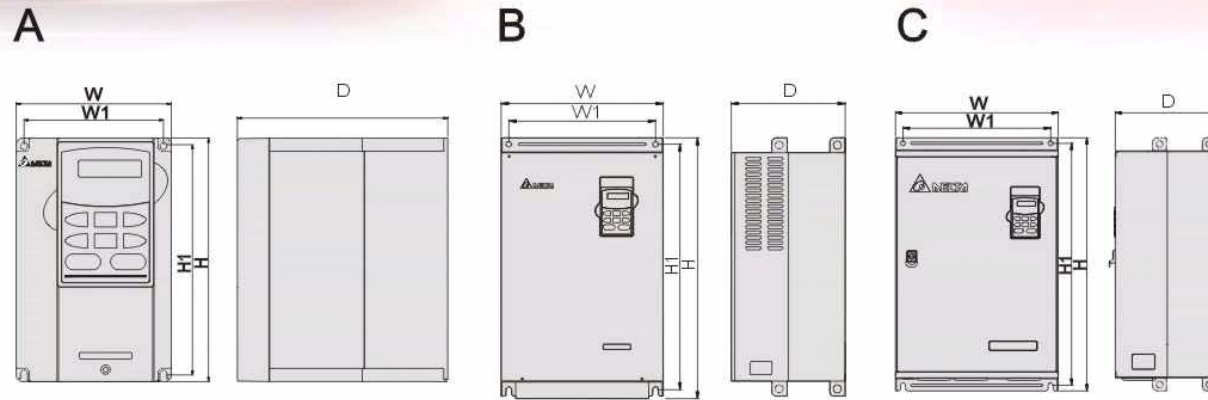


VFD-B

External Dimensions

unit:mm



■ Dimensions

Model	W	W1	H	H1	D	Fan cooled	Fig
VFD007B21A	118(4.65)	108(4.25)	185(7.28)	173(6.81)	160(6.30)	NO	
VFD007B23A	118(4.65)	108(4.25)	185(7.28)	173(6.81)	145(5.71)	NO	A
VFD007B43A	118(4.65)	108(4.25)	185(7.28)	173(6.81)	145(5.71)	NO	
VFD015B21A	118(4.65)	108(4.25)	185(7.28)	173(6.81)	160(6.30)	NO	
VFD015B21B	118(4.65)	108(4.25)	185(7.28)	173(6.81)	145(5.71)	Yes	A
VFD015B23A	118(4.65)	108(4.25)	185(7.28)	173(6.81)	160(6.30)	NO	
VFD015B23B	118(4.65)	108(4.25)	185(7.28)	173(6.81)	145(5.71)	Yes	A
VFD015B43A	118(4.65)	108(4.25)	185(7.28)	173(6.81)	160(6.30)	NO	
VFD022B21A	150(5.91)	135(5.32)	260(10.24)	244.3(9.68)	160.2(6.31)	Yes	
VFD022B23B	118(4.65)	108(4.25)	185(7.28)	173(6.81)	145(5.71)	Yes	A
VFD022B43B	118(4.65)	108(4.25)	185(7.28)	173(6.81)	145(5.71)	Yes	
VFD037B23A	150(5.91)	135(5.32)	260(10.24)	244.3(9.68)	160.2(6.31)	Yes	A
VFD037B43A	150(5.91)	135(5.32)	260(10.24)	244.3(9.68)	160.2(6.31)	Yes	A
VFD055B23A	200(7.88)	185.6(7.31)	323(12.72)	303(11.93)	183.2(7.22)	Yes	A
VFD055B43A	200(7.88)	185.6(7.31)	323(12.72)	303(11.93)	183.2(7.22)	Yes	A
VFD075B23A	200(7.88)	185.6(7.31)	323(12.72)	303(11.93)	183.2(7.22)	Yes	A
VFD075B43A	200(7.88)	185.6(7.31)	323(12.72)	303(11.93)	183.2(7.22)	Yes	A
VFD110B23A	200(7.88)	185.6(7.31)	323(12.72)	303(11.93)	183.2(7.22)	Yes	A
VFD110B43A	200(7.88)	185.6(7.31)	323(12.72)	303(11.93)	183.2(7.22)	Yes	A
VFD150B23A	250(9.84)	226(8.90)	430.8(15.90)	384(15.12)	205.4(8.08)	Yes	A
VFD150B43A	250(9.84)	226(8.90)	430.8(15.90)	384(15.12)	205.4(8.08)	Yes	A
VFD185B23A	250(9.84)	226(8.90)	430.8(15.90)	384(15.12)	205.4(8.08)	Yes	A
VFD185B43A	250(9.84)	226(8.90)	430.8(15.90)	384(15.12)	205.4(8.08)	Yes	A
VFD220B23A	250(9.84)	226(8.90)	430.8(15.90)	384(15.12)	205.4(8.08)	Yes	A
VFD220B43A	250(9.84)	226(8.90)	430.8(15.90)	384(15.12)	205.4(8.08)	Yes	A
VFD300B23A	370(14.57)	335(13.19)	595(23.43)	560(22.55)	260(10.24)	Yes	B
VFD300B43A	370(14.57)	335(13.19)	595(23.43)	560(22.55)	260(10.24)	Yes	B
VFD370B23A	370(14.57)	335(13.19)	595(23.43)	560(22.55)	260(10.24)	Yes	B
VFD370B43A	370(14.57)	335(13.19)	595(23.43)	560(22.55)	260(10.24)	Yes	B
VFD450B43A	370(14.57)	335(13.19)	595(23.43)	560(22.55)	260(10.24)	Yes	B
VFD550B43A	425(16.73)	385(15.16)	660(25.98)	631(24.84)	280(11.02)	Yes	C
VFD750B43A	425(16.73)	385(15.16)	660(25.98)	631(24.84)	280(11.02)	Yes	C

unit: mm (inch)

*We reserve the right of this catalogue contained information change without prior notice.



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Delta VFD-B Series Variable Speed AC Motor Drives

Features:

- ▶ 16-bit microprocessor controlled PWM output
- ▶ Automatic torque boost & slip compensation
- ▶ Output frequency 0.1~400Hz
- ▶ 16-step speed control & 15-step preset speed
- ▶ PID feedback control & PG feedback control
- ▶ 4 accel./decel. times & 2 S-curve selections
- ▶ Pump control & automatic energy-saving
- ▶ Process follower - 10~10VDC, 0~10VDC, 4~20mA
- ▶ MODBUS communication RS-485 (Baud rate 38400)
- ▶ Coast or ramp to stop
- ▶ Adjustable V/F curve & automatic voltage regulation
- ▶ Automatic adjustment of accel./decel. time
- ▶ Auto tuning & sensorless vector control
- ▶ Sleep / Revival Function
- ▶ Master / Auxiliary and 1st/2nd frequency source selectable



Voltage Range:

- 1 Phase 230V Series : 0.75~2.2KW (1~3HP)
- 3 Phase 230V Series : 0.75~37KW (1~50HP)
- 3 Phase 460V Series : 0.75~75KW (1~100HP)



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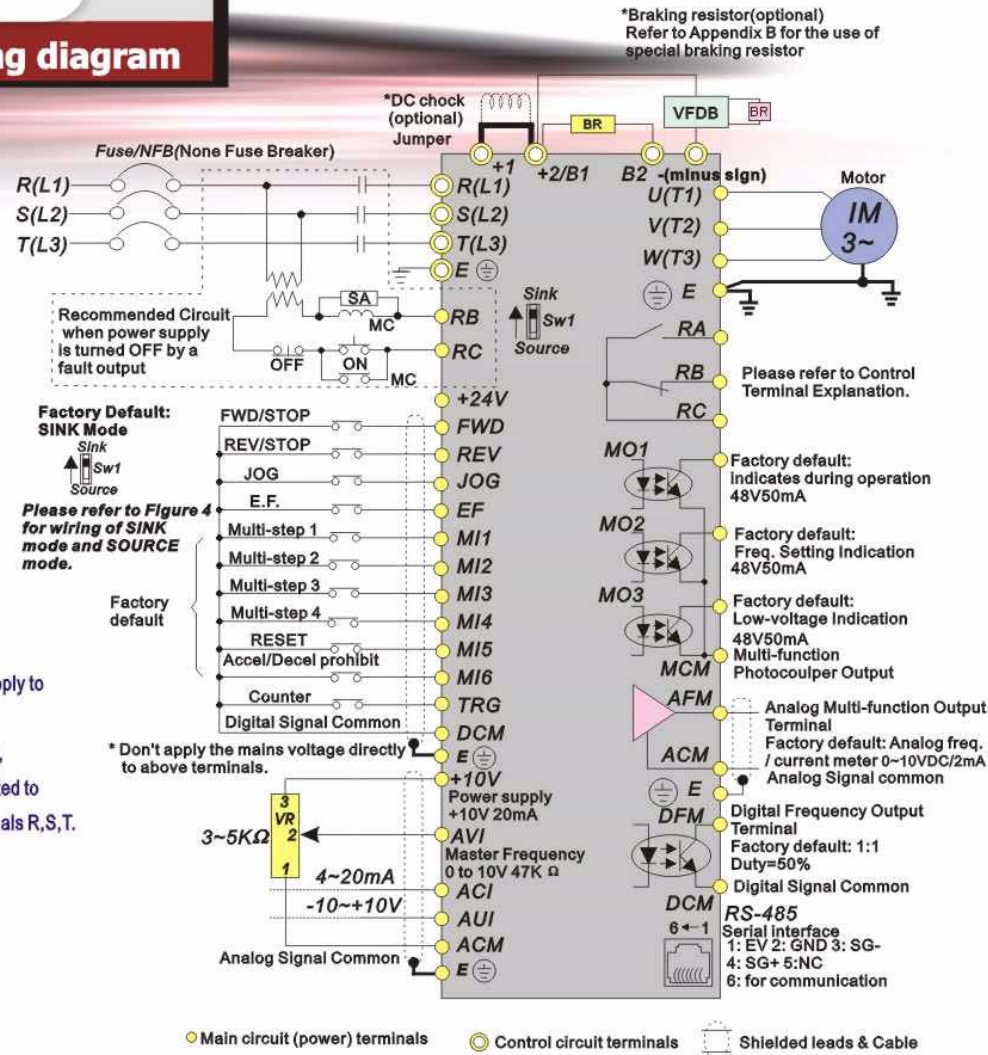
VFD-B series have been approved by CE and UL

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20050510AMD-BE

VFD-B

Standard wiring diagram



Standard specifications

230V Series 1-Phase/3-Phase

	Model VFD□□□B	007	015	022	037	055	075	110	150	185	220	300	370
Output	Max. Applicable Motor Output (kW)	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37
	Max. Applicable Motor Output (HP)	1	2	3	5	7.5	10	15	20	25	30	40	50
	Rated Capacity (kVA)	1.9	2.5	4.2	6.5	9.5	12.5	18.3	24.7	28.6	34.3	45.7	55
	Rated Current (A)	5.0	7.0	11	17	25	33	49	65	75	90	120	145
Input	Output Frequency Range	0.1~400Hz											
	Overload Endurance	150% of rated current for 60 seconds											
	Max. Output Voltage	3-Phase Proportional to input voltage											
	Phase · Voltage · Hz	1/3-Phase			3-Phase · 200~240Vac · 50/60Hz								
Input	Voltage · Frequency Tolerance	Voltage: ± 10% · Frequency: ± 5%											
	Input Current (A)	11.9/5.7	15.3/7.6	22/15.5	20.6	26	34	50	60	75	90	110	142
	Single (3-phase Input Current)	7.0	9.4	14.0	-								
	Cooling Method	Natural			Fan Cooled								
Weight (Kg)	2.7	3.2	4.5	6.8	8	10	13	13	13	13	36	36	

VFD-B

Standard specifications

460V Series 3-Phase

	Model VFD□□□B	007	015	022	037	055	075	110	150	185	220	300	370	450	550	750
Output	Max. Applicable Motor Output (kW)	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75
	Max. Applicable Motor Output (HP)	1	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100
	Rated Capacity (kVA)	2.3	3.2	4.2	6.5	9.9	13.7	18.3	24.4	28.9	34.3	45.7	55.6	69.3	84	114
	Rated Current (A)	2.7	4.2	5.5	8.5	13	18	24	32	38	45	60	73	91	110	150
Input	Output Frequency Range	0.1~400Hz														
	Overload Endurance	150% of rated current for 60 seconds														
	Max. Output Voltage	Proportional to input voltage														
	Phase · Voltage · Hz	3-Phase · 380~480Vac · 50/60Hz														
Input	Voltage · Frequency Tolerance	Voltage: ± 10% · Frequency: ± 5%														
	Input Current (A)	3.2	4.3	5.9	11.2	14	19	25	32	39	49	60	63	90	130	160
	Cooling Method	Natural							Fan Cooled							
	Weight (Kg)	2.7	3.2	4.5	6.8	8	10	13	13	13	13	36	36	36	50	50

Control specification	Control System	SPWM control (V/F or sensorless vector control)		
	Output Freq. Range	0.10~400Hz		
	Freq. Setting Resolution	0.01Hz		
	Output Freq. Resolution	0.01Hz		
	PWM Carrier Frequency	Adjustable between 1 and 15 kHz		
	Torque Boost	Auto torque, auto slip compensation, start torque: 150% at 1Hz		
	Skip Frequency	Three zones, settings range 0.1~400Hz		
	Accel./Decel. Time	0.1 to 3600 seconds (4 independent settings for accel./decel. time)		
	Stall Prevention Level	Set current limit from 20%~250%		
	DC Injection Braking	Operation frequency 0~400Hz, output 0~100% rated current Start time 0~25 seconds, stop time 0~25 seconds		
Operation specification	Braking Torque	Approx. 20% (up to 125% possible with option braking resistor or braking unit externally mounted, 1-15HP braking transistor built-in)		
	V/F Pattern	Adjustable V/F pattern		
	Frequency Setting	Keypad	Set by ▲▼	
	Operation Signals	External	-10~+10VDC, 0~10VDC, 4~20mADC, communication (RS-485)	
	Multi-function Input Terminal	Keypad	Set by RUN STOP JOG	
		External	Fwd/stop, rev/stop (run/stop, fwd/rev), 3-wire control, serial communication (RS-485)	
		External	Multi-speed selection 1 to 15, 1st/2nd/3rd/4th accel./decel. time selection Accel./decel. Inhibit, external baseblock, counter applications, ACI/AVI selection 15-step process control, disable auxiliary, jog, up/down command, sink/source selection	
	Multi-function Output Terminal	Keypad	Drive operational, frequency attained signal, zero speed, setting auxiliary	
		External	Overtorque detection, external baseblock detection Under-voltage detection, keypad or external operation signal, alarm	
	Analog Output	Select output frequency or current monitor		
Alarm Output Contact	1 Form C contact or open collector output			
Operation Functions	PID control, fan & pump control, momentary power failure restart, AVR, external fault, Fault retry, fault reset, 2 S-curves, fault records, frequency limit, digital frequency output, Parameter lockout, PG feedback control, auto tuning, REV run inhibit, stall prevention			
	Protective Functions			
Display Keypads	Overvoltage, overcurrent, under-voltage, external trip, motor overload Ground fault current, overload, overheat, IGBT short-circuit, Low current			
	8-key, 5-digit, 7-segment LED; 8 status LEDs, master frequency, output frequency, Output current, custom units, parameter values for setup, review and faults, RUN, STOP, RESET, FWD/REV, JOG			
Environment	Ambient Temperature	-10°C to +40°C (+50°C without dust covers)		
	Storage Temperature	-20°C to +60°C		
	Pollution Degree	2		
	Ambient Humidity	90% RH or less (non-condensing)		
	Installation Location	Altitude 1,000m or less, keep from corrosive gas, liquid and dust		
Vibration	9.81m/s ² (1G) less than 20Hz, 5.88m/s ² (0.6G) at 20 to 50Hz			