ASPIRO®
Electric



AS900/AS600 Model and technical data & motors

COMPANY PROFILE

www.aspiroglobal.co.in

Company's Introduction

- SMT automatic production
- Inverter Assembly line
- PCB welding
- Withstand test
- Assembly
- Loading test
- Aging test
- Packed product



















Company's Introduction



• PCB welding



• Withstand test



• Assembly



• Loading test



• Aging test



• Packed product

AS900

Model and technical data

AS900 series inverter is a general purpose high performance current vector inverter, mainly used to control and adjust the speed of three-phase ac asynchronous motor. AS900 adopts high performance vector control technology, low speed and high torque output, with good dynamic characteristics and super overload capacity.

Name plate

AS900 4T 0.75 G B

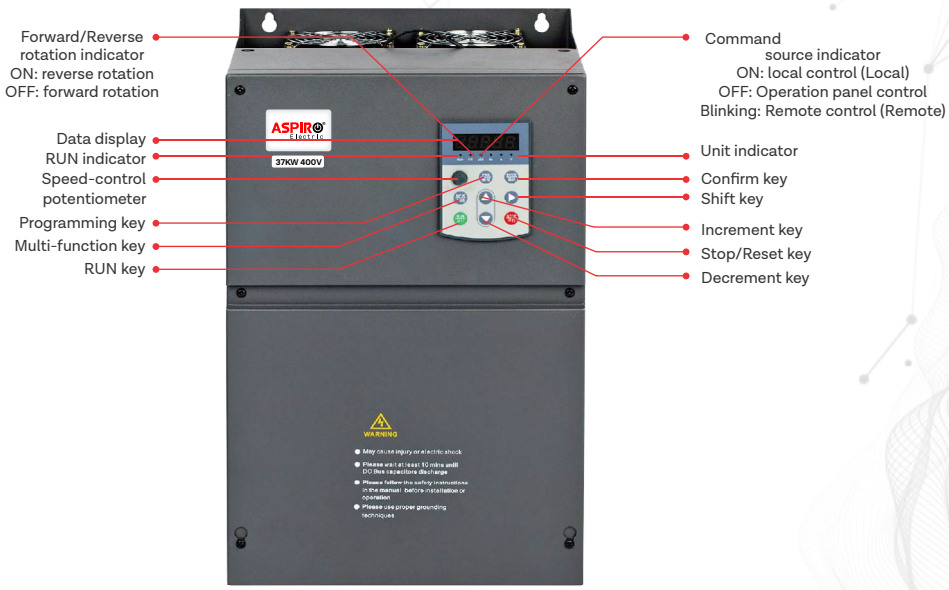
AS900 series AC drive

Mark	Voltage Class
S	Single-phase 220V
2T	Three phase 220V
4T	Three phase 380V

Mark	Braking Unit
Blank	No
B	Yes

Mark	Type of Adaptable Motor
G	General type
P	Fan pump type

Mark	0.4	0.75	···	11	···
Adaptable motor (kw)	0.4	0.75	···	11	···



AS900

Frequency Converter Characteristics



1. Power range 0.75kw-50KW;

Support PMSM vector control without absolute position feedback.

2. New speed sensorless vector control performance

No velocity sensor vector control can output 150% rated torque at 0.5hz; Sensorless vector control is less sensitive to motor parameters and improves field adaptability. it can be used for winding control and load distribution under the same load with multiple motors.

3. High starting torque characteristics

AS900 inverter provides 150% sensorless vector control of starting torque at 0.5Hz.

4. Exceptional responsiveness

Under sensorless vector control, the torque response is < 20MS.

5. Torque limit for protection machinery

The AS900 inverter can provide torque limit. When the torque instruction exceeds the maximum torque that the machine can bear, the inverter can better protect the equipment by limiting the torque within the maximum torque set to exert the maximum mechanical efficiency.

6. Flexible and practical analog input/output port

For each analog quantity input (AI1~AI2), curves of 4 points can be set respectively, which is more flexible to use. AI1~AI2 can be calibrated at the factory or the user's site, and the accuracy is up to 20MV. AO can be calibrated at factory or on site for zero drift and gain of linear curve with an accuracy of 20MV.

7. Fast current limiting function

Fast current limiting function can avoid frequency converter over current alarm. When the current exceeds the current protection point, the fast current limiting function can quickly limit the current within the current protection point, so as to protect the safety of the equipment and avoid over-current alarm caused by sudden load or interference.

8. Instant stop

This function means that the inverter will not stop when the power is cut off. In the case of instantaneous power failure or sudden voltage reduction, the inverter reduces the output speed, through the load feedback energy, compensation voltage reduction, to maintain the inverter in a short time to contaiune to run.

9. Environmental resistant design

With dustproof, moisture-proof and mildewproof paint treatment process; Wide voltage range design; Full series of independent dust design.

AS900

Model and technical data

AC drive mode	Power capacity (kVA)	Input current A	Output current A	Adaptable Motor	
				kW	HP
Single-phase power: 220V, 50/60Hz					
AS900-S 0.75GB	1.5	8.2	4.0	0.75	1
AS900-S 1.5 GB	3.0	14.0	7.0	1.5	2
AS900-S 2.2GB	4.0	23.0	9.6	2.2	3
Three-phase power: 220V, 50/60Hz					
AS900-2 T 0.75GB	3	5	3.8	0.75	1
AS900-2 T 1.GB	4	5.8	5.1	1.5	2
AS900-2 T 2.2GB	5.9	10.5	9	2.2	3
AS900-2 T 3.7GB	8.9	14.6	13	3.7	5
AS900-2 T 5.5GB	17	26	25	5.5	7.5
AS900-2 T 7.5GB	21	35	32	7.5	10
AS900-2 T 11G	30	46.5	45	11	15
AS900-2 T 15G	40	62	60	15	20
AS900-2 T 18.5G	57	76	75	18.5	25
AS900-2 T 22G	69	92	91	22	30
AS900-2 T 30G	85	113	112	30	40
AS900-2 T 37G	114	157	150	37	50
AS900-2 T 45G	134	180	176	45	60
AS900-2 T 55G	160	214	210	55	75
AS900-2 T 75G	231	307	304	75	100
Three-phase power: 380V, 50/60Hz					
AS900-4 T 0.75GB	1.5	3.4	2.1	0.75	1
AS900-4 T 1.5GB	3.0	5.0	3.8	1.5	2
AS900-4 T 2.2GB	4.0	5.8	5.1	2.2	3
AS900-4 T 3.0GB	5.0	8.0	7.0	3.0	4
AS900-4 T 4.0GB	5.9	10.5	9.0	4.0	5
AS900-4 T 5.5GB	8.9	14.6	13.0	5.5	7.5
AS900-4 T 7.5GB	11.0	20.5	17.0	7.5	10
AS900-4 T 11GB	17.0	26.0	25.0	11.0	15
AS900-4 T 15GB	21.0	35.0	32.0	15.0	20
AS900-4 T 18.5GB	24.0	38.5	37.0	18.5	25
AS900-4 T 22GB	30.0	46.5	45.0	22	30

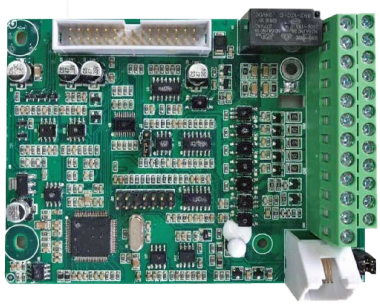
AS900

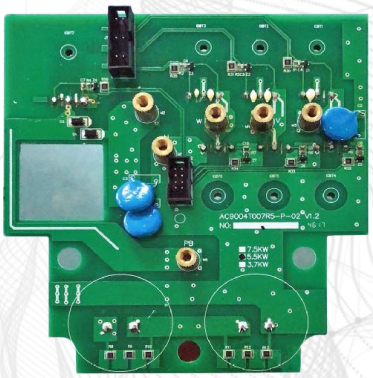
Model and technical data

AS900

AC drive mode	Power capacity (kVA)	Input current A	Output current A	Adaptable Motor	
				kW	HP
AS900-4T 30G	40.0	62.0	60.0	30	40
AS900-4T 37G	57.0	76.0	75.0	37	50
AS900-4T 45G	69.0	92.0	91.0	45	60
AS900-4T 55G	85.0	113.0	112.0	55	70
AS900-4T 75G	114.0	157.0	150.0	75	100
AS900-4T 90G	134	180	176.0	90	125
AS900-4T 110G	160	214	210.	110	150
AS900-4T 132G	192	256	253	132	175
AS900-4T 160G	231	307	304	160	250
AS900-4T 200G	250	385	377	200	300
AS900-4T 220G	280	430	426	220	300
AS900-4T 250G	355	468	465	250	400
AS900-4T 280G	396	525	520	280	370
AS900-4T 315G	445	590	585	315	500
AS900-4T 355G	500	665	650	355	420
AS900-4T 400G	565	785	725	400	530
AS900-4T 450G	630	883	820	450	600







AS900

Model and technical data

AS600 series inverter adopts DSP control system to realize vector control without speed sensor and effectively suppress low-frequency oscillation. Rich terminals make applications more flexible. It is mainly used for fan and pump loads, which have higher requirements for speed control accuracy, torque response speed and low frequency output.

Name plate

AS600 L 0.7 G B

Inverter series

Mark	Voltage level
N	Single-phase 220V
NS	Three phase 220V
L	Three phase 380V
T	Three phase 660V

Braking Unit	
Blank	No
B	With the brake unit

Mode	
G	Universal type
P	Fan and water pump type
Z	Injection moleding machine

Adaptation of motor power

Mark	0.4	0.7	···	11	15
Motor power(kw)	0.4	0.75	···	11	15



AS900

Frequency Converter Characteristics



1. Power range 0.75kw-500KW;
2. Three control modes; pg-free vector control (SAC), V/F control, torque control;
3. Starting torque : pg-free vector control : 0.5Hz/150% (SVC);
4. 16-stage simple PLC, multi-stage speed control and PID control;
5. Support various frequency setting methods; digital setting. analog setting, PID setting, communication setting etc.;
6. Support dc braking when starting and stopping;
7. Input and output terminals are freely programmed, and users can combine various working modes according to their needs;
8. Equipped with jump frequency control function to avoid mechanical resonance and make the system more stable and reliable;
9. With instantaneous power failure and non-stop function;
10. Sleep and wake up delay setting function;
11. Equipped with over-torque detection function;
12. Selection of multiple upper limit frequency setting sources;
13. Real-time parameters can be viewed through the shift key with two-way shift function;
14. Equipped with speed tracking and restart function: realize smooth start without impact to the rotating motor;
15. QUICK/JOG function: users can freely define the multi-function shortcut key. By setting this parameter, you can quickly browse the relevant function code which is modified and different from the factory default
16. Automatic voltage adjustment function: when the grid voltage changes, automatically keep the output voltage constant;
17. Oscillation suppression function: effectively solve the problem of low-frequency oscillation of high-power motor;
18. Provide multiple fault protection functions : over current, over voltage, under voltage, over heat, lack of phase overload and other protection functions.

AS600

Model and technical data

Model No.	Input voltage	Rated power (kW)	Rated input current (A)	Rated output current (A)	Compatible motor
AS600-N 0.75G	Single phase 230V±15%	0.75	8	4	0.75
AS600-N 1.5G		1.5	14.2	7.0	1.5
AS600-N 2.2G		2.2	23.0	10	2.2
AS600-NS 0.75G	3-phase 230V±15%	0.75	5.0	4.5	0.75
AS600-NS 1.5G		1.5	7.7	7	1.5
AS600-NS 2.2G		2.2	11.0	10	2.2
AS600-NS 4.0G		3.7	17.0	16	3.7
AS600-NS 5.5G		5.5	21.0	20	5.5
AS600-NS 7.5G		7.5	31.0	30	7.5
AS600-NS 11G		11.0	43.0	42	11.0
AS600-NS 15G		15.0	56.0	55	15.0
AS600-NS 18G		18.5	71.0	70	18.5
AS600-NS 22G		22.0	81.0	80	22.0
AS600-NS 30G		30.0	112.0	110	30.0
AS600-NS 37G		37.0	132.0	130	37.0
AS600-NS 45G		45.0	163.0	160	45.0
AS600-NS 55G		55.0	181.0	190	55.0
AS600-L 0.75G	3-phase 400V±15%	0.75	3.4	2.5	0.75
AS600-L 1.5G		1.5	5.0	3.7	1.5
AS600-L 2.2G		2.2	5.8	5	2.2
AS600-L 4.0G		4.0	10	9	4.0
AS600-L 5.5G		5.5	15	13	5.5
AS600-L 7.5G		7.5	20	17	7.5
AS600-L 11G		11.0	26	25	11.0
AS600-L 15G		15.0	35	32	15.0
AS600-L 18G		18.5	38	37	18.5
AS600-L 22G		22.0	46	45	22.0
AS600-L 30G		30.0	62	60	30.0
AS600-L 37G		37.0	76	75	37.0

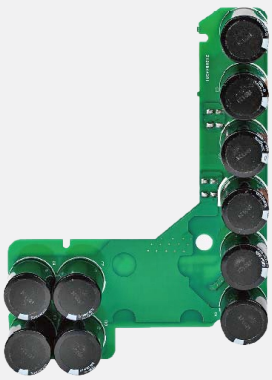
AS900

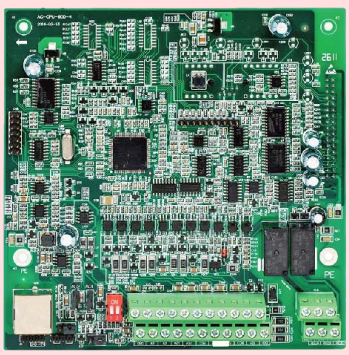
Model and technical data

AS600

Model No.	Input voltage	Rated power (kW)	Rated input current (A)	Rated output current (A)	Compatible motor
AS600-L45G	3-phase 400V±15%	45.0	90	90	45.0
AS600-L55G		55.0	105	110	55.0
AS600-L75G		75.0	140	150	75.0
AS600-L90G		90.0	160	176	90.0
AS600-L110G		110.0	210	210	110.0
AS600-L132G		132.0	240	250	132.0
AS600-160G		160.0	290	300	160.0
AS600-L185G		185.0	330	340	185.0
AS600-L200G		200.0	370	380	200.0
AS600-L220G		220.0	410	415	220.0
AS600-L250G		250.0	460	470	250.0
AS600-L280G		280.0	500	520	280.0
AS600-L315G		315.0	580	600	315.0
AS600-L350G		350.0	620	640	350.0
AS600-L400G		400.0	670	690	400.0
AS600-L500G		500.0	835	860	500.0







PLC
Controller



Function and performance:

- Frequency setting mode: digital setting, analog setting, serial communication setting, multi-segment speed setting, simple PLC setting, PID setting, etc., can realize setting combination and mode switching.
- PID control function
- Simple PLC, mulit-speed control function: 16-speed control
- Swing frequency control function
- Instantaneous power failure without stopping function
- MF.K key function: user-defined multi-function shortcut keys
- Automatic voltage adjustment function: when the grid voltage changes, it can automatically keep the output voltage constant

  Provide a variety of fault protection functions: over current, over voltage, under voltage, over heat, lack of phase, overload and other protection funtions

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