

Automation for a Changing World

Delta Basic Compact Drive ME300 Series



Optimized Space Utilization

Compact design with up to 40% size reduction compared to existing models



High Safety and Stability

Safe Torque Off (SIL2/PLd) function offers high safety machine stop



Outstanding Drive Performance

Supports both induction and permanent motors
High speed start-up and fast acceleration / deceleration



High Reliability

Extended key component lifetime
Conformal coating on PCBs: compliant with IEC 60721-3-3 class 3C2 and protects against humidity, corrosive materials and dust in severe industrial environments



Easy to Install and Use

Application selection function, quick parameter setting & duplication, and a user-friendly 4-digit keypad

Product Specifications

1-phase
115 V

Frame		A	A	A	C	
Model Name VFD___ME11ANNA		0A8	1A6	2A5	4A8	
Applicable Motor Output (kW)		0.1	0.2	0.4	0.75	
Applicable Motor Output (HP)		1/8	1/4	1/2	1	
Output Rating	Heavy Duty	Rated Output Current (KVA)	0.4	0.6	1.0	1.8
		Rated Output Current (A)	0.8	1.6	2.5	4.8
		Carrier Frequency (kHz)	2~15			
	Normal Duty	Rated Output Current (KVA)	0.4	0.7	1.0	2.1
		Rated Output Current (A)	1.0	1.8	2.7	5.5
		Carrier Frequency (kHz)	2~15			
Input Rating	Rated Output Current (A)	Heavy Duty	3.0	6.0	9.4	18
		Normal Duty	3.7	6.8	10.1	20.6
	Rated Voltage / Frequency		1-phase AC 100V~120V (-15% ~ +10%), 50/60 Hz			
	Operating Voltage Range		85~132 V _{AC}			
	Frequency Tolerance		47~63 Hz			
Cooling Method		Natural air cooling			Fan cooling	
EMC Filter		Optional				
Protection Level		IP20				

1-phase
230 V

Frame			A	B	A	B	A	B	B	B	C	C	C	C
Model Name VFD___ME21___AA			0A8		1A6		2A8		4A8		7A5		11A	
			ANN	AFN	ANN	AFN	ANN	AFN	ANN	AFN	ANN	AFN	ANN	AFN
Applicable Motor Output (kW)			0.1		0.2		0.4		0.75		1.5		2.2	
Applicable Motor Output (HP)			1/8		1/4		1/2		1		2		3	
Output Rating	Heavy Duty	Rated Output Current (KVA)	0.3		0.6		1.1		1.8		2.9		4.2	
		Rated Output Current (A)	0.8		1.6		2.8		4.8		7.5		11	
		Carrier Frequency (kHz)	2~15											
	Normal Duty	Rated Output Current (KVA)	0.4		0.7		1.2		1.9		3.2		4.8	
		Rated Output Current (A)	1.0		1.8		3.2		5		8.5		12.5	
		Carrier Frequency (kHz)	2~15											
Input Rating	Rated Output Current (A)	Heavy Duty	2.2		3.4		5.9		10.1		15.8		23.1	
		Normal Duty	2.8		3.8		6.7		10.5		17.9		26.3	
	Rated Voltage / Frequency		1-phase AC 200V~240V (-15% ~ +10%), 50/60 Hz											
	Operating Voltage Range		170~265 V _{AC}											
	Frequency Tolerance		47~63 Hz											
Cooling Method			Natural air cooling					Fan cooling	Natural air cooling	Fan cooling				
EMC Filter			Optional	Built-in	Optional	Built-in	Optional	Built-in	Optional	Built-in	Optional	Built-in	Optional	Built-in
Protection Level			IP20											

3-phase
230 V

Frame			A	A	A	A	B	C	C	D
Model Name VFD___ME23ANNAA			0A8	1A6	2A8	4A8	7A5	11A	17A	25A
Applicable Motor Output (kW)			0.1	0.2	0.4	0.75	1.5	2.2	3.7	5.5
Applicable Motor Output (HP)			1/8	1/4	1/2	1	2	3	5	7.5
Output Rating	Heavy Duty	Rated Output Current (KVA)	0.3	0.6	1.1	1.8	2.9	4.2	6.5	9.5
		Rated Output Current (A)	0.8	1.6	2.8	4.8	7.5	11	17	25
		Carrier Frequency (kHz)	2~15							
	Normal Duty	Rated Output Current (KVA)	0.4	0.7	1.2	1.9	3.0	4.8	7.4	10.3
		Rated Output Current (A)	1.0	1.8	3.2	5	8.0	12.5	19.5	27
		Carrier Frequency (kHz)	2~15							
Input Rating	Rated Output Current (A)	Heavy Duty	2.2	1.9	3.4	5.8	9.0	13.2	20.4	30
		Normal Duty	2.8	2.2	3.8	6.0	9.6	15	23.4	32.4
	Rated Voltage / Frequency		3-phase AC 200V~240V (-15% ~ +10%), 50/60 Hz							
	Operating Voltage Range		170~265 V _{AC}							
	Frequency Tolerance		47~63 Hz							
Cooling Method			Natural air cooling				Fan cooling			
EMC Filter			Optional							
Protection Level			IP20							

3-phase
460 V

Frame			A	B	A	B	B	B	C	C	C	C	D	D	D	D
Model Name VFD___ME43___AA			1A5		2A7		4A2		5A5		9A0		13A		17A	
			ANN	AFN	ANN	AFN	ANN	AFN	ANN	AFN	ANN	AFN	ANN	AFN	ANN	AFN
Applicable Motor Output (kW)			0.4		0.75		1.5		2.2		3.7		5.5		7.5	
Applicable Motor Output (HP)			1/2		1		2		3		5		7.5		10	
Output Rating	Heavy Duty	Rated Output Current (KVA)	1.1		2.1		3.2		4.2		6.9		9.9		13	
		Rated Output Current (A)	1.5		2.7		4.2		5.5		9		13		17	
		Carrier Frequency (kHz)	2~15													
	Normal Duty	Rated Output Current (KVA)	1.4		2.3		3.5		5.0		8.0		12		15.6	
		Rated Output Current (A)	1.8		3		4.6		6.5		10.5		15.7		20.5	
		Carrier Frequency (kHz)	2~15													
Input Rating	Rated Output Current (A)	Heavy Duty	1.7		3.0		4.6		6.1		9.9		14.3		18.7	
		Normal Duty	2.0		3.3		5.1		7.2		11.6		17.3		22.6	
	Rated Voltage / Frequency		3-phase AC 380V~480V (-15%~+10%), 50/60 Hz													
	Operating Voltage Range		170~265 VAC													
	Frequency Tolerance		47~63 Hz													
Cooling Method			Natural air cooling	Fan cooling	Natural air cooling	Fan cooling										
EMC Filter			Optional	Built-in	Optional	Built-in	Optional	Built-in	Optional	Built-in	Optional	Built-in	Optional	Built-in	Optional	Built-in
Protection Level			IP20													

General Specifications

Control Functions	Control Methods	V/f, SVC
	Applicant Motors	Induction motor (IM), interior permanent magnet (IPM) motor, surface permanent magnet (SPM) motor
	Max. Output Frequency	0.00~599.00 Hz
	Starting Torque*	150% / 3 Hz (V/f, SVC control for IM, heavy duty) 100% / (1/20 of motor rated frequency) (SVC control for PM, heavy duty)
	Speed Response Ability*	1:50 (V/f, SVC control for IM, heavy duty) 1:20 (SVC control for PM, heavy duty)
	Overload Tolerance	Normal Duty (ND): 120% of rated output current for 60 seconds 150% of rated output current for 3 seconds Heavy Duty (HD): 150% of rated output current for 60 seconds 200% of rated output current for 3 seconds
	Frequency Setting Signal	0~+10V / 4(0)~20 mA: PWM signal input, pulse input (10 KHz)
	Main Control Functions	Multiple motor switches (max. 2 independent motor parameter settings), fast run, Deceleration Energy Back (DEB) function, fast deceleration function, master and auxiliary frequency source selectable, momentary power loss ride thru, speed search, overtorque detection, 16-step speed (max.), accel/decel time switch, S-curve accel/decel, 3-wire sequence, JOG frequency, upper/lower limits for frequency reference, DC injection braking at start and stop, simple positioning function, PID control
	Application	Built-in parameter groups (categorized by industry) and user-defined parameter groups
Protection Functions	Motor Protection	Overcurrent protection, overvoltage protection, over-temperature protection, phase failure protection
	Stall Prevention	Stall prevention during acceleration, deceleration and running independently
Optional Card		STO (Safe Torque Off) Card
Certifications		UL, CE, C-Tick, TUV (SIL 2), RoHS, REACH

* Control accuracy may vary depending on the environment, application conditions, different motors or encoders. Please contact Delta or your local distributor for details.

Environment for Operation, Storage and Transportation

DO NOT expose the AC motor drive to extreme harsh environments, such as with excessive dust, direct sunlight at high temperature, flammable and corrosive gases, or severe vibration. The airborne salinity must remain less than 0.01 mg/cm² per year.

Operating Environment	Installation Location	IEC 60364-1/ IEC 60664-1 Pollution Degree 2, indoor use only	
	Ambient Temperature	IP20 / UL Open Type	-20~50°C -20~60°C (needs derating)
		NEMA 1 / UL Type 1	-20 to 40°C
		Side-by-side installation	-20 to 50°C (needs derating)
		Storage	-40~85°C
		Transportation	-20~70°C
		No condensation, no frost	
	Rated Humidity	Operation	Max. 90%
		Storage / Transportation	Max. 95%
		No frost	
	Air Pressure	Operation	86~106 kPa
		Storage / Transportation	70~106 kPa
	Pollution Level (IEC60721-3)	Operation	Class 3C2; Class 3S2
Storage		Class 2C2; Class 2S2	
Transportation		Class 1C2; Class 1S2	
No condensation			
Altitude	An altitude of 0~1000 m for normal operation (derating is required for installation at an altitude above 1000 m)		
Package Drop	Storage	ISTA procedure 1A (according to weight); compliant to IEC 60068-2-31	
	Transportation		
Vibration	Operating	2Hz~13.2Hz: 1.0mm, peak-peak 13.2Hz~55Hz: 0.7G~2.0G 55Hz~512Hz: 2.0G compliant to IEC60068-2-6	
	Non-operating	5Hz~2kHz: 2.5G, max. amplitude 0.015"	
Shock	Operating	15G, 11ms; compliant to IEC / EN 60068-2-27	
	Non-operating	30G	



Smarter. Greener. Together.

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