

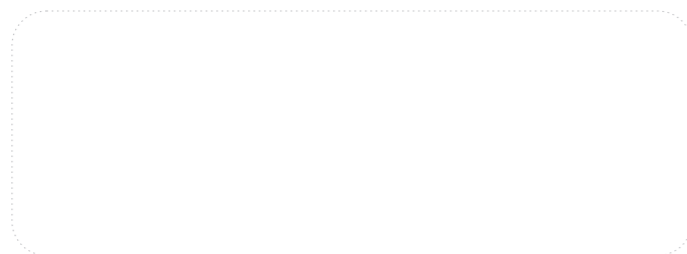


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## FR600 Series

550Vac/690Vac Vector Control Inverter



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For FRECON Website  
2016(V1.2)



**WARNING**  
Risk of electric shock  
Read manual before installation  
Touch current may be over 3 amp, Must be grounded before operation  
Wait at least 10 minutes after power off before proceeding

FRECON ELECTRIC (SHENZHEN) CO.,LTD.



FR600 Series summary

FR600 Series can be customized designed for industry solutions in Metallurgy, Crane, Petro, Chemical and Mining industries. Specifically France, Germany, Finland, South Africa and other countries developed industrial grid voltage for medium voltage drives.



Large margin derating design

- 32 bit Cortex-M3 ARM core host CPU, clocked at 144MHz.
- Infineon IGBT module 1700V voltage level.

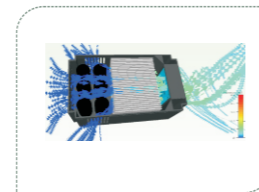


- 1000V voltage electrolytic capacitors (500V grade), 1200V voltage electrolytic capacitors (660V grade)
- 1800V voltage rectifier module (500V grade), 2400V voltage rectifier module (660V grade)



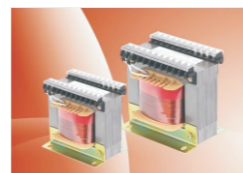
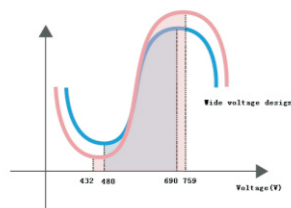
superior environmental adaptability

- Standard products using three anti-paint treatment, Duct isolation technology, resistant to moisture, dust, sealed design, easy to deal with harsh industrial environments.



Superior Immunity design

- Wide operating voltage range, low voltage by over-modulation technology to ensure load capacity.
- On the grid surge (lightning strike), power grid noise, electrostatic immunity, to harsh industrial standards.
- Control power and bus separation; control power transformer isolated isolation separate power supply, control power standard design of the filter circuit.



Excellent performance

- ◆ High starting torque
- ◆ 180% Rated torque / 0.5Hz (SVC 1)
- ◆ 180% Rated torque / 0.25Hz (SVC 2)
- ◆ Reduce the sensitivity from SVC control to motor parameter, to improve the site adaptability

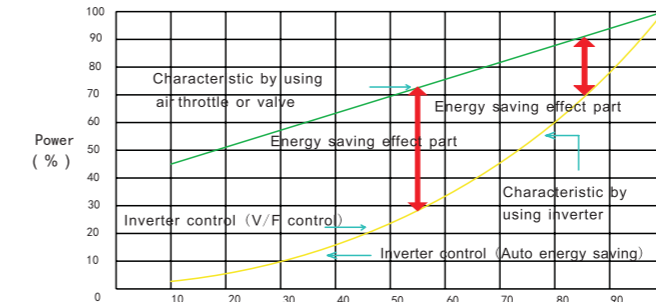


Abundant function

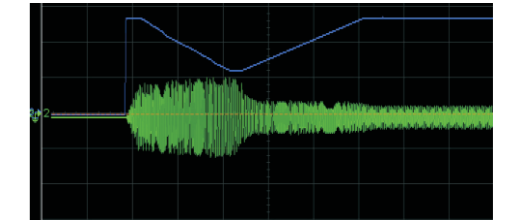
Integrated model with G&P in one

Load torque characteristic		Variable torque characteristic (P model)	Constant torque characteristic (G model)
Load characteristic		Torque vs Speed graph showing a curve that rises with speed.	Torque vs Speed graph showing a constant torque level.
		Fan, pump load type	Conveyor belt, trolley and other constant torque load type
		Load torque change is proportional to speed (Non need overload capacity)	Fixed Load torque (Overload capacity required)
Inverter characteristic	Overload capacity	120% rated current: 60S	150% rated current: 60S
	Maximum output power	600Hz	600Hz

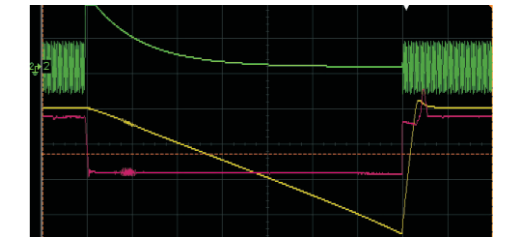
- Equipped functions most suitable for fan and pump, equipped PID control function
- To implement temperature, pressure, flow control without extra controllers



- Air flow or water flow Q(%) energy saving effect characteristic
- Different motor characteristic, different effect
- ◆ Dormant & wakeup function  
Supports frequency dormant & wakeup and pressure dormant & wakeup, better adaptability for various sites
- ◆ Speed tracing function  
Inverter starts motor smoothly according to motor's current running direction and speed

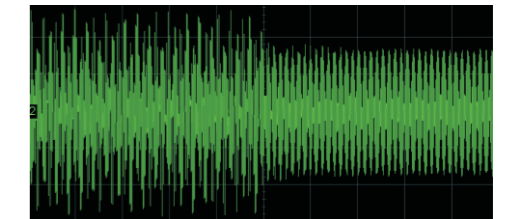


Speed tracing output frequency and current waveform



Green color is input voltage  
Yellow color is output frequency  
Red color is bus voltage

- ◆ Oscillation suppression function



Convenient debugging

- ◆ Powerful background software



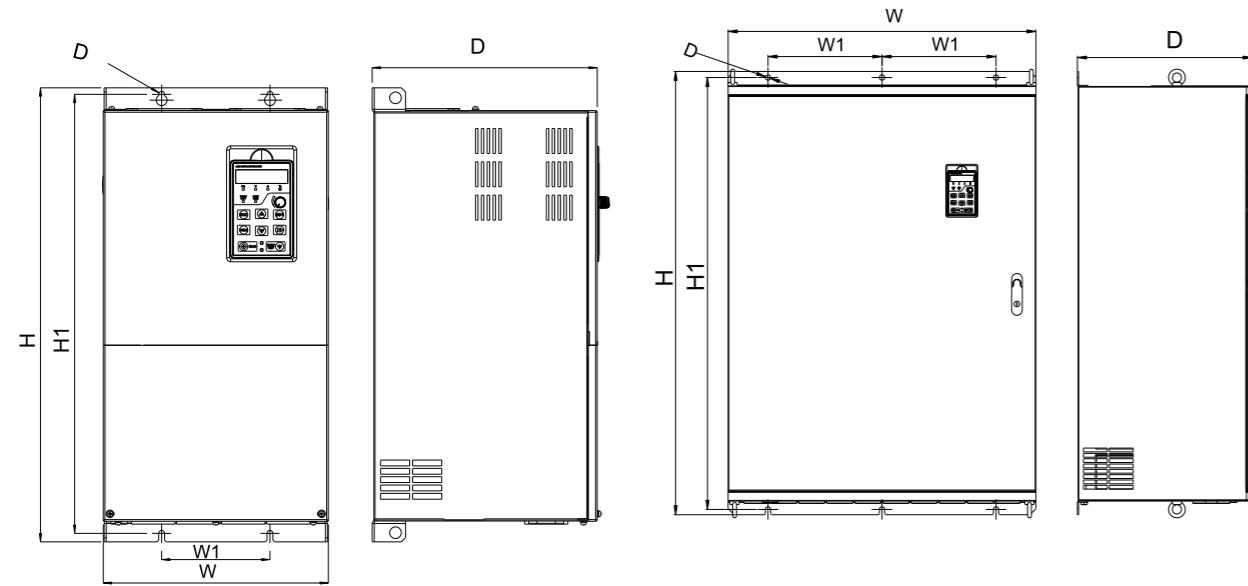
- ◆ Short-cut menu

- Common parameters setting rapidly to save customer's time to read manual
- ◆ Unique upload and download module which is convenient for parameter commissioning  
Restore factory parameters, backup user parameters
- ◆ Design special application macro according to industry demand



Product Installation Dimension

F6-1~F6-6 Structure Dimension Diagram



Size of the case	External and installation dimensions (mm)					
	W	W1	H	H1	D	Mounting Hole Diameter
F6-1	206	130	414	398	229	7
F6-2	270	130	545	527	270	7
F6-3	355	230	620	602	290	7
F6-4	430	320	825	798	305	12
F6-5	660	230	1030	1000	369	14
F6-6	810	300	1167	1137	460	14

Service Network

