

# Chapter 1 Product Overview

## 1.1 Name Plate

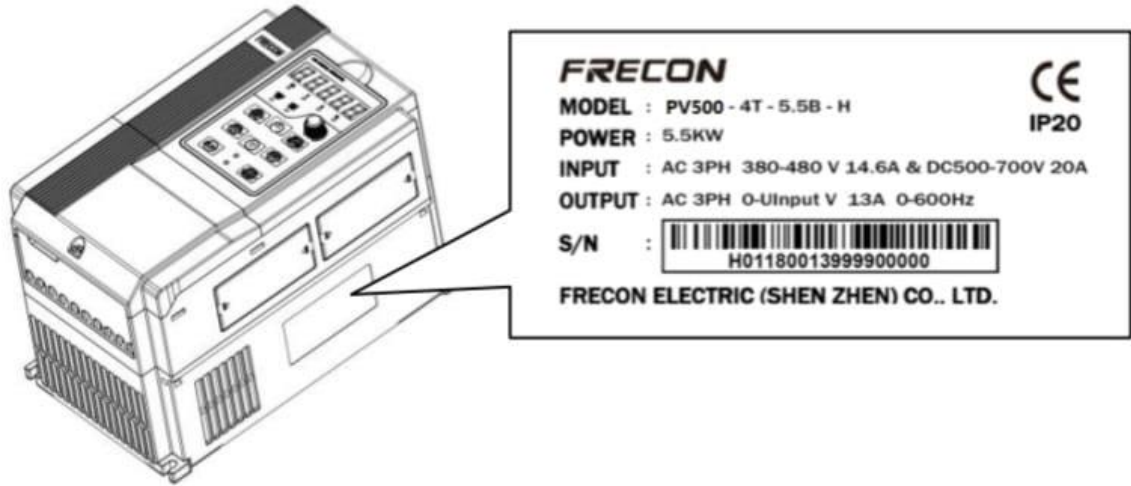


Figure 1-1 Name Plate

### Model Instruction

Model numbers on name plate consist of numbers, symbols, and letters, to express its respective series, suitable power type, power level and other information.

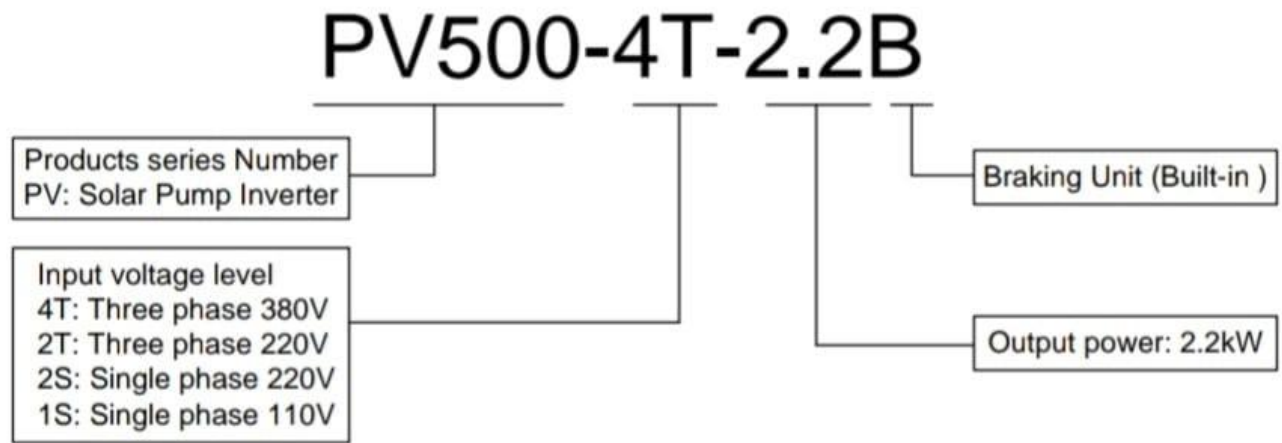


Figure 1-2 Product Model Naming Rules

## 1.2 Product Specifications

### 1.2.1 Electric specification of AC110V Input product

Table 1-1 Electric specification of AC110V Input product

Model	Recommended Solar Power (kW)	Maximum Input DC Current (A)	Rated Input AC Current (A)	Rated Output Current (A)	Adaptive Motor (kW)
PV150A-1S-0.7B	0.4	7.5	9.3	4.2	0.25
PV150A-1S-1.5B	0.6	10.6	15.7	7.5	0.4
PV150A-1S-2.2B	1.0	10.6	24	9.5	0.75

Input specification	
<b>PV Input</b>	
Maximum Input DC Voltage	450VDC
Recommended Voc Range	170~300VDC
Recommended MPPT Voltage Range	140~240VDC
Operation Voltage Range	70~450VDC
<b>Grid or backup generator input</b>	
Input voltage	1PH 110V(-15%~30%)
<b>Output specification</b>	
Rated output voltage	3PH 110V
Output frequency	0~600.00Hz (default: 0~50.00Hz)
<b>Protection</b>	
Built-in Protection	Lighting Protection, over-current, overvoltage, output phase-lose, under-load, under-voltage, short circuit, overheating, water pump run dry etc.

**1.2.2 Electric specification of AC220 Input product****Table 1-2 Electric specification of AC220 Input product**

Model	Recommended Solar Power (kW)	Maximum Input DC Current (A)	Rated Input AC Current (A)	Rated Output Current (A)	Adaptive Motor (kW)
PV150A-2S-0.4B	0.6	10.6	6.5	2.5	0.4
PV150A-2S-0.7B	1.0	10.6	9.3	4.2	0.75
PV150A-2S-1.5B	2.0	10.6	15.7	7.5	1.5
PV150A-2S-2.2B	2.9	10.6	24	9.5	2.2
PV500-2T-4.0B	5.2	21.1	18	17	4.0
PV500-2T-5.5B	7.2	31.7	26.5	25	5.5
PV500-2T-7.5B	9.8	42.2	33.5	32	7.5
PV500-2T-011B	14.3	63.4	47.5	45	11
PV500-2T-015B	19.5	95.0	63	60	15
PV500-2T-018	24.1	116.2	79	75	18
PV500-2T-022	26.8	137.3	96	91	22
PV500-2T-030	39	169.0	118	112	30
PV500-2T-037	48.1	232.3	158	150	37
PV500-2T-045	58.5	274.6	185	176	45
PV500-2T-055	71.5	337.9	221	210	55
PV500-2T-075	97.5	401.3	263	250	75

<b>Input specification</b>	
<b>PV Input</b>	
Maximum Input DC Voltage	450VDC
Recommended Voc Range	360~430VDC
Recommended MPPT Voltage Range	250~350VDC
Operation Voltage Range	PV150A: 70~450VDC PV500: 230~450VDC
<b>Grid or backup generator input</b>	

Input voltage	2S: 1PH 220V(-15%~20%) 2T: 3PH 220V(-15%~20%)
<b>Output specification</b>	
Rated output voltage	3PH 220V
Output frequency	0~600.00Hz (default: 0~50.00Hz)
<b>Protection</b>	
Built-in Protection	Lighting Protection, over-current, overvoltage, output phase-lose, under-load, under-voltage, short circuit, overheating, water pump run dry etc.

### 1.2.3 Electric specification of AC 380V&DC 540V Input product

Table 1-3 Electric specification of AC 380V&DC 540V Input product

Model	Recommended Solar Power (kW)	Maximum Input DC Current (A)	Rated Input AC Current (A)	Rated Output Current (A)	Adaptive Motor (kW)
PV150A-4T-0.7B	1.0	10.6	3.4	2.5	0.75
PV150A-4T-1.5B	2.0	10.6	5	4.2	1.5
PV150A-4T-2.2B	2.9	10.6	5.8	5.5	2.2
PV150A-4T-4.0B	5.2	10.6	11	9.5	4
PV500-4T-4.0B	5.2	10.6	11	9.5	4
PV500-4T-5.5B	7.2	21.1	14.6	13	5.5
PV500-4T-7.5B	9.8	21.1	20.5	17	7.5
PV500-4T-011B	14.3	31.7	26	25	11
PV500-4T-015B	19.5	42.2	35	32	15
PV500-4T-018B	24.1	52.8	38.5	37	18.5
PV500-4T-022B	28.6	63.4	46.5	45	22
PV500-4T-030B	39.0	95.0	62	60	30
PV500-4T-037	48.1	116.2	76	75	37
PV500-4T-045	58.5	137.3	92	91	45
PV500-4T-055	71.5	169.0	113	112	55
PV500-4T-075	97.5	232.3	157	150	75
PV500-4T-090	117.0	274.6	186	176	90
PV500-4T-110	143.0	337.9	220	210.0	110
PV500-4T-132	171.6	401.3	260	253.0	132

PV500&PV150A Series Solar Pumping Inverter

PV500-4T-160	208.0	485.8	310	304.0	160
PV500-4T-185	240	559.7	355	350.0	185
PV500-4T-200	250	612.5	382	377.0	200
PV500-4T-220	286.0	675.8	430	426.0	220
PV500-4T-250	325.0	760.3	475	470.0	250
PV500-4T-280	364.0	855.4	535	520.0	280
PV500-4T-315	409.5	961.0	610	600.0	315
PV500-4T-355	461.5	1087.7	665	650.0	355
PV500-4T-400	520.0	1225.0	785	725.0	400
PV500-4T-450	585.0	1372.8	865	800.0	450

<b>Input specification</b>	
<b>PV Input</b>	
Maximum Input DC Voltage	800VDC
Recommended Voc Range	550~750VDC
Recommended MPPT Voltage Range	450~600VDC
Operation Voltage Range	230~800VDC
<b>PV Input (HV : High voltage)</b>	
Maximum Input DC Voltage	900VDC
Recommended Voc Range	550~850VDC
Recommended MPPT Voltage Range	450~600VDC
Operation Voltage Range	230~900VDC
<b>Grid or backup generator input</b>	
Input Voltage	3PH 380V(-15%~30%)
<b>Output specification</b>	
Rated output voltage	3PH 380V
Output frequency	0~600.00Hz (Default 0~50.00Hz)

Protection	
Built-in Protection	Lighting Protection, over-current, overvoltage, output phase-lose, under-load, under-voltage, short circuit, overheating, water pump run dry etc.
General Parameters	
Application Site	No direct sunshine, no dust, corrosive gas, combustible gas, oil mist, steam, dripping or salinity etc.
Altitude	0~2000 m Derated use above 1000m, per 100m, the rated output current decrease 1%.
Environment Temperature	-10℃~40℃ (Environment Temperature be 40℃~50℃, please keep derated use.)
Humidity	5~95%, non-condensation
Vibration	less than 5.9 m/s <sup>2</sup> (0.6g)
Storage Temperature	-20℃~+70℃
Efficiency	Rated Power Run≥93%
Installation	Wall or rail mounting
Protection Grade	IP20
Cooling	Forced Air Cooling

#### 1.2.4 Electric specification of PV150I series

Table 1-4 Electric specification of PV150I series

Model	Recommended Solar Power (kW)	Maximum Input DC Current (A)	Rated Input AC Current (A)	Rated Output Current (A)	Adaptive Motor (kW)
PV150I-2S-0.4B	0.6	10.6	5.3	4.2	0.4
PV150I-2S-0.7B	1.0	10.6	9.4	7.5	0.75
PV150I-2S-1.5B	2.0	10.6	13.1	10.5	1.5
PV150I-2S-2.2B	2.9	21.1	21.3	17	2.2
PV150I-2S-4.0B	5.2	31.7	31.3	25	4
PV150I-2S-5.5B	7.2	42.2	40.0	32	5.5

Input specification	
<b>PV Input</b>	
Maximum Input DC Voltage	450VDC

PV500&PV150A Series Solar Pumping Inverter

Recommended Voc Range	360~430VDC
Recommended MPPT Voltage Range	250~350VDC
Operation Voltage Range	70~450VDC
<b>Grid or backup generator input</b>	
Input voltage	1PH 220V(-15%~20%)
<b>Output specification</b>	
Rated output voltage	3PH 220V
Output frequency	0~600.00Hz (default: 0~50.00Hz)
<b>Protection</b>	
Built-in Protection	Lighting Protection, over-current, overvoltage, output phase-lose, under-load, under-voltage, short circuit, overheating, water pump run dry etc.

### 1.3 Dimension Drawing

#### 1.3.1 PV150A

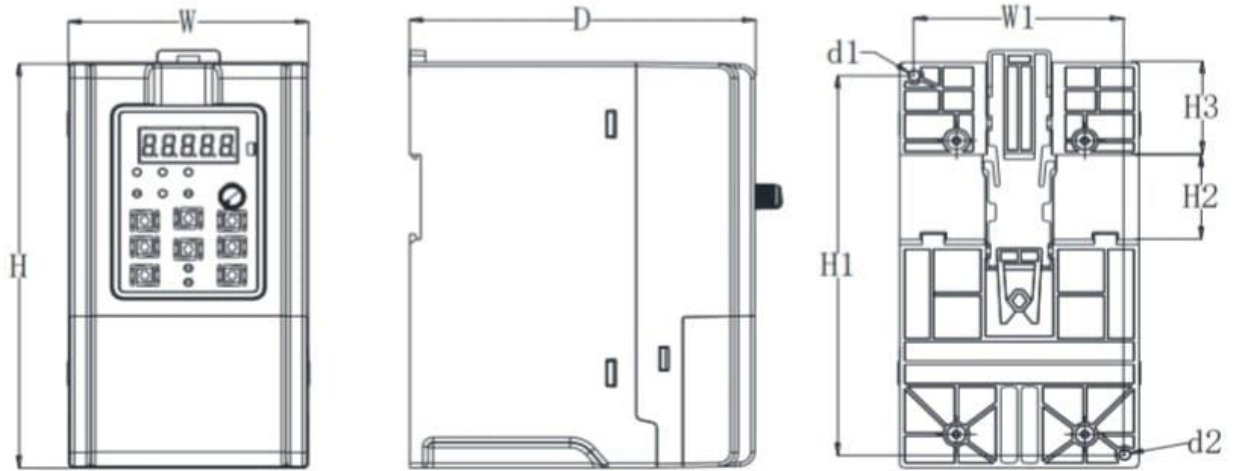


Fig 1-3 Product size chart

Table 1-6 Configuration, mounting dimensions and weight

Model	External and installation dimensions (mm)									N.W (kg)
	W	H	D	W1	H1	H2	H3	Install hole d1	Install hole d2	
PV150A-1S-0.7B	75	150	120	65	140	35	38.5	4.5	4.5	0.95
PV150A-2S-0.2B										
PV150A-2S-0.4B										
PV150A-2S-0.7B										
PV150A-4T-0.7B										
PV150A-4T-1.5B										
PV150A-1S-1.5B	93	171	132	82	160	35	39	4.5	4.5	1.46
PV150A-1S-2.2B										
PV150A-2S-1.5B										
PV150A-2S-2.2B										
PV150A-4T-2.2B										
PV150A-4T-4.0B										



1.3.2 PV500

◆4~22kW Dimensions and wall mounting dimensions

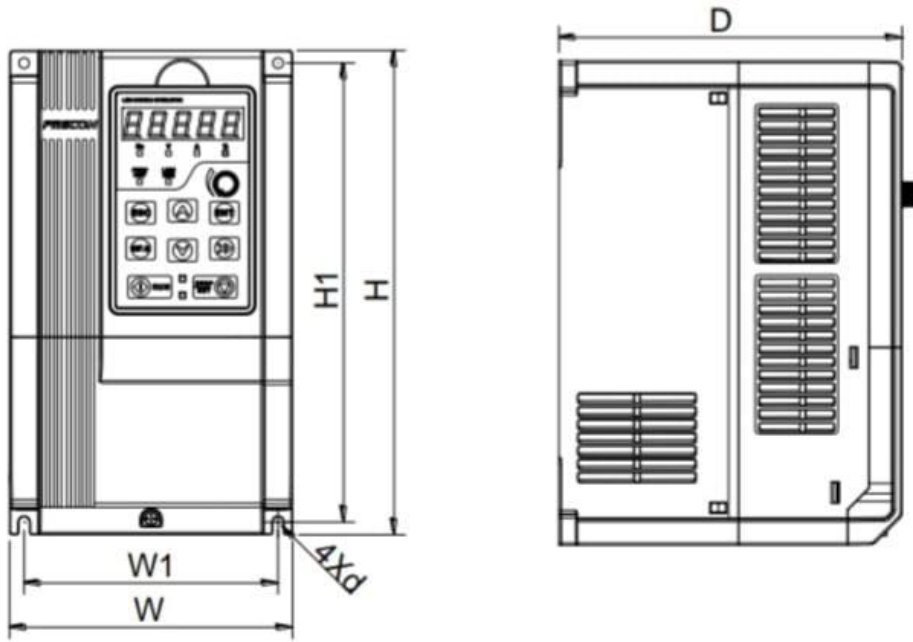


Figure 1-4 4~22kW Wall Installation Diagram

◆30~450kW Dimensions and installation dimensions

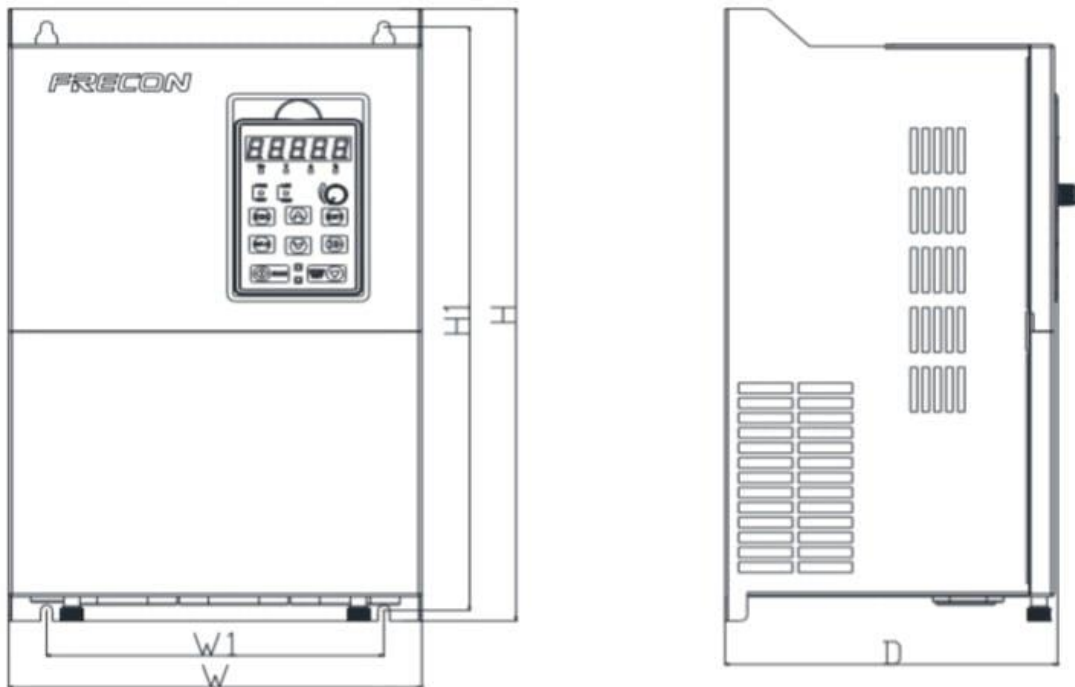


Figure 1-5 30~450kw Wall Mounting Diagram

Table 1-6 Configuration, mounting dimensions and weight

Model NO.	External and installation dimensions (mm)						Weight (Kg)
	W	W1	H	H1	D	Mounting Hole Diameter	
3-Phase:380V, 50/60Hz Range:-15%~+30%							
PV500-4T-0.7B	80	60	200	190	150	6	1.25
PV500-4T-1.5B							
PV500-4T-2.2B							
PV500-4T-4.0B	116.6	106.6	186.6	176.6	175	4.5	2.5
PV500-4T-5.5B							
PV500-4T-7.5B	146	131	249	236	177	5.5	3.9
PV500-4T-011B							
PV500-4T-015B							
PV500-4T-018B	198	183	300	287	185	5.5	6.2
PV500-4T-022B							
PV500-4T-030B	245	200	410	391	200	7	11.8
PV500-4T-037B	275	200	470	451	215	7	15
PV500-4T-045							
PV500-4T-055							
PV500-4T-075	310	200	620	601	262	9.5	26
PV500-4T-090							
PV500-4T-110	400	300	750	724	300	11.5	68
PV500-4T-132							
PV500-4T-160							
PV500-4T-185	500	300	855	822	370	12	112
PV500-4T-200							
PV500-4T-220							
PV500-4T-250	540	340	924.5	896	380	12	120
PV500-4T-280							
PV500-4T-315	620	400	996	963	390	12	133
PV500-4T-355							
PV500-4T-400							
PV500-4T-450	700	500	1025.5	988.5	390	14	195

1.3.3 PV150I

◆ Dimensions and wall mounting dimensions

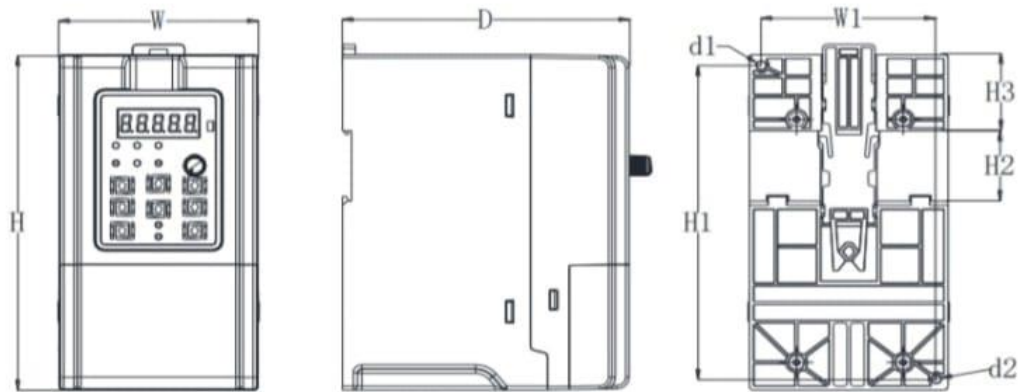


Figure 1-7 Product size chart

Table1-6 Configuration, mounting dimensions and weight

Model	External and installation dimensions (mm)									N.W (kg)
	W	H	D	W1	H1	H2	H3	Install hole d1	Install hole d2	
PV150I-2S-0.4B	75	150	117	65	140	35	38.5	4.5	4.5	1.1
PV150I-2S-0.7B	93	171	130	82	160	35	39	4.5	4.5	1.5
PV150I-2S-1.5B										
PV150I-2S-2.2B	117	187	160	102	172	-	-	4.7	4.7	2.5
PV150I-2S-4.0B	146	249	174	131	236	-	-	5.5	5.5	3.9
PV150I-2S-5.5B	198	300	182	183	287	-	-	5.5	5.5	6.2