



H1 Series Inverter USER MANUAL

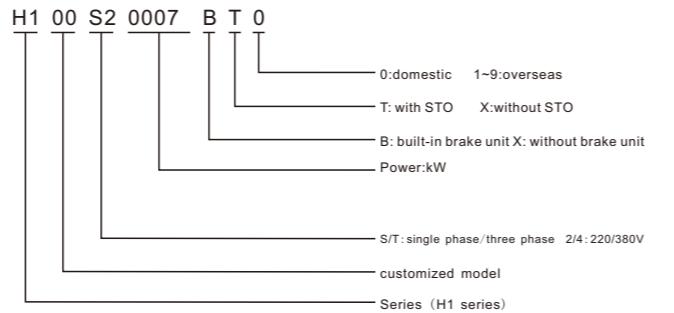
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NO.1 Product introduction

1.1 Technical Features

Items	Description
input	Rated voltage /frequency 3ph: 380V~440V , 50Hz/60Hz 1ph: 200V~240V , 50Hz/60Hz
output	Allowed voltage 3ph: 320V~460V ; 1ph: 180V~260V; voltage Imbalance rate: <3% ; frequency: ±5%
control performance	Voltage 0~rated input voltage Frequency 0Hz~1000Hz Overload capacity 150% rated current 60s, 180% rated current 2s Control mode V/F, SVC Modulation Mode SVPWM Motor type asynchronous motor, synchronous motor, single phase motor (consult factory before using) Start torque 1Hz/150% Speed range 1:100(SVC) Frequency accuracy digital setting: maximum frequency±0.01%; analog setting: maximum frequency±1%; Frequency resolution digital setting: 0.1Hz; analog setting: maximum frequency±1%; Acceleration/deceleration curve line/ S -curve Rapid current limit limit current rapidly within the current protection value, to ensure the safety of the equipment None-stop when instantaneous power off none-stop when instantaneous power off, automatic frequency drop Command source keypad, terminal, communication Set value source digital, analog,multi-speed,communication PID support main setting+PID Operation panel LED display Can display: output frequency,output voltage,output current , Bus voltage, display value 1 , display value 2 , error, alarm External keypad YES Protection function over-current protection, over-voltage protection, under-voltage protection, overheating protection, over-load protection, phase lose protection, earth leakage, etc Environment Store environment indoor, away from direct sunlight, no dust, no corrosive gas, no inflammable gas, no oil mist, no vapour, no drip and no salinity, etc Altitude derating use above 1000M, derating 10% per 1000M Environment temperature -10°C~+40°C(environment temperature around 40°C~50°C please derating use) Humidity 5%~95%RH, no condensation Store temperature -40°C~+70°C Vibration <5. 9M/S (0.6g)

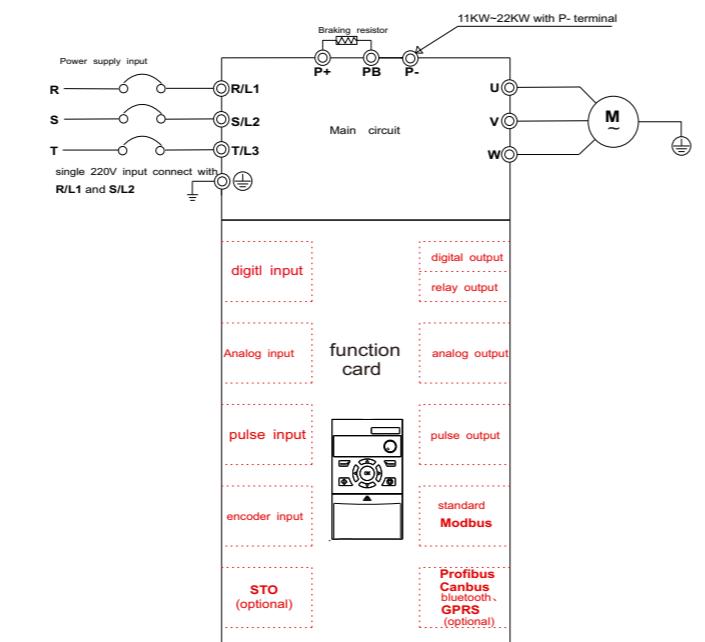
1.2 H1 nameplate



1.3 H1 series specifications and models

Base.No	Models	Input voltage	Power (kw)	Output current(A)	Adaptive motor(kW)
F1	H100S20007BX0	1 phase 220V	8.2	0.75	5.0
	H100S20015BX0	1 phase 220V	14.0	1.5	7.0
F2	H100T20022BX0	1 phase 220V	23.0	2.2	12.5
		3 phase 220V	13.5		2.2
F3	H100T20037BX0	1 phase 220V	38.6	3.7	15.2
	H100T20055BX0	3 phase 220V	16.5		3.7
F4	H100T20075BX0	3 phase 220V	24	5.5	23
	H100T20110BX0	3 phase 220V	37	7.5	31
F1	H100T40007BX0	3 phase 380V	4.0	0.75	3.0
	H100T40015BX0	3 phase 380V	5.8	1.5	4.5
F2	H100T40022BX0	3 phase 380V	6.5	2.2	5.6
	H100T40040BX0	3 phase 380V	12.6	4.0	10.5
F3	H100T40055BX0	3 phase 380V	16	5.5	14
	H100T40075BX0	3 phase 380V	21	7.5	19
F4	H100T40110BX0	3 phase 380V	28	11	26
	H100T40150BX0	3 phase 380V	36	15	33
F5	H100T40185BX0	3 phase 380V	42	18.5	40
	H100T40220BX0	3 phase 380V	48	22	46

NO.2 Main circuit and function card



Notice: different function card corresponding to different terminals. Except standard function card, can customize any type of card.

Reset parameters when using different function cards. An AC drive only can use one function card.

Warning: Do not use function card when power is on!

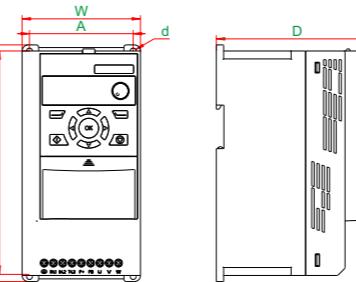
2.1 Main circuit terminal description

Terminal identification	Name	Function description
	Grounding terminal	Safety grounding
R/L1、S/L2、T/L3	Main circuit power input terminal	Connect three phase power supply, single phase power supply connect to R/L1, S/L2
P+、PB	Braking terminal	Connect to external braking resistor
P+、P-	DC bus terminal	Two sets or more inverters use a common DC bus (11KW~22KW has P-terminal)
U、V、W	output terminal	Connect to three phase motor

2.2 Function card configuration table

Function card	H10001	H10002	H10003	H10004	H10005	H10006	H10007	H10008	H10009	H10010	H10011	H10012
Digital Input	4	3	4	8	2	2	3	2	2	4	4	3
Digital output								4	4			
Relay output	1		3	1	1	1	1	1	1	1	1	1
Analog Input	1		1		2			1	1	1	1	1
Analog output					2			1	1			
Pulse Input						1						
Pulse output						1						
Encoder Input							1					
Modbus	1	1	1	1	1	1	1	1	1	1	1	1
Profibus								1				
Canbus									1			
Bluetooth										1		
GPRS											1	
STO												1
Typical application												

NO.3 Product Dimension



Framework	Dimensions (mm)			
	W(Width)	H(Height)	D(Depth)	A
F1	85	170	124	67.3
F2	97	194	133	85
F3	126	237	147	112
F4	168	298	160	154
F5	198	355	177	183

NO.4 Keypad description

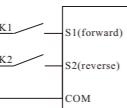
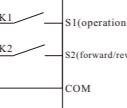
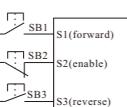
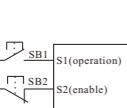
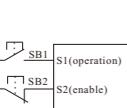
Item	Structure	Function description
1		Display
2		Program/exit
3		Status display interface work as status switch key; other interface work as left shift key
4		Reserved key
5		RUN
6		Potentiometer: refer to parameter P1.63
7		In the mode of program, work as value change key; otherwise, UP/DOWN key, refer to parameter P1.63, P2.03, P2.04
8		Enter
9		STOP/RESET
10		Customization key

4.1 Keypad appearance and keypad explanation

Indicator light	Status	Function description
RUN	light on/flickering	operating /decelerating
REV	light on	reverse operation
REM	light on	remote operation
ALM	light on	fault indication
M	light on	customization indication, default alarm indication
U		
d		
H		
L		
R		
E		

4.2 Indicator light description

Display code	Item description
F	output frequency
C	output current
U	output voltage
d	

Function code	Function	Description(setting range)	Factory default																															
P0.37	S1 type	0:positive logic 1:negative logic 2:rising edge 3:falling edge function: select external terminal trigger type * principle interpretation: 0:positive logic, high level is valid status, low level is invalid status; 1:negative logic, high level is invalid status, low level is valid status; 2:rising edge, rising edge is valid; 3:falling edge, falling edge is valid. *two-line mode 1: the mode is most commonly used two-line mode, enable and direction combined, K1 and K2 control forward/reverse of motor	0																															
																																		
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* two-line mode 2: enable and direction separated, in this mode K1 is enable terminal, direction is controlled by K2.																																		
																																		
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P0.41	AI1 low side voltage(current)	-999999.000~999999.000 ◎Analog input AI1 setting +AI1 low side voltage/current: set the lowest voltage/current of input signal. +AI1 high side voltage/current: set the highest voltage/current of input signal. +AI1 low side setting: set corresponding value of low side voltage/current. +AI1 high side setting: set corresponding value of high side voltage/current.	0.000V(mA)																															
P0.42	AI1 high side voltage(current)	range setting AI1 high side setting AI1 terminal setting AI1 low side setting	10.000V(mA)																															
P0.43	AI1 low side setting	0.000%	0.000%																															
P0.44	AI1 high side setting	100.000%	100.000%																															
P0.45	AO1 signal source	0.always 0 1.always 1 2.output frequency 3.motor current 4.output voltage 5.motor torque 6.output power 7.setting frequency 100~9999:high level parameter AO1 signal source function description as below:	2																															