LAEG



LD350 Series
Universal Control Driver

Product Introduction

The LD350 series inverter is a general-purpose high-performance current vector inverter that uses high-performance vector control technology, low-speed high-torque output, good dynamic characteristics, super overload capacity, rich and powerful functions, and stable performance. It can be used to drive various automated production equipment.



Product Features

High Quality Design

01

Wide Voltage Design in line with International Standards

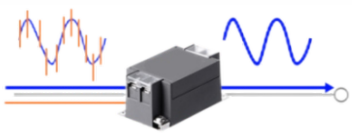
Meet single-phase 200V~240V, three-phase 200V~240V and 380～480V power grid requirements including Europe, North America, India, etc.



02

Various EMC Specifications and Solutions

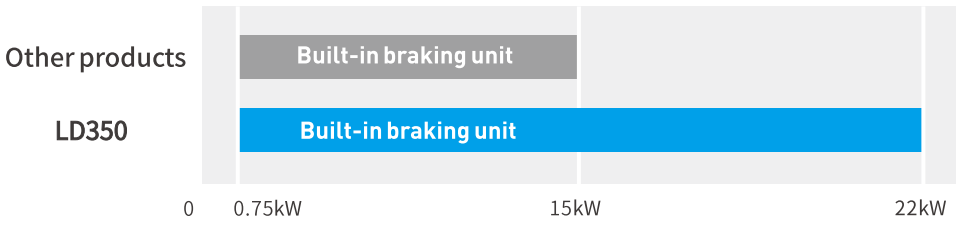
Meet EU C3 , C2 and other requirements and can provided comprehensive solutions for occasions with high EMC requirements.



03

Complete DC Braking Circuit Solution

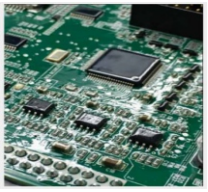
0.75-22kW: built-in braking unit; ⩾30kW: optional built-in braking unit
More comprehensive and intelligent braking protection: with braking resistor short circuit protection, braking circuit overcurrent protection, braking pipe overload protection, braking pipe direct detection and other functions.



04

Long Life Design

The core components use higher quality components, and the single board adopts the triple-proof paint automatic spraying process to increase the environmental tolerance and improve the protection capability of the single board.





05

Independent Air Duct Design

Effectively prevent external pollution from entering the inverter and causing short circuit and other faults, thus improving reliability.

06

International IEC Standard Design

The products comply with international IEC standards and meet RoHS standards for environmental protection needs.

Note: Each power segment of the LD350 series has passed the test certification.

Excellent Performance

Good Voltage and Current Control

Overvoltage Stall

During the deceleration process, the output frequency is adjusted to avoid excessive motor power generation due to excessive deceleration, which may cause overvoltage on the DC bus of the inverter.

Overcurrent Stall

During the acceleration process, the output frequency is adjusted to avoid excessive load caused by excessive acceleration, which may cause overcurrent in the inverter.

Excellent Parameter Self-learning Function

It can accurately perform self-learning of rotating or static motor parameters, is easy to debug, simple to operate, and providing higher control accuracy and response speed.

Asynchronous Motor

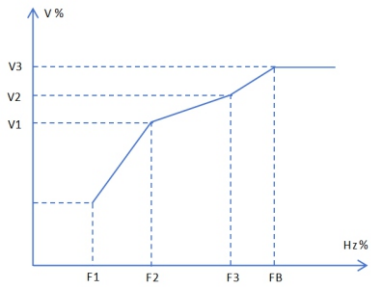
1.Static parameter self-learning
2.Comprehensive parameter self-learning

Synchronous Motor

1.Load parameter self-learning
2.No-load parameter self-learning

Multi-point Voltage and Flux Setting Function

Three curve setting modes: linear, multi-point curve, square curve
The three points of the curve can be adjusted.
The most suitable curve can be set according to the torque characteristics of the equipment. Combined with the best excitation control, better energy-saving effect can be achieved.



Application

It can be applied to industries such as textile, papermaking, wire drawing, machine tools, packaging, food, fans, water pumps and various automated production equipment.



Food Processing



Textile Industry



Processing Machine Tools



Ventilation System



Agricultural Irrigation

Model Description

LD350 E - 7R5 G - T4 B

Frequency converter series
Universal vector series

	Standard series
K	Special for air compressor
W	Special for constant pressure water supply
E	Special for PMSM

2R2	2.2kW
011	11kW
200	200kW

B	Built-in braking unit
C	Cabinet with base
D	Built-in reactor

S2	Single phase 220V
T2	Three-phase 220V
T4	Three-phase 380V

G	Constant torque load
P	Variable torque load (Fan, Water pump)

Technical Specifications

Function		Specification
Input	Input voltage (V)	AC 3PH 220V(-15%)~240V(+10%) AC 3PH 380V(-15%)~440V(+10%)
	Input frequency (Hz)	50Hz or 60Hz Allowed range: 47~63Hz
Output	Output frequency (Hz)	0~400Hz
Technical control feature	Control mode	V/F; SVC
	Motor type	Asynchronous motor; PMSM
	Speed ratio	1:120(SVC)
	Overload capability	G type: 150% of rated current: 60s 200% of rated current: 3s P type: 120% of rated current: 60s 150%of rated current:1s
Running control feature	Frequency setting	Digital setting, analog setting, pulse frequency setting, multi-step speed running setting, simple PLC setting, PID setting, MODBUS communication setting Realize the shifting between the set combination and set channel.
	Auto voltage adjustment	Keep a stable voltage automatically when the grid voltage transients.
	Fault protection	Provide over 30 fault protection functions: overcurrent, overvoltage, undervoltage, overheating, phase loss and overload, etc.
	Speed tracking	Restart the rotating motor smoothly.
Peripheral interface	Terminal analog input resolution	≤10mV
	Terminal switch input resolution	≤ 2ms
	Analog input	2 channels (VCI,CCI)0~10V/0~20mA
	Analog output	2 channels (A01,A02)0~10V/0~20mA
	Digital input	5 channels common input 1 channel high speed input
	Digital output	2 channels optocoupler isolation/open collector output Rated current 20mA(DO,HDO)
	Relay output	2 channels programmable relay output RA NO, RB NC, RC common terminal TA NO, TB NC, TC common terminal Contactor capacity: 3A/250VAC, 3A/30VDC
Others	Mountable method	Wall-mounted
	Temperature of the running environment	-10-40°C When the ambient temperature is 40~50°C, the rated value decreases by 1% for every 1°C increase.
	Ingress protection	IP20
	Cooling	Air-cooling
	Braking unit	⩾22kW: Standard 30kW/37kW: Optional
	Braking resister	External braking
	EMC filter	Built-in C3 filter: meet the degree requirement of IEC61800-3 C3 Optional external filter : meet the degree requirement of IEC61800-3 C2

General Specifications

▶ 380V

Frame size		A				B		C	
Type LD350-___T4B		0R7	1R5	2R2	4R0	5R5	7R5	011	015
Applicable motor power KW		0.75	1.5	2.2	4	5.5	7.5	11	15
Applicable motor horsepower HP		1	2	3	5	7.5	10	15	20
Output	Rated output capacity KVA	1.5	3	4	5.9	8.9	11	17	21
	Rated output current A	2.1	3.8	5.1	9.0	13	17	25	32
	Output frequency Hz	0.01-400Hz							
	Carrier frequency range KHz	1--16KHz							
	Overload capacity	150% of rated current: 60s							
		200% of rated current: 1s							
Input	Input Current A	3.4	5.0	5.8	10.5	14.6	20.5	26	35
	Input voltage frequency	3-phase 380V, 50/60Hz							
	Allowable voltage fluctuation	-15%-+10%							
Cooling system		Forced air cooling							
Braking unit		Built-in							

▶ 380V

Frame size		D		E		F		G		H			I	
Type LD350-___T4B		018	022	030	037	045	055	075	090	110	132	160	185	200
Applicable motor power KW		18.5	22	30	37	45	55	75	90	110	132	160	185	200
Applicable motor horsepower HP		25	30	40	50	60	75	100	125	150	200	220	250	275
Output	Rated output capacity KVA	24	30	40	57	69	85	114	134	160	192	231	244	250
	Rated output current A	37	45	60	75	91	112	150	176	210	253	304	340	377
	Output frequency Hz	0.01-400Hz												
	Carrier frequency range KHz	1--16KHz												
	Overload capacity	150% of rated current: 60s												
		200% of rated current: 1s												
Input	Input Current A	38.5	46.5	62	76	92	113	157	180	214	256	307	350	385
	Input voltage frequency	3-phase 380V, 50/60Hz												
	Allowable voltage fluctuation	-15%-+10%												
Cooling system		Forced air cooling												

▶ 380V

Frame size		J		K		L	
Type LD350-___T4B		220	250	280	315	355	400
Applicable motor power KW		220	250	280	315	355	400
Applicable motor horsepower HP		300	340	380	430	485	545
Output	Rated output capacity KVA	280	355	396	445	500	565
	Rated output current A	426	465	520	585	650	725
	Output frequency Hz	0.01-400Hz					
	Carrier frequency range KHz	1--16KHz					
	Overload capacity	150% of rated current: 60s					
		200% of rated current: 1s					
Input	Input Current A	430	468	525	590	665	785
	Input voltage frequency	3-phase 380V, 50/60Hz					
	Allowable voltage fluctuation	-15%-+10%					
Cooling system		Forced air cooling					

NOTE: 1. The adapted motor capacity is the maximum capacity when using Jianghuai standard 4p motor.
2. The rated input current changes with the change of power supply impedance.
3. The power supply capacity value changes with the change of power supply impedance.

LAEG

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