

ETETA
ELECTRIC



MA510 series

THE COMPELECT MOTOR

CONTROL SOLUTION



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The Complete Motor Control Solution

with power for a wide range of applications

Gravitational Handling Equipment

| crane

Metal Processing Machine

| Press , Lathes

Plastics / Rubber Processing Machine

| Extruder , Injection Molding Machine

Tension Control Equipment

| Printing Machine , Reeling Machine

Textile Machine

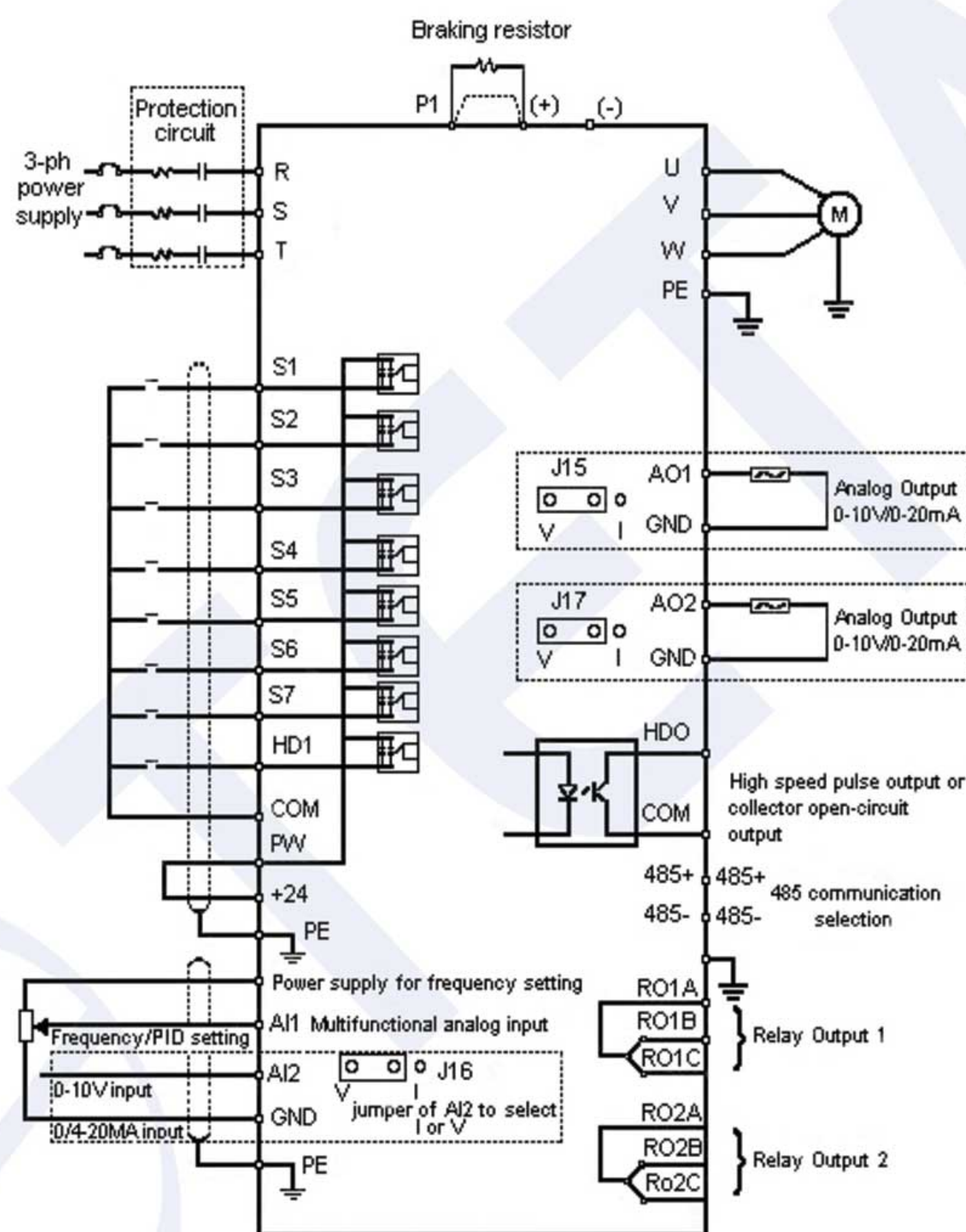
| Dyeing and Finishing Machine

Wire/Cable Making Machine

| Wire Drawing Machine



WIRING DIAGRAM



- *1:** Only the master circuit of 380 V 1~20HP (included) or models of lower capacity with built-in braking resistor provide terminal PB. The braking resistor can be connected directly between (+) and PB
- *2:** The wire length of the braking resistor should be less than 5m
- *3:** Please pay attention to safety prevention and smooth ventilation when installing braking resistors because the temperature will rise for the heat releasing
- *4:** The (+) and (-) terminals of the braking units corresponds to the (+) and terminals of the inverter when the external braking unit is connected
- *5:** The wiring length between the (+) and (-) terminals of the inverter and the (+), (-) of the braking units should not be more than 5m and the distributing length among BR1 and BR2 and the braking resistor terminals should not be more than 10m

I/O
Features

Input Voltage Range	380 / 220 V±15%
Input Frequency Range	0~50 HZ
Output Voltage Range	0~220/380V
Output Frequency Range	0~600 HZ

I/O
Terminals

Input Terminals	Digital Input : 7 , High speed pulse : 1
	Analoge Input : 2 , AI1: -10V~10V , AI2: 0~10V or 0~20mA
Output Terminals	Open Collector / High speed pulse output : 1
	Relay output : 2
	Analoge output : 2 , AO1: 0/4~20mA or 0~10V
Communication terminals	RS-485 , Modbus-RTU

Control
Function

Control Mode	V/F control, Sensorless vector control(SVC)
Speed Adjusting Range	1:100(SVC)
Overload Capacity	150% rated current 60s, 180% rated current 10s
Frequency Reference Source	Keypad,Analoge Input,HDI,Serial Communication,Multi-step speed
	Simple PLC and PID The combination of multi-modes and switch between modes
Other Functions	Traverse Control Function
	PID Control Function
	Simple PLC, Multi-Steps Speed Control Function:16 Steps speed can be set
	None-Stop when instantaneous power off

Control Function	Other Functions	Speed Trace Function : Smoothly start the running motor
		Automatic Voltage Regulation Function (AVR)
		Up to 23 fault protection : over current,over voltage,under voltage
		Over voltage , over tempreature, phase failure, etc.
Man-machine Interface	LED Display	setting frequency,output frequency,output voltage,output current. etc.
	Multi-Function Key-press	The QUICK/JOG key-press can be used as multi-function key-press
Environm ental constraint	Temperature	(-10C° ~ +40C°) Inverter will be derated if ambient temperature exceeds 40C.
	Humidity	≤90% , without condensation
	Altitude	≤1000M , output rated power
		>1000M , output power with derating
	Impingement and Oscillation	The inverter is prohibited to drop on floor or with suddenly impact
		It also prohibited to be installed at the place where the oscilation may occure
	Electromagnetic Radiation	The inverter is prohibited to be installed at the place where
		Strong electromagnetic radiation may occur
	Store Environment	The inverter is prohibited to be stored at the place where with
		Direct sunlight , fall of oil mist, steam and with heavy oscillation.

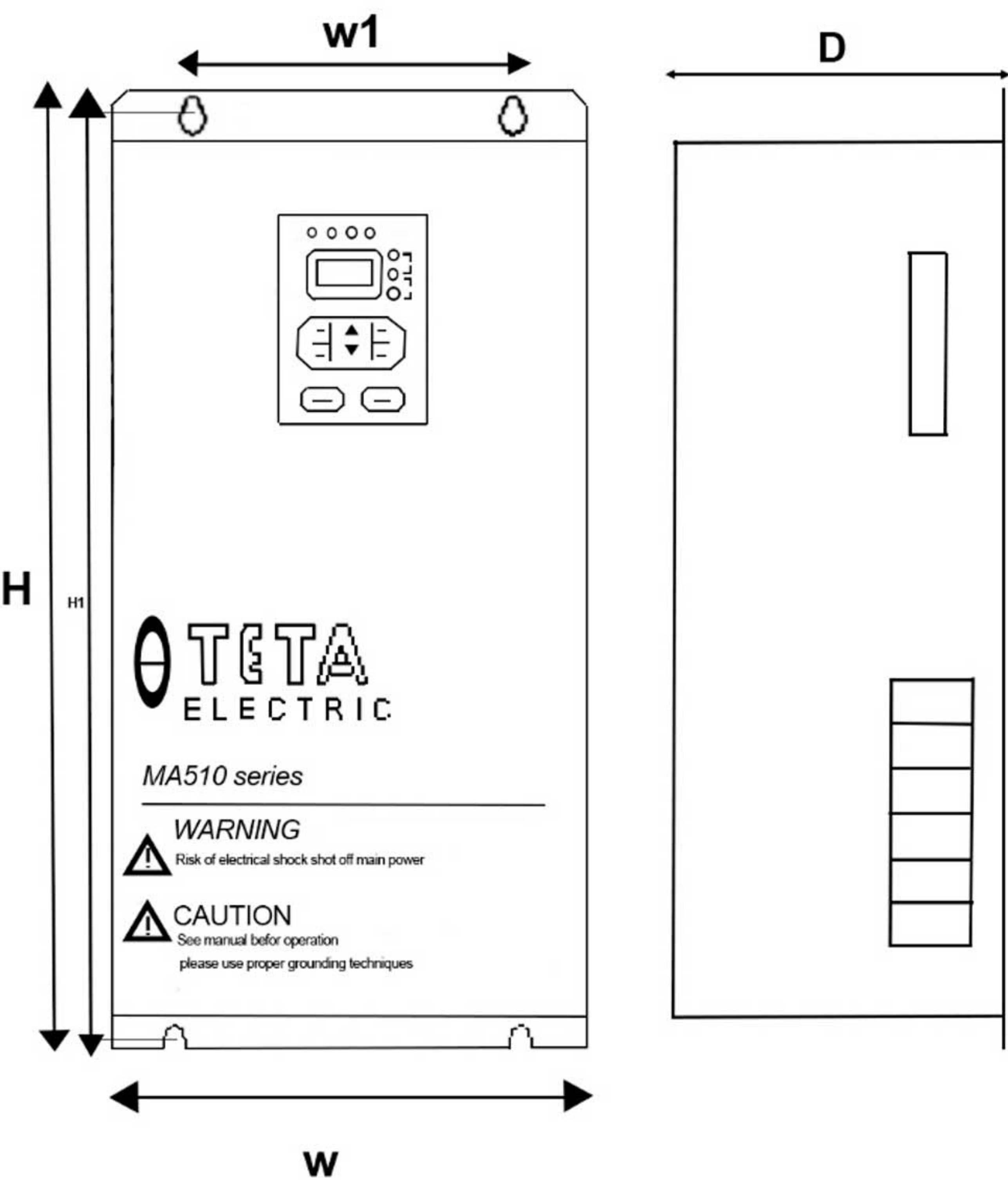


Model Number	Input Voltage	Rated Power (kw)	Rated input current (A)	Rated output current (A)	Compatible Motor (HP)
MA510-2001	3-phase 220V ±15%	0.75	5	4.5	1
MA510-2002		1.5	7.7	7	2
MA510-2003		2.2	11	10	3
MA510-2005		4	17	16	5
MA510-2008		5.5	21	20	7.5
MA510-2010		7.5	31	30	10
MA510-2015		11	43	42	15
MA510-2020		15	56	55	20
MA510-2025		18.5	71	70	25
MA510-2030		22	81	80	30
MA510-2040		30	112	110	40
MA510-2050		37	132	130	50
MA510-2060		45	163	160	60
MA510-2075		55	181	190	75

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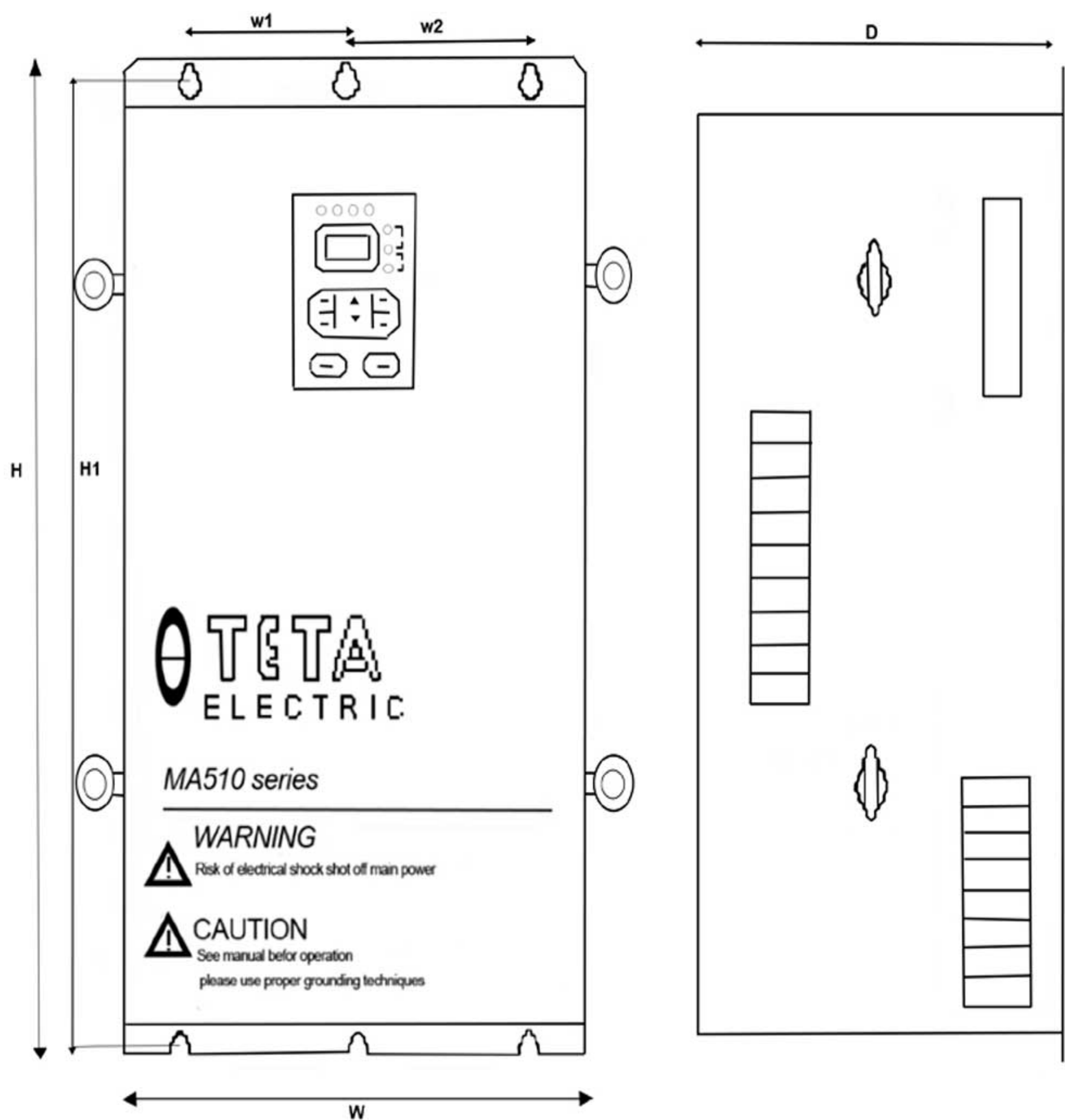
Model Number	Input Voltage	Rated Power (kw)	Rated input current (A)	Rated output current (A)	Compatible Motor (HP)
MA510-4001	3-PHASE 380V ±15%	0.75	3.4	2.5	1
MA510-4002		1.5	5	3.7	2
MA510-4003		2.2	5.8	5	3
MA510-4005		4	10	9	5
MA510-4008		5.5	15	13	7.5
MA510-4010		7.5	20	17	10
MA510-4015		11	26	25	15
MA510-4020		15	35	32	20
MA510-4025		18.5	38	37	25
MA510-4030		22	46	45	30

Model Number	Input Voltage	Rated Power (kw)	Rated input current (A)	Rated output current (A)	Compatible Motor (HP)
MA510-4040	3-PHASE 380V ±15%	30	62	60	40
MA510-4050		37	76	75	50
MA510-4060		45	90	90	60
MA510-4075		55	105	110	75
MA510-4100		75	140	150	100
MA510-4125		90	160	176	125
MA510-4150		110	210	210	150
MA510-4175		132	240	250	175
MA510-4215		160	290	300	215
MA510-4250		185	330	340	250



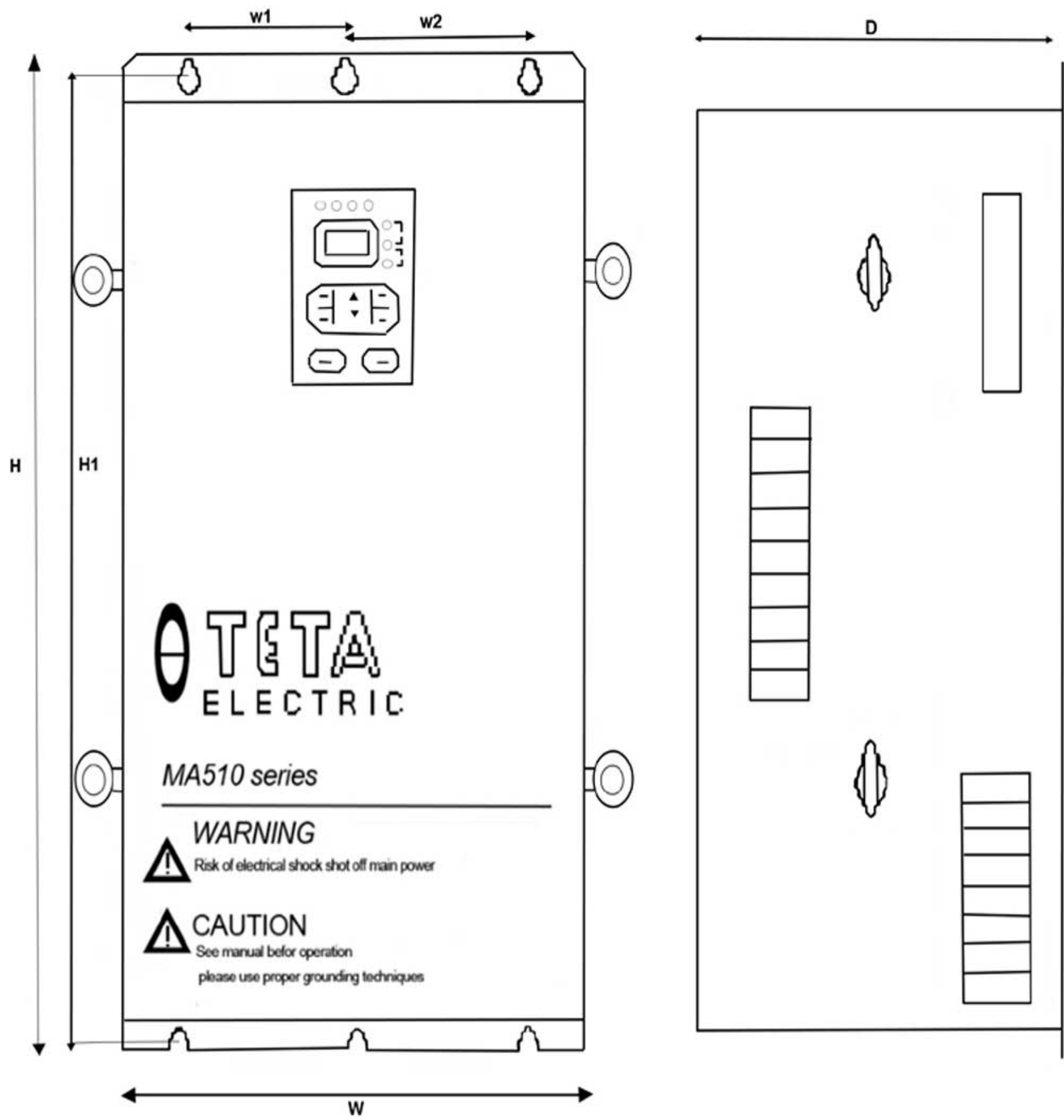
a) 380 v : 25 HP ~ 40 HP

Inverter Model	Dimension (mm)					
	W	H	D	W1/W2	H1	GW(KG)
MA510-4025	290	470	215	175	460	12
MA510-4030	290	470	215	175	460	12
MA510-4040	290	470	215	175	460	12



b) 380 v : 50 HP ~ 75 HP

Inverter Model	Dimension (mm)					
	W	H	D	W1/W2	H1	GW(KG)
MA510-4050	375	585	270	115	665	36
MA510-4060	375	585	270	115	665	36
MA510-4075	375	585	270	115	665	36



c) 380 v :100HP ~ 150 HP

Inverter Model	Dimension (mm)					
	W	H	D	W1/W2	H1	GW(KG)
MA510-4100	460	755	330	160	735	48
MA510-4125	460	755	330	160	735	48
MA510-4150	460	755	330	160	735	48



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25%

