



Distributor

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L510

Variable Frequency Drive



L510 Series Compact Inverter



Received prestigious Taiwan Excellence Award 2011 for outstanding design and unique features.



Main Product Features

- 32 bit CPU design provides high performance, faster A/D conversion and torque compensation.
- Output frequency up to 650Hz.
- Built-in Modbus RS485 communication for one to one and one to many control.
- Communication interface modules for Profibus/ DeviceNet/ Ethernet(TCP/IP)/ CANopen.
- Built-in digital display and keypad including speed adjustment potentiometer.
- RJ45 interface for PC and copy module.
- Built-in EMI filter. For interference suppression in compliance with (IEC) EN61800-3.
- Compact space saving design for side by side installation. Plus optional Din rail mounting kit.
- Heat sink cooling design for frame1.Fan Cooling Frame 2.
- PID functionality
- Auto run. 7 programmable sequences (single cycle or repeated cycles)
- Auto Carrier frequency change to limit inverter over temperature.
- Full protective functions.

Power Rating	0.2kW 0.25HP	0.4kW 0.5HP	0.75kW 1HP	1.5kW 2HP	2.2kW 3HP
L510	100V 1 phase				
	200V 1 phase				
	200V 3 phase				

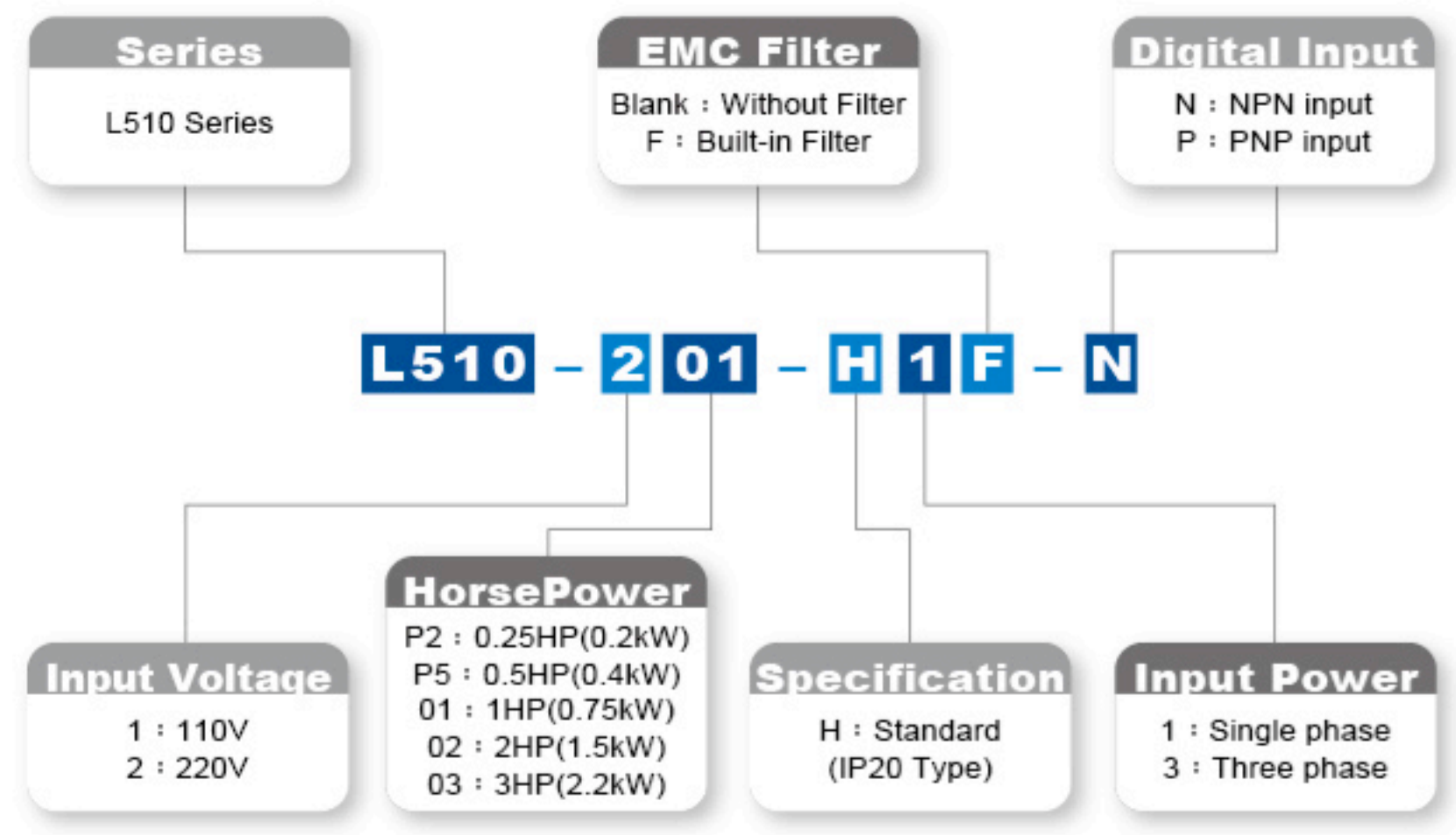
Product Specifications

Single phase, 100-120V model			
L510-□□□-H1-N	1P2	1P5	101
Horsepower(HP)	0.25	0.5	1
Max Applicable Motor Output (kW)	0.2	0.4	0.75
Rated Output Current(A)	1.8	2.6	4.3
Rated Capacity(KVA)	0.68	1	1.65
Max. Input Voltage	Single phase 100-120V(+10%/-15%),50/60Hz		
Max. Output Voltage	Three phase 0-240V		
Input Current(A)	9.5	13	19
Allowable momentary power loss time (second)	1	1	1
Protection Level	IP20		

Single phase, 200-240V model					
L510-□□□-H1-N	2P2	2P5	201	202	203
Horsepower(HP)	0.25	0.5	1	2	3
Max Applicable Motor Output (kW)	0.2	0.4	0.75	1.5	2.2
Rated Output Current(A)	1.8	2.6	4.3	7.5	10.5
Rated Capacity(KVA)	0.68	1.00	1.65	2.90	4.00
Max. Input Voltage	Single phase 200-240V(+10%/-15%),50/60Hz				
Max. Output Voltage	Three phase 0-240V				
Input Current(A)	4.9	7.2	11	15.5	21
Allowable momentary power loss time (second)	1.0	1.0	1.0	2.0	2.0
Protection Level	IP20				

Three phase, 200-240V model					
L510-□□□-H3-N	2P2	2P5	201	202	203
Horsepower(HP)	0.25	0.5	1	2	3
Max Applicable Motor Output (kW)	0.2	0.4	0.75	1.5	2.2
Rated Output Current(A)	1.8	2.6	4.3	7.5	10.5
Rated Capacity(KVA)	0.68	1.00	1.65	2.90	4.00
Max. Input Voltage	Single phase 200-240V(+10%/-15%),50/60Hz				
Max. Output Voltage	Three phase 0-240V				
Input Current(A)	3.0	4.0	6.4	9.4	12.2
Allowable momentary power loss time (second)	1.0	1.0	1.0	2.0	2.0
Protection Level	IP20				

Definition of model ➔

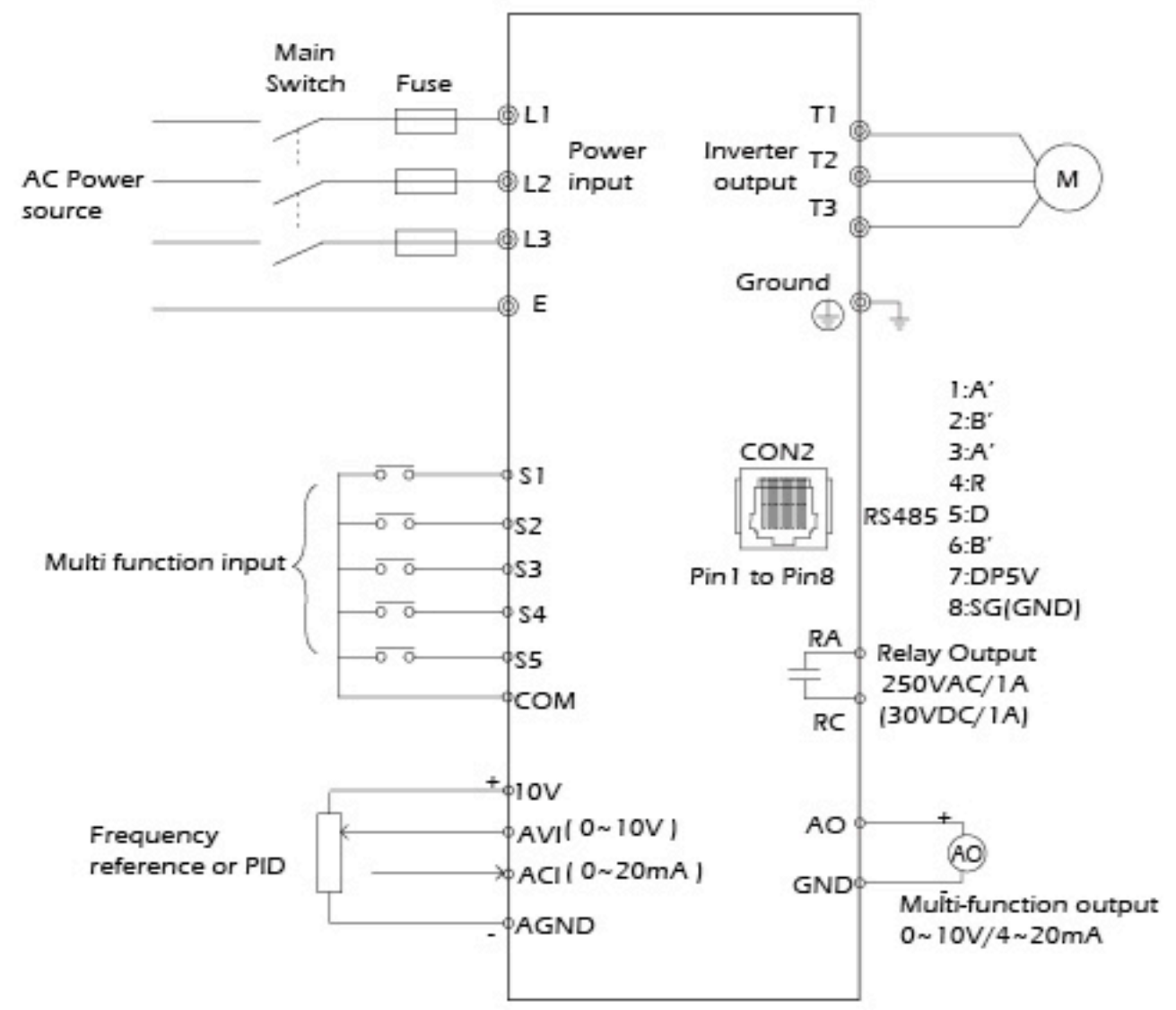


Typical Applications ➔

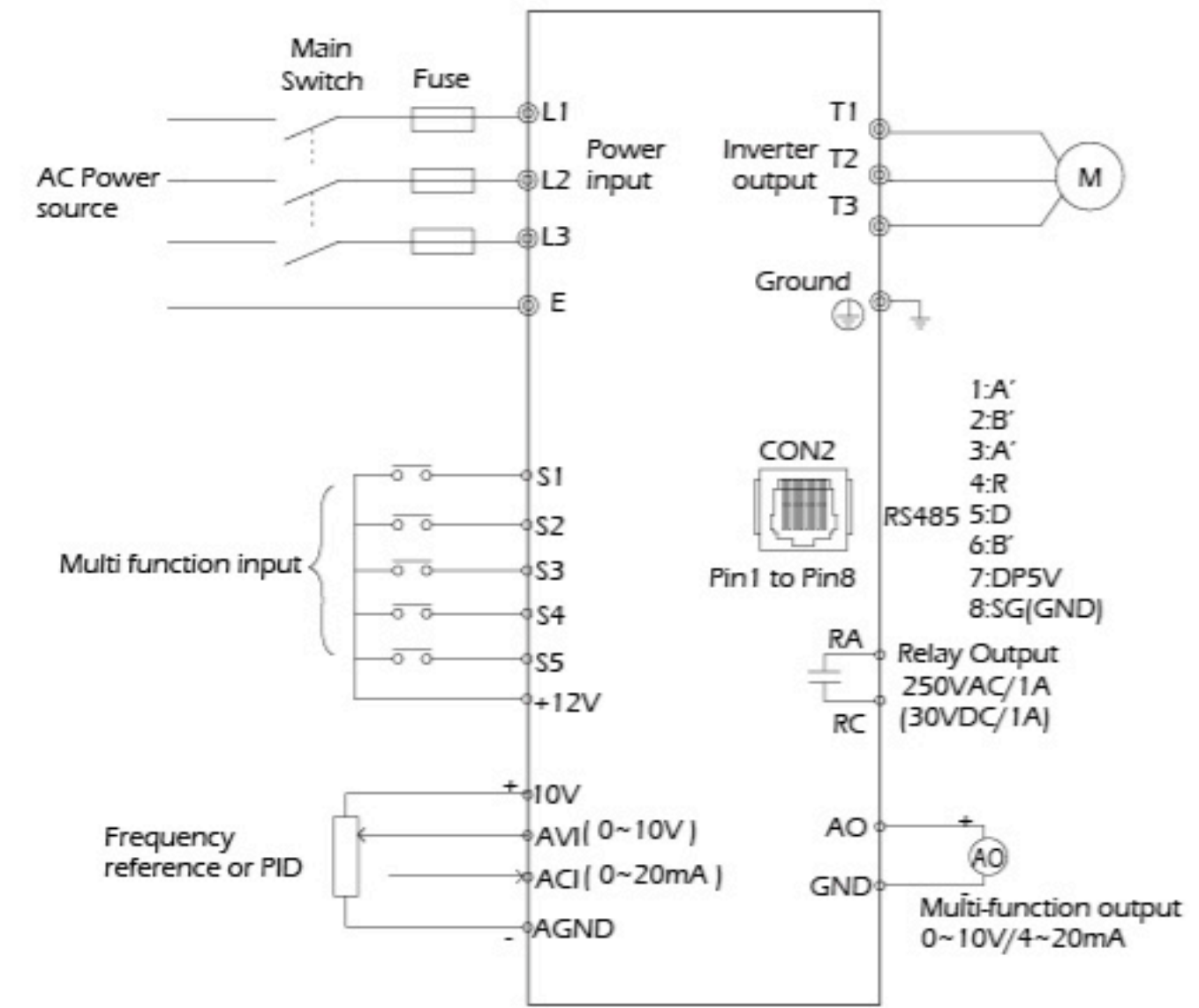
Fans, Pumps, Conveyors, packaging machines, textile machines and auto door control



Wiring Diagram(NPN Input) ➔



Wiring Diagram(PNP Input) ➔



General Specifications

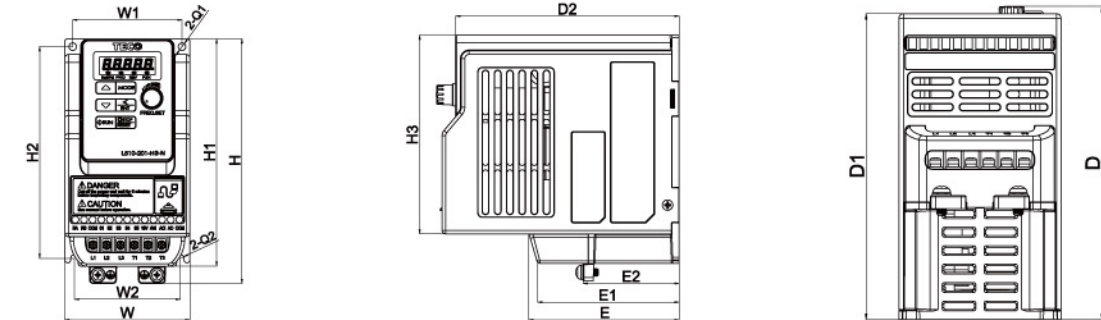


Item	L510	
Control Mode	V/F Control+Auto-torque compensation function	
Frequency	Range	0.01~650.00Hz
	Setting resolution	Digital input : 0.01Hz Analog input : 0.06Hz/60Hz
	Setting	Keypad : Set directly with ▲ ▼ keys or the VR on the keypad External terminal: AVI(0-10V/2-10V),ACI(0-20mA/4-20mA) input Up/down function by multifunction inputs and also by communication method
	Frequency limit	Lower & Upper frequency limits and 2 Skip frequencies
Run	Operation set	Panel : run, stop button control External terminal : Multi-operation-mode2 / 3 wire selection / Jog operation Communication operation
	V / F curve setting	6 Preset curves, One programmable curve
Main Control functions & Features	Carrier frequency	1-16KHz(default 5KHz)
	Acceleration and deceleration control	2 sets of Acceleration / deceleration times 4 S curve settings
	Multifunction input	19 functions
	Multifunction output	14 functions
	Multifunction analog output	5 functions
Display	Other features	Overload detection, 8 preset speeds, auto-run, two Acc/Dec presets, Main/Alt run and frequency selections, PID control, Torque boost, V/F start frequency and fault reset
	LED	Display: parameter, parameter value, frequency, line speed, DC voltage, output voltage, output current, PID feedback, input and output terminal status, Heat sink temperature, Program Version, Fault Log
Protective Functions	Status Indicator	HZ/RPM, Forward/Reverse & FUN (function display)
	Overload Protection	Integrated motor overload protection
	Over voltage	> 410Vdc
	Under Voltage	< 190Vdc
	Momentary Power Loss Restart	Power loss ride through available up to 2 secs
	Stall Prevention	Stall prevention for Acceleration/ Deceleration and also during Continuous run
	Short-circuit output terminal	Electronic Circuit Protection
	Grounding Fault	Electronic Circuit Protection
Communication Control	Other protection features	Heat sink over temperature, Auto carrier frequency reduction due to temperature, Fault output, Reverse disable, Direct start on power up disable, Parameter access lock
	Communication Control	Built-in RS485 modbus, One to one or One to many control
Environment	Operating temperature	-10~40°C(-10~50 °C with fan)
	Storage temperature	-20~60°C
	Humidity	95% RH or less (no condensation)
	Shock	20Hz or less 1G(9.8m/s ²)20-50Hz 0.6G(5.88m/s ²)
	Protection class	IP20

Dimension



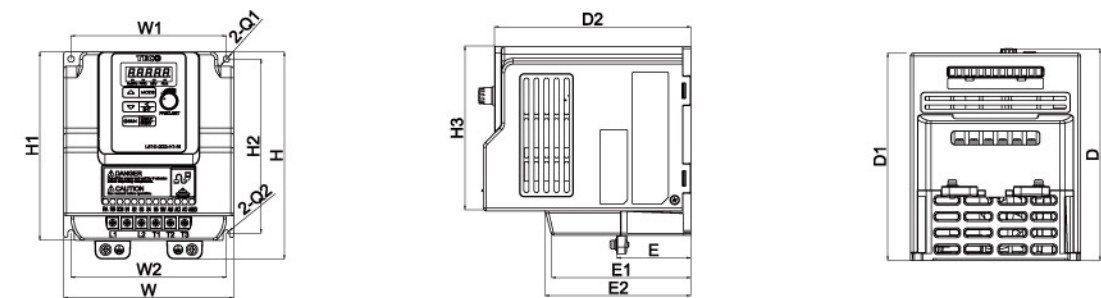
Frame1



Model	W	W1	W2	H	H1	H2	D	D1
L510-1P2-H1	72(2.83)	63(2.48)	61(2.40)	141(5.55)	131(5.16)	122(4.80)	139.2(5.48)	136(5.35)
L510-1P5-H1								
L510-2P2-H1(F)								
L510-2P5-H1(F)								
L510-201-H1(F)								
L510-2P2-H3								
L510-2P5-H3								
L510-201-H3								

Unit : mm(inch)

Frame2



Model	W	W1	W2	H	H1	H2	D	D1
L510-101-H1	118(4.65)	108(4.25)	108(4.25)	144(5.67)	131(5.16)	121(4.76)	147.3(5.80)	144.2(5.68)
L510-202-H3								
L510-203-H3								
L510-202-H1(F)								
L510-203-H1(F)								

Note :

1. F : Means built in EMC filter.
2. The dimension of NPN and PNP types are the same.

Unit : mm(inch)