

Function Code	Name	Description	Factory Setting	Modify
P-000	Speed control model	0: Sensorless vector control Torque 1: V/Fcontrol	0	×
P-001	Run command source	0: Keypad 1: Terminal 2: Communication	0	×
P-002	Keypad and terminal UP/DOWN setting	0: Valid, save UP/DOWN value when power off 1: Valid, do not save UP/DOWN value when power off 2: Invalid 3: Stop reset	0	✓
P-003	Frequency command source	0: Keypad 1: FV 2: FI 3: FV + FI 4: Save 5: PID 6: Remote communication 7: Panel potentiometer	0	✓
P-004	Maximum frequency	10.00~600.00Hz	50.00Hz	×
P-005	Upper frequency limit	P-006~P-004 (the maximum frequency)	50.00Hz	✓
P-006	Lower frequency limit	0.00Hz~P-005 (lower frequency limit)	00.00	✓
P-007	Acceleration time 0	0.1~3600.0s	Depend on model	✓
P-008	Deceleration time 0	0.1~3600.0s	Depend on model	✓
P-009	Keypad reference frequency	0.00Hz~P-004 (the maximum frequency)	50.00Hz	✓
P-010	Running direction election	0: Forward 1: Reverse 2: Forbid reverse	0	×
P-011	Carrier frequency	1.0~15.0kHz	Depend on model	✓
P-012	Motor parameters autotuning	0: No action 1: Rotation autotuning 2: Static autotuning	0	×

P-013	Restore parameters	0: No action 1: Restore factory setting (Except Motorparameters) 2: clear fault records 3:Reserved 4: Restore factory setting (Include Motorparameters) 5-9: Reserved 10: Bag cutting machine 11-17: Reserved 18: Carving machine of JiNan 19: Carving machine of NanJing	0	×
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Function Code	Name	Description	Factory Setting	Modify
P-014	AVR function	0: Invalid 1: alid all the time 2: Only valid in deceleration	2	✓
P-015	Start Mode	0: Start direotly 1: DC braking and start 2: Speed tracking and start	0	×
P-016	Starting frequenoy	0.00~10.00Hz	0.00Hz	✓
P-017	Hold time of Starting frequenoy	0.0~50.0s	0.0s	✓
P-018	DC braking Current before start	0.0~150.0%	0.0%	✓
P-019	DC braking time before start	0.0~50.0s	0.0s	✓
P-020	Acceleration/Deceleration mode	0: Linear 1: reserved	0	✓
P-021	Starting frequenoy of DC braking	0.00~P-004	0.00Hz	✓
P-022	Waiting time before DC braking	0.0~50.0s	0.0s	✓
P-023	DC braking current	0.0~150.0%	0.0%	✓
P-024	DC braking time	0.0~50.0s	0.0s	✓
P-025	Dead time of	0.0~3600.0s	0.0s	✓

	FWD/REV			
P-026	Terminal detection selection when power is on	0: Disabled 1: Inabled	0	✓
P-027	Action when running frequency is less than lower frequency limit	0: Running at the lower frequency limit 1: Stop 2: Stand-by	0	×
P-028	Inverter model	0: G model 1: P model	Depend on model	×
P-029	Motor rated power	0.4~900.0kW	Depend on model	×
P-030	Motor rated frequency	0.01Hz~P-004	Depend on model	×
P-031	Motor rated speed	0~36000rpm	Depend on model	×
P-032	Motor rated voltage	0~460V	Depend on model	×
P-033	Motor rated current	0.1~2000.0A	Depend on model	×
P-034	Motor stator resistance	0.001~65.535 Ω	Depend on model	✓
P-035	Motor rotor resistance	0.001~65.535 Ω	Depend on model	✓
P-036	Motor leakage	0.1~6553.5mH	Depend on model	✓

Function Code	Name	Description	Factory Setting	Modify
P-037	Motor mutual inductance;	0.1~6553.5mH	Depend on model	✓

P-038	Current without load	0.01~655.35A	Depend on model	✓
P-039	ASR proportional gain K, 1	0~100	15	✓
P-040	ASR integral time K, 1	0.01~10.00s	2.00s	✓
P-041	ASR switching point 1	0.00Hz~P-044	5.00Hz	✓
P-042	ASR proportional gain K, 2	0~100	10	✓
P-043	ASR integral time K, 2	0.01~10.00s	3.00	✓
P-044	ASR switching point 2	P-041~P-004 (the Maximum frequency)	10.00Hz	✓
P-045	Slip compensation rate of VC	50%~200%	100%	✓
P-046	Torque upper limit	0.0~200.0% (the rated current of the inverter)	150.0%	✓
P-047	V/F curve selection	0: Linear curve 1: Torque_stepdown curve(2.0 order)	0	×
P-048	Torque boost	0.0%: (auto) 0.1%~30.0%	0.0%	✓
P-049	Torque boost out-off	0.0%~50.0% (motor rated frequency)	20.0%	×
P-050	Slip compensation limit	0.0~200.0%	0.0%	✓
P-051	Auto energy saving selection	0: Disabled 1: Inabled	0	×
P-052	Reserved			◎
P-053	X1 Terminal function	0: Invalid 1: Forward  2: Reverse 3: 3-wire control 4: Jog Forward	1	×
P-054	X2 Terminal function	5: Jog Reverse 6: Coast to stop  7: Reset fault 8: External fault input	2	×
		9: UP command		

P-055	X3 Terminal function	10: DOWN command 11: clean UP/DOWN  12: Multi-step speed reference 1 13: Multi-step speed reference 2	8	×
P-056	X4 Terminal function	14: Multi-step speed reference 3 15: ACC/DEC time selection1 1 16: ACC/DEC time selection1 2  17: ACC/DEC time selection1 3 18: Closed loop failure	7	×

Function Code	Name	Description	Factory Setting	Modify
P-057	X5 Terminal function	19: Pause traverse operation 20: Pause traverse operation 21: ACC/DEC ramp hold	4	×
P-058	X6 Terminal function	22: Terminal stop 23: UP/DOWN invalid temporarily 24: Terminal count  25: Clean Terminal count	5	×
P-059	ON-OFF filter times	1~10	5	√
P-060	Terminal control mode	0: 2-wire control mode 1 1: 2-wire control mode 2  2: 3-wire control mode 1 3: 3-wire control mode 2	0	×
P-061	UP/DOWN setting change rate	0.01~50.00Hz/s	0.50Hz/s	√
P-062	FV lower limit	0.00V~10.00V	0.00V	√
P-063	FV lower limit corresponding setting	-100.0%~100.0%	0.0%	√
P-064	FV upper limit	0.00V~10.00V	10.00V	√
P-065	FV upper limit corresponding setting	-100.0%~100.0%	100.0%	√

P-066	FV filter time constant	0.00s~10.00s	0.10s	√
P-067	FI lower limit	0.00V~10.00V	0.00	√
P-068	FI lower limit corresponding setting	-100.0%~100.0%	0.0%	√
P-069	FI upper limit	0.00V~10.00V	10.00	√
P-070	FI upper limit corresponding setting	-100.0%~100.0%	100.0%	√
P-071	FI filter time constant	0.00s~10.00s	0.10s	√
P-072	Relay J1 output selection	0: No output 1: Run forward 2: Run reverse 3: Fault output  4: FDT reached 5: Frequency reached 6: Zero speed running 7: Upper frequency limit reached	1	√
P-073	Relay J2 output selection	8: Lower frequency limit reached 9: speed running without in Zero  10: auxiliary pump 1 11: auxiliary pump 2 12: Preset count value 13: Preset count value to early warning 14: Running	3	√

Function Code	Name	Description	Factory Setting	Modify
P-074	F0 function selection	0: Running frequency 1: Reference frequency 2: Rotation speed 3: Output current 4: Output voltage  5: Output power 6: Output torque 7: FV 8: FI 9~10: Reserved	0	√
P-075	F0 lower limit	0.0%~100.0%	0.0%	√

P-076	F0 lower limit corresponding setting	0.00V ~10.00V	0.00V	√
P-077	F0 upper limit	0.0%~100.0%	100.0%	√
P-078	F0 upper limit corresponding setting	0.00V ~10.00V	10.00V	√
P-079	User password	0~65535	0	√
P-080	Keypad UP/DOWN frequency accumulation function choice	0: accumulation function off 1: accumulation function on	1	×
P-081	Keypad UP/DOWN Step length	0.00 ~10.00Hz	0.01Hz	√
P-082	JOG function selection	0: Jog 1: FWD/REV switching 2: Clear UP/DOWN setting	0	×
P-083	STOP function selection	0: Valid when keypad control 1: Valid when keypad or terminal control 2: Valid when keypad or communication control 3: Always valid	0	√
P-084	Panel potentiometer zero adjustment	0~10	3	√
P-085	Running status display selection	0~0xFFFF BIT0: Running frequency F BIT1: Reference frequency H BIT2: DC bus voltage U BIT3: Output voltage u BIT4: Output current A BIT5: Rotation speed r BIT6: Output power G BIT7: Output torque d BIT8: PID preset y BIT9: PID feedback L BIT10: Input terminal status b BIT11: Output terminal status o BIT12: FV e BIT13: FI E BIT14: Multi velocity h BIT15: Count value J	03FF	√

Function Code	Name	Description	Factory Setting	Modify
P-086	Stop status display selection	0~0xFFFF BIT0: Reference frequency H BIT1: DC bus voltage U BIT2: Input terminal status b BIT3: Output terminal status o BIT4: PID preset y BIT5: PID feedback L BIT6: FV e BIT7: FI E BIT8: Multi velocity h BIT9: Count value J BIT10~BIT15: Reserved	00FF	√
P-087	Reserved			
P-088	Radiator temperature	0~100.0℃		⊙
P-089	Software version		9.99	⊙
P-090	Accumulated running time	0~65535h	0	⊙
P-091	Thirdlatest fault type	0~24 0: Notfault 1: Reserved 2: Reserved 3: Reserved 4: Over-current when acceleration (OC1) 5: Over-current when deceleration (OC2) 6: Over-current when constant speed running (OC3)		⊙
P-092	Secondlatest fault type	7: Over-voltage when acceleration (OU1) 8: Over-voltage when deceleration (OU2) 9: Over-voltage when constant speed running (OU3) 10: DC Bus under-voltage (UV) 11: Motor overload (OL1) 12: Inverter overload (OL2) 13: Reserved 14: Output phase failure (SP0) 15: Reserved		⊙
		16: Inverter overheat (OH2)		



P-093	Latest fault type	17: External fault (EF) 18: Communication fault (CE) 19: Current detection fault (ItE) 20: Autotuning fault (tE) 21: EEPROM fault (EEP) 22: PID feedback fault (PIDE) 23: Reserved 24: Reserved		⊙
P-094	Output frequency at current fault		0.00Hz	⊙
P-095	Output current at current fault		0.0A	⊙
P-096	DC Bus voltage at current fault		0.0V	⊙
P-097	Input terminal status		0	⊙
	at current fault			

Function Code	Name	Description	Factory Setting	Modify
P-098	Output terminal status at current fault		0	⊙
P-099	Jog reference	0.00~P-004	5.00Hz	✓
P-100	Jog acceleration time	0.1~3600.0s	Depend on model	✓
P-101	Jog deceleration time	0.1~3600.0s	Depend on model	✓
P-102	Skip Frequency	0.00~P-004	0.00Hz	✓
P-103	Skip Frequency bandwidth	0.00~P-004	0.00Hz	✓
P-104	Traverse amplitude	0.0~100.0%	0.0%	✓
P-105	Amplitude frequency	0.0~50.0%	0.0%	✓
P-106	Rise time of traverse	0.1~3600.0s	5.0s	✓
P-107	Fall time of traverse	0.1~3600.0s	5.0s	✓
P-108	Auto reset times	0~3	0	✓
P-109	reset interval	0.1~100.0s	1.0s	✓

P-110	FDT level	0.00~ P-004	50.00Hz	√
P-111	FDT lag	0.0~100.0%	5.0%	√
P-112	Frequency arrive detecting range	0.0~100.0%	0.0%	√
P-113	Brake threshold voltage	115.0~140.0% (380V )	130.0%	√
		115.0~140.0% (220V )	120.0%	
P-114	Speed display coefficient	0.1~999.9%	100.0%	√
P-115	PID preset source selection	0: Keypad (P-116) 1: FV 2: FI 3: Remote communication 4: Multi-step 5: Potentiometer setting	0	√
P-116	Keypad PID preset	0.0%~100.0%	0.0%	√
P-117	PID feedback source selection	0: FV 1: FI 2: FV+FI 3: Communication	0	√
P-118	PID output characteristic	0: Positive 1: Negative	0	√
P-119	Proportional gain (Kp)	0.00~100.00	1.00	√
P-120	Integral time (Ti)	0.01~10.00s	0.10s	√
P-121	Differential time (Td)	0.00~10.00s	0.00s	√
P-122	Sampling cycle (T)	0.01~100.00s	0.10s	√

Function Code	Name	Description	Factory Setting	Modify
P-123	Bias limit	0.0~100.0%	0.0%	√

P-124	Feedback lost detecting value	0.0~100.0%	0.0%	√
P-125	Feedback lost detecting time	0.0~3600.0s	1.0s	√
P-126	0th slop running time	-100.0~100.0%	0.0%	√
P-127	1th slop running time	-100.0~100.0%	0.0%	√
P-128	2th slop running time	-100.0~100.0%	0.0%	√
P-129	3th slop running time	-100.0~100.0%	0.0%	√
P-130	4th slop running time	-100.0~100.0%	0.0%	√
P-131	5th slop running time	-100.0~100.0%	0.0%	√
P-132	6th slop running time	-100.0~100.0%	0.0%	√
P-133	7th slop running time	-100.0~100.0%	0.0%	√
P-134	Motor overload protection	0: Disabled 1: Normal motor (with low speed compensation) 2: Variable frequency motor (without low speed compensation)	1	×
P-135	Motor overload protection current	20.0%~120.0% (rated current of the motor)	100.0%	√
P-136	Threshold of trip-free	70.0~110.0% (standard bus voltage)	80.0%	√
P-137	Decrease rate of trip-free	0.00Hz~P-004 (the max frequency)	0.00Hz	√
P-138	Over-voltage stall protection	0: disabled 1: enabled	0	√
P-139	Over_voltage stall protection point	110%~150% (380V )	120%	√
		110%~150% (220V )	115%	
P-140	Auto current limiting threshold	100~200%	160%(G)	√
			120%(P)	

P-141	Frequency decrease rate when current limiting	0.00~100.00Hz/s	10.00Hz/S	√
P-142	Local address	1~247, 0 stands for the broadcast address	1	√
P-143	Baud rate selection	0: 1200BPS 1: 2400BPS 2: 4800BPS 3: 9600BPS 4: 19200BPS 5: 38400BPS	3	√

Function Code	Name	Description	Factory Setting	Modify
P-144	Data format	0:no parity check (N, 8, 1) for RTU 1:even parity check (E, 8, 1) for RTU 2:odd parity check (O, 8, 1) for RTU 3:no parity check (N, 8, 2) for RTU 4:even parity check (E, 8, 2) for RTU 5:odd parity check (O, 8, 2) for RTU 6:no parity check (N, 7, 1) for ASCII 7:even parity check (E, 7, 1) for ASCII 8:odd parity check (O, 7, 1) for ASCII  9:no parity check (N, 7, 2) for ASCII 10:even parity check (E, 7, 2) for ASCII 11:odd parity check (O, 7, 2) for ASCII 12:no parity check (N, 8, 1) for ASCII 13:even parity check (E, 8, 1) for ASCII 14:odd parity check (O, 8, 1) for ASCII 15:no parity check (N, 8, 2) for ASCII 16:even parity check (E, 8, 2) for ASCII 17:odd parity check (O, 8, 2) for ASCII	0	√
P-145	Communication on delay time	0~200ms	5ms	√
P-146	Communication on timeout delay	0.0 (Disabled) , 0.1~100.0s	0.0s	√
P-147	Communication on	0: Alarm and coast to stop 1: No alarm and continue to run	1	√

	error action	2: No alarm but stop running (only communication) 3: No alarm but stop (every control)		
P-148	Communication Response action	0: enabled 1: disabled	0	√
P-149	Low frequency oscillation suppression threshold point	0~500	15	√
P-150	high frequency oscillation suppression threshold point	0~500	15	√
P-151	Suppression of oscillation amplitude	0~100	20	√
P-152	Suppression of high and low frequency cutoff frequency	0.00Hz~P-004	12.5Hz	√
P-153	Suppression oscillation	0: enabled 1: disabled	0	√
P-154	PWM mode	0~122	0	×
P-155	No-load current compensation coefficient	0~9.99	0.5	√
P-156	Xi terminal inverting Logic selection	Binary D0-D5 correspond X1-X6, respectively	0	√
P-157	Current count value	0-65000	0	√
P-158	Current preset	0-65000	100	√
P-159	Count to early warning	0-65000	1	√
P-160	Count to action selection	0: close output 1: continue output	0	√

Function Code	Name	Description	Factory Setting	Modify
P-161	Program operation mode	0: close 1: continuous cycle mode 2: single cycle mode 3: after the single cycle to maintain the final frequency	0	×
P-162	Choice power down memory in the program Operation mode	0: do not to remember 1: remember	0	×
P-163	Program time unit	0: second 1: minute	0	✓
P-164	0 <sup>th</sup> step running time	0~6000.0	2.0	✓
P-165	1 <sup>th</sup> step running time	0~6000.0	2.0	✓
P-166	2 <sup>th</sup> step running time	0~6000.0	2.0	✓
P-167	3 <sup>th</sup> step running time	0~6000.0	2.0	✓
P-168	4 <sup>th</sup> step running time	0~6000.0	2.0	✓
P-169	5 <sup>th</sup> step running time	0~6000.0	2.0	✓
P-170	6 <sup>th</sup> step running time	0~6000.0	2.0	✓
P-171	7 <sup>th</sup> step running time	0~6000.0	2.0	✓
P-172	Plus deceleration time selection 1	0~7777 Single digit: Adds a deceleration to the zero section Ten digit: Adds a deceleration to the first section Hundreds digit: Adds a deceleration to the second section Thousands digit: Adds a deceleration to the third section 0: Plus deceleration time 0 1: Plus deceleration time 1 2: Plus deceleration time 2 3: Plus deceleration time 3 4: Plus deceleration time 4 5: Plus deceleration time 5 6: Plus deceleration time 6 7: Plus deceleration time 7	0	✓

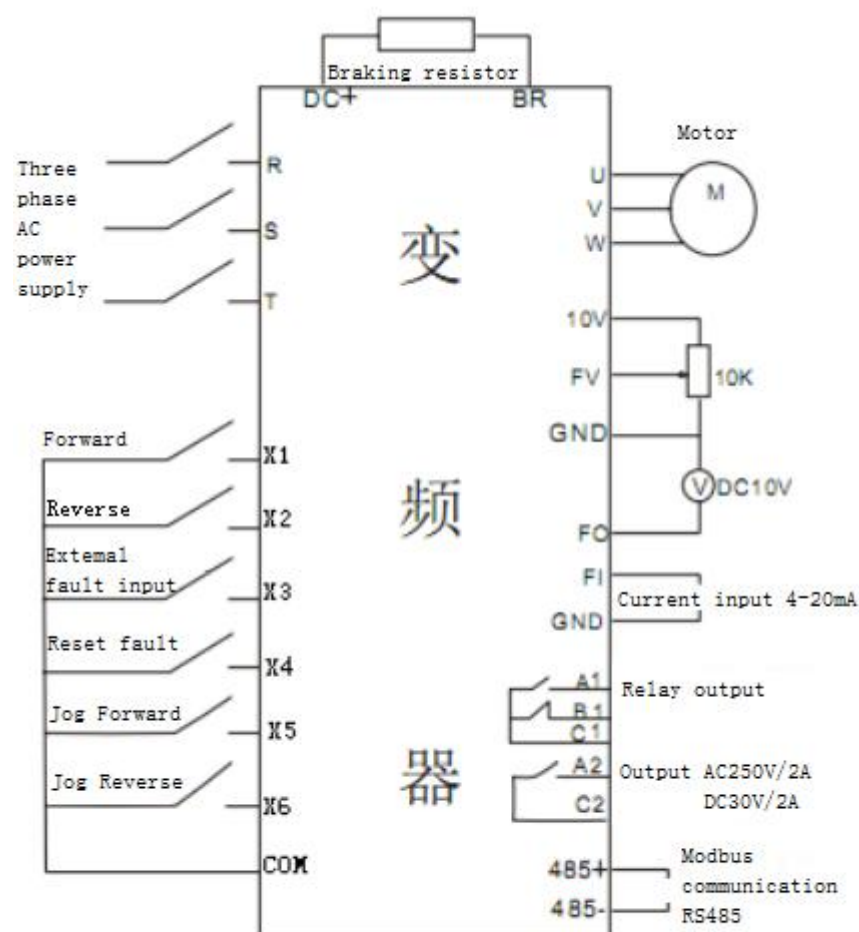
P-173	Plus deceleration time selection 2	0~7777 Single digit: Adds a deceleration to the 4th section Ten digit: Adds a deceleration to the 5th section Hundreds digit: Adds a deceleration to the 6th section Thousands digit: Adds a deceleration to the 7th section	0	✓
P-174	Acceleration 1	0.1~3600.0s	Depend on model	✓
P-175	Deceleration 1	0.1~3600.0s	Depend on model	✓
P-176	Acceleration 2	0.1~3600.0s	Depend on model	✓
P-177	Deceleration 2	0.1~3600.0s	Depend on model	✓
P-178	Acceleration 3	0.1~3600.0s	Depend on model	✓
P-179	Deceleration 3	0.1~3600.0s	Depend on model	✓

Function Code	Name	Description	Factory Setting	Modify
P-180	Acceleration 4	0.1~3600.0s	Depend on model	✓
P-181	Deceleration 4	0.1~3600.0s	Depend on model	✓
P-182	Acceleration 5	0.1~3600.0s	Depend on model	✓
P-183	Deceleration 5	0.1~3600.0s	Depend on model	✓
P-184	Acceleration 6	0.1~3600.0s	Depend on model	✓
P-185	Deceleration 6	0.1~3600.0s	Depend on model	✓
P-186	Acceleration 7	0.1~3600.0s	Depend on model	✓
P-187	Deceleration 7	0.1~3600.0s	Depend on model	✓
P-188	Number of	0~2	0	✓

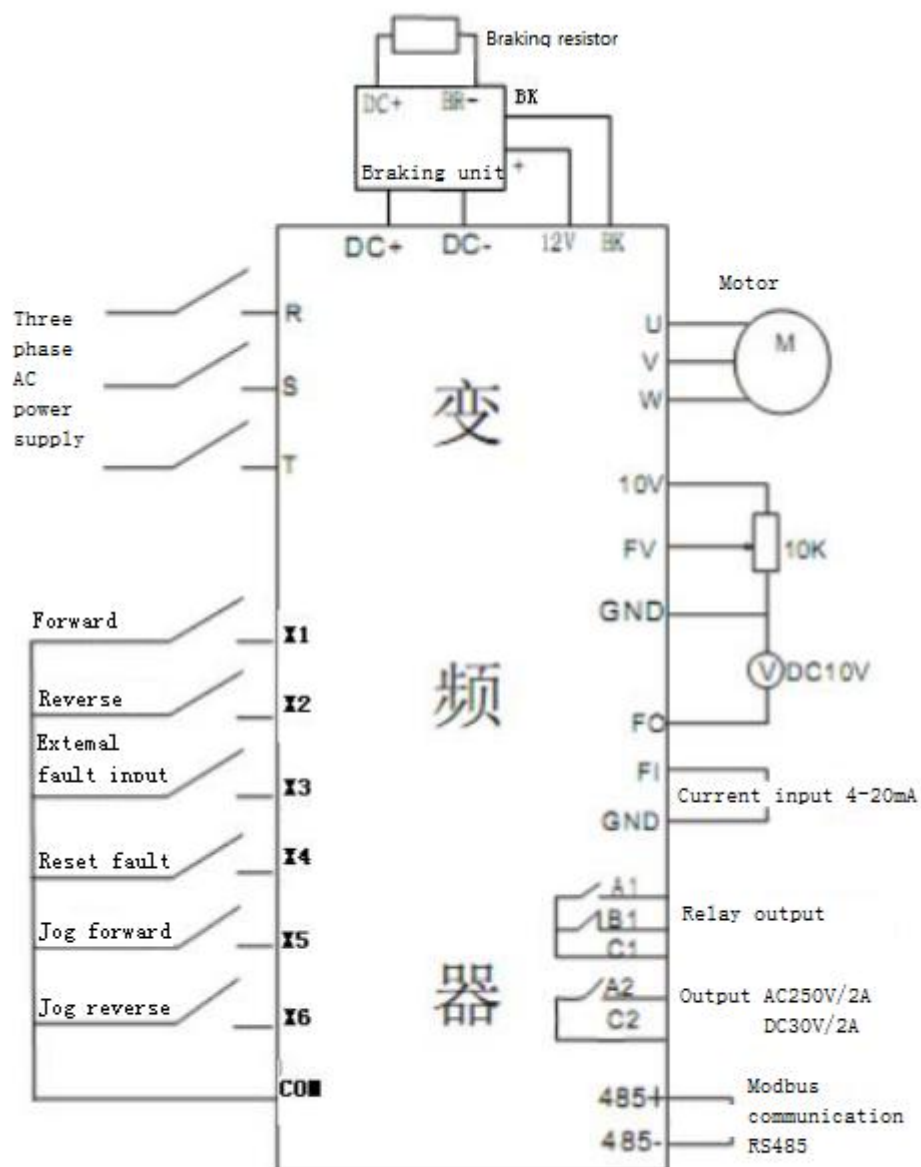
	auxiliary pumps			
P-189	Waking pressure	0~100.0%	20.0%	√
P-190	Sleep function	0: off 1: on	0	√
P-191	Resting pressure	0~100.0%	80.0%	√
P-192	Sleep delay time	0~6000.0	60.0s	√
P-193	Wake delay time	0~6000.0	30.0s	√
P-194	Auxiliary pump start to work	0~6000.0	0.0s	√
P-195	Auxiliary pump start to power off	0~6000.0	0.0s	√
P-196	Sleep frequency	0~P-005	30.0Hz	√







Terminal wiring diagram for 15KW and below  
(Single inverter power input R、T)



Terminal wiring diagram for 18.5KW and above