

SEMISOM /50 - /65



Electric submersible pumps SEMISOM /50 - /65

for sewage water



APPLICATION

To expel rainwater, to convey waste and sewage water from sewage tanks

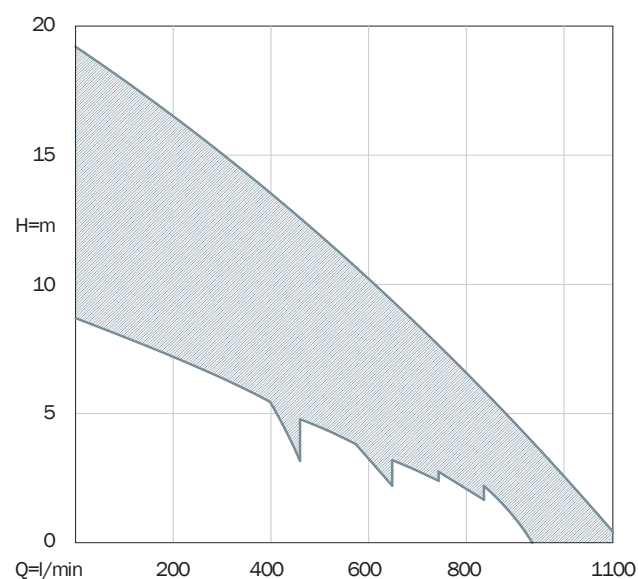
To pump liquids containing solids (Vortex or Double-channel impeller) and filaments (Double-channel impeller)

To pump sewage keeping its biological process unchanged (Semisom 754/65 4 poles)

CHARACTERISTICS

IP rating	IP68
Duty	Continuous S1
Maximum immersion depth (m)	20
Maximum number of starts per hour	30
Maximum temperature of the liquid pumped (°C)	50
PH of the liquid pumped	6 - 10
Density of the liquid pumped (kg/dm ³)	<1,1
Suitable for inverter drive	Only three-phase versions

APPLICATION RANGE



CONSTRUCTION

Coolant filled, asynchronous, rewindable electric AC motor with short circuit rotor. Insulation Class F. Windings with phase insulators to protect the motor from power peaks, as a guarantee of a highly-trustworthy product.

Resin-insulated cable kit to prevent penetration of water inside the motor

Shafts machined on ball bearings and mechanical seals location

Double mechanical seal with oil-chamber in-between


MATERIALS


Tie rods, handle, motor casing, bolts and nuts	Stainless Steel AISI304
Shaft	Stainless Steel AISI420B
Cover and volute	Mechanical cast iron EN GJL-250
Impeller	Mechanical cast iron EN GJL-200
Mechanical seal	Silicon carbide and alumina
Seal ring	NBR rubber
Elastomers	NBR rubber
Cable	Neoprene H07RN8-F

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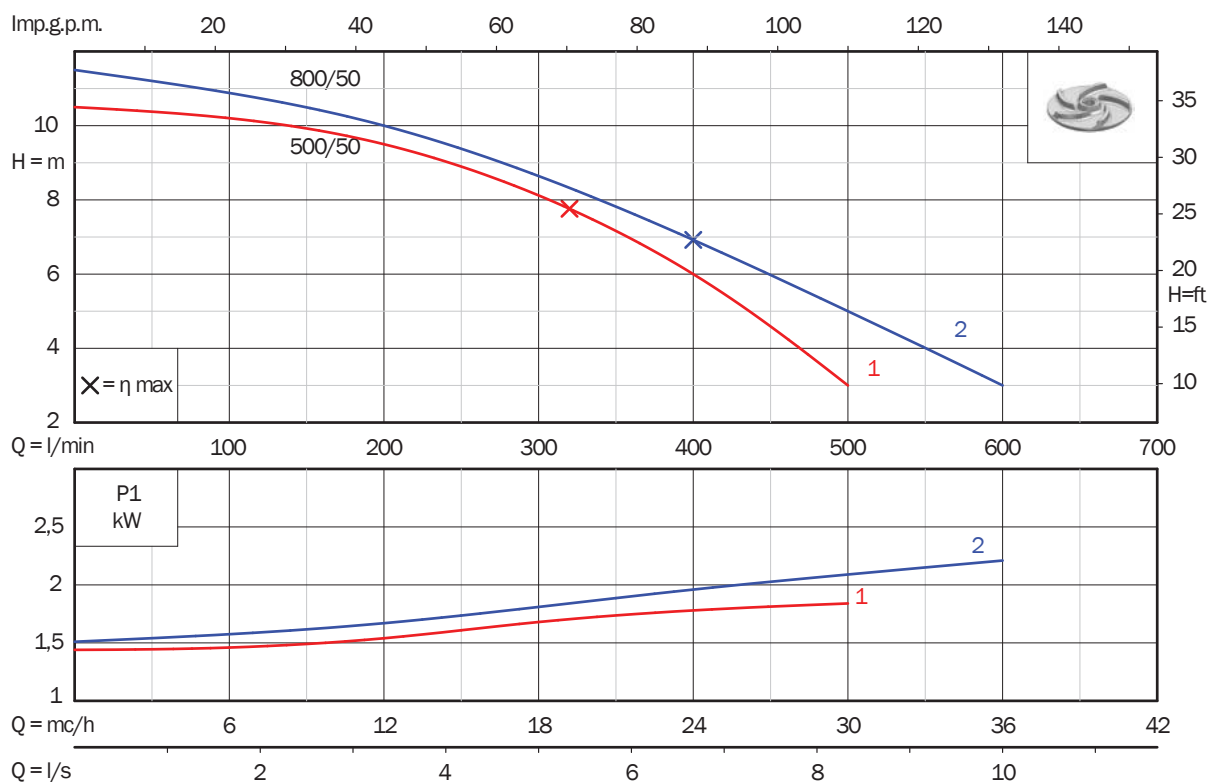
for sewage water

PERFORMANCE DATA

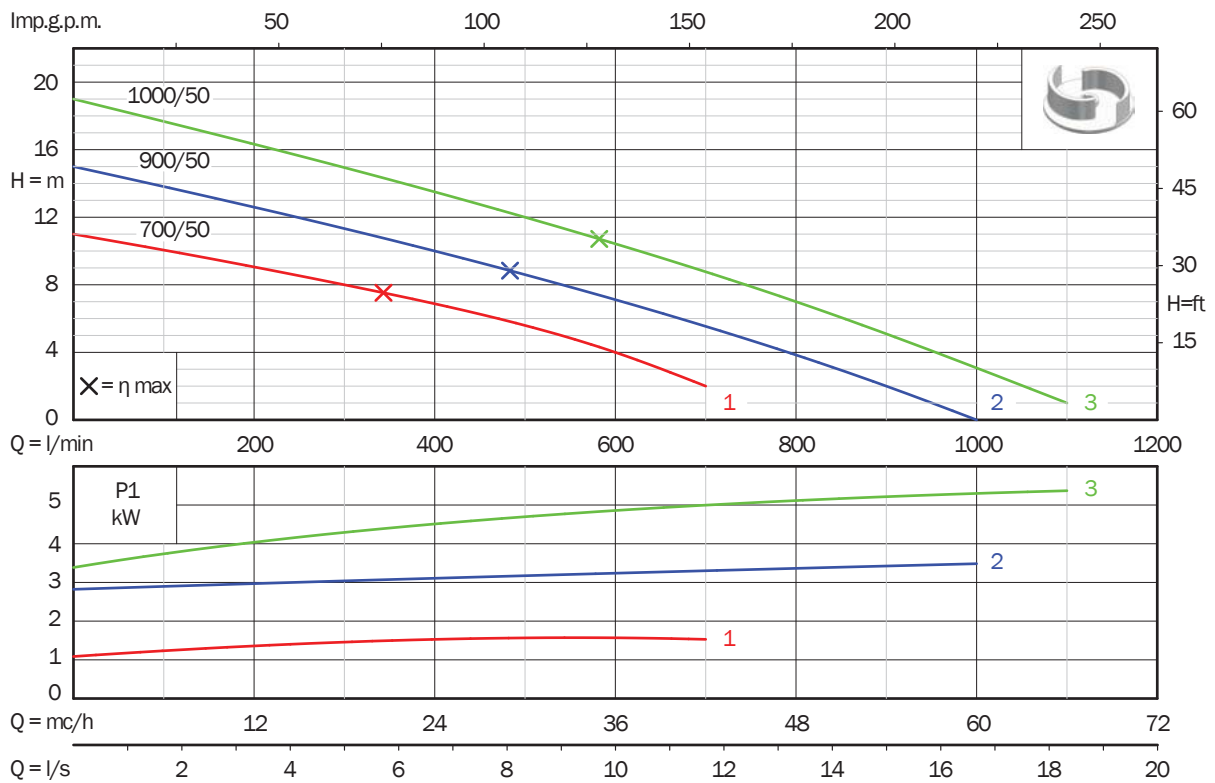
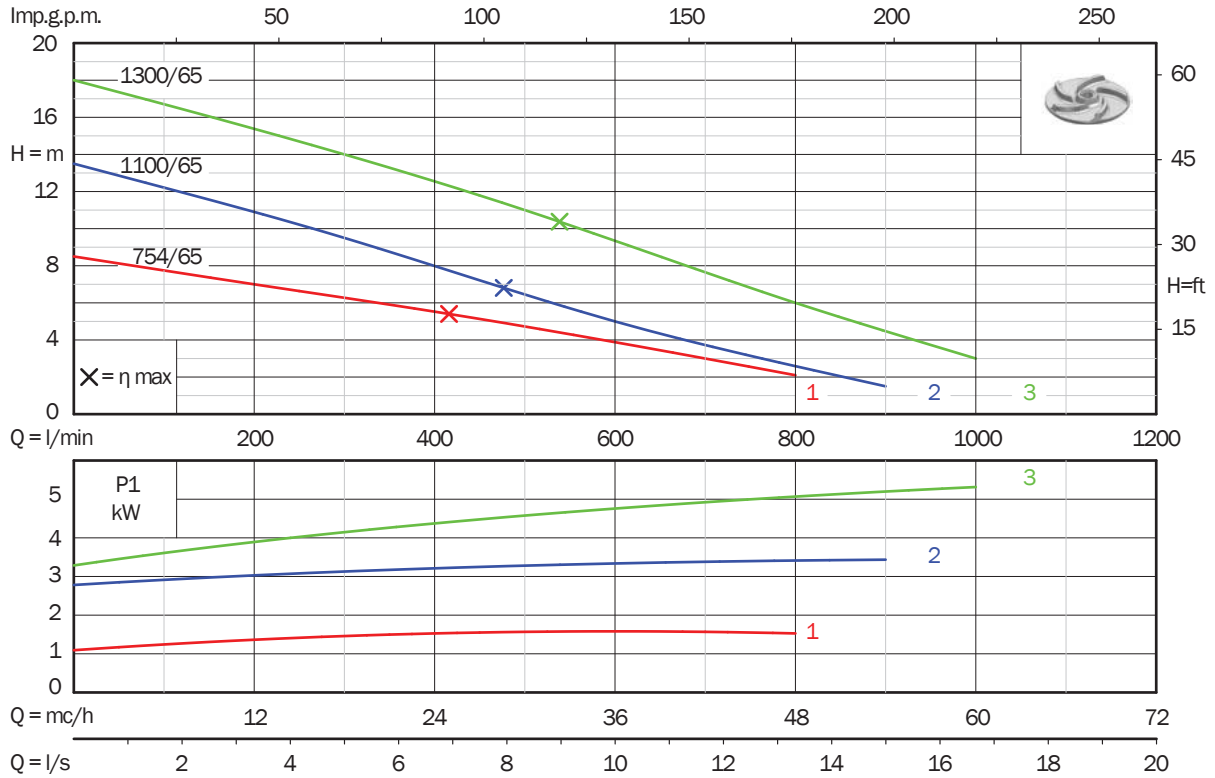
Vortex Impeller 	P2		1~230 V		3~400 V		Poles	DNM	Solid Passage ø	Flow												
	hp	kW	Max A	µF	Max A	Q																
	H (m)																					
SEMISOM 500/50	1,5	1,1	8,9	31,5	3,3	2	2"	50	m³/h	0	6	12	18	24	30	36	42	48	54	60	66	
SEMISOM 800/50	2	1,5	10,4	40	4	2	2"½	50	l/min	0	100	200	300	400	500	600	700	800	900	1000	1100	
SEMISOM 1100/65	3	2,2			6	2	3"	65		10,5	10	9,5	8	6	3							
SEMISOM 1300/65	4,5	3,4			8,1	2	3"	65		11,5	11	10	9	7,5	5	3						
SEMISOM 754/65	1,6	1,2	7,7	25	3,3	4	3"	65		13,5	12,5	11	9,5	8	7	5	4	2,5	1,5			
										18	16,5	15,5	14	12,5	11	9	7	6	4	3		
										8,5	7,8	7	6,2	5,5	4,6	3,8	3	2,1				

Channel impeller 	P2		1~230 V		3~400 V		Poles	DNM	Solid Passage ø	Flow												
	hp	kW	Max A	µF	Max A	Q																
	H (m)																					
SEMISOM 700/50	1,5	1,1	8,8	35	3,3	2	2"	50	m³/h	0	6	12	18	24	30	36	42	48	54	60	66	
SEMISOM 900/50	2	1,5	11,2	40	4	2	2"½	50	l/min	0	100	200	300	400	500	600	700	800	900	1000	1100	
SEMISOM 1000/50	3	2,2			5,9	2	2"½	50		11	10	9	8	7	5,5	4	2					
										15	14	13	11,5	10	8,5	7	5,5	3,5	2	0		
										19	17,5	16,5	15	13,5	12	10,5	8,5	7	5	3	1	

PERFORMANCE CURVES



PERFORMANCE CURVES



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PERFORMANCE DATA 2 poles 60 Hz

Vortex Impeller 	Code	Version		P2		P1		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	kW	A		l/min	m			A	B	C	D	
SEMISOM 500/50	SMZ/50/500/1	230 V	1-phase	1,5	1,1	1,84	8,9	100 - 300 - 500	10 - 8 - 3	50	2"	518	70	354	254	32	
	SMZ/50/500+G/1	230 V	1-phase+float			1,63	3,3									32,3	
	STZ/50/500/1	400 V	3-phase	508	30,5												
SEMISOM 800/50	SMZ/50/800/1	230 V	1-phase	2	1,5	2,21	10,4	100 - 300 - 600	11 - 9 - 3	50	2"½	543	70	362	254	34,5	
	SMZ/50/800+G/1	230 V	1-phase+float			2,07	4									34,8	
	STZ/50/800/1	400 V	3-phase	508	31												

P1: Max. absorbed power - P2: Nominal power of the motor

PERFORMANCE DATA 2 poles 60 Hz

Channel impeller 	Code	Version		P2		P1		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight
				hp	kW	kW	A		l/min	m			A	B	C	D	
SEMISOM 700/50	SMZ/50/700/1	230 V	1-phase	1,5	1,1	2,05	8,8	100 - 400 - 700	10 - 7 - 2	50	2"	518	70	354	254	32,5	
	SMZ/50/700+G/1	230 V	1-phase+float			1,93	3,3									32,8	
	STZ/50/700/1	400 V	3-phase	508	31												
SEMISOM 900/50	SMZ/50/900/1	230 V	1-phase	2	1,5	2,6	11,2	100 - 500 - 1000	14 - 8,5 - 0	50	2"½	543	70	362	254	35	
	SMZ/50/900+G/1	230 V	1-phase+float			2,39	4									35,3	
	STZ/50/900/1	400 V	3-phase	508	31												
SEMISOM 1000/50	STZ/50/1000/1	400 V	3-phase	3	2,2	3,33	5,9	100 - 500 - 1100	17,5 - 12 - 1	50	2"½	543	70	362	254	35	

P1: Max. absorbed power - P2: Nominal power of the motor

SUPPLIED WITH

10 meters power cable

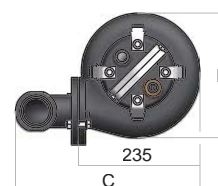
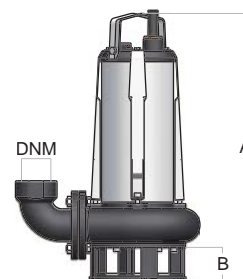


Control box containing capacitor and illuminated thermal protector switch (single-phase versions)



OPTIONS

Version with thermic probe so to protect the motor from overheating (to be wired to protection/control panel type QT-MT - AM-AT)



ACCESSORIES


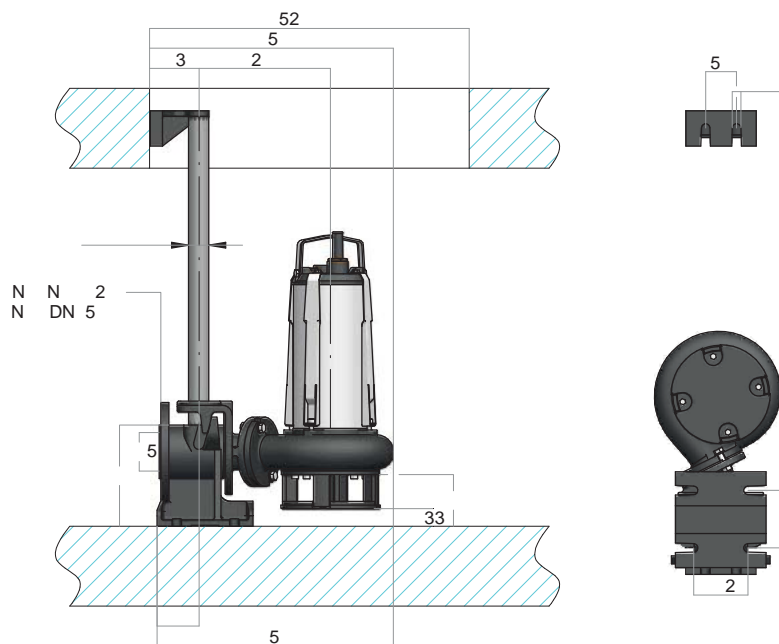
Code	Description
04105046	Guide rail kit /50 (1"¼ guide poles not included) 


ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT



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PERFORMANCE DATA 2 poles 60 Hz

Vortex Impeller 	Code	Version		P2		P1		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight kg
				hp	kW	kW	A		l/min	m			A	B	C	D	
SEMISOM 1100/65	STZ/65/1100/1	400 V	3-phase	3	2,2	3,37	6		100 - 500 - 900	12,5 - 7 - 1,5	65	3"	584	65	417	222	40
SEMISOM 1300/65	STZ/65/1300/1	400 V	3-phase	4,5	3,4	5,1	8,1		100 - 600 - 1000	16,5 - 9 - 3	65	3"	609	65	417	222	42,5

P1: Max. absorbed power - P2: Nominal power of the motor

PERFORMANCE DATA 4 poles 60 Hz

Vortex Impeller 	Code	Version		P2		P1		Max	Flow		Ø solids	DNM	Dimensions (mm)				Weight kg
				hp	kW	kW	A		l/min	m			A	B	C	D	
SEMISOM 754/65	SMZ/65/754/1	230 V	1-phase	1,6	1,2	1,55	7,7		100 - 400 - 800	7,8 - 5,5 - 2,1	65	3"	569	65	417	222	38,5
	SMZ/65/754+G/1	230 V	1-phase+float														1,45
	STZ/65/754/1	400 V	3-phase														38,5

P1: Max. absorbed power - P2: Nominal power of the motor

SUPPLIED WITH

10 meters power cable

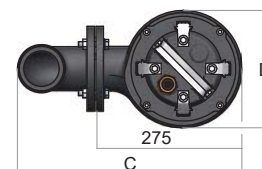
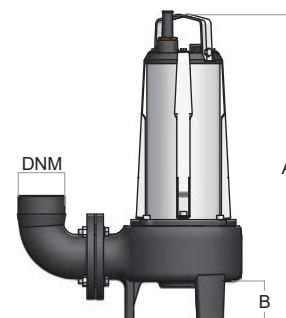


Control box containing capacitor and illuminated thermal protector switch (single-phase versions)



OPTIONS

Version with thermic probe so to protect the motor from overheating (to be wired to protection/control panel type QT-MT - AM-AT)



ACCESSORIES

Code	Description
04105052	Guide rail kit /65 (1"¼ guide poles not included)

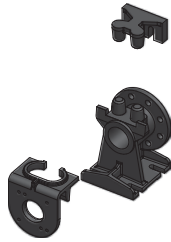
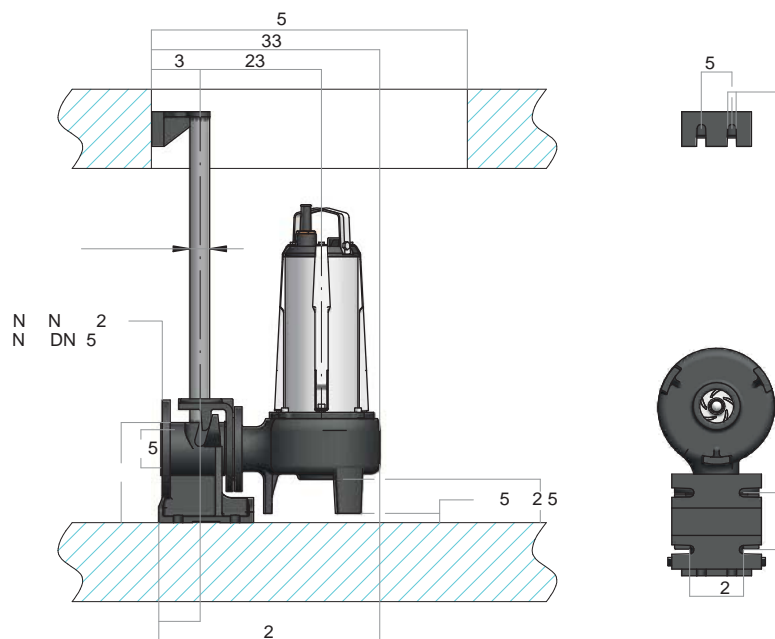


ILLUSTRATION OF AN INSTALLATION WITH GUIDE RAIL KIT



Photovoltaic

