

Standard Specifications

3-phase 400V class

Model L200-	European Version	004HFEF	007HFEF	015HFEF	022HFEF	030HFEF	040HFEF	055HFEF	075HFEF	
	US Version	004HFU	007HFU	015HFU	022HFU	-	040HFU	055HFU	075HFU	
Output Ratings	Applicable motor size, 4-pole kW(HP) *1	0.4(1/2)	0.75(1)	1.5 (2)	2.2(3)	3(4)	4.0(5)	5.5(7.5)	7.5(10)	
	Rated capacity	1.0	1.7	2.6	3.8	5.4	5.9	7.5	11	
	Rated output current (A) *2	1.1	1.9	2.9	4.2	6.2	6.6	10.3	12.7	
	Overload capacity(output current)	1.5	2.5	3.8	5.5	7.8	8.6	13	16	
	Rated output voltage (V)	150% for 60sec								
Input Rating	Rated input voltage (V)	3-phase (3-wire) 380 to 480V (proportional to input voltage)								
Protective enclosure		3-phase 380 to 480V+/-10%, 50/60Hz+/-5%								
Cooling method		Self-cooling			IP20			Force ventilation		
Weight (kg)	-HFEF	1.4	1.8	1.9	1.9	1.9	1.9	3.8	3.8	
	-NFU/LFU	0.7	0.7	1.8	1.8	-	1.8	3.5	3.5	

General Specifications

Item		General Specifications	
Control	Control method	Line-to-line sine wave pulse-width modulation (PWM) control	
	Output frequency range *5	0.5 to 400Hz	
	Frequency accuracy *6	Digital command :±0.01%, Analog command±0.2% (25±10°C)	
	Frequency setting resolution	Digital: 0.1Hz, Analog: (max frequency)/1000	
	Voltage/Frequency Characteristic	V/f control, V/f variable (constant torque, reduced torque)	
	Acceleration/deceleration time	0.01 to 3000 sec., (linear, sigmoid), two-stage accel./decel.	
	Carrier frequency range	2.0 to 14.0kHz	
Input terminal	Protective functions	Over-current, over-voltage, under-voltage, overload, overheat, ground fault at power-on, overload limit, input over-voltage, external trip, EEPROM error, CPU error, USP error, LAD stop at over-voltage, over-current suppression	
	Specification	4.7kohm input impedance, sink/source logic selectable	
Output signal	Functions	FW(Forward), RV(Reverse), CF1-CF4(Multispeed command), JG(Jogging), DB(External DC braking), SET(Second motor constants setting), 2CH(Second accel./decel.), FRS(Free-run stop), EXT(External trip), USP(Unattended start protection), SFT(Software lock), AT(Analog input selection), RS(Reset), PTC(Thermistor input) *7, STA(3-wire start), STP(3-wire stop), F/R(3-wire fwd./rev.), PID(PID On/Off), PIDC(PID reset), UP/DWN(Remote-controlled accel./decel.), UDC(Remote-controlled data clearing), OPE(Operator control), NO(Not selected)	
		Specification	27V DC 50mA max open collector output, 2 terminals 1c output 250V AC/30V DC 2.5A relay (AL0, AL1, AL2 terminals)
	Analog output terminal	Function	RUN(run signal), FA1(Frequency arrival type 1 - constant speed), FA2(Frequency arrival type 2 - over-frequency), OL(overload advance notice signal), OD(Output deviation for PID control), AL(alarm signal), DC(Wire brake detect on analog input)
		Specification	0 to 10V DC (8-bit resolution)
Operator	Display	Function	Analog voltage monitor, analog current monitor
	Status LED Interface	Specification	4-digits 7 segment LEDs
Operation	Frequency setting	Operator keypad	Parameter setting, output frequency, output current, motor torque, scaled value of output frequency, trip history, I/O terminal condition, input power, output voltage
		External signal	Power, Alarm, Run, Prg. Hz and A
		Serial port	Potentiometer, RUN, STOP/RESET, UP, DOWN, FUN and STR keys
	FW/RV Run	Operator keypad	Up and Down keys / Value settings or analog setting via potentiometer on operator keypad
		External signal	0 to 10 V DC, 4 to 20 mA
Environment	Operating temperature	Serial port	RS485 interface (Modbus RTU)
		Operator keypad	Run key / Stop key (change FW/RV by function command)
	Storage temperature	External signal	FW Run/Stop (NO contact), RV set by terminal assignment (NC/NO), 3-wire input available
	Humidity	Serial port	RS485 interface (Modbus RTU)
	Vibration		-10 to 40°C(derating for output frequency is required if carrier frequency exceeds 5kHz)
Location		-25 to 70°C	
Options	Other functions		AVR (Automatic Voltage Regulation), V/f characteristic selection, accel./decel. curve selection, frequency upper/lower limit, 16 stage multispeed, PID control, frequency jump, external frequency input bias start/end, jogging, automatic torque boost, trip history etc.
	Coating color		Blue (DIC14 Version NO.436)
			Remote operator with copy function (SRW-0EX), EMI filters, input/output reactors, DC reactors, radio noise filters, braking resistors, braking units, LCR filter, communication cables (ICS-1, 3), programming software (being planned)

- Note 1: The applicable motor refers to Hitachi standard 3-phase motor (4-pole). When using other motors, care must be taken to prevent the rated motor current (50/60 Hz) from exceeding the rated output current of the inverter.
- Note 2: The output voltage decreases as the main supply voltage decreases (except when using the AVR function). In any case, the output voltage cannot exceed the input power supply voltage.
- Note 3: The braking torque via capacitive feedback is the average deceleration torque at the shortest deceleration (stopping from 50/60 Hz as indicated). It is not continuous regenerative braking torque. The average decel torque varies with motor loss. This value decreases when operating beyond 50 Hz. If a large regenerative torque is required, the optional regenerative braking unit should be used.
- Note 4: The protection method conforms to JEM 1030.
- Note 5: To operate the motor beyond 50/60 Hz, consult the motor manufacturer for the maximum allowable rotation speed.
- Note 6: The output frequency may exceed the maximum frequency setting (A004 or A024) for automatic stabilization control.
- Note 7: Only terminal 5 is assignable the PTC (thermistor) function.

•L200-055,075HFU

