Yolico

Detailed Work Makes Quality
Our Quality Equals Perfection

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YD3000N

Economic Current Vector Inverter

ISO9001 CE

Technical data subject to change without notice / Y3 2015.06.V01

YD3000N Economic Current Vector Inverter

Friendly easy Operation

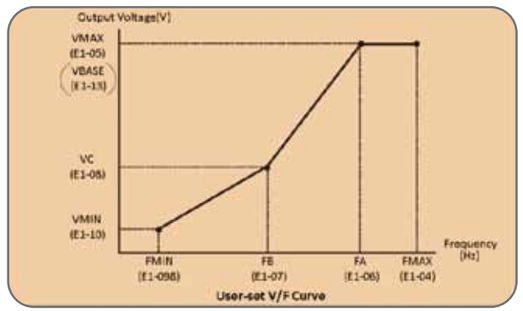
Parameters can be selected easily by logic groups

Dynamic Self-Study Mode

Self-Study Mode works at vector control, Inverter can be set with details of motor nameplate

Various V/f Curve Setting

There are totally 15 preset V/f curves setting and 1 adjustable V/f curve setting can be selected, such as High Starting Torque Curve, Variable Torque Curve, High Speed Operation. They can match different kind of loadings, also Uer-set V/f curve can work at PG Vector Control Mode as Well.



Full Protection Function

Over Load, Over Current, Over Voltage, Low Voltage, Phase Loss, Ground Fault, etc. To make sure the equipment operates properly.

Energy Saving Control

Automatically adjust output voltage according to loadiing at vector control in order to give better performance when motor operates on different load. It improves motor efficiency then saves energy.

Various Frequency Command Given

Multi-Channel Analog Input Given :
2 off Voltage Signal Input Channel : 0~10VDC or 0~+/- 10VDC (motor reverse with negative input)
1 off Current Signal Input Channel : 0(4)~20mA (voltage signal input available by parameter setting)

Setting Frequency Command by Digital Operator
Communication Command

Monitor Function

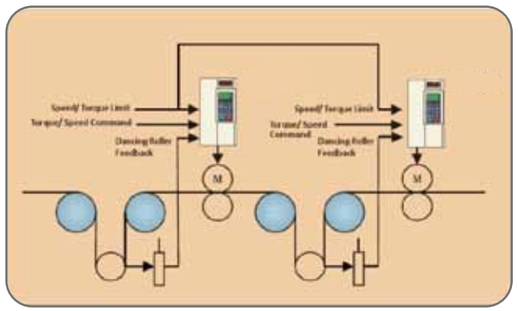
The following items can be monitored with the Digital Operator. Frequency Command, Output Frequency, Output Current, Motor Speed, Output Voltage, Main Circuit DC Voltage, Output Power, Torque Command, Input Terminal Status, Operating Status, Speed Deviation, PID feedback Value, Fault History, and so on.
With Monitor Function, both Inverter and Motor will have better performance.

PID Control Function

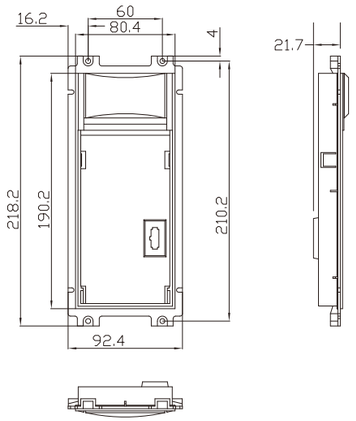
PID Control Function may through controlling the Rotational Speed of motor to achieve the controlled Process Quantity as the Target, this process Quantity may be Temperature, Flow, Pressure, Speed, and so on.

The purpose of PID control is making the Process Quantiry Stabilizing as the Target (setting) value. The PID control with Feedforward Speed setting Function is comprehensive used in Synchrunization or Winder / Unwinder Control System.

The Given Command and Feedback Quantity decide the output Frequency of the Inverter.



Operator Description

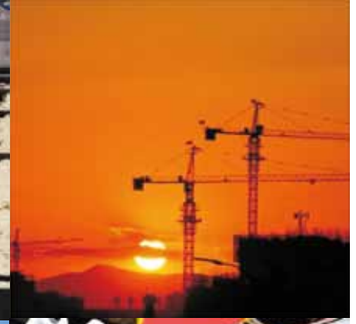
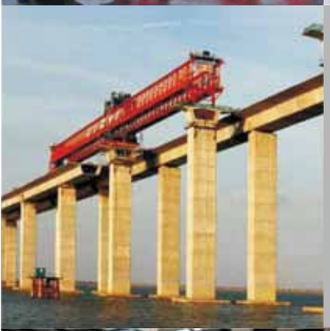


Remote Operator Mounting Kit Installing Dimension

YD3000N Series Operator

YD3000N Series LCD Operator uses Graphic DOT MATRIX Module. It can display English/Chinese letters. The user can read the parameters easier and set the parameter faster. Remote Operator requires the Operator Mounting Kit and Exclusive cable.



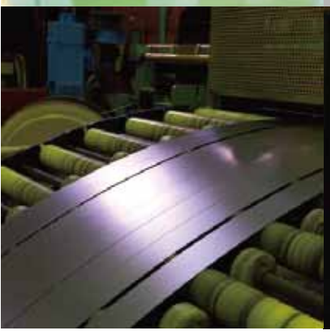
Crane & Hoist
Wood Machinery
Textile Machinery
Fan & Blower




Packaging Machinery
Food Machinery
Chemical Industry
Treadmill


Steel & Metal
Conveyor
CNC Machinery
Pump



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YD3000N Standard Specification

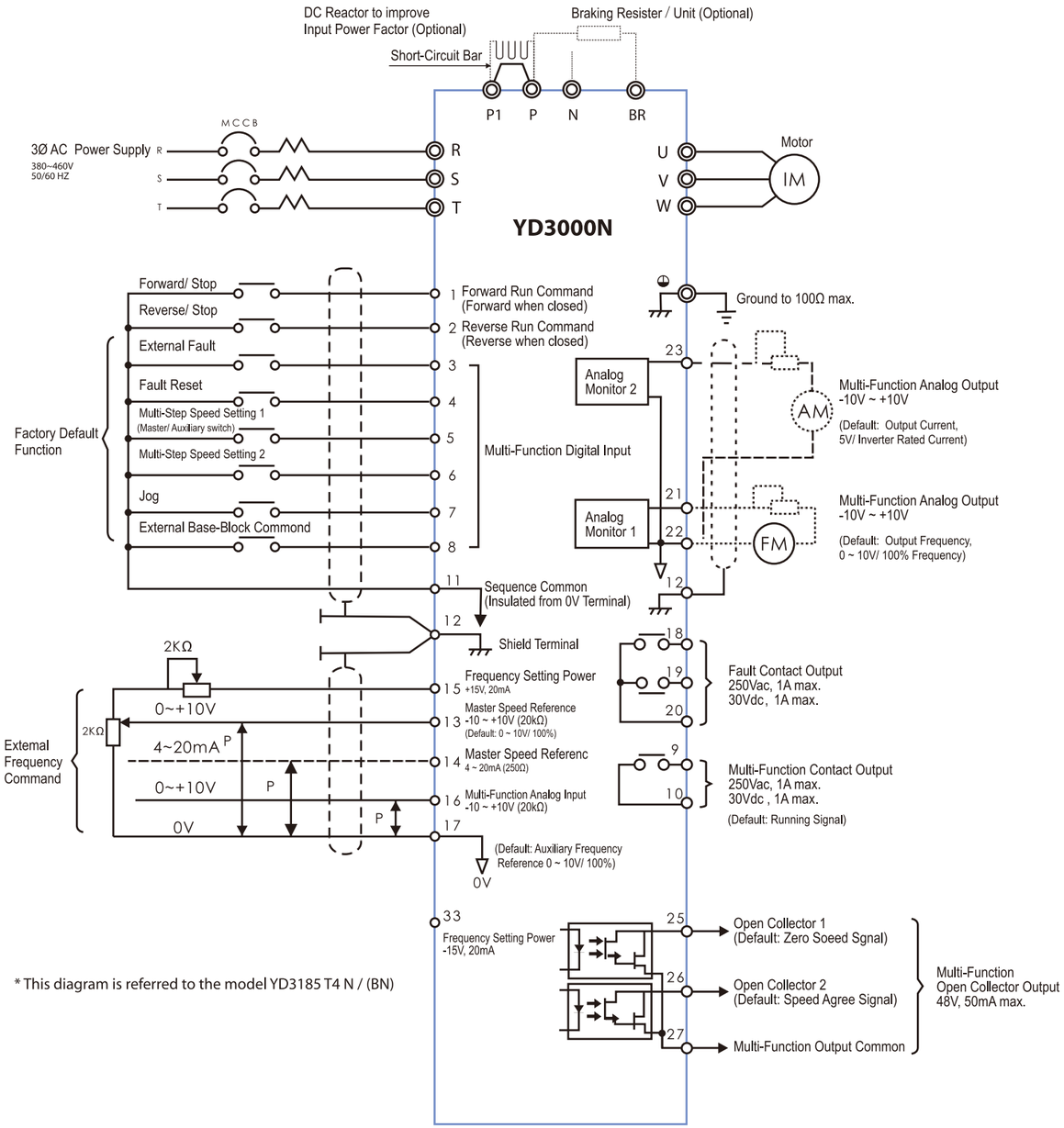
YD3000N		1P5	2P2	3P7	5P5	7P5	011	015	018	022	030	037	045	055	075	093	110	132	160	185	200	220	250	280	315	355	400	450	500	560	630	
Motor Power (kW)		1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	93	110	132	160	185	200	220	250	280	315	355	400	450	500	560	630	
Rated Output	Capacity (kVA)	3.7	4.7	6.1	11	14	21	26	31	37	50	61	73	98	130	140	170	200	230	260	300	340	380	430	460	490	519	585	650	722	780	
	Rated Ouput Current (A)	4.8	6.2	8	14	18	27	34	41	48	65	80	96	128	165	180	224	260	302	340	380	450	470	530	605	670	738	864	984	1100	1185	
	Max. Output Voltage(V)	3Ø 380/ 400/ 415/ 460V(Proportional to Input Voltage)																														
	Rated Output Frequency	Up to 400Hz (Avaliable by Programming)																														
Power Input	Voltage, Frequency	3Ø 380/ 400/ 415/ 460V, 50/ 60Hz																														
	Allow Voltage Fluctuation	+10%, -15%																														
	Allow Frequency Fluctuation	±5%																														
Control Characteristic	Control Method	Sensorless Vector Control																														
	Torque Characteristic	150% at 1Hz																														
	Speed Control Range	1:100																														
	Speed Control Accuracy	±0.2% (25°C ± 10°C)																														
	Speed Control Response	5Hz																														
	Torque Limits	Provided (Only 2 Quadrant Steps)																														
	Torque Accuracy	±5%																														
	Frequency Control Range	0.1 ~ 400Hz																														
	Frequency Accuracy (Temperature Characteristic)	Digital Reference: ±0.01% (-10°C ~ +40°C), Analog Reference: ±0.1% (25°C ± 10°C)																														
	Frequency Setting Resolution	Digital Reference: 0.01Hz, Analog Reference: 0.03Hz/ 60Hz (11 bits + Sign)																														
	Output Frequency Resolution (Caculation)	0.01Hz																														
	Overload Capacity	150% Rated Current for 1 minute																														
	Frequency Setting Signal	Analog -10 ~ +10V, 0 ~ 10V, 4-20mA																														
	Acceleration/ Deceleration Time	0.01 ~ 6000Seconds(4 Selectable Combinations of Independent Acceleration and Deceleration Settings)																														
	Braking Torque	Approximately 20%																														
Protective Functions	Motor Protection	Protection by Electric Thermal Overload Relay																														
	Instaneous Overcurrent Protection	Stops at approx. 200% of Rated Output Current																														
	Overload Protection	150% Rated Current for 1 minute																														
	Overvoltage Protection	Stops when Main Circuit DC Bus Voltage is approx. 820V																														
	Undervoltage Protection	Stops when Main Circuit DC Bus Voltage is approx. 380V																														
	Momentary Power Loss Ridethru	Stops for 15mS or more. By selecting the Momentary Power Loss Mode, operation can be continued if Power is restored within 2 Seconds																														
	Cooling Fin Overheating	Portection by Thermistor																														
	Stall Prevention	Stall Prevention during Acceleration, Running, Deceleration																														
	Grounding Protection	Protection by Electric Circuit (Overcurrent Level)																														
	Charge Indicator	(Internal LED) Lit when the Main Circuit DC Bus Voltage is approx. 50V or more																														
Environment	Ambient Operating Humidity	-10°C ~ +40°C (Enclosed Wall-Mounted Type) -10°C ~ +45°C (Open Chassis Type)																														
	Ambient Operating Temperature	90% RH max.																														
	Storage Temperature	-20°C,~+60°C																														
	Application Site	Indoor (No Corrosive Gas, Dust, etc.)																														
	Altitude	1000M MAX																														
	Vibration	10 ~ 20Hz, 9.8m/S² (1G) max.; 20 ~ 50Hz, 2m/S² (0.2G) max.																														

∗1 RS-485 Card Option
∗2 PG Card Option

YD3000N Connection Example (Diagram)

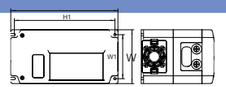
Please follow the Diagram making a Wire Connection

When using the Digital Operator, the Motor can be operated by wiring only the Main Circuit

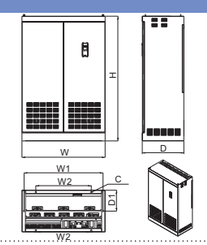


* This diagram is referred to the model YD3185 T4 N / (BN)

YD3000N Dimension

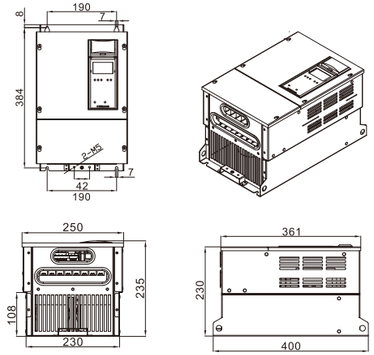


MODEL	POWER	DIMENSION			INSATLL SIZE	
		H	W	D	H1	W1
YD31P5T4BN~YD35P5T4BN	1.5-5.5 kW	279	140	190	262	114.5

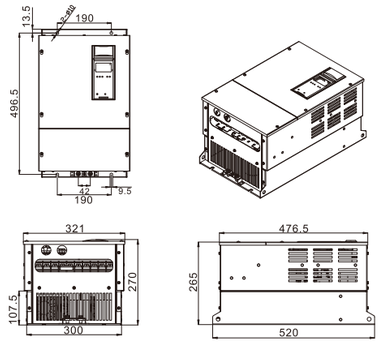


POWER	H	W	W1	W2	D	D1	C	FRAME
YD3355 T4 N	1800	1000	956	800	600	300	15	F10
YD3400 T4 N								
YD3450 T4 N								
YD3500 T4 N	1800	1200	1140	800	600	300	15	F11
YD3560 T4 N								
YD3630 T4 N								

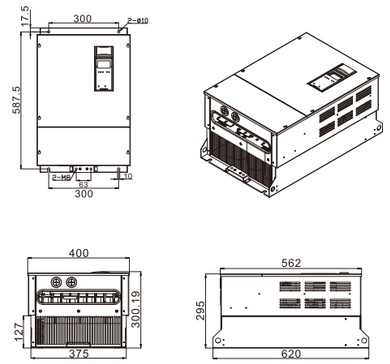
Frame 4
YD3018 T4 N
YD3022 T4 N
YD3030 T4 N



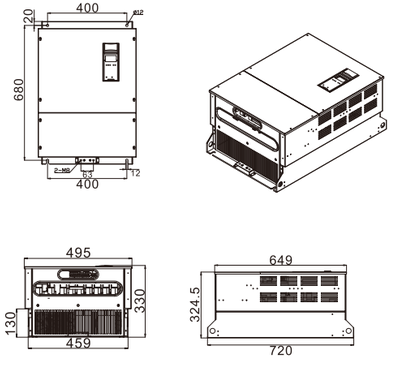
Frame 5
(YD3030 T4 BN)
YD3037 T4 N
YD3045 T4 N
YD3055 T4 N



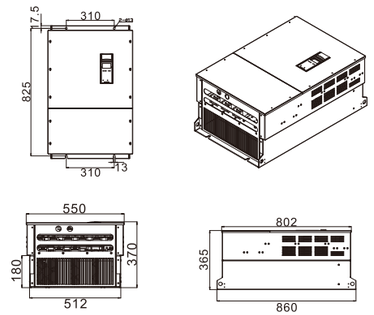
Frame 6
YD3075 T4 N
YD3093 T4 N
YD3110 T4 N



Frame 7
YD3132 T4 N
YD3160 T4 N



Frame 8
YD3185 T4 N
YD3200 T4 N
YD3220 T4 N



Frame 9
YD3250 T4 N
YD3280 T4 N
YD3315 T4 N