



MV Series High Performance Drive

**Shenzhen Kaidechang Electronic Technology Co., Ltd.**

Address: Room 309, Wutong Space, No. 2123, Bixin Road, Longgang District, Shenzhen, China

Email: 3176708292@ qq.com

[13265873957@163.com](mailto:13265873957@163.com)

Tel: +86-13265873957

+86-18123659512



## Company Profile

Shenzhen Megmeet Drive Technology Co., Ltd. is a subsidiary of Shenzhen Megmeet Electric Co., Ltd., our company is a leading manufacturer of AC, servo drives and power converter for commercial and industrial applications. Our company is a National High-tech Enterprise, subsidiary Nanjing Software Company passed the national "double soft" enterprise certification. The company won the "2012 China Top Ten Innovative Enterprises in Electric Industry", and participated in the National 863 key project as the core enterprise. Our electric vehicle motor controllers won the first prize in the "2012 China HEV Bus Energy Saving Competition".

A group of engineers with Ph.D. have been working in drive and power electronics field for a long time in well-known overseas companies, having a deep understanding of drive and power electronic conversion and related industrial products. Our company has been awarded 20 patents and copyrights.

Our company focused on the development, production and sales of drives and related power conversion systems, providing customized solutions to high-end customers quickly based on our strong innovation capabilities, achieving win-win situation. Our main products include low and medium voltage drives, integrated and special drive, servo systems, vehicle motor controller, etc.. mainly for equipment manufacturing, recyclable energy and energy saving. Our products have been widely used in different industries like elevators, cranes, rubber and plastics, automotive, municipal, printing and packaging, textiles, wire and cable, machine tools, fabricated metal products, coal mining, building materials, metallurgy and so on.



R & D base(Shenzhen)



Global manufacturing center(Zhuzhou)

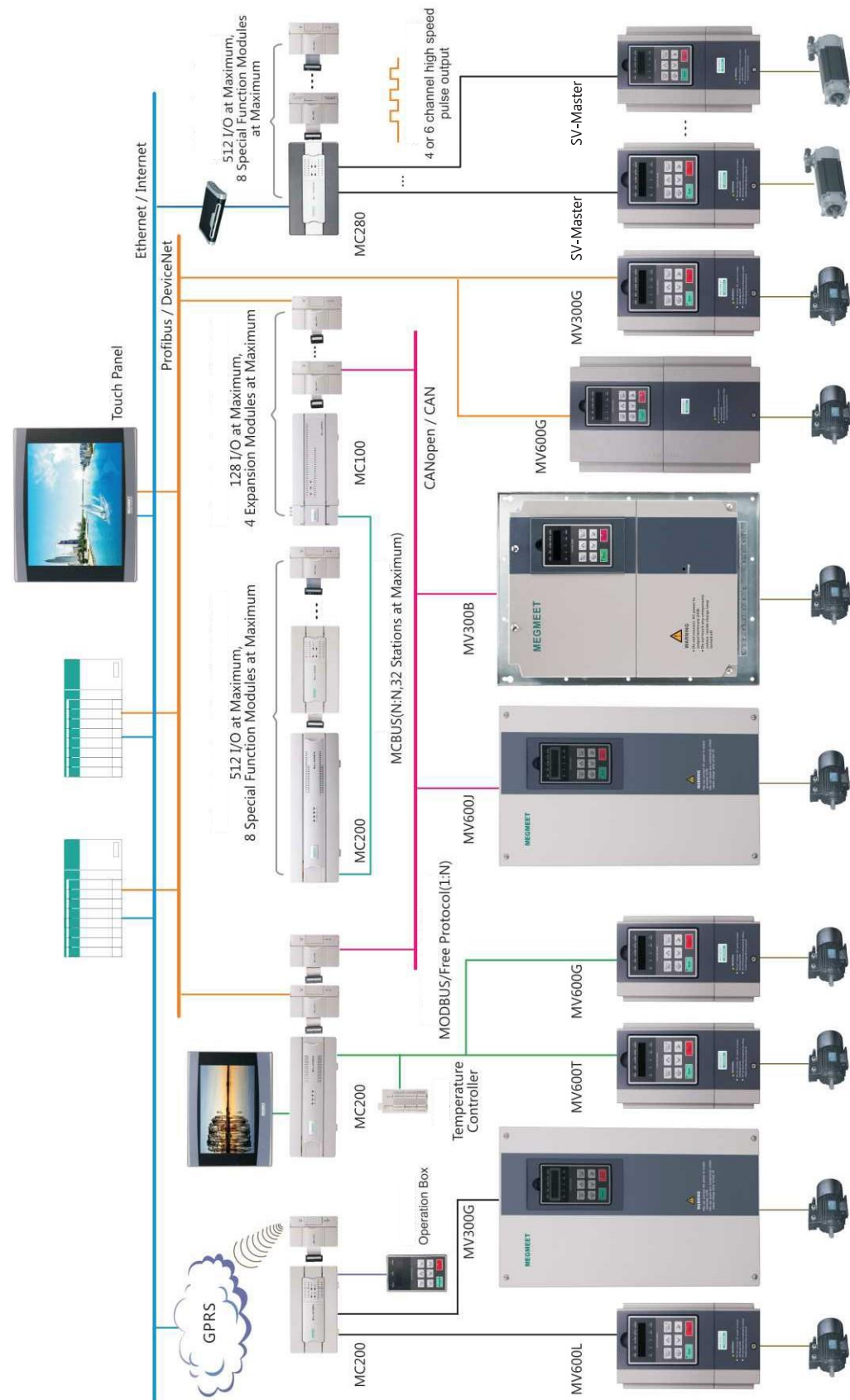


Customer reception hall(Shenzhen)



Product exhibition hall





## MV Series Drive Introduction

Series	Features	Applications	Product
MV600G engineering drive	DSP + FPGA control platform, the system is fast and stable, input and output modules parallelization; Leading integrated motor control algorithm, can drive asynchronous motor, permanent magnet synchronous motor, linear motor, etc.; Leading vector control algorithm, stable operation, good dynamic performance, high precision and positioning in the closed-loop vector control, from 0Hz to 1500Hz; Support various encoder card, multiple field bus card.	Focus on the closed-loop vector control field; Papermaking, metallurgy, textile, printing and dyeing, chemical fiber, printing and packaging, and other drive system; Special motor, new type motor control, such as high-speed asynchronous motor, permanent magnet synchronous motor, direct-drive motor, linear motor, etc.	
MV600L drive special for lifting	Braking control; light load up speed; multi-motor parameters, etc.	Tower crane, construction hoist, driving, port / dock crane, shiplifts, mine hoisting	
MV600T drive special for tension	Roll diameter calculation, inertia compensation, tension taper, tension PID, etc.	Retractable roll applications	
MV300G high-performance vector drive	Leading current vector control algorithm; Open-loop vector torque control; Multi-motor parallel open-loop vector control; Modular system design, support a variety of options expansion; Rich features, meet the demand of a variety of industries.	Focus on the application of open loop vector; A variety of machine tools, printing and packaging, driving mechanism, metal products, plastic machinery, air compressors, printing and dyeing, engineering machinery, etc.	
MV300P energy-saving drive	Automatic energy-saving algorithm, the most efficient motor control; power calculation; sleep control, switching of multi-command, non-stop upon instantaneous power interruption	Fans, pumps and other constant power load	
MV300B drive special for cotton spinning	Special fanless design meet the stable operation of the drive under the high temperature, damp and hot and multi fiber environment	Cotton spinning and other special applications, such as spinning, carding machines, combing machines, compact spinning, roving machines, etc.	
MV200 high performance general drive	Strong usability, simple debugging, high reliability, high cost-effective	HVAC, textile machinery, light industry machinery, ceramic machinery, engraving machine, food machinery, cable machinery, etc.	
MV100 compact drive	Simple, easy to use, strong applicability	Light industry machinery, ceramic machinery, engraving machines, food machinery, cable machinery, etc.	
MV600J hydraulic servo drive	For hydraulic control characteristics, servo drive use the unique optimal control algorithm, achieve fast and smooth control of pressure and flow; In the multi-pump hydraulic system, use complex control program of multi-pump parallel flow and bypass flow using built-in high-speed bus, with more energy saving, higher response, etc.	Injection molding machine, shoe machine, hollow blowing machine, die-casting machine, etc.	
SV-Master servo drive	Multiple position control mode, use simple solution; Integration of synchronous and asynchronous motor; Support multiple fieldbus system integration; Double closed loop control; Wide power range, 1.5 ~ 400kW, have mature and successful cases.	CNC machining center spindle drive Position control of high-power milling machine, planer Cutting, shaping of steel plate, steel, corrugated paper and others Flying shear, peeling Angle control, position control of textile and printing and packaging	

## MV Series Reliability Design

### MV Series grid environmental adaptability

- ▶ Full range of voltage range: 323 ~ 528V
- ▶ All series provide phase-phase, phase-ground short-circuit protection as well as shoot-through protection
- ▶ Full range of drive 75kW and below, if it has built-in brake pipe then it provide braking resistor short circuit protection
- ▶ All series support DC power supply, DC operating voltage 450 ~ 750V, built-in snubber circuit
- ▶ 75kW and above with DC reactor as standard, reduce harmonics and improve reliability
- ▶ Full range of drive input has built-in lightning stroke protection device, effectively improve over-voltage/ over-current impact of the power grid
- ▶ The key components of main circuit large margin design, slow down the aging process of devices, reduce the failure rate and improve the life of the drive



Lightning Laboratory corner



EMC Laboratory corner

### MV Series external use environmental adaptability

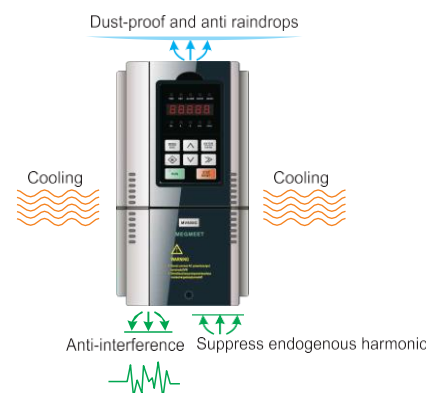
- ▶ All series independent duct design, completely isolate the electronic system and the cooling system
- ▶ Electronic systems protective coating process, effective dust-proof, moisture-proof, anti-mildew
- ▶ Radiator shutter design with patent, prevent water drip into the drive body
- ▶ All adopt industrial-grade connectors with "snap", improve shock resistance of drive



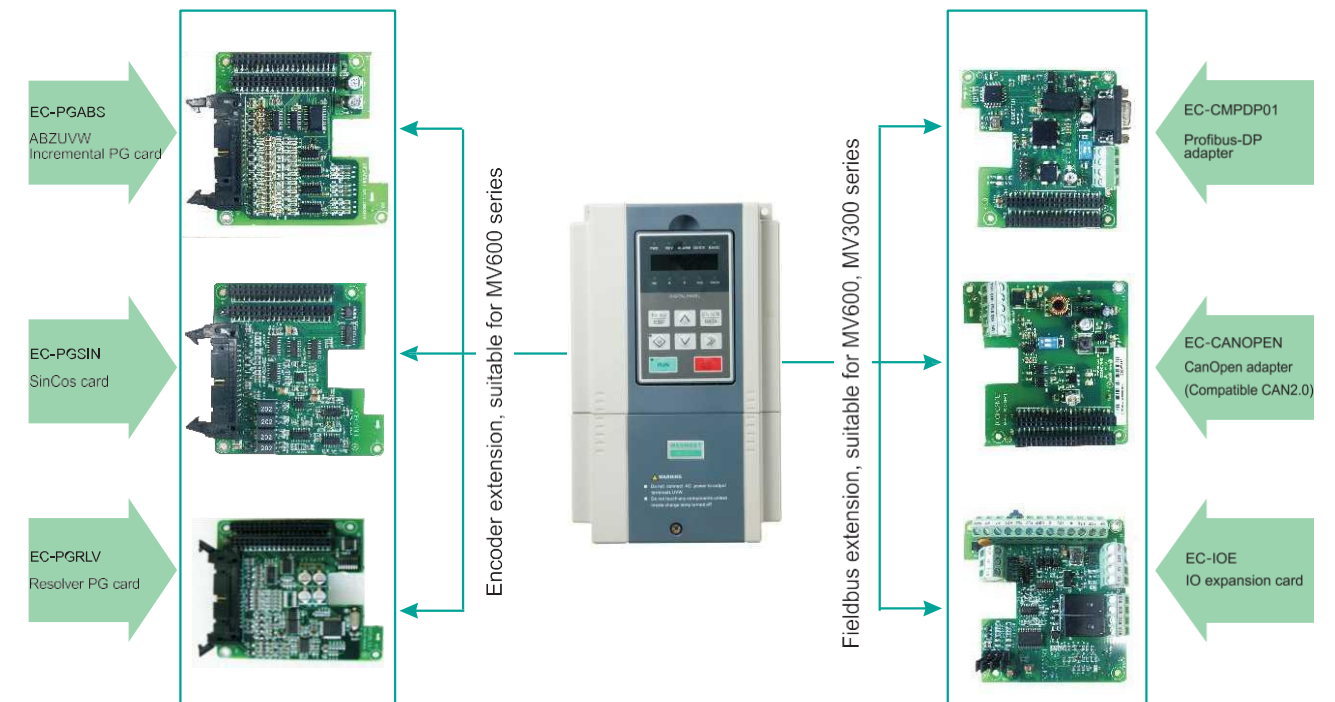
Environmental Laboratory corner

### MV Series meets the following standards

- ▶ General standards: GB12668-90, GB3797-90, IEC61800-2
- ▶ EMC standards: IEC61800-3, IEC1000-4, IEEE Std 519-1992
- ▶ Safety standards: GB4943, GB7588-1995, EN50178-1998, IEC60204-1, UL508C EN81-1
- ▶ Reliability standards: GB2423.1-89, GB2423.2-89, GB2423.5-95, GB2423.9-89, GB2423.10-95

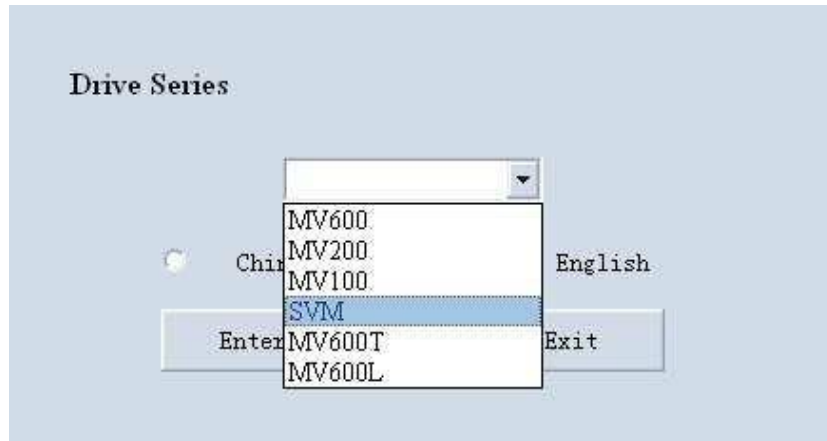


## MV Series Modular Design

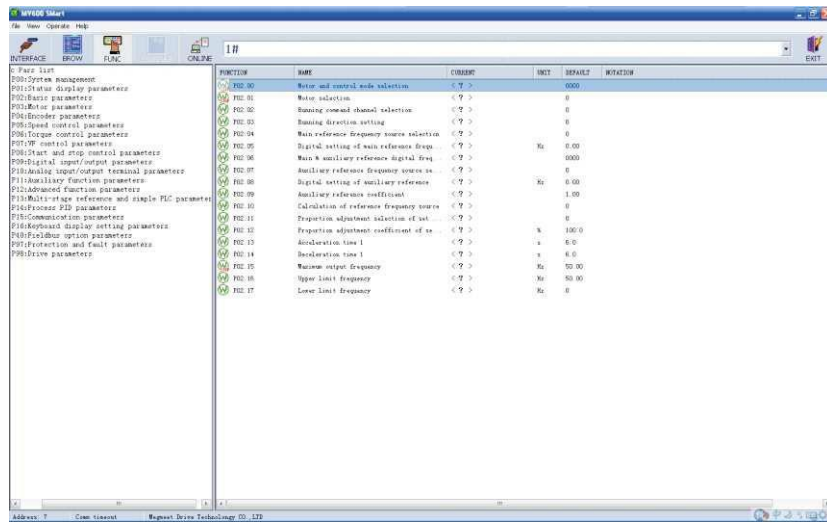


- ▶ Standard RJ45 interface, RS485 transmission, can use standard network cable, transmission distance up to 200 meters
- ▶ Parameter backup / download, hot plug, keyboard self-check / lock
- ▶ Standard LED, optional LCD

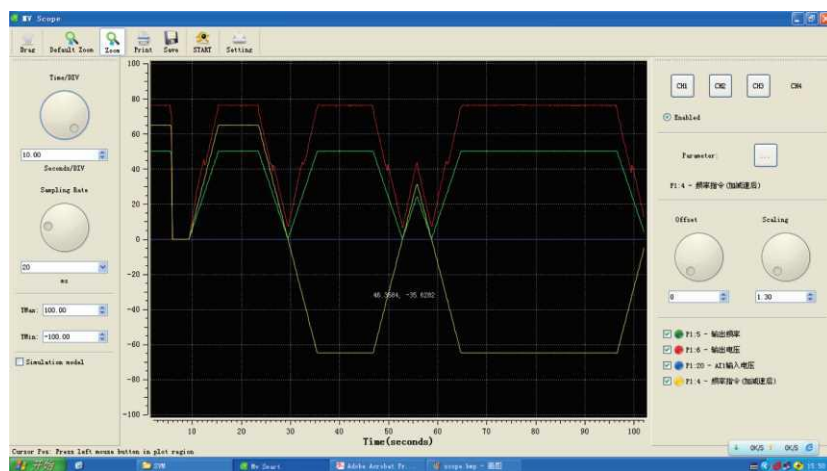
### MV-SMART Software



- ▶ Support all drives of megmeet
- ▶ Support multiple drive network

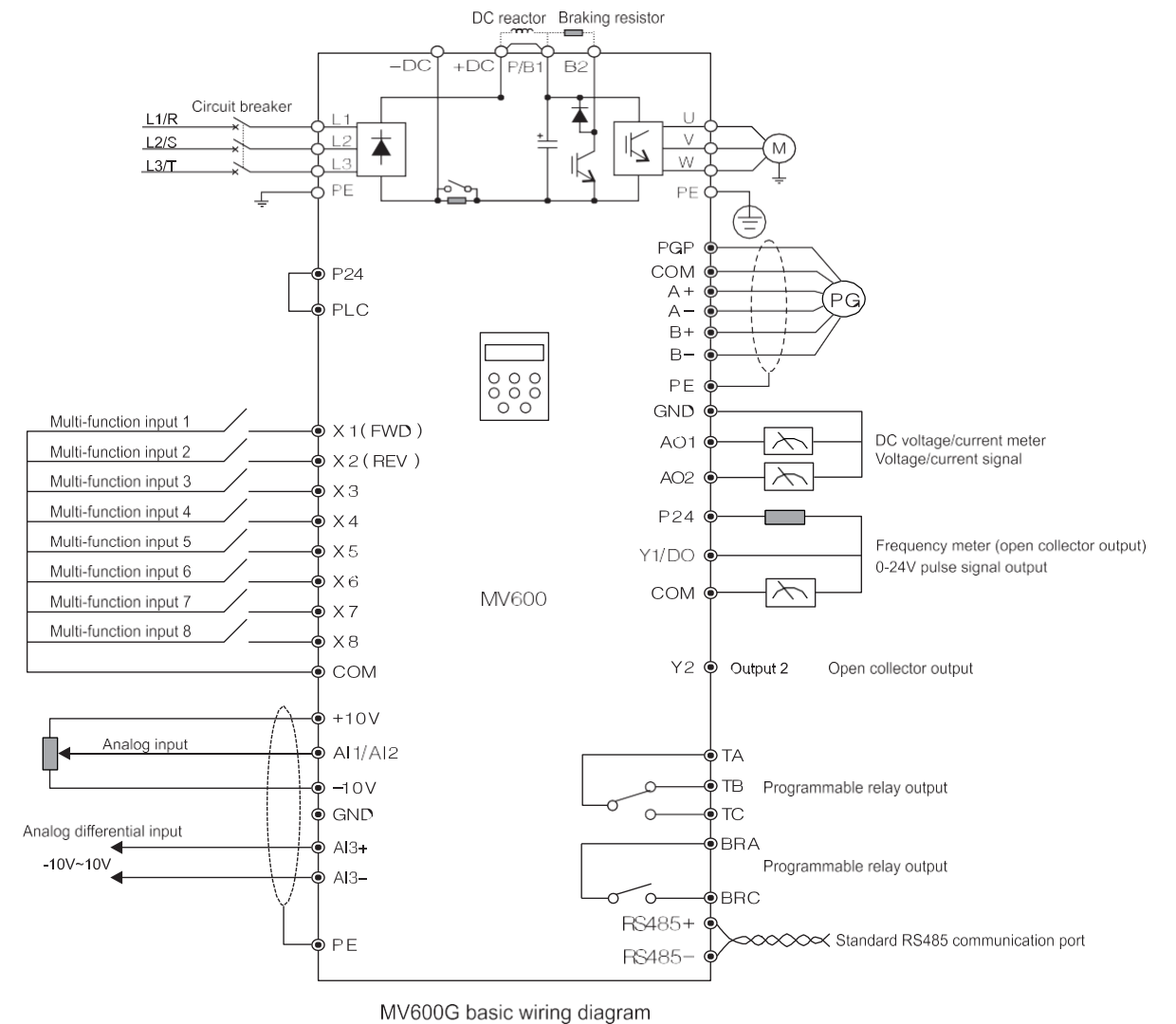
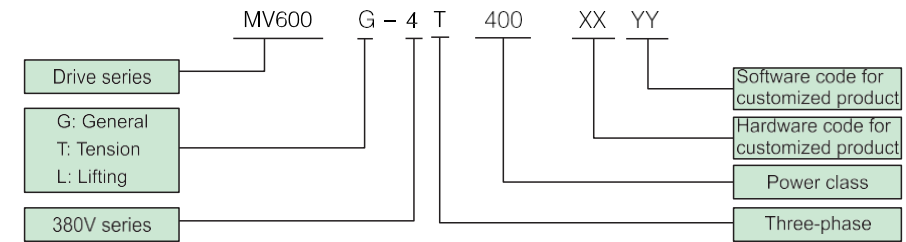


- ▶ Support saving, uploading, downloading of parameter files



- ▶ Support four channels of analog or digital sampling, real-time monitor process variables
- ▶ Adjustable sampling time and refresh rate
- ▶ Support zooming and playback of waveforms

### MV600G Engineering Drive



- Note:
1. 75kW and below of MV600G have built-in braking unit as standard
  2. 75kW and above of MV600G have external DC reactor as standard
  3. X7, X8 are high speed input terminals, the maximum input frequency is 50k. X7, X8 can double as 24V open collector PG inputs
  4. Y1 is high-speed output, the maximum output is 50k pulse.
  5. DC part terminals of the drive of 75kW and above are (+ DC, -DC, P), where (+ DC, P) connect DC reactor

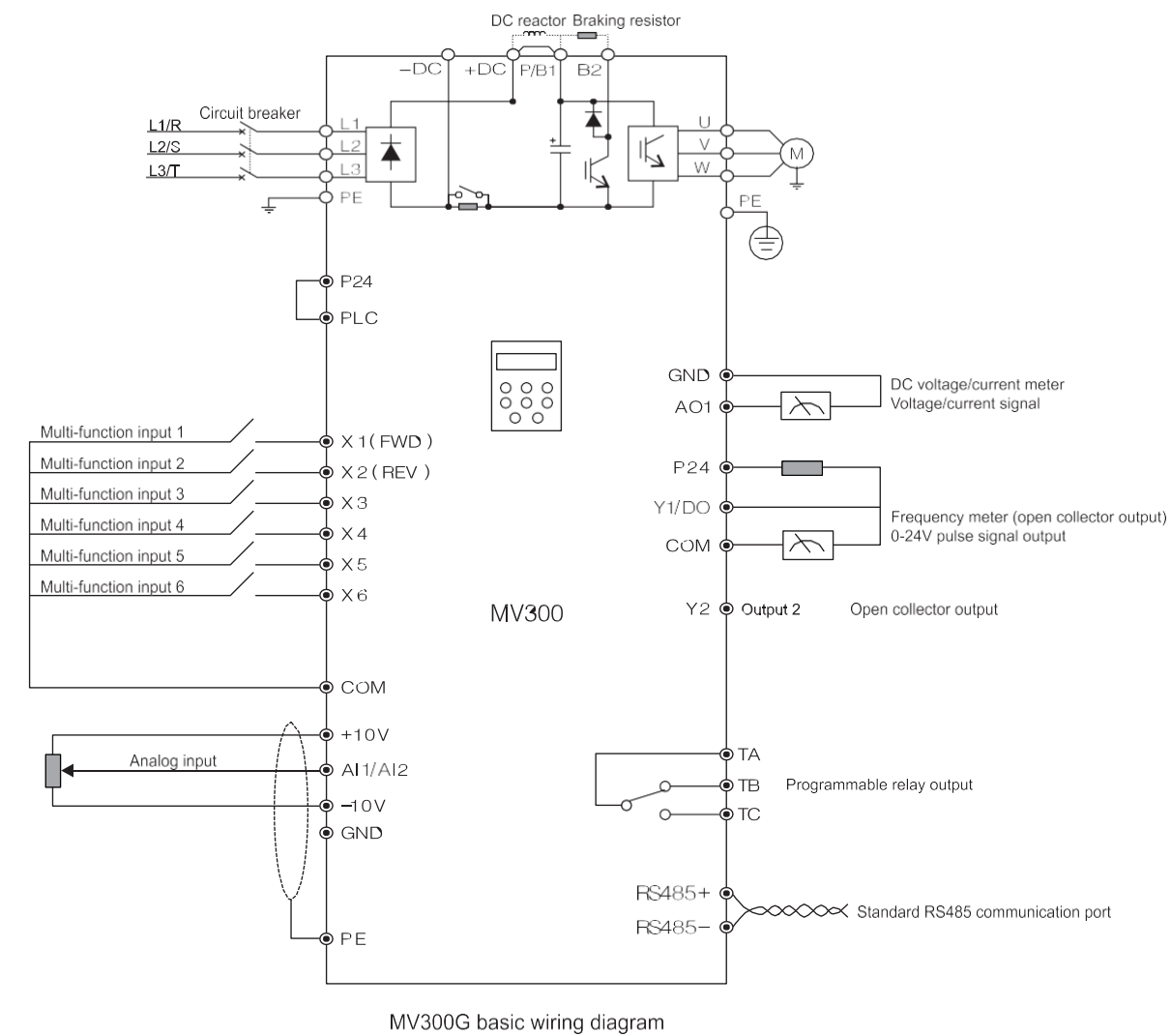
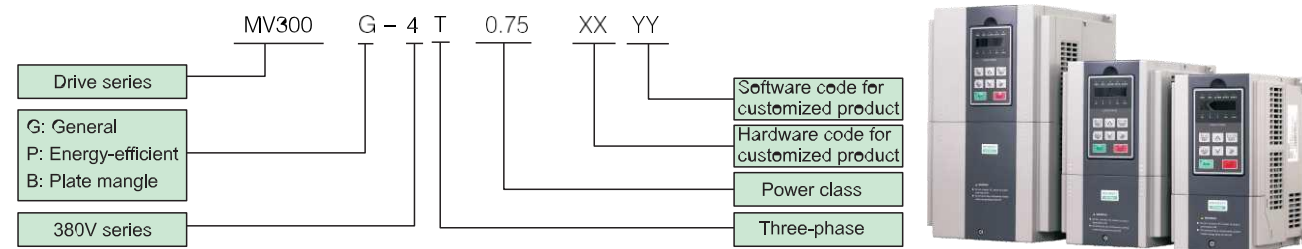
## MV600G Series Technical Specifications

Input/output	Rated voltage (V)	Three-phase: 380V~480V; continuous fluctuation of voltage: ±10%, transient fluctuation of voltage: -15%~+10% (i.e. the range is 323V~528V); voltage unbalance rate: <3%
	Rated frequency (Hz)	50Hz/60Hz, fluctuation range: ±5%
	Output voltage (V)	Output with three-phase under rated input conditions, 0 ~ rated input voltage, the error is less than ±3%
	Output frequency (Hz)	V/F: 0.00~3000Hz (unit can be selected between 0.1Hz and 0.01Hz); vector control: 0~650Hz
	Overload capacity	1 min for 150% rated current, 2s for 200% rated current
Operation control features	Control mode	Vector control without PG, vector control with PG, simple servo control, V/F control without PG, V/F control with PG
	Maximum output frequency	3000Hz for V/F control, 650Hz for vector control
	Speed adjusting range	1: 200 (vector control without PG); 1: 1000 (vector control with PG, simple servo control)
	Speed control precision	± 0.2% (vector control without PG); ±0.02% (vector control with PG, simple servo control)
	Speed fluctuation	± 0.3% (vector control without PG); ±0.1% (vector control with PG, simple servo control)
	Positioning precision	< ± 1 pulse (PMSM)
	Torque response time	<5ms (vector control with PG, simple servo control), <10ms (vector control without PG)
	Torque control	The torque control precision is 7.5% when vector control without PG, and 5% when vector control with PG
	Startup torque	150% @ 0Hz (vector control without PG); 200% @ 0Hz (vector control with PG)
Product functions	Key functions	Fast tracking, non-stop upon instantaneous power interruption, drooping control, automatic restart, dwell function, speed mode torque limiter, torque mode speed limiter, speed and torque control mode switching, zero servo, over torque/under torque detection, 16 stage speed operation and control, four kinds of acceleration/deceleration time switching, acceleration/deceleration time auto-tuning, S curve acceleration/deceleration, 3 section resonance frequency, motor parameter static tuning, rotary tuning, system mechanical inertia auto-tuning, synchronous motor angle tuning, two sets of motor parameters switching, main frequency and auxiliary frequency superposition, switching of multi-command, slip compensation, energy saving operation, PID adjustment (sleep function), fan speed control, MODBUS communication, DC braking, dynamic braking, simple PLC
	Startup frequency	0Hz~60.00Hz
	Frequency setting mode	Digital panel setting, terminal UP/DN setting, communication setting, analog setting (AI1/AI2/AI3), terminal pulse setting and various combinations
	Acceleration/deceleration time	0.1~3600.0s (unit can be selected among 0.1s, s and min)
	Brake pipe configuration	Models of 15kW and below have built-in braking unit which has fixed braking capacity as standard, and the braking rate is 0.0~100.0%, have an external braking resistor; models of 18.5 kW~75kW have built-in braking unit which has customized braking capacity as standard
	DC braking capacity	Initial frequency: 0.00Hz~60.00Hz, braking time: 0.1s~30.0s, braking current: 0%~100% for HD, 0%~80% for ND; according to the nominal rated current of the drive, but does not exceed 100% of drive rated current
	Terminal functions	Pluggable
Protection function	Up to 41 protection. Over-current protection; over-voltage / under voltage protection; input / output phase loss protection; power module protection; overheating protection; drive / motor overload protection; peripheral protection; abnormal communication , abnormal PG feedback and analog input protection; ±10V,+24V overload/short circuit protection; abnormal brake unit protection; self-checking before running	
Others	Efficiency	≥ 90% (7.5kW and below); ≥ 93% (45kW and below); ≥ 95% (55kW and above)
	Installation method	Wall-mounted
	Protection degree	IP20
	Cooling mode	0.75kW natural cooling, 1.5kW ~ 400kW forced cooling
Environment	Operating site	Indoor, away from direct sunlight, free from dust, corrosive gas, combustible gas, oil mist, water vapor, water dripping or salt
	Altitude	Used at the place lower than 1000m (derated at the place above 1000m, derated 10% for every increase of 1000m)
	Ambient temperature	-10℃~+40℃(derated when used in the ambient temperature of 40℃~50℃)
	Humidity	5%~95%RH, non-condensing
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
Storage temperature	-40℃~+70℃	

## MV600G Model and Technical Data

Enclosure model	Drive model	Rated capacity (kVA)	Rated input current (A)	Rated output current (A)	Rated output power (kW)
		HD	HD	HD	HD
R2	MV600G-4T0.75	1.5	3.5	2.3	0.75
	MV600G-4T1.5	3	5.1	3.7	1.5
	MV600G-4T2.2	4	5.8	5.5	2.2
R3	MV600G-4T3.7	5.9	10.5	8.8	3.7
	MV600G-4T5.5	8.5	14.5	13	5.5
R4	MV600G-4T7.5	11	20.5	17	7.5
	MV600G-4T11	17	26	25	11
R5	MV600G-4T15	21	35	32	15
	MV600G-4T18.5	24	38.5	37	18.5
R6	MV600G-4T22	30	46.5	45	22
	MV600G-4T30	40	62	60	30
R7	MV600G-4T37	50	76	75	37
	MV600G-4T45	60	92	90	45
R8	MV600G-4T55	72	113	110	55
	MV600G-4T75	100	157	152	75
R9	MV600G-4T90	116	180	176	90
	MV600G-4T110	138	214	210	110
R9P	MV600G-4T132	167	256	253	132
	MV600G-4T160	200	307	304	160
R10	MV600G-4T200	250	385	380	200
	MV600G-4T220	280	430	426	220
R11	MV600G-4T280	355	525	495	280
	MV600G-4T315	445	590	585	315
R11	MV600G-4T355	500	665	650	355
	MV600G-4T400	565	785	725	400

### MV300G Series High-performance Vector Drive



MV300G basic wiring diagram

- Note:
1. 15kW and below of MV300G have built-in braking unit as standard, 18.5~75kW have optional braking unit (built-in)
  2. 75kW and above of MV300G have external DC reactor as standard
  3. X6 is high speed input terminals, the maximum input frequency is 50k.
  4. Y1 is high-speed output, the maximum output is 50k pulse.
  5. DC part terminals of the drive of 75kW and above are (+ DC, -DC, P), where (+ DC, P) connect DC reactor

### MV300G Series Technical Specifications

Input/output	Rated voltage (V)	Three-phase: 380V~480V; continuous fluctuation of voltage: $\pm 10\%$ , transient fluctuation of voltage: $-15\% \sim +10\%$ (i.e. the range is 323V~528V); voltage unbalance rate: $< 3\%$
	Rated frequency (Hz)	50Hz/60Hz, fluctuation range: $\pm 5\%$
	Output voltage (V)	Output with three-phase under rated input conditions, 0~rated input voltage, the error is less than $\pm 3\%$
	Output frequency (Hz)	V/F: 0.00~3000Hz (unit: 0.01Hz); vector control: 0~650Hz
	Overload capacity	1 min for 150% rated current, 2s for 200% rated current
Operation control features	Control mode	Vector control without PG, V/F control
	Speed adjusting range	1: 200 (vector control without PG)
	Speed control precision	$\pm 0.2\%$ (vector control without PG)
	Speed fluctuation	$\pm 0.3\%$ (vector control without PG)
	Torque response	$< 10\text{ms}$ (vector control without PG)
Product functions	Torque control	The torque control precision is 7.5% when vector control without PG
	Startup torque	150% @ 0Hz (vector control without PG)
	Key functions	Fast tracking, over-torque/under-torque detection, torque limit, multi-stage speed operation, multiple acceleration/deceleration time switching, auto-tuning, S curve acceleration/deceleration, slip compensation, fan speed control, skip frequency operation, energy saving operation, PID adjustment (sleep function), non-stop upon instantaneous power interruption, switching of multi-command, MODBUS communication, drooping control, torque control, torque and speed control mode switching, automatic restart, DC braking, dynamic braking; simple PLC, dwell function, two sets of motor parameters switching
	Basic frequency	0.01Hz~3000.0Hz
	Startup frequency	0Hz~60.00Hz
Others	Frequency setting mode	Digital panel setting, terminal UP/DN setting, host device communication setting, analog setting (AI1/AI2), terminal pulse setting
	Acceleration/ deceleration time	0.1~3600.0 (unit can be selected among 0.1s, s and min)
	Brake pipe configuration	Models of 15kW and below have built-in braking unit as standard, models of 18.5kW~75kW have optional part, also can be built-in braking unit, models of above 75kW have external optional part
	DC braking capacity	Initial frequency: 0.00Hz~60.00Hz Braking time: 0.1s~30.0s Braking current: 0%~100% according to the nominal rated current of the drive
	Terminal functions	Pluggable
Environment	Efficiency	$\geq 93\%$ (7.5kW and below); $\geq 95\%$ (45kW and below); $\geq 98\%$ (55kW and above)
	Installation method	Wall-mounted
	Protection degree	IP20
	Cooling mode	0.75kW natural cooling, 1.5kW ~ 400kW forced cooling
Environment	Operating site	Indoor, away from direct sunlight, free from dust, corrosive gas, combustible gas, oil mist, water vapor, water dripping or salt
	Altitude	Used at the place lower than 1000m (derated at the place above 1000m, derated 1% for every increase of 100m)
	Ambient temperature	$-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$ (derated when used in the ambient temperature of $40^{\circ}\text{C} \sim 50^{\circ}\text{C}$ )
	Humidity	5%~95%RH, non-condensing
Environment	Vibration	Less than $5.9\text{m/s}^2$ (0.6g)
	Storage temperature	$-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$

### MV300G Model and Technical Data

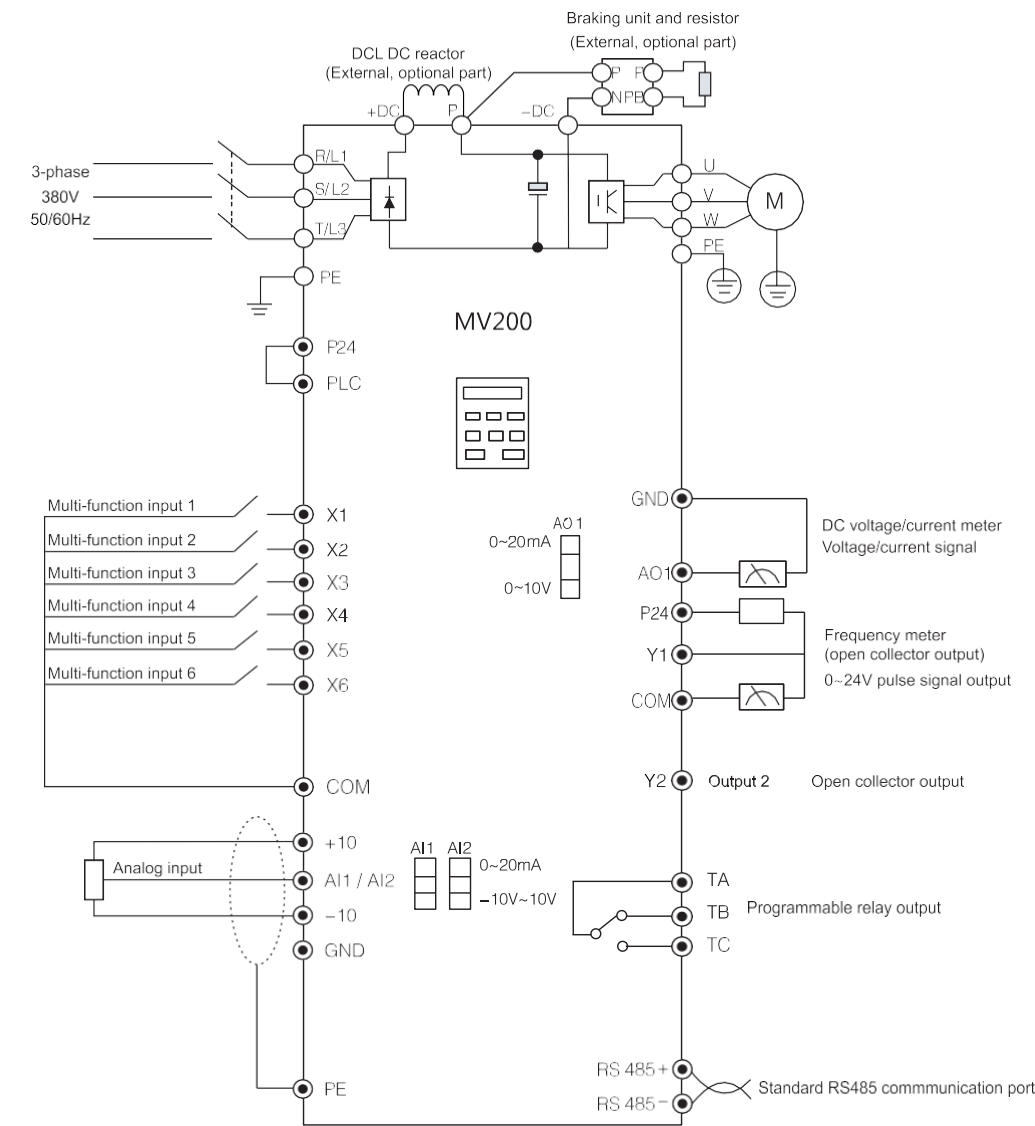
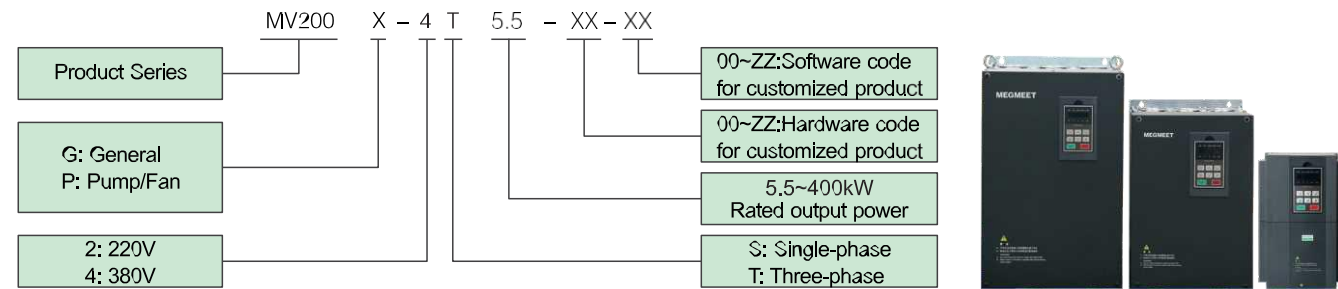
Enclosure model	Drive model	Rated capacity (kVA)	Rated input current (A)	Rated output current (A)	Rated output power (kW)
R2	MV300G-4T0.75	1.5	3.5	2.3	0.75
	MV300G-4T1.5	3	5.1	3.7	1.5
	MV300G-4T2.2	4	5.8	5.5	2.2
	MV300G-4T3.7	5.9	10.5	8.8	3.7
R3	MV300G-4T5.5	8.5	14.5	13	5.5
	MV300G-4T7.5	11	20.5	17	7.5
R4	MV300G-4T11	17	26	25	11
	MV300G-4T15	21	35	32	15
R5	MV300G-4T18.5	24	38.5	37	18.5
	MV300G-4T22	30	46.5	45	22
	MV300G-4T30	40	62	60	30
R6	MV300G-4T37	50	76	75	37
	MV300G-4T45	60	92	90	45
R7	MV300G-4T55	72	113	110	55
	MV300G-4T75	100	157	152	75
R8	MV300G-4T90	116	180	176	90
	MV300G-4T110	138	214	210	110
R9	MV300G-4T132	167	256	253	132
	MV300G-4T160	200	307	304	160
R9P	MV300G-4T200	250	385	380	200
R10	MV300G-4T220	280	430	426	220
	MV300G-4T280	355	525	495	280
	MV300G-4T315	445	590	585	315
R11	MV300G-4T355	500	665	650	355
	MV300G-4T400	565	785	725	400

### MV300P Model and Technical Data

Enclosure model	Drive model	Rated capacity (kVA)	Rated input current (A)	Rated output current (A)	Rated output power (kW)
R2	MV300P-4T0.75	1.5	3.5	2.3	0.75
	MV300P-4T1.5	3	5.1	3.7	1.5
	MV300P-4T2.2	4	5.8	5.5	2.2
	MV300P-4T3.7	5.9	10.5	8.8	3.7
	MV300P-4T5.5	8.5	14.5	13	5.5
R3	MV300P-4T7.5	11	20.5	17	7.5
R4	MV300P-4T11	17	26	25	11
	MV300P-4T15	21	35	32	15
	MV300P-4T18.5	24	38.5	37	18.5
R5	MV300P-4T22	30	46.5	45	22
	MV300P-4T30	40	62	60	30
	MV300P-4T37	50	76	75	37
R6	MV300P-4T45	60	92	90	45
	MV300P-4T55	72	113	110	55
R7	MV300P-4T75	100	157	152	75
	MV300P-4T90	116	180	176	90
R8	MV300P-4T110	138	214	210	110
	MV300P-4T132	167	256	253	132
R9	MV300P-4T160	200	307	304	160
	MV300P-4T200	250	385	380	200
R9P	MV300P-4T220	280	430	426	220
R10	MV300P-4T280	355	525	495	280
	MV300P-4T315	388	620	585	315
	MV300P-4T355	500	665	650	355
R11	MV300P-4T400	565	785	725	400



### MV200 Series High Performance General Drive



Basic wiring diagram 2 (for model of 90kWG/110kWP and above)

Note: “○” in the figure is main circuit terminal and “●” in the figure is control circuit terminal.  
The basic wiring diagram for model of 75kWG/90kWP and below is the same as that of MV300G.

### MV200 Series Technical Specifications

Input/output power	Rated voltage (V)	Three-phase: 380V~480V; continuous fluctuation of voltage: ±10%, transient fluctuation of voltage: -15%~+10%; Voltage unbalance rate: < 3%, the distortion rate complies with IEC61800-2
	Rated frequency (Hz)	50Hz/60Hz, fluctuation range: ±5%
	Output voltage (V)	Output with three-phase under rated input conditions: 0 ~ rated input voltage, the error is less than ±3%
	Output frequency (Hz)	0.00~3000.0Hz, the minimum unit: 0.01Hz
	Overload capacity	G: 1 min for 150% rated current, 0.5 s for 200% rated current P: 1 min for 110% rated current, 1 s for 150% rated current
Operation control features	Control mode	High-performance vector control
	Max. output frequency	3000Hz
	Speed adjusting range	1:100
	Speed control precision	± 0.5%
	Speed fluctuation	± 0.3%
Startup torque	150% @ 0.5Hz	
Product functions	Key functions	Fast tracking, multi-stage speed operation, multiple acceleration/deceleration time switching, auto-tuning, S curve acceleration/deceleration, slip compensation, fan control, skip frequency operation, energy saving operation, PID adjustment (sleep function), non-stop upon instantaneous power interruption, switching of multi-command, MODBUS communication, Fieldbus communication, drooping control, automatic restart, DC braking, dynamic braking; simple PLC, dwell function, two sets of motor parameters switching
	Basic frequency	0.01Hz~3000.0Hz
	Startup frequency	0.00Hz~60.00Hz
	Frequency setting mode	Digital panel setting, terminal UP/DN setting, host device communication setting, analog setting (AI1/AI2), terminal pulse setting, fieldbus communication setting
	Acc./dec. time	0.1~3600.0 (unit can be selected among 0.1s, s and min)
	Dynamic braking capacity	G: 18.5kW and below have built-in braking unit as standard, 22kW~75kW can customize built-in braking unit, braking rate: 0.0~100.0% P: 18.5kW and below have built-in braking unit as standard, 22kW~90kW can customize built-in braking unit, braking rate: 0.0~100.0%
DC braking capacity	Initial frequency: 0.00Hz~60.00Hz; Braking time: 0.1s~30.0s; Braking current: 0%~100% for model G, 0%~50% for model P; according to the nominal rated current of the drive	
Protection function	Overcurrent protection, overvoltage / undervoltage protection, input / output phase loss protection, thermal protection, overload protection, etc.	
Others	Efficiency	≥93% (7.5kW and below); ≥95% (45kW and below); ≥98% (55kW and above)
	Installation method	Wall-mounted
	Protection degree	IP20
	Cooling mode	Air cooling with fan control
Environment	Operating site	Indoor, away from direct sunlight, free from corrosive gas, combustible gas, oil mist, water vapor, water dripping or salt
	Altitude	Used at the place lower than 1000m, (derated at the place above 1000m, derated 1% for every increase of 100m)
	Ambient temperature	-10℃~+40℃ (derated when used in the ambient temperature of 40℃~50℃)
	Humidity	5%~95%RH, non-condensing
	Vibration	Less than 5.9m/s²(0.6g)
Storage temperature	-40℃~+70℃	

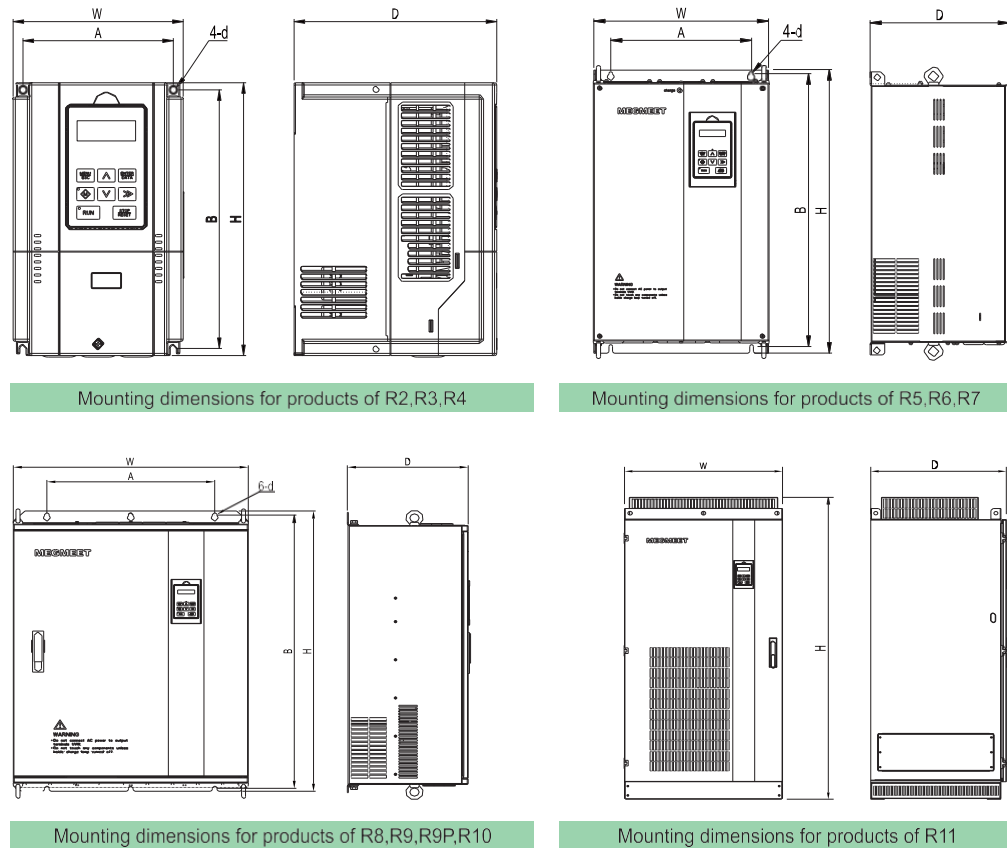
### MV200G Model and Technical Data

Enclosure mode	Drive model	Rated capacity (kVA)	Rated input current (A)	Rated output current (A)	Rated output power (kW)
R3	MV200G-4T5.5	8.5	14.5	13.0	5.5
	MV200G-4T7.5	11.0	20.5	17.0	7.5
R4	MV200G-4T11	17.0	26.0	25.0	11
	MV200G-4T15	21.0	35.0	32.0	15
	MV200G-4T18.5	24.0	38.5	37.0	18.5
R5	MV200G-4T22	30.0	46.5	45.0	22
	MV200G-4T30	40.0	62.0	60.0	30
	MV200G-4T37	50.0	76.0	75.0	37
R6	MV200G-4T45	60.0	92.0	90.0	45
	MV200G-4T55	72.0	113.0	110.0	55
R7	MV200G-4T75	100.0	157.0	152.0	75
R8	MV200G-4T90	116.0	180.0	176.0	90
	MV200G-4T110	138.0	214.0	210.0	110
	MV200G-4T132	167.0	256.0	253.0	132
R9	MV200G-4T160	200.0	307.0	304.0	160
	MV200G-4T200	250.0	385.0	380.0	200
R10	MV200G-4T220	280.0	430.0	426.0	220
	MV200G-4T280	355.0	525.0	495.0	280
	MV200G-4T315	445.0	590.0	585.0	315
R11	MV200G-4T355	500.0	665.0	650.0	355
	MV200G-4T400	565.0	785.0	725.0	400

### MV200P Model and Technical Data

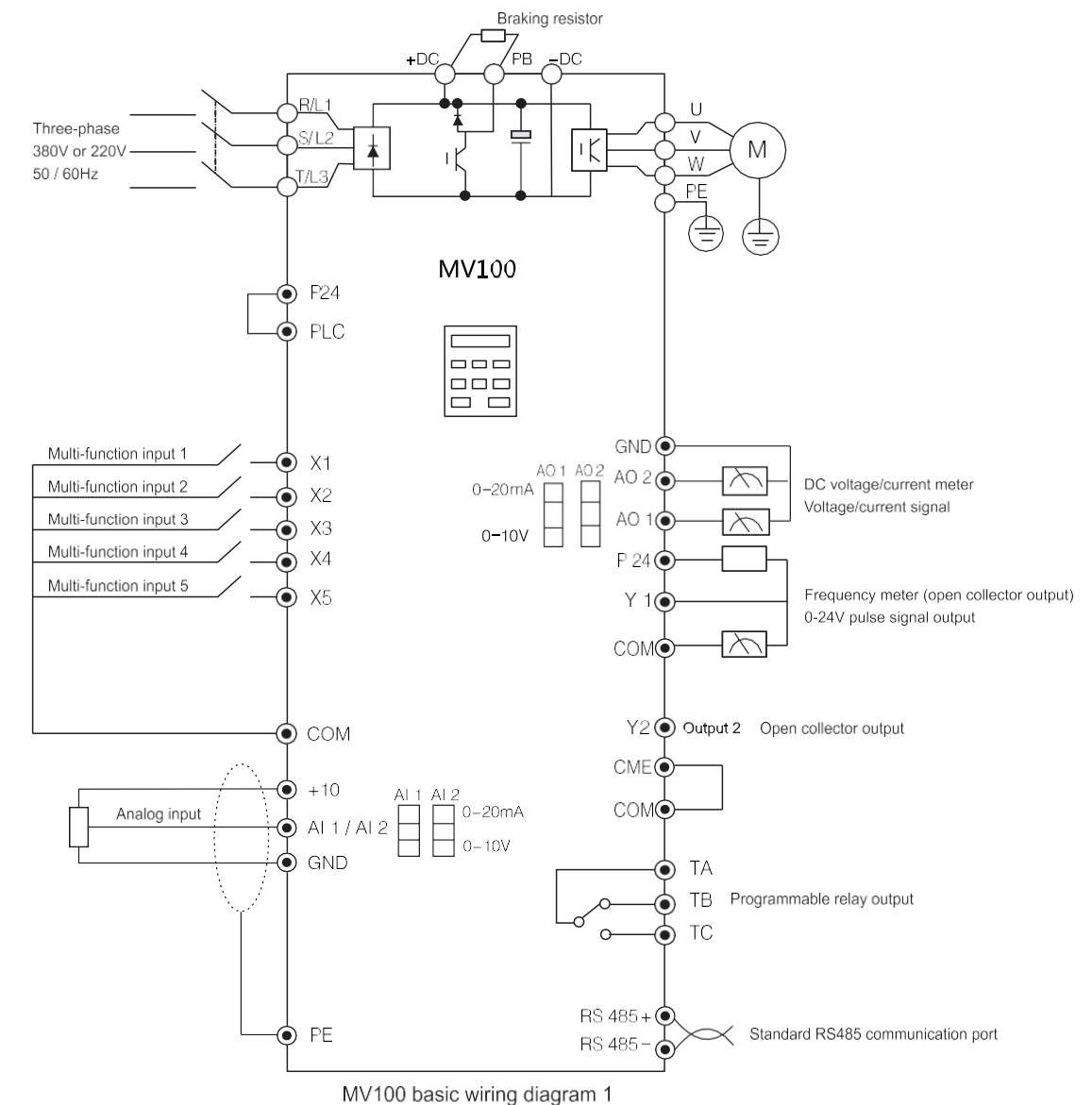
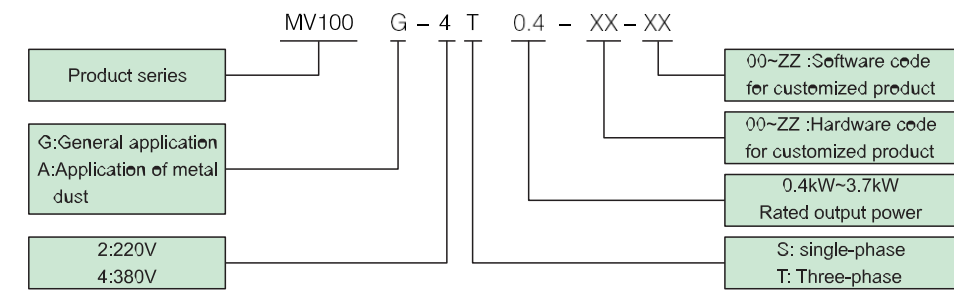
Enclosure mode	Drive model	Rated capacity (kVA)	Rated input current (A)	Rated output current (A)	Rated output power (kW)
R2	MV200P-4T5.5	8.5	14.5	13.0	5.5
R3	MV200P-4T7.5	11.0	20.5	17.0	7.5
R4	MV200P-4T11	17.0	26.0	25.0	11
	MV200P-4T15	21.0	35.0	32.0	15
	MV200P-4T18.5	24.0	38.5	37.0	18.5
R5	MV200P-4T22	30.0	46.5	45.0	22
	MV200P-4T30	40.0	62.0	60.0	30
	MV200P-4T37	50.0	76.0	75.0	37
R6	MV200P-4T45	60.0	92.0	90.0	45
	MV200P-4T55	72.0	113.0	110.0	55
R7	MV200P-4T75	100.0	157.0	152.0	75
R7	MV200P-4T90	116.0	180.0	176.0	90
	MV200P-4T110	138.0	214.0	210.0	110
R8	MV200P-4T132	167.0	256.0	253.0	132
	MV200P-4T160	200.0	307.0	304.0	160
R9	MV200P-4T200	250.0	385.0	380.0	200
	MV200P-4T220	280.0	430.0	426.0	220
R10	MV200P-4T280	355.0	525.0	495.0	280
	MV200P-4T315	445.0	590.0	585.0	315
R11	MV200P-4T355	500.0	665.0	650.0	355
	MV200P-4T400	565.0	785.0	725.0	400

### MV Series Outline and Mounting Dimensions

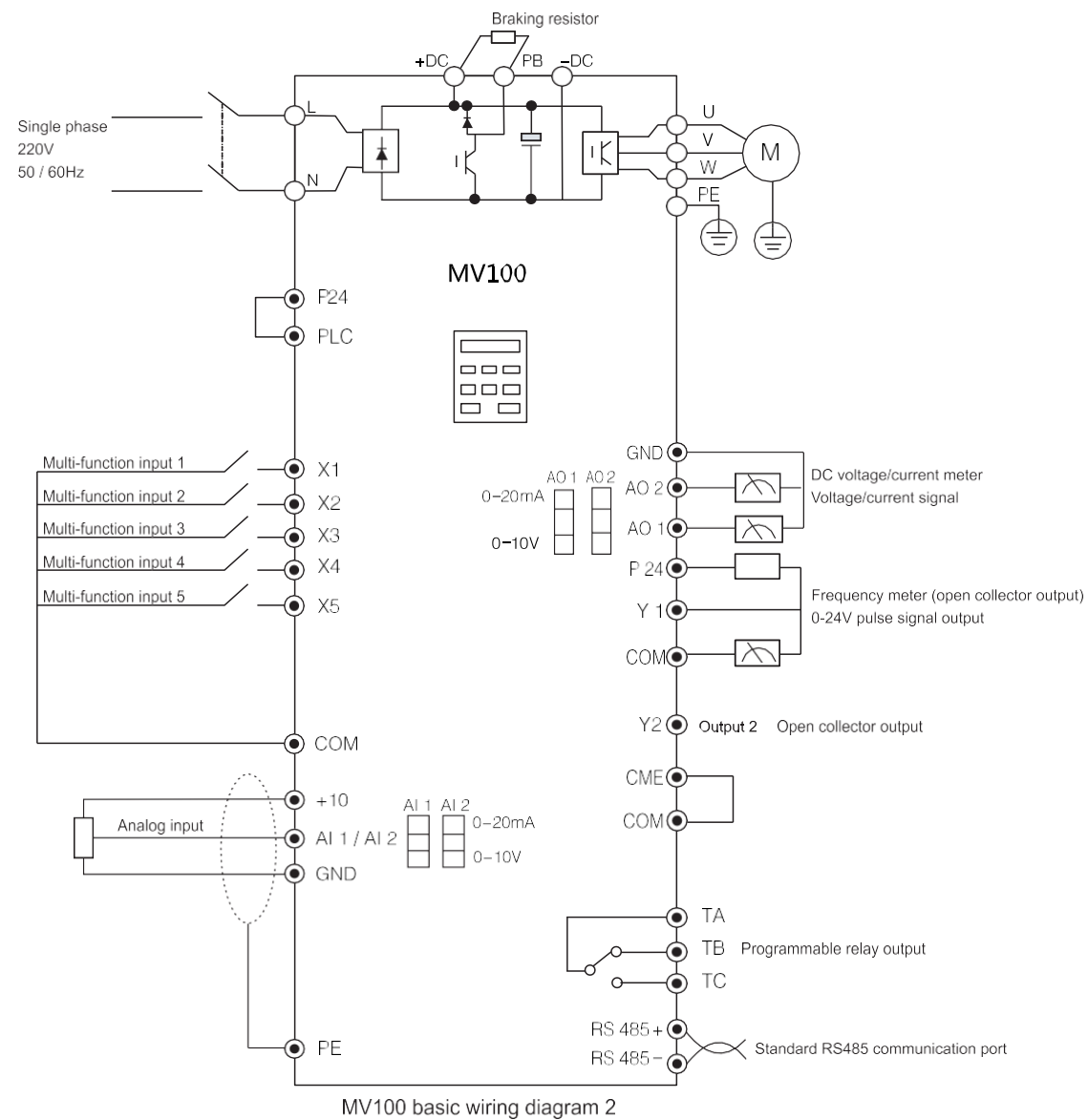


Enclosure model	A(mm)	B(mm)	H(mm)	W(mm)	D(mm)	Diameter of mounting aperture (mm)	Gross weight ±0.5 (kg)
R2	115	218	229	126	174	5.5	4
R3	137	236	249	155	198	5.5	4
R4	186	314.5	330	209	206	6.5	9
R5	220	437.5	451.5	284.5	213	6.5	19
R6	270	549	570	335	267	7	41
R7	270	579	600	335	292	7	49
R8	350	705	726.5	452	328.5	12	87
R9	350	827.5	849.5	500	350	12	154
R9P	370	827.5	849.5	530	350	12	154
R10	500	932	956	700	361.5	14	216
R11	Cabinet machine		1624	710	610	-	250

### MV100 Compact Drive



Note: Suitable for three-phase 380V or 220V series; "○" in the figure is main circuit terminal and "●" in the figure is control circuit terminal.



MV100 basic wiring diagram 2

Note: Suitable for single phase 220V series; "○" in the figure is main circuit terminal and "●" in the figure is control circuit terminal.

## MV100 Series Power Specifications

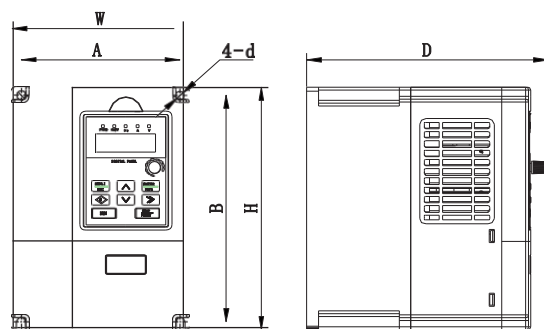
Three-phase 380V series power specifications						
Drive model	MV100A-4T0.4	MV100G-4T0.75 MV100A-4T0.75	MV100G-4T1.5 MV100A-4T1.5	MV100G-4T2.2 MV100A-4T2.2	MV100G-4T3.7	
Applicable motor power	0.4kW	0.75kW	1.5kW	2.2kW	3.7kW	
Applicable motor power	0.5HP	1HP	2HP	3HP	5HP	
Input power	Input current	1.9A	3.2A	4.3A	7.1A	11.2A
	Rated voltage	Three-phase 380~480V				
	Voltage fluctuation range	± 10%(342~528V)				
	Rated frequency	50Hz/60Hz				
	Frequency fluctuation range	± 5%(47~63Hz)				
Output	Rated output capacity	1.2kVA	2kVA	3.3kVA	4.4kVA	6.8kVA
	Rated output current	1.5A	2.5A	4.2A	5.5A	8.5A
	Output voltage	0~the corresponding three-phase input voltage, the error is less than ± 3%				
	Output frequency range	V/F: 0.0~2000.0Hz (unit: 0.1Hz)				
	Carrier frequency	0.7~15kHz				
Overload capacity	1 min for 150% rated current, 0.5 s for 200% rated current					
Cooling mode	Forced air cooling					

Single-phase 220V series power specifications					
Drive model	MV100G-2S0.4	MV100G-2S0.75	MV100G-2S1.5	MV100G-2S2.2	
Applicable motor power	0.4kW	0.75kW	1.5kW	2.2kW	
Applicable motor power	0.5HP	1HP	2HP	3HP	
Input power	Input current	6.5A	9.7A	15.4A	24A
	Rated voltage	Single-phase 200~240V			
	Voltage fluctuation range	± 10%(180~264V)			
	Rated frequency	50Hz/60Hz			
	Frequency fluctuation range	± 5%(47~63Hz)			
Output	Rated output capacity	1kVA	1.6kVA	2.9kVA	4.2kVA
	Rated output current	2.5A	4.2A	7.5A	11A
	Output voltage	0~the corresponding three-phase input voltage, the error is less than ± 3%			
	Output frequency range	V/F: 0.0~2000.0Hz (unit: 0.1Hz)			
	Carrier frequency	0.7~15kHz			
Overload capacity	1 min for 150% rated current, 0.5 s for 200% rated current				
Cooling mode	Forced air cooling				

Three-phase 220V series power specifications					
Drive model	MV100G-2T0.4	MV100G-2T0.75	MV100G-2T1.5	MV100G-2T2.2	
Applicable motor power	0.4kW	0.75kW	1.5kW	2.2kW	
Applicable motor power	0.5HP	1HP	2HP	3HP	
Input power	Input current	2.7A	5.1A	9A	
	Rated voltage	Three-phase 200~240V			
	Voltage fluctuation range	± 10%(180~264V)			
	Rated frequency	50Hz/60Hz			
Frequency fluctuation range	± 5%(47~63Hz)				
Output	Rated output capacity	1kVA	1.6kVA	2.9kVA	4.2kVA
	Rated output current	2.5A	4.2A	7.5A	11A
	Output voltage	0~the corresponding three-phase input voltage, the error is less than ± 3%			
	Output frequency range	V/F: 0.0~2000.0Hz (unit: 0.1Hz)			
	Carrier frequency	0.7~15kHz			
	Overload capacity	1 min for 150% rated current, 0.5 s for 200% rated current			
Cooling mode	Forced air cooling				

## MV100 Series Control Specifications

Operation control features	Control mode	V/F control without PG
	Maximum output frequency	2000.0Hz
	Speed adjusting range	1: 100
	Speed control precision	± 0.5%
	Speed fluctuation	± 0.3%
Startup torque	150% @ 0Hz	
Product functions	Key functions	Fast tracking, multi-stage speed operation, auto-tuning, skip frequency operation, PID adjustment, non-stop upon instantaneous power interruption, switching of multi-command, MODBUS communication, automatic restart, DC braking, dynamic braking, dwell function
	Basic frequency	0.1Hz~2000.0Hz
	Startup frequency	0.0Hz~60.0Hz
	Frequency setting mode	Digital panel setting, terminal UP/DN setting, host device communication setting, analog setting (AI1/AI2), terminal pulse setting
	Acceleration/deceleration time	0.1~3600.0 (unit can be selected among 0.1s, s and min)
	Dynamic braking capacity	Built-in braking unit, braking rate 0.0~100.0%
	DC braking capacity	Initial frequency: 0.0Hz~60.0Hz Braking time: 0.1s~30.0s Braking current: 0%~100%
Protection function	Over-current, overvoltage, under voltage, overheat, overload protection, etc.	
Others	Efficiency	93%
	Installation method	Wall-mounted
	Protection degree	IP20
	Cooling mode	Air cooling
Environment	Operating site	Indoor, away from direct sunlight, free from corrosive gas, combustible gas, oil mist, water vapor, water dripping or salt
	Altitude	Used at the place lower than 1000m (derated at the place above 1000m, derated 1% for every increase of 100m)
	Ambient temperature	-10℃~+40℃(derated when used in the ambient temperature of 40℃~50℃)
	Humidity	5%~95%RH, non-condensing
	Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)
Storage temperature	-40℃~+70℃	



Enclosure model	A (mm)	B (mm)	H (mm)	W (mm)	D (mm)	Diameter of mounting aperture (mm)	Gross weight ±0.5 (kg)
G1R1	78	137	147	88	163	4.5	1.3
G1R2	107	171	183	119	163	5.5	2

Note: In the following table, pale green shading part corresponds to the enclosure model G1R1, dark gray shading part corresponds to the enclosure model G1R2.

Series	0.4kW	0.75kW	1.5kW	2.2kW	3.7kW
Three-phase 380V		MV100G-4T0.75	MV100G-4T1.5	MV100G-4T2.2	MV100G-4T3.7
		MV100A-4T0.4	MV100A-4T0.75	MV100A-4T1.5	MV100A-4T2.2
Single-phase 220V	MV100G-2S0.4	MV100G-2S0.75	MV100G-2S1.5	MV100G-2S2.2	
Three-phase 220V	MV100G-2T0.4	MV100G-2T0.75	MV100G-2T1.5	MV100G-2T2.2	

### MV300B Drive Special for Cotton Spinning



### MV300B Model and Technical Data

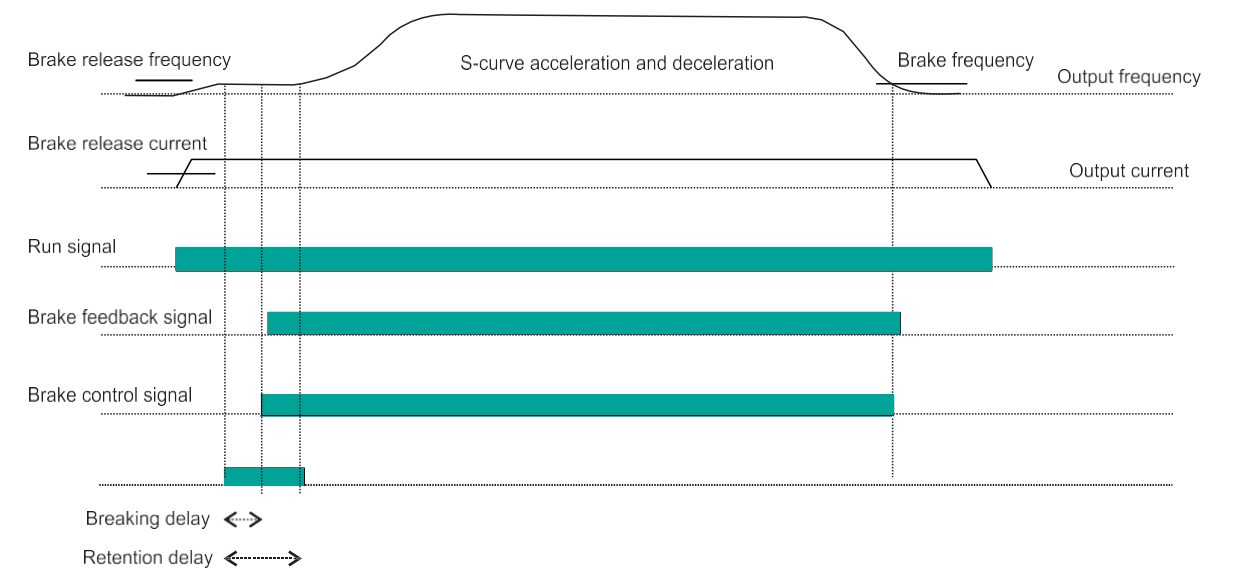
Enclosure model	Drive model	Rated capacity (kVA)	Rated input current (A)	Rated output current (A)	Rated output power (kW)
WR3	MV300BN-4T5.5	8.5	14.5	13	5.5
	MV300BH-4T5.5	8.5	14.5	13	5.5
	MV300BN-4T7.5	11	20.5	17	7.5
	MV300BH-4T7.5	11	20.5	17	7.5
WR4	MV300BN-4T11	17	26	25	11
	MV300BH-4T11	17	26	25	11
	MV300BN-4T15	21	35	32	15
	MV300BH-4T15	21	35	32	15
	MV300BN-4T18.5	24	38.5	37	18.5
WR5	MV300BH-4T18.5	24	38.5	37	18.5
	MV300BN-4T22	30	46.5	45	22
	MV300BH-4T22	30	46.5	45	22
	MV300BN-4T30	40	62	60	30
	MV300BH-4T30	40	62	60	30
WR6	MV300BN-4T37	50	76	75	37
	MV300BH-4T37	50	76	75	37
	MV300BN-4T45	60	92	90	45
	MV300BH-4T45	60	92	90	45
WR7	MV300BN-4T55	72	113	110	55
	MV300BH-4T55	72	113	110	55

Note:

1. For mounting dimensions, please contact the manufacturer
2. Basic wiring diagram of MV300B is consistent with MV300G
3. Performance indicators of MV300B is consistent with MV300G
4. MV300B can be upgraded to MV600B by hardware non-standard, so as to achieve performance and technical indicators of MV600.

### MV600L Drive Special for Lifting

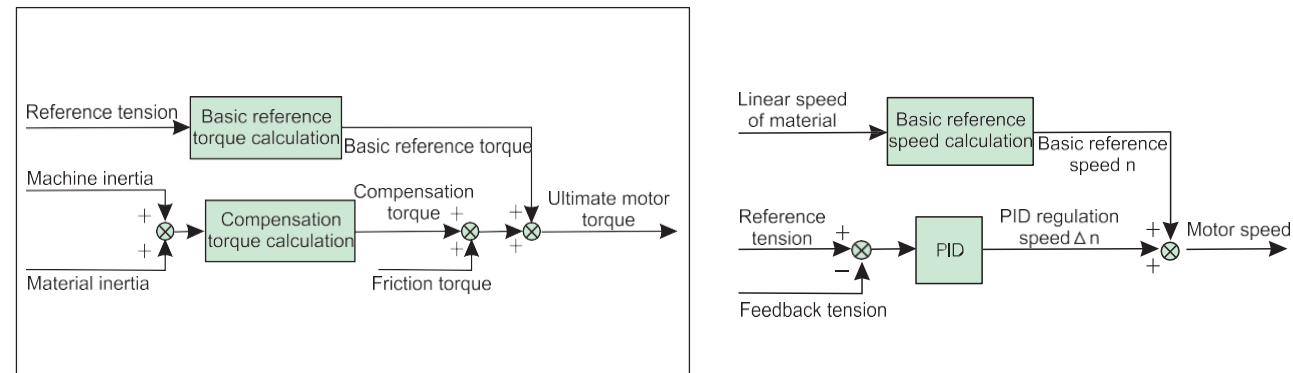
MV600L drive special for lifting has exactly the same hardware platform with MV600, but has developed specialized application software packages for the tower crane, construction hoist, port machinery, driving, mine hoisting equipment and others in engineering machinery.



Unique algorithm	Unique vector control one-driving-more technology; can one-driving-more in open-loop and also one-driving-more control in closed-loop when receiving PG feedback signal of the motor
Brake control	Built-in braking control program as standard, ensure smooth braking and it doesn't slide, real-time monitor brake signal, ensure the safe and reliable
Multi-motor switching	Built-in two sets of motor parameters, can switch via the multi-function terminal/communication, include switching encoder parameters
Acceleration and deceleration	Built-in 4 sets of acceleration and deceleration time, can choose linear or S-curve acceleration and deceleration
Modular expansion	Support modular expansion, include fieldbus, input and output terminals, various encoders
Light load up speed	Support light load up speed function in the constant power range, ensure efficiency
Open-loop torque control	Open-loop torque control in the absence of PG
Zero servo function	Ensure in situ when the motor is at zero speed

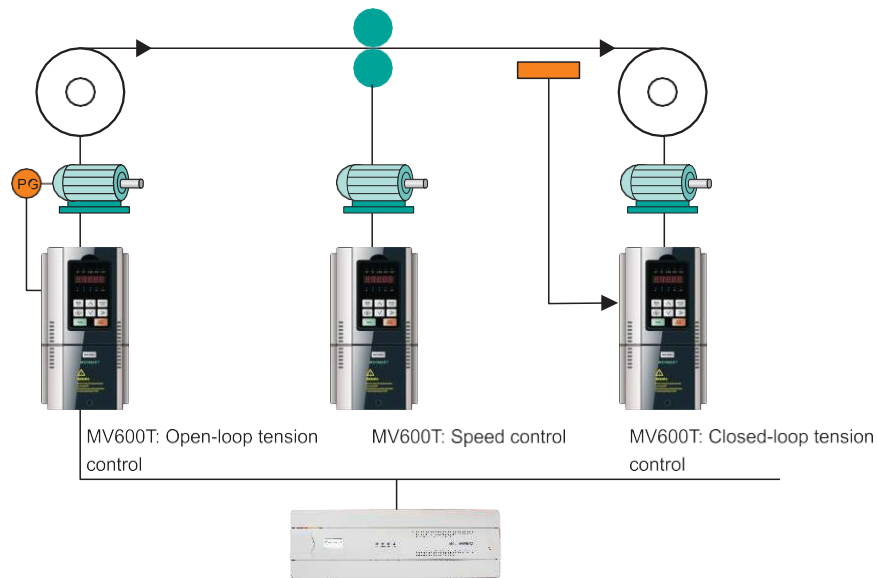
## MV600T Drive Special for Tension

With the high speed and high performance of retractable roll equipment, when doing retractable roll processing for long-size products such as paper, wire, all kinds of films, strip and others, the material tension control technology is becoming increasingly important. MV600T drive can automatically control the output torque or automatically adjust the speed of controlled tractor, so that the tension on strip (wire) can maintain constant, it is suitable for papermaking, paper processing, printing and dyeing, packaging, wire and cable, adhesive tape, textiles, leather, metallic foil processing, fiber, rubber and other industries. For retractable roll control, the drive comes with an internal coil diameter calculation module that can automatically calculate the change of the roll diameter, making more precise tension control. MV600T drive can independently constitute tension control system completely replacing the torque motor, DC motor, tension controller, as opposed to the traditional tension controller plus drive control scheme, using this drive can make the system more simple, low cost, ease of maintenance and obtain a more stable control.



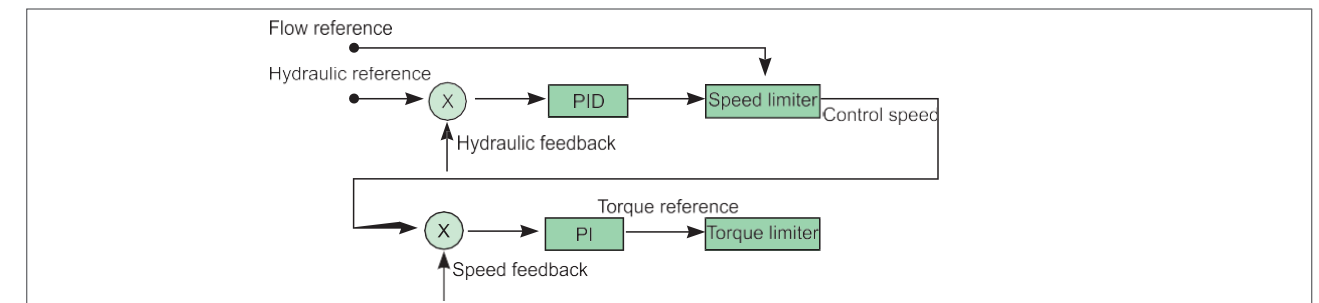
Note: In the open-loop tension torque mode, the drive support speed sensor torque mode, also support torque mode without speed sensor. Only for the occasion that the tension control accuracy is not high and there is no tension transient mutation control, you can consider the vector mode without speed sensor.

Note: The tension detection can be a floating roller (position) or tension sensor.

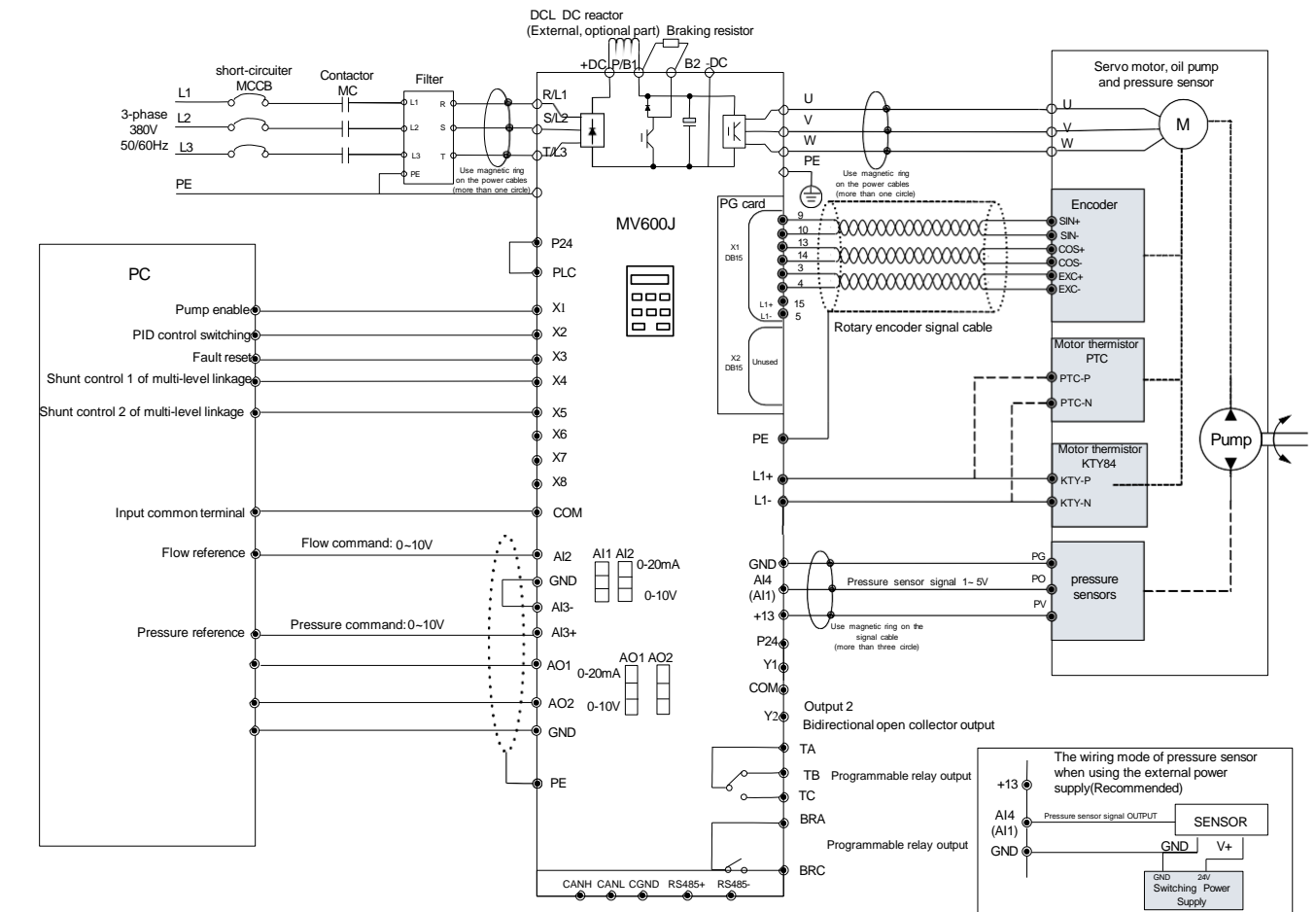


## MV600J Hydraulic Servo Drive

MV600J hydraulic servo drive aimed at the characteristics that electrical control space of injection molding machine is small and heat dissipation is poor, take full account of the drive installation, maintenance convenience on the the structure design, and ensure the normal operation under high-temperature environment through a unique cooling duct and the main circuit large margin design; can meet the requirements of the users for low noise and low EMI by adopting the integrated EMC design and optimized PWM control technology; for technological requirements of injection molding machine, use a unique motor control algorithm to realize fast and smooth control of pressure and flow. MV600J not only can meet single pump motor control, but also can realize multi-pump multi-motor control through CAN bus.



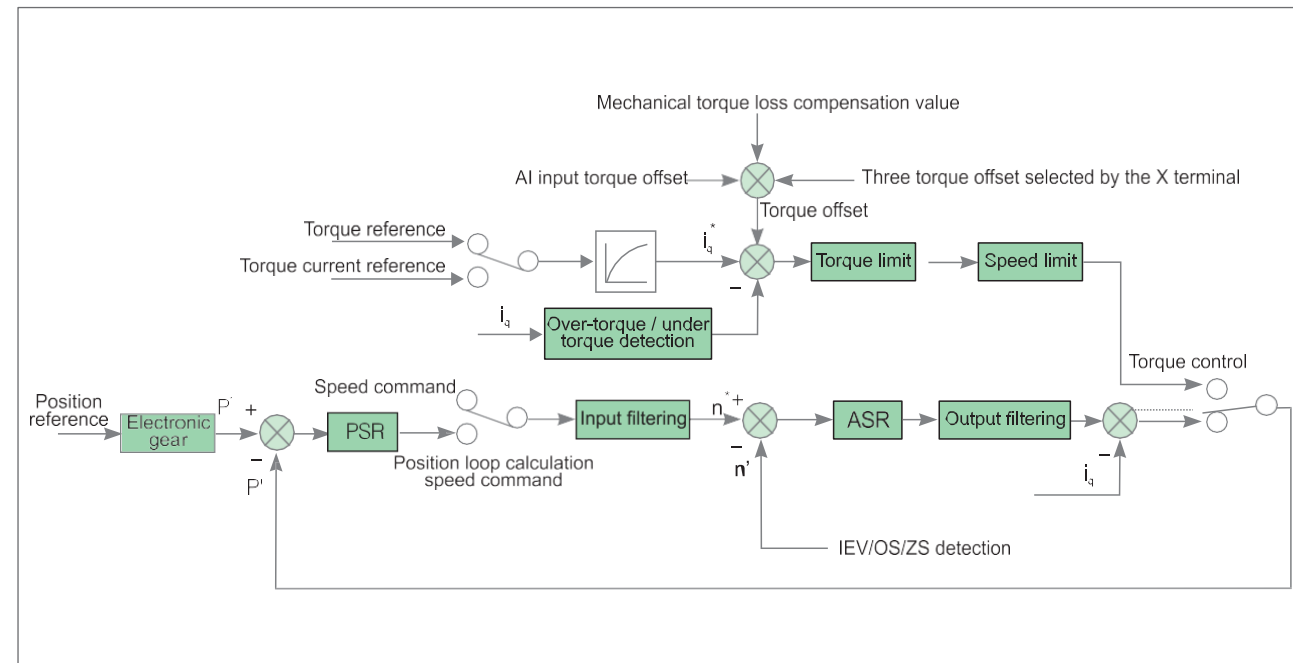
Servo drive pressure flow control algorithm



Main circuit and control circuit terminal wiring diagram

## SV-Master Servo Drive

SV-Master servo drive is based on the hardware platform of the high-performance vector control drive MV600G, enhance closed loop vector and servo control function, applicable to machine tool servo spindle, paper processing, printing and dyeing, packaging, textile and other industry with servo requirements. SV-Master can drive asynchronous and synchronous motor and achieve high power weakening control. SV-Master servo drive have torque control, speed control and position control mode, and can switch mode online. SV-Master support multiple PG expansion cards, such as incremental ABZUVW encoders, resolver encoder and SinCos encoder. General servo can support pulse sequence electronic gear synchronous, multi-point digital position positioning, relative position and absolute position positioning, etc., pulse sequence input through the terminal board or PG expansion card, support multiple pulse input form. For machine tool servo spindle, can achieve spindle accurate stop, spindle tool change, rigid tapping function, can achieve rotary shear function.

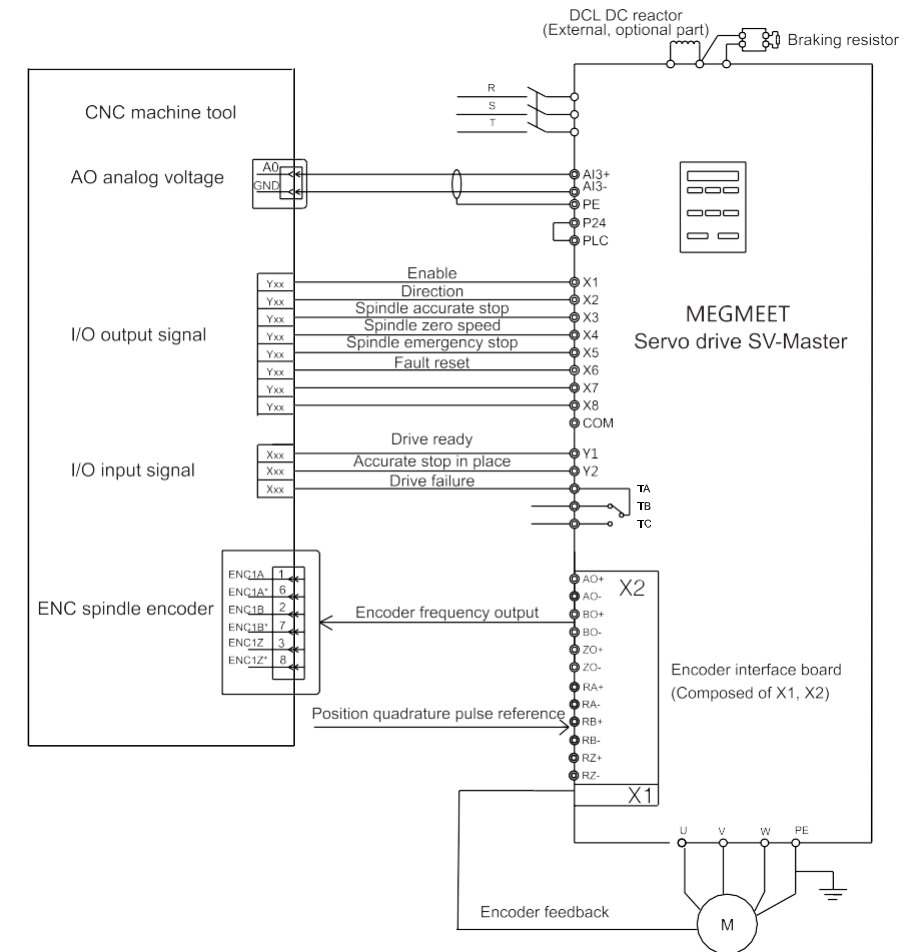


Position loop control schematic

### Position reference mode

Pulse reference 1	Pulse reference 2	Analog reference	Communication reference	Digital position reference
Encoder card quadrature pulse reference	Terminal board X7, X8	High-speed analog sampling channel	RS485 or bus card	Programmable terminal Xi
		Set the analog to high-speed sampling mode, then the acceleration and deceleration time automatically becomes 0	Support real-time change of Modbus, Profi-DP, CAN, CanOpen, Devicenet	Support homing, multi-point positioning, continuous or reciprocating positioning

## SV-Master Servo Drive Applications



Hybrid incremental encoder X1 port definition

Pin	Signal name	Signal description
1	GND	Ground
2	VCC	5V power output
3	Z+	Encoder Z+ signal
4	Z-	Encoder Z- signal
5	B+	Encoder B+ signal
6	B-	Encoder B- signal
7	A+	Encoder A+ signal
8	A-	Encoder A- signal
9	W+	Encoder W+ signal
10	W-	Encoder W- signal
11	V+	Encoder V+ signal
12	V-	Encoder V- signal
13	U+	Encoder U+ signal
14	U-	Encoder U- signal
15	NC	Empty
Shell	Shield	Shield

Resolver X1 port definition

Pin	Signal name	Signal description
1	NC	Empty
2	NC	Empty
3	EXC+	Encoder EXC+ signal
4	EXC-	Encoder EXC- signal
5	NC	Empty
6	NC	Empty
7	NC	Empty
8	NC	Empty
9	SIN+	Encoder SIN+ signal
10	SIN-	Encoder SIN- signal
11	NC	Empty
12	NC	Empty
13	COS+	Encoder COS+ signal
14	COS-	Encoder COS- signal
15	NC	Empty
Shell	Shield	Shield

SinCos encoder X1 port definition

Pin	Signal name	Signal description
1	GND	Ground
2	VCC	5V power output
3	NC	Empty
4	NC	Empty
5	SR+	Encoder SR+ signal
6	SR-	Encoder SR- signal
7	SD+	Encoder SD+ signal
8	SD-	Encoder SD- signal
9	SC+	Encoder SC+ signal
10	SC-	Encoder SC- signal
11	SB+	Encoder SB+ signal
12	SB-	Encoder SB- signal
13	SA+	Encoder SA+ signal
14	SA-	Encoder SA- signal
15	NC	Empty
Shell	Shield	Shield

Each encoder X2 port definition

Pin	Signal name	Signal description
1	GND	GND
2	VCC	5V power output
3	PZO+	Encoder frequency output ZO+
4	PZO-	Encoder frequency output ZO-
5	PBO+	Encoder frequency output BO+
6	PBO-	Encoder frequency output BO-
7	PAO+	Encoder frequency output AO+
8	PAO-	Encoder frequency output AO-
9	RZ+	Pulse command Z+
10	RZ-	Pulse command Z-
11	RB+	Pulse command B+
12	RB-	Pulse command B-
13	RA+	Pulse command A+
14	RA-	Pulse command A-
15	NC	Empty
Shell	Shield	Shield