INVERTER

TECO

7200MA Series

ISO 14001 BSMI

TÜV CERT ISO 9001

c UL us CE

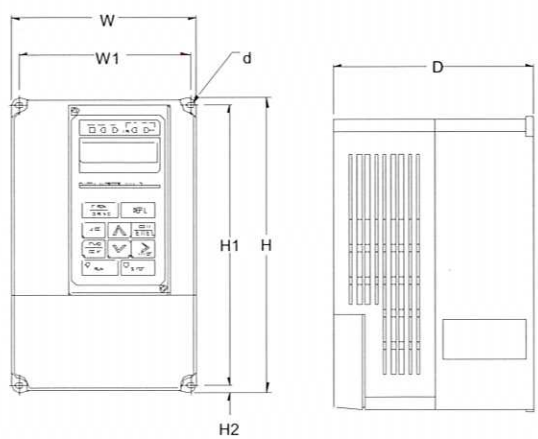
TECO 7200MA Series

Features

1. Graphic LCD operator, used as Copy Unit
2. PG built-in interface
3. Energy saving
4. Automatic torque boost
5. Full Range DC injection braking.
6. Multi-functions (PID, simple PLC, timer, Multiple Frequency pulse output).
7. Dual rating operation (constant and variable torque) with overload protection.
8. Built-in braking resistor has braking torque reaching 100% rated torque (2%ED for 5sec).
9. MODBUS built-in (PROFIBUS optional)
10. Sensorless vector + Auto-tunning
11. Customer Application Software Environment (C.A.S.E.)
12. Pulse train command, +10V ~ -10V analog command.

Dimensions

Voltage	Max. applicable motor output	Mounting Dimension (mm)				External Dimension (mm)			Weight
		W1		H1	H2 (NEMA1)	W	H (NEMA1)	D	(Kg)
220V 1ø /3ø	1	122		207	5	132	217	143.5	2.3
	2								
	3	126		266	6.8	140	279.5	176.5	4.3
220V 3ø	5								
	7.5	192		286	7	211.2	300	215	5.6
	10								
	15	245		340	10	265	360	225	12
	20								
	25								13
	30	Top	210	530	10 (67)	269.2	553.1 (646.5)	277.1	31
	40	Under	180						
440V 3ø	1	122		207	5	132	217	143.5	2.3
	2								
	3	126		266	6.8	140	279.5	176.5	4.3
	5.4								
	7.5	192		286	7	211.2	300	215	5.6
	10								
	15	245		340	10	265	360	225	12
	20								
	25								13
	30								
	40	Top	210	530	10 (67)	269.2	553.1 (646.5)	277	31
	50	Under	180						
	60	Top	250	630	10 (67)	308.2	652.6 (746.5)	282	47
	75	Under	220						

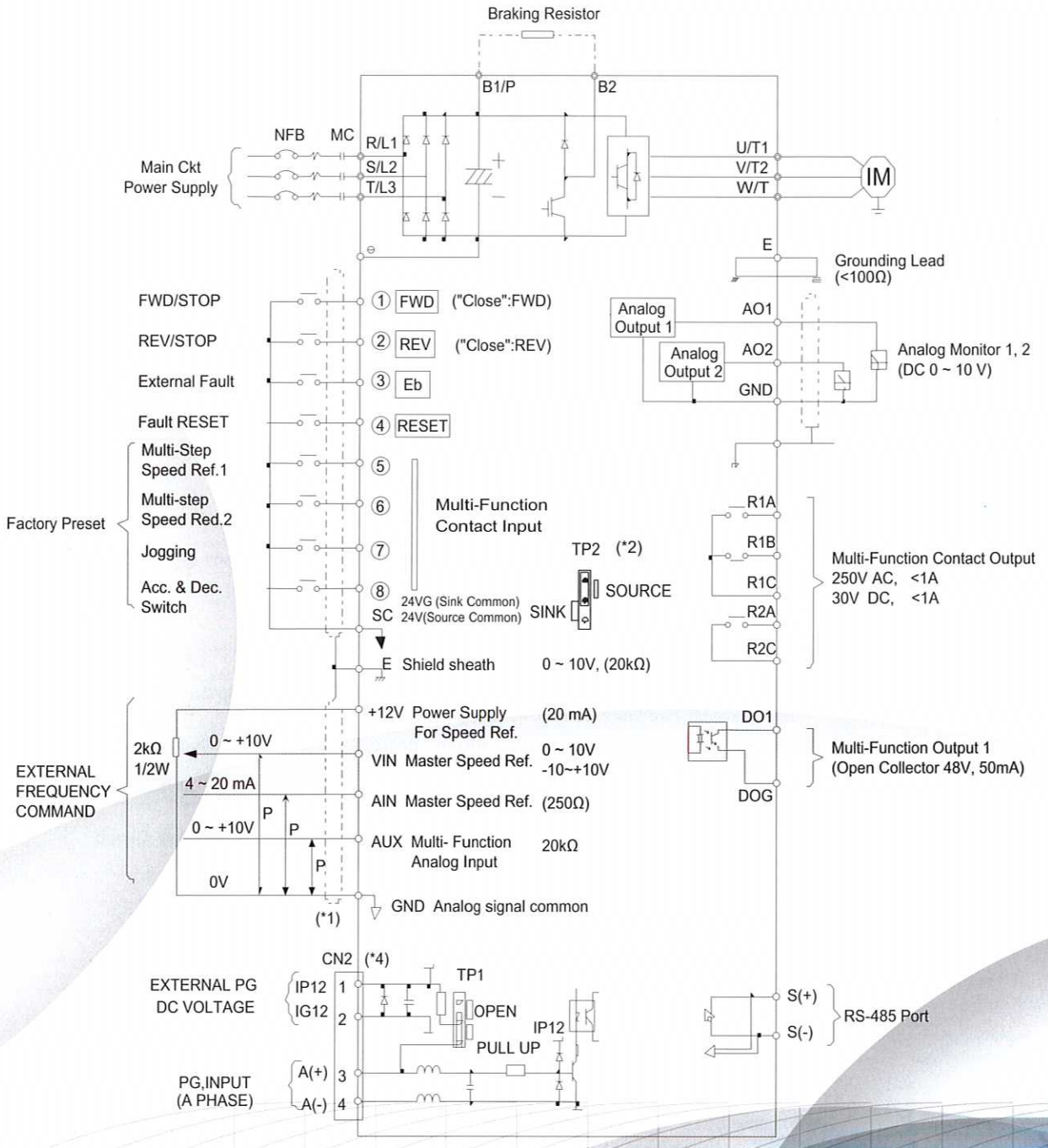


Model Designation

JNTM BG BB 0001 AZ S - -

Series	Keypad	Enclosures and mountings	Max. applicable motor capacity (HP)	Rated Voltage	Hardware Information	UL Information	Reserved
7200MA	BG: LCD digital operator (CE mark) BC: LED digital operator	BB: Enclosed, wall-mounted type (NEMA-1) BA:Open chassis type (IP00)	0001 : 1HP ⌇ ⌇ 0075 : 75HP	JK: 220V, 60Hz (200V, 50Hz) AZ: 440V,60Hz (380V, 50Hz)	– :Standard type S:220V/440V,1~2HP compact size type A:220V/440V,7.5~10HP Ver.2 type	– :Standard type U:UL/CUL standard	-

Connection Diagram



(*1) Shield Wire, P Shielde Twisted Wire

(*2) The terminal ① ~ ⑧ can be set as SINK or SOURCE when setting ① ~ ⑧ as sink , the jumper of TP2 must be set to SINK position, and set to SOURCE position for source type input.

(*3) VIN Ref. can be set in two input methods as 0~+10V or-10~+10V

(*4) The terminal A(+), A(-) can be the input terminal of Pulse input Frequency Command, and the jumper of TP1 must be set to OPEN position Pulse Input Frequency range:0~32KHz,Voltage range: 3~12V,input impedance27KΩ

(*5) The terminal arrangement

24VG	1	3	5	7	24V	VIN	AIN	AUX	DO1	DOG	IP12	A(+)	A(-)
E	2	4	6	8	+12V	-12V	GND	A01	A02	E	IG12	S(+)	S(-)

R2A	R2C	R1A	R1B	R1C

(*6) The control board code No. : 4P101C01301

Specification

Input Voltage Class			220V CLASS										440V CLASS													
			1/3-Phase	3-Phase									3-Phase													
Model			JNTMBGBB□□□□JK										JNTMBGBB□□□□AZ													
			0001	0002	0003	0005	7R50	0010	0015	0020	0025	0030	0040	0001	0002	0003	0005	7R50	0010	0015	0020	0025	0030	0040	0050	0060	0075
Max Applicable Motor Output	HP		1	2	3	5.4	7.5	10	15	20	25	30	40	1	2	3	5.4	7.5	10	15	20	25	30	40	50	60	75
	KW		0.75	1.5	2.2	4	5.5	7.5	11	15	18.5	22	30	0.75	1.5	2.2	4	5.5	7.5	11	15	18.5	22	30	37	45	55
Output	Rated Output Capacity (KVA)		2	2.7	4	7.5	10.1	13.7	20.6	27.4	34	41	54	2.2	3.4	4.1	7.5	10.3	12.3	20.6	27.4	34	41	54	68	82	110
	Rated Output Current(A)		4.8	6.4	9.6	17.5	24	32	48	64	80	96	130	2.6	4	4.8	8.7	12	15	24	32	40	48	64	80	96	128
	Max. Output Voltage (V)		3-Phase 200~230V											3-Phase 380~460V													
	Max. Output Frequency (Hz)		Through Parameter Setting (0Hz to 400Hz)																								
Power Source	Rated Voltage Frequency		1 /3-Phase 200V~ 230V 50/60Hz	3-Phase 200V~230V 50/60Hz										3-Phase 380~460V，50／60Hz													
	Allowable Voltage Fluctuation		-15 %~ +10%																								
	Allowable Frequency Fluctuation		±5%																								
Control Feature	Operation Mode		Graphic LCD Panel (English and Chinese) with parameters copying (LED Panel:option)																								
	Control Mode		Sinusoidal PWM																								
	Frequency Control Range		0.1Hz ~ 400Hz																								
	Frequency Accuracy (varied with temperature)		Digital Command: ±0.01% (-10 ~ +40°C), Analog Command: ±0.1% (25°C±10°C),																								
	Speed Control Accuracy		±0.1%(V/F with PG feedback), ±0.5% (Sensorless Vector Contorl)																								
	Frequency Command Resolution		Digital Command: 0.01Hz Analog Command: 0.06Hz/60Hz																								
	Frequency Output Resolution		0.01Hz																								
	Overload Resistibility		150% Rated Current for 1 Min.																								
	Frequency Setting Signal		DC 0~+10V / 4~20 mA DC-10V~+10V and Pulse Input Frequency Command (Above 220V/440V 3HP)																								
	Acc./Dec. Time		0.0~6000.0 sec (Accel/Decel Time Can Be Set Independently)																								
	Voltage-Frequency Characteristics		V/F Curve Can Be Set Through Parameter Setting																								
	Regeneration Torque		Approx. 20%																								
	Basic Control Function		Restart After Momentary Power Loss, PID Control, Auto Torque Boost, Slip Compensation, RS_485 Communication, Feedback Control, PLC function, 2 Analog Output Port																								
	Extra Function		Cumulative Power on & Operation Hour record , Energy Saving, Up/Down Operation, 4 Different sets of Fault Status Record (Including Latest one), Multiple-Pulse Output Select Local/Remote,Customer Application Software Environment (C.A.S.E.), SINK/SOURCE Interface																								
Protection Function	Stall Prevention		During Acceleration/Deceleration and constant Speed Running (Current Level Can Be Selected During Acceleration and Constant Speed Running. During Deceleration, Stall Prevention Can Be Enabled or Disabled)																								
	Instantaneous Overcurrent		200% Rated Current																								
	Motor Overload Protection		Electronic Overload Curve Protection																								
	Inverter Overload Protection		150% Rated Current for 1 Min.																								
	Overvoltage		Stop if VDC≧410V (220 Class) or VDC≧820V (440 Class)																								
	Undervoltage		Stop if VDC≦200V (220 Class) or VDC≦400V (440 Class)																								
	Momentary Power Loss Ride-Through time		≧15ms, stop otherwise																								
	Overheat Protection		Protection by Thermistor																								
	Grounding Protection		Protection by DC Current Sensor																								
	Charge Indication (LED)		Lit when the DC Bus Voltage Above 50V																								
	Input Phase Loss(IPL)		Motor coasts to stop at Input Phase Loss																								
	Output Phase Loss(OPL)		Motor coasts to stop at Output Phase Loss																								
Environmental Condition	Application Site		Indoor (No Corrosive Gas And Dust Present)																								
	Ambient Temperature		-10°C ~ +40°C (Not Frozen)																								
	Storage Temperature		-20°C ~ +60°C																								
	Ambient Humidity		Below 90%RH (Non-Condensing)																								
	Height, Vibration		Below 1000M, 5.9m/S^2 (0.6G), (JISC0911 Standard)																								
Communication Function			RS-485 Installed (MODBUS Protocol)																								
Encoder Feedback Interface			Built-in PG Feedback Interface Open-collector Interface or Complementary Interface																								
EMI			Meet EN61800-3 With Specified EMI Filter																								
EMS			Meet EN 61800-3																								
Option			PROFIBUS Card																								

Braking Resistor

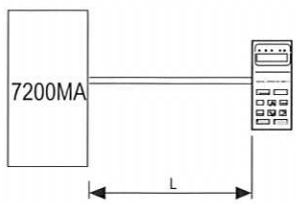
Resistor Model		Inverter Capacity		Specification of braking resistor		Braking resistor	Braking torque
		V	HP	W		ED%	%
JNBR	150W200	220V 1ø/3ø	1	150	200	3	125
	150W100		2	150	100	3	125
	150W70		3	150	70	3	120
	150W62	220V 3ø	5	150	62	3	100
	600W35		7.5	600	35	10	100
	800W25		10	800	25	10	100
	2R4KW17		15	2400	17	10	100
	3KW13		20	3000	13	10	100
	4R8KW8		25	4800	8	10	125
	4R8KW6R8		30	4800	6.8	10	125
	3KW10		40	3000	10	10	100
	150W750	440V 3ø	1	150	750	3	130
	150W400		2	150	400	3	125
	150W300		3	150	300	3	115
	150W200		5	150	200	3	110
	600W130		7.5	600	130	10	105
	800W100		10	800	100	10	100
	1KW68		15	1000	68	10	100
	1R6KW50		20	1600	50	10	100
	4R8KW32		25	4800	32	10	125
	4R8KW27R2		30	4800	27.2	10	125
	6KW20		40	6000	20	10	125
	9R6KW16		50	9600	16	10	125
	9R6KW13R6		60	9600	13.6	10	125
	6KW20		75	6000	20	10	135

Filter

Filter Model	Current	Inverter Model		Filter Model	Current	Inverter Model	
		V	HP			V	HP
JUNF12015S-MA	15A	220V 1ø	1	JUNF3 4008S-MA	8A	440V 3ø	1
JUNF12015S-MA	15A		2	JUNF3 4008S-MA	8A		2
JUNF12020S-MA	20A		3	JUNF3 4012S-MA	12A		3
JUNF32012S-MA	12A	220V 3ø	1	JUNF3 4012S-MA	12A		5.4
JUNF32012S-MA	12A		2	JUNF3 4024S-MA	24A		7.5
JUNF32024S-MA	24A		3	JUNF3 4024S-MA	24A		10
JUNF32024S-MA	24A		5.4	JUNF3 4048S-MA	48A		15
JUNF32048S-MA	48A		7.5	JUNF3 4048S-MA	48A		20
JUNF32048S-MA	48A		10	KMF370A	70A		25
JUNF32070S-MA	70A		15	KMF370A	70A		30
JUNF32070S-MA	70A		20	KMF3100A	100A		40
				KMF3100A	100A		50
				KMF3150A	150A		60
				KMF3180A	180A		75

LCD operator with extension wire

When used for remote control purpose, the LCD operator can have different extension wires based upon the applications. Some extension wires are listed below.



Cable Length	Extension Cable Set *1	Extension Cable *2	Blank Cover *3
1m	4H332D0010000	4H314C0010003	4H300D1120000
2m	4H332D0030001	4H314C0030004	
3m	4H332D0020005	4H314C0020009	
5m	4H332D0040006	4H314C0040000	
10m	4H332D0130005	4H314C0060001	

*1: Including special cable for LCD digital operator, Blank cover, fixed use screws and installation manual.
*2: One special cable for LCD digital operator.
*3: A blank cover to protect against external dusts, metallic powder, etc.

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GJ-13-04 2005-03-21