

# SJ700 & SJ200 Series

VARIABLE FREQUENCY CRANE & HOIST DRIVES

Sensorless or Closed-Loop Vector Control



Intelligent Sensorless Vector Control



# Two High-Performance General-Purpose Drive Families...

## SJ200

Meet all the performance and safety requirements of crane and hoist systems using low cost, off-the-shelf drives.

**Compact, high torque, full-featured microdrive,** for applications up to 10 hp



- Hitachi award-winning iSLV (intelligent sensorless vector) technology, providing high starting torque of 200% or more at 1 Hz
- Advanced trip avoidance functions
- Built-in PLC-type logic and timing functions

## MODEL LINEUP

| Motor hp | 200 V class   | 400 V class   |
|----------|---------------|---------------|
| 1/4      | SJ200-002NFU2 | SJ200-002HFU2 |
| 1/2      | SJ200-004NFU2 | SJ200-004HFU2 |
| 1        | SJ200-007NFU2 | SJ200-007HFU2 |
| 2        | SJ200-015NFU2 | SJ200-015HFU2 |
| 3        | SJ200-022NFU2 | SJ200-022HFU2 |
| 5        | SJ200-037LFU2 | SJ200-040HFU2 |
| 7.5      | SJ200-055LFU2 | SJ200-055HFU2 |
| 10       | SJ200-075LFU2 | SJ200-075HFU2 |

# ...Two Drive Families to Help "Hoist Up" Your Profits!

## SJ700

Both series are suited for all CMAA and HMI service classes for traverse and hoisting motion. Ideal for load brake and non-load brake hoists.



**Large capacity,  
high torque drive  
with a powerful  
function set,** for  
applications up to 10 hp

- Advanced vector control technology, providing high starting torque of 200% or more at 0.3 Hz
- Closed-loop capability with optional encoder feedback board
- Advanced trip avoidance functions
- Powerful on-board programmable controller functions

## MODEL LINEUP

| Motor hp | 200 V class    | 400 V class    |
|----------|----------------|----------------|
| 15       | SJ700-110LFUF2 | SJ700-110HFUF2 |
| 20       | SJ700-150LFUF2 | SJ700-150HFUF2 |
| 25       | SJ700-185LFUF2 | SJ700-185HFUF2 |
| 30       | SJ700-220LFUF2 | SJ700-220HFUF2 |
| 40       | SJ700-300LFUF2 | SJ700-300HFUF2 |
| 50       | SJ700-370LFUF2 | SJ700-370HFUF2 |
| 60       | SJ700-450LFUF2 | SJ700-450HFUF2 |
| 75       | SJ700-550LFUF2 | SJ700-550HFUF2 |
| 100      | -              | SJ700-750HFUF2 |
| 125      | -              | SJ700-900HFUF2 |

# Bridge Crane Control & Power Distribution Panels

## HBC Series

Pre-engineered panels are available for fast delivery. SJ200 bridge axis inverter is built in – complete crane control systems can be developed quickly & easily.

### Standard design bridge control panel includes features to meet most application requirements

- 1 – 10 hp, 230 VAC and 460 VAC
- Hitachi SJ200 crane & hoist inverter built in for bridge axis
- 30 – 100 A supply power at rated voltage for hoist/trolley axes
- Lockable through-door disconnects
- Main contactor same rating as disconnect
- Fuse or circuit breaker models available
- Fusible, touch-safe branch circuit protection
- NEMA 1 standard rating (16"W x 31" W x 10" D)
- NEMA 3R, 4, 4X, 12 and 13 optionally available
- Brake contactor included
- 150 VA control power transformer
- Internally mounted dynamic braking resistor
- Individual motor overloads
- DIN-rail mounted termination strip
- Configurable for custom requirements



# STANDARD PANEL DESIGN INCLUDES:

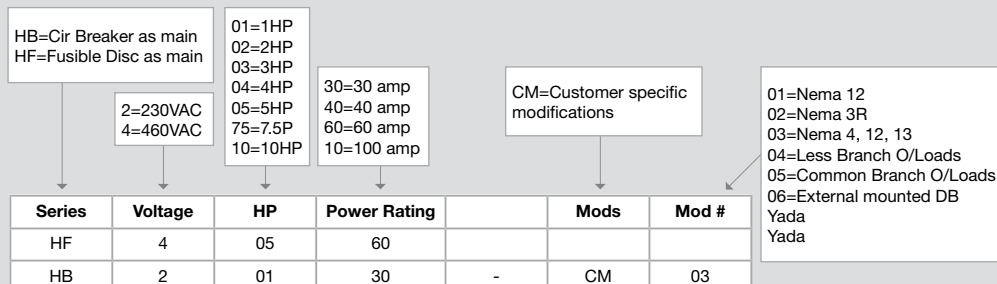
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| Nema 1 enclosure 16" x 31" x 10"D          | Fusible, Touchsafe Branch Circuit Protection |
| Fusible or Breaker Through Door Disconnect | Individual Motor Overloads                   |
| Main Contactor Sized Same as Disconnect    | 150VA Control Transformer                    |
| Braking Contactor                          | Din Rail Mounted Termination Strip           |
| Hitachi SJ200 Bridge Crane Drive           | Internally Mounted DB Resistor               |

## PART NUMBERS FOR BASE MODELS

| 230VAC      |                  |                    |
|-------------|------------------|--------------------|
| Description | Fused Disconnect | Breaker Disconnect |
| 30A, 1HP    | HF2-0130         | HB2-0130           |
| 30A, 2HP    | HF2-0230         | HB2-0230           |
| 30A, 3HP    | HF2-0330         | HB2-0330           |
| 40A, 2HP    | HF2-0240         | HB2-0240           |
| 40A, 3HP    | HF2-0340         | HB2-0340           |
| 40A, 5HP    | HF2-0540         | HB2-0540           |
| 60A, 2HP    | HF2-0260         | HB2-0260           |
| 60A, 3HP    | HF2-0360         | HB2-0360           |
| 60A, 5HP    | HF2-0560         | HB2-0560           |
| 60A, 7.5HP  | HF2-7560         | HB2-7560           |
| 60A, 10HP   | HF2-0160         | HB2-1060           |
| 100A, 5HP   | HF2-0510         | HB2-0510           |
| 100A, 7.5HP | HF2-7510         | HB2-7510           |
| 100A, 10HP  | HF2-1010         | HB2-1010           |

| 480VAC      |                  |                    |
|-------------|------------------|--------------------|
| Description | Fused Disconnect | Breaker Disconnect |
| 30A, 1HP    | HF4-0130         | HB4-0130           |
| 30A, 2HP    | HF4-0230         | HB4-0230           |
| 30A, 3HP    | HF4-0330         | HB4-0330           |
| 40A, 2HP    | HF4-0240         | HB4-0240           |
| 40A, 3HP    | HF4-0340         | HB4-0340           |
| 40A, 5HP    | HF4-0540         | HB4-0540           |
| 60A, 2HP    | HF4-0260         | HB4-0260           |
| 60A, 3HP    | HF4-0360         | HB4-0360           |
| 60A, 5HP    | HF4-0560         | HB4-0560           |
| 60A, 7.5HP  | HF4-7560         | HB4-7560           |
| 60A, 10HP   | HF4-0160         | HB4-1060           |
|             |                  |                    |
|             |                  |                    |
|             |                  |                    |

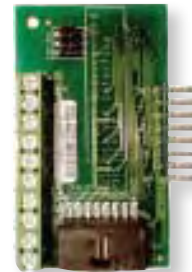
### Hitachi America Bridge Crane Control & Distribution Panel Part No. Diagram



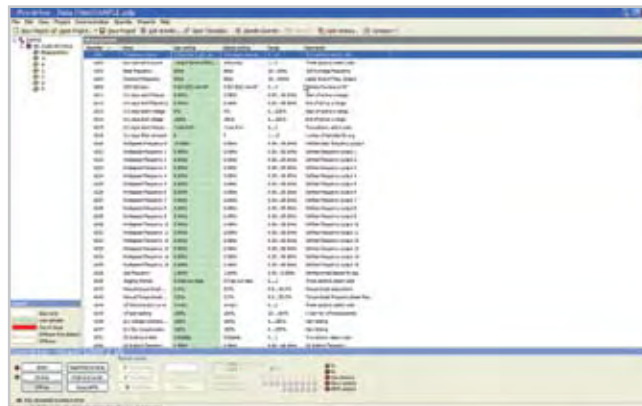
| EXAMPLES | Part Number  | Description  |
|----------|--------------|--|
|          | HF40560      | Basic Package, 460V, 5HP, 60A power capacity, Nema 1 enclosure with thru door fusible disconnect                     |
|          | HB20130-CM03 | Basic Package, 230V, 1HP, 30A power capacity in Nema 4, 12, & 13 enclosure with thru door circuit breaker disconnect |

# Both series are empowered for crane & hoist service by means of a unique Hitachi pendant interface board that

- converts 115 VAC pendant signals to DC, and
- performs necessary interface logic functions
- can be customize to OEM requirements



**HITACHI inverters feature easy programming via the removable standard keypad, or using the advanced PC-based ProDrive software.**



HITACHI inverters conform to global standards and are environmentally friendly, meeting RoHS standards



## For more information, contact:

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