

SC Series

Submersible Pumps

60Hz

SPCO®
makes life easier

Applications

For water supply from wells or reservoirs.
For domestic use, for civil and industrial applications.
For garden use and irrigation.

Operating conditions

Maximum fluid temperature up to +35°C.
Maximum sand content: 0.15%.
Maximum immersion: 50m.
Minimum well diameter: Ø130mm.

Motor and Pump

Rewindable motor
Three-phase: 220V/60Hz or 380V/60Hz
Single-phase: 110V/60Hz or 220V/60Hz
Equip with start control box or digital auto-control box
It's available to equip with floating switch
Curve tolerance according to ISO 9906

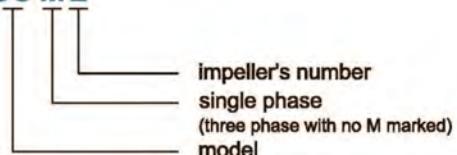
Options on request

Special mechanical seal
Other voltages

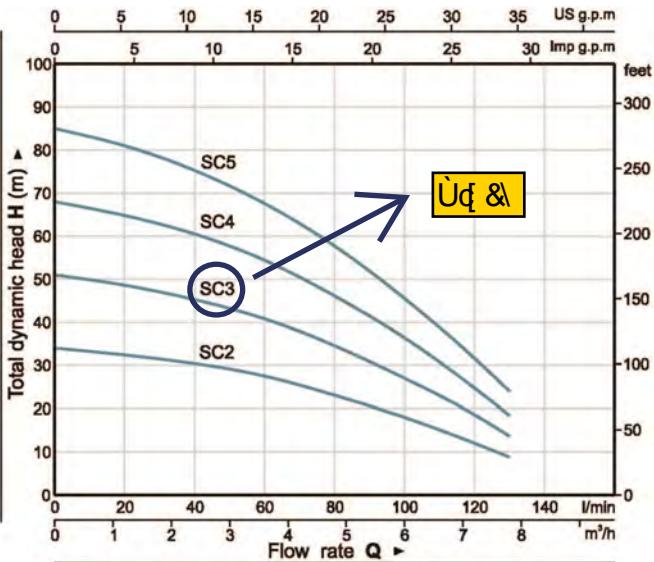
Warranty: 1 year

(according to our general sales conditions).

SC M 2



Components	Material
Pump external casing	AISI 304 SS
Delivery casing	AISI 304 SS
Suction lantern	AISI 304 SS
Diffuser	Plastic.PPO
Impeller	Plastic.PPO
Motor external casing	AISI 304 SS
Top chock	①Cast-iron ASTM NO.30 ②AISI 420 SS
Bottom support	AISI 304 SS
Mechanical seal	Graphite-Ceramic
Shaft	AISI 304 SS-ASTM 5140
Seal lubricant oil	Oil for food machinery and pharmaceutic use.



PERFORMANCE DATA 60Hz

MODEL		P ₂		DELIVERY								n≈3450 1/min
1 - 110V/220V	3 - 220V/380V	KW	HP	Q l/min	m ³ /h	0	1.2	2.4	3.6	4.8	6.0	7.2
SCM2	SC2	0.75	1	H(m)	34	32	30	27	23	18	12	
SCM3	SC3	0.92	1.25		51	49	46	41	34	27	19	
SCM4	SC4	1.1	1.5		68	65	61	54	46	36	25	
SCM5	SC5	1.5	2		85	81	76	68	57	45	31	

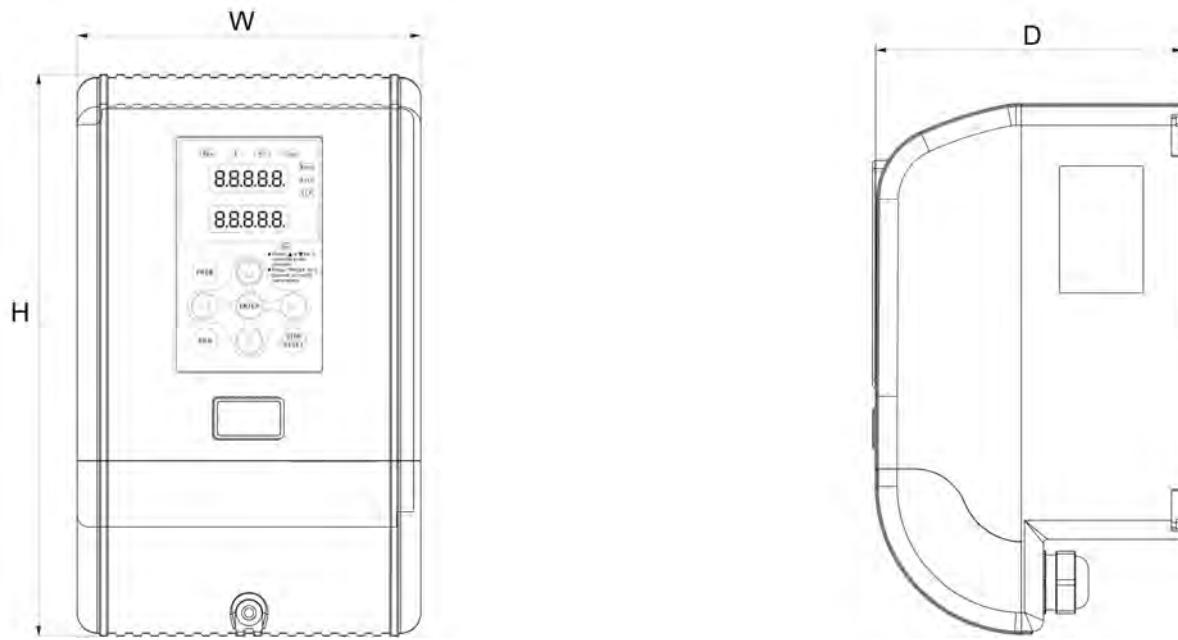


Technical Specifications

Item	Technical Index	Specification
Input	Input voltage	1AC/3AC 220V±15%, 3AC 460V±15%
	Input frequency	50/60Hz±5%
Control functions	Output voltage	0~rated input voltage
	Output frequency	0~600Hz
	Operation command mode	Keypad control Terminal control Serial communication control (Modbus)
	Overload capacity	150% / 60s, 180% / 10s, 200% / 1s.
	Built-in PID	Built-in PID control function, special for constant pressure water supply.
Input/output terminals	Input terminals	Programmable digital input: 5 multifunctional inputs 2 programmable analog input: VI: 0~10V CI: 4~20mA
	Output terminals	Refer to typical wiring for details
	Communication terminals	RS485 communication interface, support MODBUS-RTU communication protocol
Display	LED display	Display frequency setting, output frequency, output voltage, output current, etc. Two lines display.
Environment	Ambient temperature	-10°C~40°C, without direct sunshine.
	Humidity	90%RH or less (non-condensing)
	Altitude	≤1000M: output rated power, >1000M: output derated.
	Storage temperature	-20°C~60°C

External and keypad dimensions

ARA388

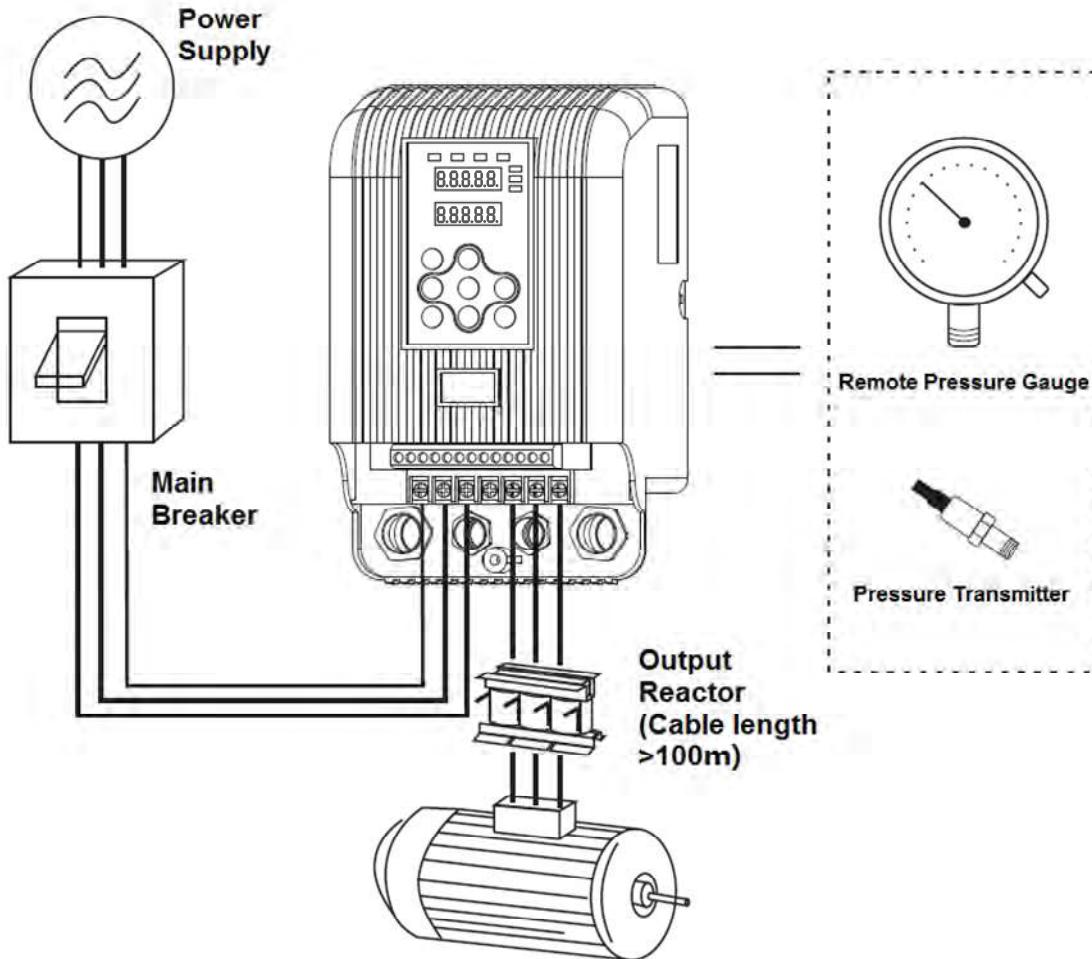


Unit (mm)

Model	W	H	D
ARA388-00040S2			
ARA388-00075S2			
ARA388-00150S2			
ARA388-00220S2	120	196.2	112.1
ARA388-00075T4			
ARA388-00150T4			
ARA388-00220T4			
ARA388-00400T4			
ARA388-00550T4	150	241	142.5
ARA388-00750T4			

Chapter 3 Installation and wiring

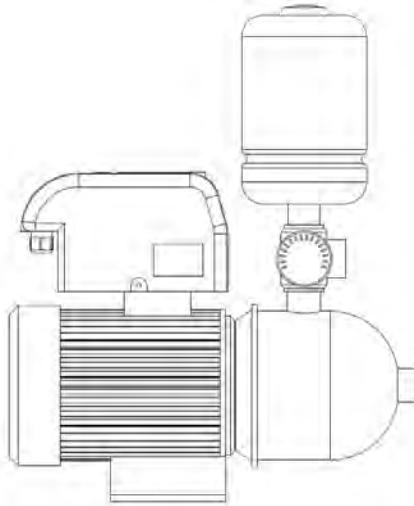
3.1 System wiring connection



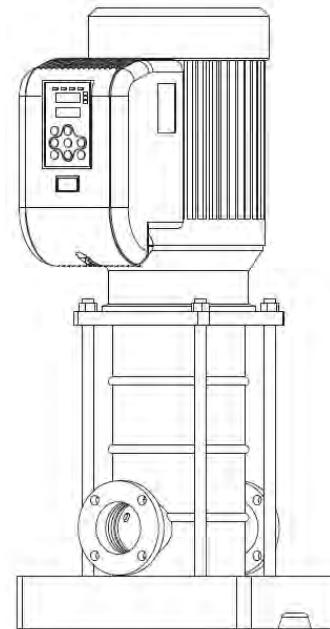
- (1) ARA388/KD386 build-in a lightning protection device, it will be self-protected for induction thunder. But for some special places where the thunder happens very frequently, it is better to add an additional lighting protection device.
- (2) If the installation place's altitude is higher than 1000m, the output power of ARA388/ARA386 will be derated.

Installation

ARA388 is designed to install on the water pump directly, it has the below two installation types:

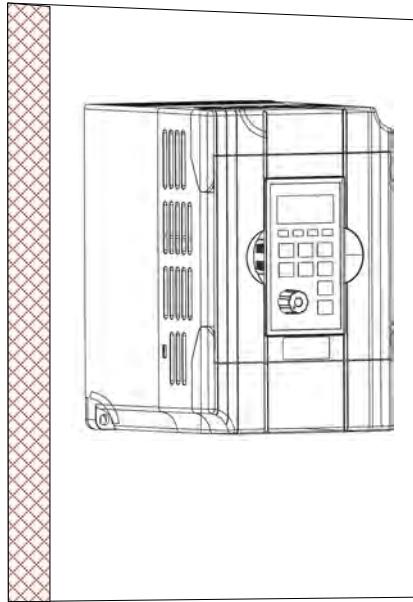


Horizontal type



Vertical type

2, ARA386 is designed to install on the wall or in the control cabinet.

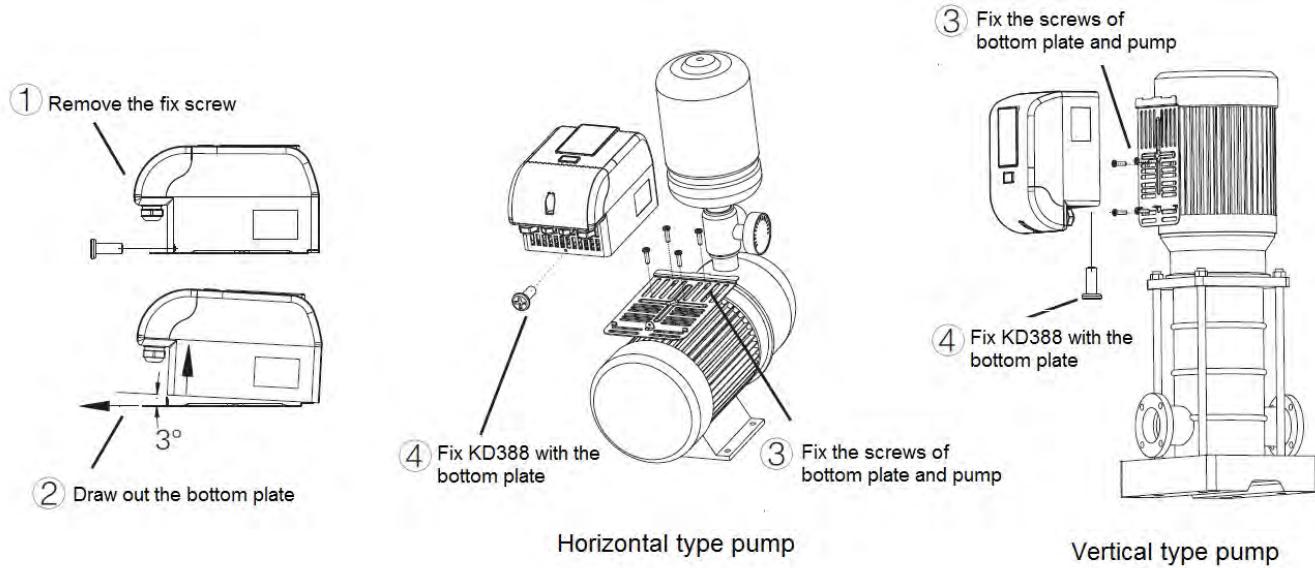


On the wall



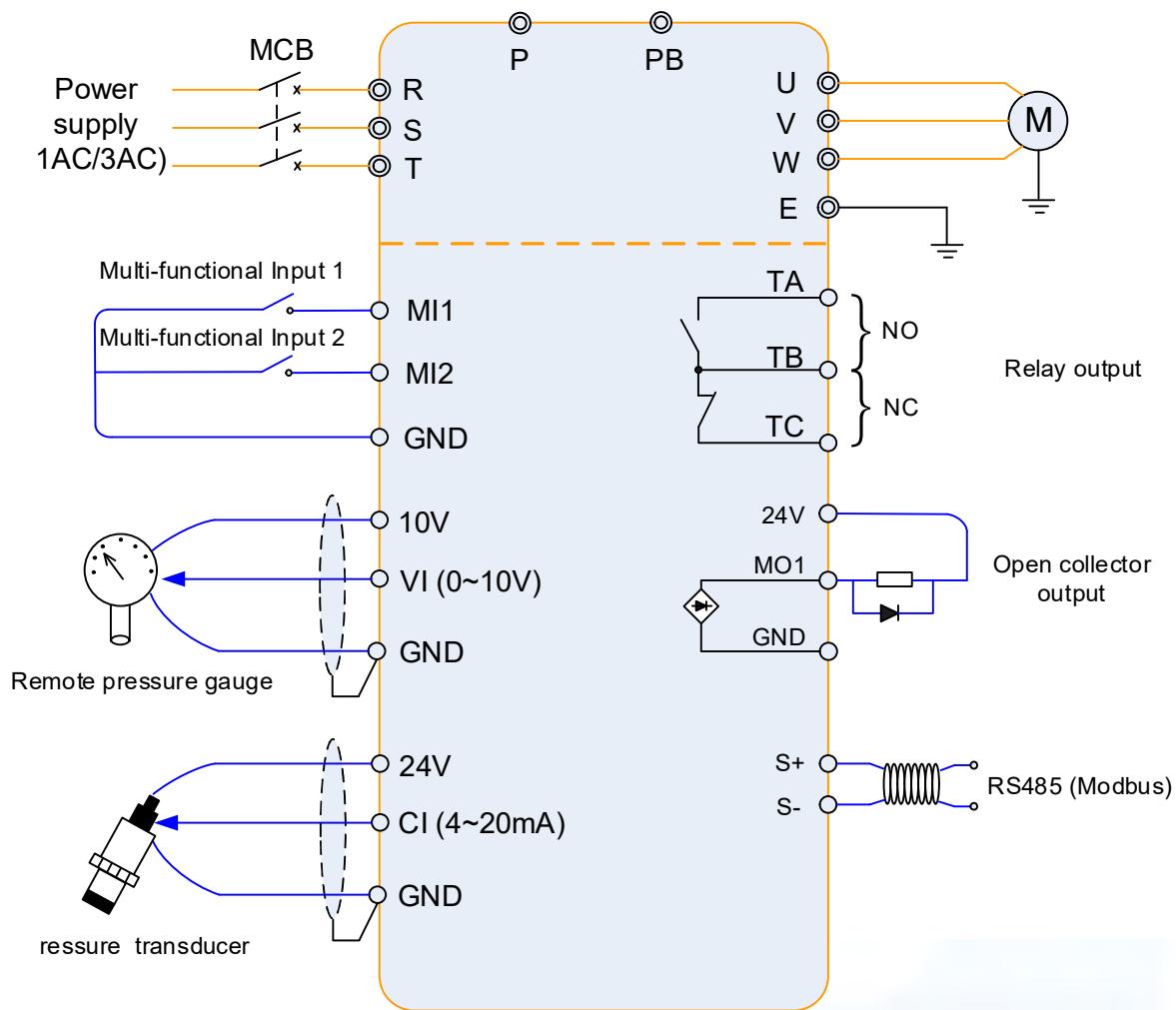
In the control cabinet

ARA388 disassemble and install diagram



Typical diagram

ARA388



Keypad operation instruction

diagram of keypad

ARA388 keypad



ARA386 keypad



0.75~2.2kW

≥4kW



functions description of keypad

Button	Name	Function
	Programming key	Entry and exit of primary menu
	Confirmation key	Progressively enter menu, and confirm parameters
	Run key	Start ARA388/ARA386 under keyboard control mode (F1-00=0)
	Stop / Reset	Stop ARA388/ARA386 in running status and reset operation in fault alarm status.
	Increase key	Increase the setting value or function codes
	Decrease key	Decrease the setting value or function codes
	Left shift key	Left shift while parameters changing, shift the parameters display on main LED (Top LED)
	Right shift key	Right shift while parameters changing, shift the parameters display on main LED (Top LED)

Functions description of indicators

Indicators	Function
Mpa	When LED display the pressure of pipe line, the indicator will light-on
A	When LED display the output current, the indicator will light-on
Hz	When LED display the running frequency, the indicator will light-on
Auto	Light-on: Auto operation mode light flicker: stand by
Com	When multiple KD388 inter connected successfully, the indicator will light-on
Manu	ARA388 under Manual operation mode
SLP	ARA388 under sleep mode



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