring features

n.3 bimetal thermal protectors (Klixon) in series
 n.1 double leakage sensor, mechanical seals chamber and stator housing



water technology

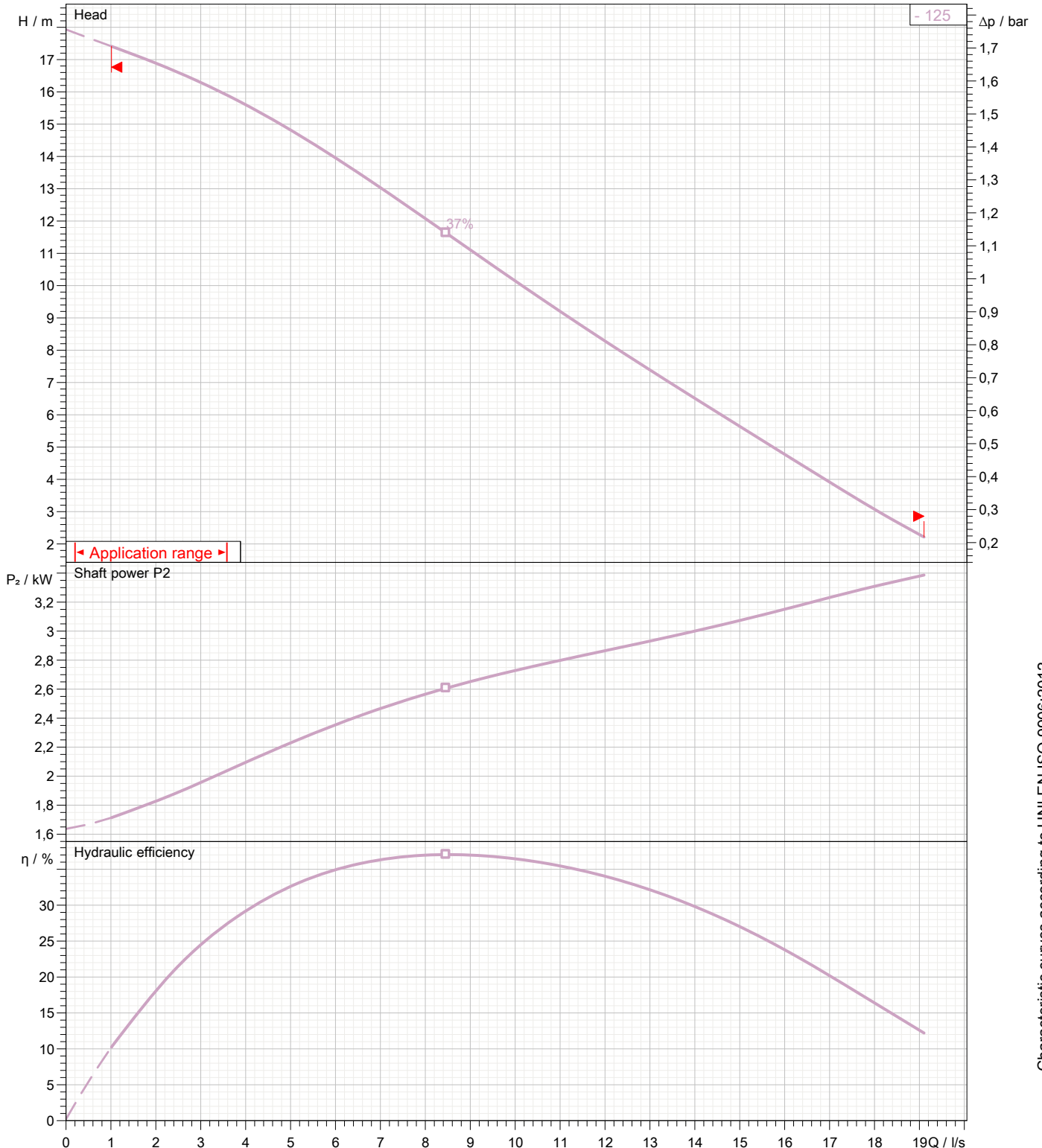
Data sheet ZUG V065A 4/2AW 125



Pump performance curves

3 ~ 50 Hz

Hydraulic type V 065A - 2p		Nominal impeller size		Impeller type Vortex impeller		Free passage 65 mm		Created by LB	
Density 998,3 kg/m ³		Viscosity 1,005 mm ² /s		N° of vanes		Discharge DN 65		Suction DN 65	
DUTY POINT									
Flow	Head	Shaft power P2	Power input P1	Hydraulic efficiency	Total efficiency	NPSH			



Characteristic curves according to UNI EN ISO 9906:2012



water technology

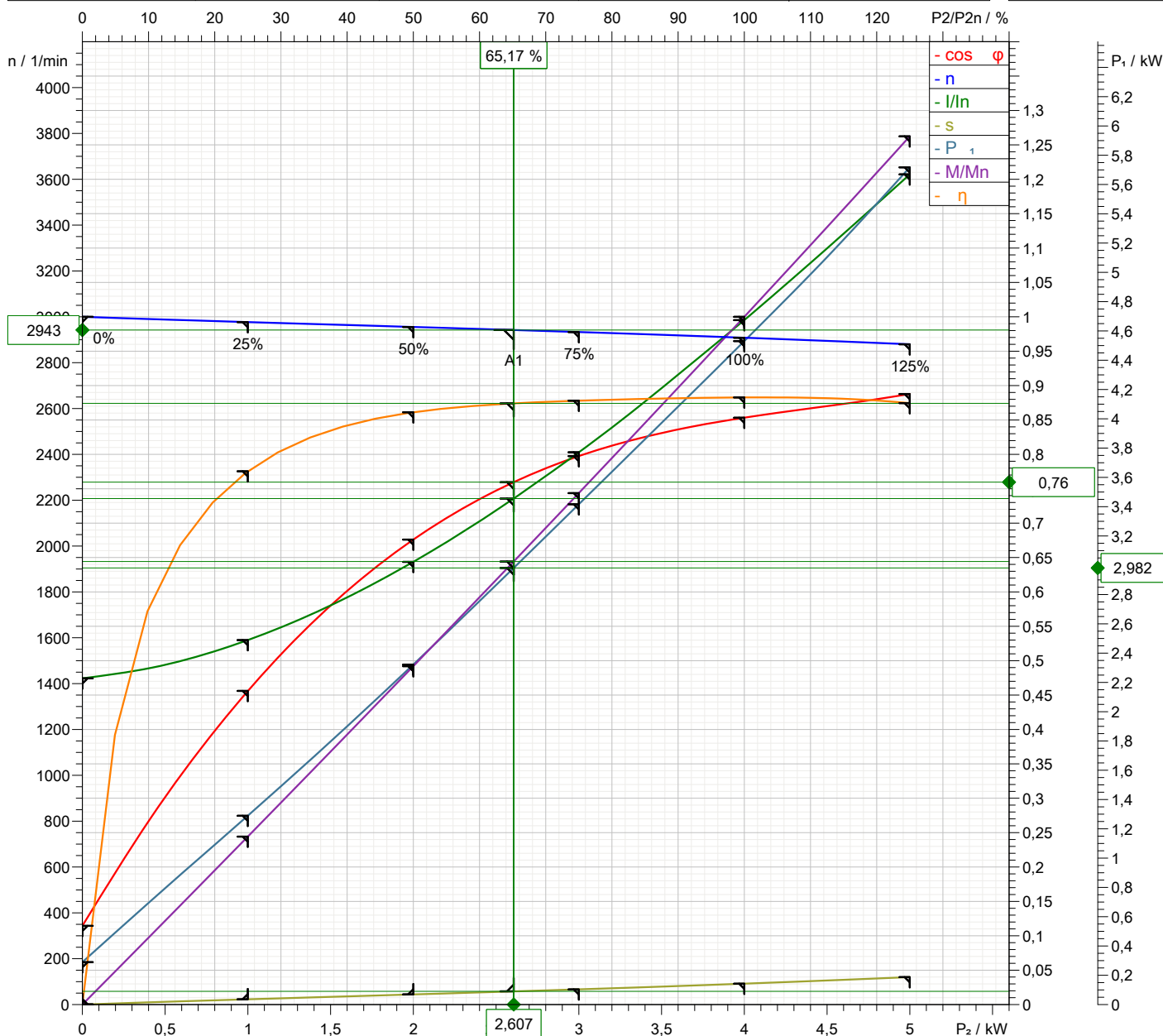
Data sheet ZUG V065A 4/2AW 125



Motor performance curves

3 ~ 50 Hz

Motor ZU 4/2 AW	Rated power 4,0 kW	Rated voltage 400 V	Motor efficiency 88,4 %	N. poles 2	Created by LB
Nominal Speed 2908 1/min	Rated current 7,7 A	cos φ 0,85	Rated torque 13,1 Nm	Starting current 23,9 A	Data version 01-06-2014



Symbol	No load	25 %	50 %	75 %	100 %	125 %
P / kW	0	1	2	3	4	5
P / kW	0,2896	1,29	2,322	3,417	4,531	5,717
I / A	3,652	4,081	4,957	6,184	7,663	9,295
cos φ	0,1145	0,4561	0,6762	0,7975	0,8534	0,8878
n / 1/min	3000	2977	2956	2934	2909	2880
s / %	0,0002381	0,7655	1,476	2,214	3,041	3,993
M / Nm	0	3,208	6,462	9,766	13,13	16,58
η / %	0	77,54	86,13	87,81	88,28	87,45

Tolerances according to EN 60034-1

All data shown are not binding. Zenit reserves the right to change data and dimensions without notice.

Dimensional drawing

3 ~ 50 Hz

Installation type P: bottom coupling device - vertical discharge DN65 - guide pipes 2"

WET/DRY use: WET

Flushing valve - drilling: -

Discharge: DN 65 EN 1092-2

Drilling variant: PA

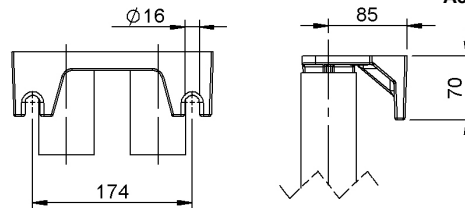
Suction: DN 65 UNDRILLED

Accessory * : DAC 65/65V+KAF 116-2" EN (P)

Pressure rating (suction/discharge): -/PN 10

Accessory code * : 9001.031

* Accessory must be ordered separately



Dimension	Value
H	845

Dimension in mm

