

# Frequency Inverters X200 Series

Compact Inverter

**HITACHI**  
Inspire the Next



- RoHS compliance
- Integrated EMC filter
- Safe Stop function
- Improved trip avoidance function
- Automatic energy saving function
- Network compatible
- Versatile functions and many more

# Frequency Inverter X200 Series

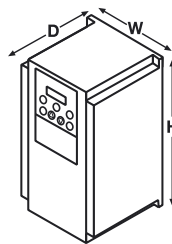
Compact Inverter

## All features at a glance

Inverter X200	1-/3-phase 200V class							3-phase 400V class					
	002 SFEF	004 SFEF	005 SFEF	007 SFEF	011 SFEF	015 SFEF	022 SFEF	004 HFEF	007 HFEF	015 HFEF	022 HFEF	030 HFEF	040 HFEF
Applicable motor (kW)	0.2	0.4	0.55	0.7	1.1	1.5	2.2	0.4	0.7	1.5	2.2	3.0	4.0
Rated output current (A)	1.4	2.6	3.0	4.0	5.0	7.1	10.0	1.5	2.5	3.8	5.5	7.8	8.6
Rated input voltage	1 ~ 200 ... 240 V, +10 %, -15 %, 50/60 Hz ±5 %							3 ~ 380 ... 480 V, +10 %, -15 %, 50/60 Hz ±5 %					
Rated output voltage	3 ~ 200 ... 240 V (corresponding to input voltage)							3 ~ 380 ... 480 V (corresponding to input voltage)					
Integrated EMC filter	EN61800-3 category C1 filter							EN61800-3 category C2 filter					
Output frequency range	0.5 ... 400 Hz												
Frequency accuracy (at 25 °C ±10 °C)	Analogue setting: ±0.4 %, digital setting: ±0.01 %												
Frequency setting resolution	Analogue setting: Maximum frequency/1000, digital setting: 0.1 Hz												
V/f characteristics	V/f control, V/f variable (constant torque, reduced torque)												
Overload capacity	150 % for 60 s												
Acceleration/deceleration time	0.01 - 3000 s (linear, sigmoid), two stage accel./decel.												
Starting torque	100 % at 6Hz												
Input	Intelligent input terminal 10kOhm input impedance, sink/source logic selectable												
	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), 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), ADD(ADD frequency enable), F-TM(force terminal mode), RDY(quick start enable), S-ST(Special-Set 2nd Motor Data), EMR(Safety stop), NO(Not selected)												
Output	Intelligent output terminal 27V DC 50mA max open collector output, 1 terminals 1c output 250V AC/30V DC 2.5A relay (AL0, AL1, AL2 terminals)												
	Functions 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), FBV(PID Second Stage Output), NDC(ModBus Network Detection Signal), LOG(Logic Output Function), ODC(Option Card Detection Signal), LOC(Low load)												
	Analogue output terminal 0 ... 10V, analogue frequency monitor, analogue current monitor												
Serial port	RS485 (Modbus RTU)												
Standards	CE, UL, cUL, c-Tick												
Protection	Overcurrent, overvoltage, undervoltage, overload, overheat, ground fault protection at startup, input overvoltage, external trip, EEPROM error, CPU error, USP error, Thermistor error, Driver error, Safety stop												
Environmental conditions	Temperature / humidity -10 ... +50 °C (carrier derating required for ambient temperature higher than 40 °C), no freezing / 20 ... 90 % humidity (non condensing)												
	Vibration / Installation 5.9 m/s <sup>2</sup> 10 ... 55 Hz / altitude 1000 m or less, indoors, no corrosive gases or dust												
Options	Remote operator, copy unit, cable for digital operator, reactor for improving power factor, noise filter, ProDrive Software												
Protection class	IP20												
Weight kg (approx.)	0.8	1.0	1.5	2.4	2.5	1.5	2.3	2.4					

## X200 Series Dimensions

X200		002 SFEF	004 SFEF	005 SFEF 007 SFEF 004 HFEF	011 SFEF 015 SFEF 022 SFEF 007 HFEF 015 HFEF 022 HFEF 030 HFEF 040 HFEF
Width	mm	80	80	110	110
Height	mm	155	155	189	189
Depth	mm	93	107	128	155



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