

TRAVERSE

CMAA CRANE CLASS A, B & C

HITACHI
Inspire the Next

					RESISTOR
	MOTOR	kW	INVERTER	DB UNIT	MODEL
	HP				
230 Volts	1	0.7	SJ200-007NFU2	INTERNAL	CRX-001
	2	1.5	SJ200-015NFU2	INTERNAL	CRX-002
	3	2.2	SJ200-022NFU2	INTERNAL	CRX-003
	5	3.7	SJ200-037LFU2	INTERNAL	CRX-004
	7.5	5.5	SJ200-055LFU2	INTERNAL	CRX-005
	10	7.5	SJ200-075LFU2	INTERNAL	CRX-006
	15	11	SJ700-110LFUF2	INTERNAL	CR-007
	20	15	SJ700-150LFUF2	INTERNAL	CR-008
	25	19	SJ700-185LFUF2	INTERNAL	CR-008
	30	22	SJ700-220LFUF2	INTERNAL	CR-010
	40	30	SJ700-300LFUF2	(2) x HBU-2015	(2) x CR-008
	50	37	SJ700-370LFUF2	(2) x HBU-2030	(2) x CR-009
	60	45	SJ700-450LFUF2	(2) x HBU-2030	(2) x CR-010
	75	55	SJ700-550LFUF2	(2) x HBU-2030	(2) x CR-033
460 Volts	1	0.7	SJ200-007HFU2	INTERNAL	CRX-012
	2	1.5	SJ200-015HFU2	INTERNAL	CRX-013
	3	2.2	SJ200-022HFU2	INTERNAL	CRX-014
	5	4	SJ200-040HFU2	INTERNAL	CRX-015
	7.5	5.5	SJ200-055HFU2	INTERNAL	CRX-016
	10	7.5	SJ200-075HFU2	INTERNAL	CR-017
	15	11	SJ700-110HFUF2	INTERNAL	CR-018
	20	15	SJ700-150HFUF2	INTERNAL	CR-019
	25	19	SJ700-185HFUF2	INTERNAL	CR-020
	30	22	SJ700-220HFUF2	INTERNAL	CR-021
	40	30	SJ700-300HFUF2	HBU-4030	CR-022
	50	37	SJ700-370HFUF2	HBU-4045	CR-023
	60	45	SJ700-450HFUF2	HBU-4045	CR-024
	75	55	SJ700-550HFUF2	(2) x HBU-4030	(2) x CR-042
100	75	SJ700-750HFUF2	(2) x HBU-4045	(2) x CR-023	
125	90	SJ700-900HFUF2	(2) x HBU-4045	(2) x CR-024	

Service of 10 Cycles per Hour with Average 50% Load
Typical Cycle Definition:
 Raise for 30 seconds @ 50% load
 Traverse for 60 seconds @ 50% load
 Lower for 30 seconds @ 50% load
 Raise for 30 seconds @ 10% load
 Traverse for 30 seconds @ 10% load
 Traverse Decel: 5 seconds/120% braking torque

NOTE: Cells highlighted in YELLOW signify MULTIPLE DB units and MULTIPLE resistors. ONE resistor is required for EACH DB unit.

Resistors shown are TYPICAL values based on the CMAA Class definition.

TRAVERSE

CMAA CRANE CLASS D



		RESISTOR			
	MOTOR	kW	INVERTER	DB UNIT	RESISTOR
	HP		MODEL	MODEL	
230 Volts	1	0.7	SJ200-007NFU2	INTERNAL	CR-025
	2	1.5	SJ200-015NFU2	INTERNAL	CR-026
	3	2.2	SJ200-022NFU2	INTERNAL	CR-027
	5	3.7	SJ200-037LFU2	INTERNAL	CR-028
	7.5	5.5	SJ200-055LFU2	INTERNAL	CR-029
	10	7.5	SJ200-075LFU2	INTERNAL	CR-029
	15	11	SJ700-110LFUF2	INTERNAL	CR-007
	20	15	SJ700-150LFUF2	INTERNAL	CR-030
	25	19	SJ700-185LFUF2	INTERNAL	CR-030
	30	22	SJ700-220LFUF2	INTERNAL	CR-032
	40	30	SJ700-300LFUF2	(2) x HBU-2030	(2) x CR-031
	50	37	SJ700-370LFUF2	(2) x HBU-2030	(2) x CR-032
	60	45	SJ700-450LFUF2	(2) x HBU-2030	(2) x CR-033
	75	55	SJ700-550LFUF2	(3) x HBU-2030	(3) x CR-032
460 Volts	1	0.7	SJ200-007HFU2	INTERNAL	CR-034
	2	1.5	SJ200-015HFU2	INTERNAL	CR-035
	3	2.2	SJ200-022HFU2	INTERNAL	CR-036
	5	4	SJ200-040HFU2	INTERNAL	CR-037
	7.5	5.5	SJ200-055HFU2	INTERNAL	CR-037
	10	7.5	SJ200-075HFU2	INTERNAL	CR-038
	15	11	SJ700-110HFUF2	INTERNAL	CR-039
	20	15	SJ700-150HFUF2	INTERNAL	CR-040
	25	19	SJ700-185HFUF2	INTERNAL	CR-040
	30	22	SJ700-220HFUF2	INTERNAL	CR-041
	40	30	SJ700-300HFUF2	HBU-4045	CR-043
	50	37	SJ700-370HFUF2	HBU-4045	CR-044
	60	45	SJ700-450HFUF2	(2) x HBU-4030	(2) x CR-042
	75	55	SJ700-550HFUF2	(2) x HBU-4045	(2) x CR-043
100	75	SJ700-750HFUF2	(2) x HBU-4045	(2) x CR-044	
125	90	SJ700-900HFUF2	HBU-4220	CR-045	

Service of 20 Cycles per Hour with Average 65% Load
Typical Cycle Definition:
 Raise for 30 seconds @ 65% load
 Traverse for 60 seconds @ 65% load
 Lower for 30 seconds @ 65% load
 Raise for 30 seconds @ 10% load
 Traverse for 30 seconds @ 10% load
 Traverse Decel: 3 seconds/150% braking torque

NOTE: Cells highlighted in YELLOW signify MULTIPLE DB units and MULTIPLE resistors. ONE resistor is required for EACH DB unit.

Resistors shown are TYPICAL values based on the CMAA Class definition.

TRAVERSE

CMAA CRANE CLASS E



					RESISTOR
	MOTOR HP	kW	INVERTER MODEL	DB UNIT MODEL	MODEL
230 Volts	1	0.7	SJ200-007NFU2	INTERNAL	CR-025
	2	1.5	SJ200-015NFU2	INTERNAL	CR-003
	3	2.2	SJ200-022NFU2	INTERNAL	CR-028
	5	3.7	SJ200-037LFU2	INTERNAL	CR-028
	7.5	5.5	SJ200-055LFU2	INTERNAL	CR-029
	10	7.5	SJ200-075LFU2	INTERNAL	CR-029
	15	11	SJ700-110LFUF2	INTERNAL	CR-007
	20	15	SJ700-150LFUF2	INTERNAL	CR-030
	25	18.5	SJ700-185LFUF2	INTERNAL	CR-030
	30	22	SJ700-220LFUF2	INTERNAL	CR-032
	40	30	SJ700-300LFUF2	(2) x HBU-2030	(2) x CR-031
	50	37	SJ700-370LFUF2	(2) x HBU-2030	(2) x CR-033
	60	45	SJ700-450LFUF2	(3) x HBU-2030	(3) x CR-031
	75	55	SJ700-550LFUF2	(3) x HBU-2030	(3) x CR-033
460 Volts	1	0.7	SJ200-007HFU2	INTERNAL	CR-034
	2	1.5	SJ200-015HFU2	INTERNAL	CR-035
	3	2.2	SJ200-022HFU2	INTERNAL	CR-036
	5	4	SJ200-040HFU2	INTERNAL	CR-037
	7.5	5.5	SJ200-055HFU2	INTERNAL	CR-037
	10	7.5	SJ200-075HFU2	INTERNAL	CR-038
	15	11	SJ700-110HFUF2	INTERNAL	CR-039
	20	15	SJ700-150HFUF2	INTERNAL	CR-040
	25	18.5	SJ700-185HFUF2	INTERNAL	CR-082
	30	22	SJ700-220HFUF2	INTERNAL	CR-041
	40	30	SJ700-300HFUF2	HBU-4045	CR-043
	50	37	SJ700-370HFUF2	HBU-4045	CR-044
	60	45	SJ700-450HFUF2	(2) x HBU-4030	(2) x CR-083
	75	55	SJ700-550HFUF2	(2) x HBU-4045	(2) x CR-043
	100	75	SJ700-750HFUF2	(2) x HBU-4045	(2) x CR-044
125	90	SJ700-900HFUF2	HBU-4220	CR-045	

Service of 25 Cycles per Hour with Average 100% Load
Typical Cycle Definition:
 Raise for 24 seconds @ 100% load
 Traverse for 24 seconds @ 100% load
 Lower for 24 seconds @ 10% load
 Raise for 24 seconds @ 10% load
 Traverse for 24 seconds @ 10% load
 Traverse Decel: 3 seconds/160% braking torque

NOTE: Cells highlighted in YELLOW signify MULTIPLE DB units and MULTIPLE resistors. ONE resistor is required for EACH DB unit.

Resistors shown are TYPICAL values based on the CMAA Class definition.

TRAVERSE
CMAA CRANE CLASS F



					RESISTOR	
		MOTOR HP	kW	INVERTER MODEL	DB UNIT MODEL	MODEL
230 Volts		1	0.7	SJ200-007NFU2	INTERNAL	CR-002
		2	1.5	SJ200-015NFU2	INTERNAL	CR-003
		3	2.2	SJ200-022NFU2	INTERNAL	CR-028
		5	3.7	SJ200-037LFU2	INTERNAL	CR-028
		7.5	5.5	SJ200-055LFU2	INTERNAL	CR-029
		10	7.5	SJ200-075LFU2	INTERNAL	CR-029
		15	11	SJ700-110LFUF2	HBU-2030	CR-031
		20	15	SJ700-150LFUF2	HBU-2030	CR-032
		25	18.5	SJ700-185LFUF2	HBU-2030	CR-032
		30	22	SJ700-220LFUF2	(2) x HBU-2015	(2) x CR-030
		40	30	SJ700-300LFUF2	(2) x HBU-2030	(2) x CR-032
		50	37	SJ700-370LFUF2	(2) x HBU-2030	(2) x CR-033
		60	45	SJ700-450LFUF2	(3) x HBU-2030	(3) x CR-032
		75	55	SJ700-550LFUF2	(3) x HBU-2030	(3) x CR-033
460 Volts		1	0.7	SJ200-007HFU2	INTERNAL	CR-034
		2	1.5	SJ200-015HFU2	INTERNAL	CR-035
		3	2.2	SJ200-022HFU2	INTERNAL	CR-036
		5	4	SJ200-040HFU2	INTERNAL	CR-037
		7.5	5.5	SJ200-055HFU2	INTERNAL	CR-037
		10	7.5	SJ200-075HFU2	INTERNAL	CR-038
		15	11	SJ700-110HFUF2	HBU-4030	CR-019
		20	15	SJ700-150HFUF2	HBU-4030	CR-041
		25	18.5	SJ700-185HFUF2	HBU-4030	CR-042
		30	22	SJ700-220HFUF2	HBU-4030	CR-042
		40	30	SJ700-300HFUF2	HBU-4045	CR-044
		50	37	SJ700-370HFUF2	(2) x HBU-4030	(2) x CR-042
		60	45	SJ700-450HFUF2	(2) x HBU-4030	(2) x CR-083
		75	55	SJ700-550HFUF2	(2) x HBU-4045	(2) x CR-044
	100	75	SJ700-750HFUF2	HBU-4220	CR-045	
	125	90	SJ700-900HFUF2	HBU-4220	CR-047	

**Continuous Severe Service
With Loads Near Rated Capacity**
Typical Cycle Definition:
Raise 100% load
Traverse @ 100% load
Lower @ 100% load
Raise @ 100% load
Traverse @ 100% load
Traverse Decel: 2 seconds/175% braking torque

**NOTE: Cells highlighted in
YELLOW signify MULTIPLE
DB units and MULTIPLE
resistors. ONE resistor is
required for EACH DB unit.**

Resistors shown are TYPICAL values based on the CMAA Class definition.

HOIST - OPEN LOOP
No Load Brake
 CMAA CRANE CLASS A, B & C
 HMI HOIST CLASS H1, H2, & H3



		RESISTOR			
	MOTOR HP	kW	INVERTER MODEL	DB UNIT MODEL	MODEL
230 Volts	1	0.7	SJ200-007NFU2	INTERNAL	CR-035
	2	1.5	SJ200-015NFU2	INTERNAL	CR-036
	3	2.2	SJ200-022NFU2	INTERNAL	CR-048
	5	3.7	SJ200-037LFU2	INTERNAL	CR-049
	7.5	5.5	SJ200-055LFU2	INTERNAL	CR-050
	10	7.5	SJ200-075LFU2	INTERNAL	CR-051
	15	11	SJ700-110LFUF2	INTERNAL	CR-052
	20	15	SJ700-150LFUF2	INTERNAL	CR-053
	25	18.5	SJ700-185LFUF2	INTERNAL	CR-054
	30	22	SJ700-220LFUF2	INTERNAL	CR-055
	40	30	SJ700-300LFUF2	HBU-2015	CR-056
	50	37	SJ700-370LFUF2	HBU-2015	CR-057
	60	45	SJ700-450LFUF2	HBU-2030	CR-058
	75	55	SJ700-550LFUF2	HBU-2030	CR-059
460 Volts	1	0.7	SJ200-007HFU2	INTERNAL	CR-012
	2	1.5	SJ200-015HFU2	INTERNAL	CR-012
	3	2.2	SJ200-022HFU2	INTERNAL	CR-060
	5	4	SJ200-040HFU2	INTERNAL	CR-061
	7.5	5.5	SJ200-055HFU2	INTERNAL	CR-062
	10	7.5	SJ200-075HFU2	INTERNAL	CR-065
	15	11	SJ700-110HFUF2	INTERNAL	CR-065
	20	15	SJ700-150HFUF2	INTERNAL	CR-066
	25	18.5	SJ700-185HFUF2	INTERNAL	CR-066
	30	22	SJ700-220HFUF2	INTERNAL	CR-067
	40	30	SJ700-300HFUF2	HBU-4015	CR-068
	50	37	SJ700-370HFUF2	HBU-4015	CR-068
	60	45	SJ700-450HFUF2	HBU-4015	CR-069
	75	55	SJ700-550HFUF2	HBU-4030	CR-070
	100	75	SJ700-750HFUF2	HBU-4030	CR-071
	125	90	SJ700-900HFUF2	HBU-4045	CR-072
	150	110	SJ700-1100HFUF2	HBU-4045	CR-100
200	150	SJ700-1500HFUF2	(2) x HBU-4030	(2) x CR-071	

Service of 10 Cycles per Hour with Average 50% Load
Typical Cycle Definition:
 Raise for 30 seconds @ 50% load
 Traverse for 60 seconds @ 50% load
 Lower for 30 seconds @ 50% load
 Raise for 30 seconds @ 10% load
 Traverse for 30 seconds @ 10% load
 Traverse Decel: 5 seconds/120% braking torque

NOTE: Cells highlighted in YELLOW signify MULTIPLE DB units and MULTIPLE resistors. ONE resistor is required for EACH DB unit.

IMPORTANT: For non-load brake hoists, if no encoder is used (open-loop), over speed protection must be provided by mechanical means.

NOTES:

- 1) Resistors shown are TYPICAL values based on the CMAA Class definition. Your specific hoist design and usage profile may dictate different values.
- 2) These selection tables assume a non-load brake hoist.
- 3) Chart is based on OPEN loop drives. For closed loop, refer to separate chart.

HOIST - CLOSED LOOP
No Load Brake
CMAA CRANE CLASS A, B & C
HMI HOIST CLASS H1, H2, & H3



		RESISTOR			
	MOTOR HP	KW	INVERTER MODEL	DB UNIT MODEL	MODEL
230 Volts	1	0.7	SJ700-007NFUF2	INTERNAL	CR-035
	2	1.5	SJ700-015NFUF2	INTERNAL	CR-036
	3	2.2	SJ700-022NFUF2	INTERNAL	CR-048
	5	3.7	SJ700-037LFUF2	INTERNAL	CR-049
	7.5	5.5	SJ700-055LFUF2	INTERNAL	CR-050
	10	7.5	SJ700-075LFUF2	INTERNAL	CR-051
	15	11	SJ700-110LFUF2	INTERNAL	CR-052
	20	15	SJ700-150LFUF2	INTERNAL	CR-053
	25	18.5	SJ700-185LFUF2	INTERNAL	CR-054
	30	22	SJ700-220LFUF2	INTERNAL	CR-055
	40	30	SJ700-300LFUF2	HBU-2015	CR-056
	50	37	SJ700-370LFUF2	HBU-2015	CR-057
	60	45	SJ700-450LFUF2	HBU-2030	CR-058
	75	55	SJ700-550LFUF2	HBU-2030	CR-059
	460 Volts	1	0.7	SJ700-007HFUF2	INTERNAL
2		1.5	SJ700-015HFUF2	INTERNAL	CR-012
3		2.2	SJ700-022HFUF2	INTERNAL	CR-060
5		4	SJ700-040HFUF2	INTERNAL	CR-061
7.5		5.5	SJ700-055HFUF2	INTERNAL	CR-062
10		7.5	SJ700-075HFUF2	INTERNAL	CR-065
15		11	SJ700-110HFUF2	INTERNAL	CR-065
20		15	SJ700-150HFUF2	INTERNAL	CR-066
25		18.5	SJ700-185HFUF2	INTERNAL	CR-066
30		22	SJ700-220HFUF2	INTERNAL	CR-067
40		30	SJ700-300HFUF2	HBU-4015	CR-068
50		37	SJ700-370HFUF2	HBU-4015	CR-068
60		45	SJ700-450HFUF2	HBU-4015	CR-069
75		55	SJ700-550HFUF2	HBU-4030	CR-070
100		75	SJ700-750HFUF2	HBU-4030	CR-071
125	90	SJ700-900HFUF2	HBU-4045	CR-072	
150	110	SJ700-1100HFUF2	HBU-4045	CR-100	
	200	150	SJ700-1500HFUF2	(2) x HBU-4030	(2) x CR-071

Service of 10 Cycles per Hour with Average 50% Load
Typical Cycle Definition:
 Raise for 30 seconds @ 50% load
 Traverse for 60 seconds @ 50% load
 Lower for 30 seconds @ 50% load
 Raise for 30 seconds @ 10% load
 Traverse for 30 seconds @ 10% load
 Traverse Decel: 5 seconds/120% braking torque

NOTE: Cells highlighted in YELLOW signify MULTIPLE DB units and MULTIPLE resistors. ONE resistor is required for EACH DB unit.

NOTES:

- 1) Resistors shown are TYPICAL values based on the CMAA Class definition. Your specific hoist design and usage profile may dictate different values.
- 2) These selection tables assume a non-load brake hoist.
- 3) Chart is based on CLOSED loop drives. For OPEN loop, refer to separate chart

HOIST - CLOSED LOOP
CMAA CRANE CLASS D
HMI HOIST CLASS H4



	MOTOR HP	kW	INVERTER MODEL	DB UNIT MODEL	RESISTOR
					MODEL
230 Volts	1	0.7	SJ700-007HFUF2	INTERNAL	CR-035
	2	1.5	SJ700-015HFUF2	INTERNAL	CR-048
	3	2.2	SJ700-022HFUF2	INTERNAL	CR-038
	5	3.7	SJ700-040HFUF2	INTERNAL	CR-063
	7.5	5.5	SJ700-055HFUF2	INTERNAL	CR-051
	10	7.5	SJ700-075HFUF2	INTERNAL	CR-052
	15	11	SJ700-110LFUF2	INTERNAL	CR-064
	20	15	SJ700-150LFUF2	INTERNAL	CR-054
	25	18.5	SJ700-185LFUF2	INTERNAL	CR-055
	30	22	SJ700-220LFUF2	INTERNAL	CR-056
	40	30	SJ700-300LFUF2	HBU-2030	CR-057
	50	37	SJ700-370LFUF2	HBU-2030	CR-058
	60	45	SJ700-450LFUF2	HBU-2030	CR-059
	75	55	SJ700-550LFUF2	(2) x HBU-2015	(2) x CR-057
460 Volts	1	0.7	SJ700-007HFUF2	INTERNAL	CR-060
	2	1.5	SJ700-015HFUF2	INTERNAL	CR-060
	3	2.2	SJ700-022HFUF2	INTERNAL	CR-061
	5	4	SJ700-040HFUF2	INTERNAL	CR-062
	7.5	5.5	SJ700-055HFUF2	INTERNAL	CR-074
	10	7.5	SJ700-075HFUF2	INTERNAL	CR-075
	15	11	SJ700-110HFUF2	INTERNAL	CR-066
	20	15	SJ700-150HFUF2	INTERNAL	CR-067
	25	18.5	SJ700-185HFUF2	INTERNAL	CR-067
	30	22	SJ700-220HFUF2	INTERNAL	CR-068
	40	30	SJ700-300HFUF2	HBU-4015	CR-069
	50	37	SJ700-370HFUF2	HBU-4030	CR-069
	60	45	SJ700-450HFUF2	HBU-4030	CR-070
	75	55	SJ700-550HFUF2	HBU-4030	CR-071
	100	75	SJ700-750HFUF2	HBU-4045	CR-072
	125	90	SJ700-900HFUF2	HBU-4045	CR-073
150	110	SJ700-1100HFUF2	(2) x HBU-4045	(2) x CR-071	
200	150	SJ700-1500HFUF2	(2) x HBU-4045	(2) x CR-072	

Service of 20 Cycles per Hour with Average 65% Load
Typical Cycle Definition:
 Raise for 30 seconds @ 65% load
 Traverse for 60 seconds @ 65% load
 Lower for 30 seconds @ 65% load
 Raise for 30 seconds @ 10% load
 Traverse for 30 seconds @ 10% load
 Traverse Decel: 3 seconds/150% braking torque

NOTE: Cells highlighted in YELLOW signify MULTIPLE DB units and MULTIPLE resistors. ONE resistor is required for EACH DB unit.

NOTES:

- 1) Resistors shown are TYPICAL values based on the CMAA Class definition. Your specific hoist design and usage profile may dictate different values.
- 2) These selection tables assume a non-load brake hoist.
- 3) Chart is based on CLOSED loop drives.

HOIST - CLOSED LOOP
No Load Brake
CMAA CRANE CLASS E
HMI HOIST CLASS H5



	MOTOR HP	kW	INVERTER MODEL	DB UNIT MODEL	RESISTOR
					MODEL
230 Volts	1	0.7	SJ700-007HFUF2	INTERNAL	CRX-036
	2	1.5	SJ700-015HFUF2	INTERNAL	CRX-076
	3	2.2	SJ700-022HFUF2	INTERNAL	CRX-050
	5	3.7	SJ700-040HFUF2	HBU2015	CRX-051
	7.5	5.5	SJ700-055HFUF2	HBU2015	CR-052
	10	7.5	SJ700-075HFUF2	HBU2015	CR-053
	15	11	SJ700-110LFUF2	HBU2015	CR-055
	20	15	SJ700-150LFUF2	HBU-2030	CR-056
	25	18.5	SJ700-185LFUF2	HBU-2030	CR-057
	30	22	SJ700-220LFUF2	HBU-2030	CR-058
	40	30	SJ700-300LFUF2	(2) x HBU-2015	(2) x CR-056
	50	37	SJ700-370LFUF2	(2) x HBU-2030	(2) x CR-058
	60	45	SJ700-450LFUF2	(2) x HBU-2030	(2) x CR-058
75	55	SJ700-550LFUF2	(2) x HBU-2030	(2) x CR-059	
460 Volts	1	0.7	SJ700-007HFUF2	INTERNAL	CRX-012
	2	1.5	SJ700-015HFUF2	INTERNAL	CRX-079
	3	2.2	SJ700-022HFUF2	INTERNAL	CRX-080
	5	4	SJ700-040HFUF2	INTERNAL	CRX-074
	7.5	5.5	SJ700-055HFUF2	HBU-4015	CR-065
	10	7.5	SJ700-075HFUF2	HBU-4015	CR-066
	15	11	SJ700-110HFUF2	HBU-4015	CR-067
	20	15	SJ700-150HFUF2	HBU-4015	CR-068
	25	18.5	SJ700-185HFUF2	HBU-4015	CR-068
	30	22	SJ700-220HFUF2	HBU-4030	CR-069
	40	30	SJ700-300HFUF2	HBU-4030	CR-070
	50	37	SJ700-370HFUF2	HBU-4045	CR-071
	60	45	SJ700-450HFUF2	HBU-4045	CR-072
	75	55	SJ700-550HFUF2	(2) x HBU-4045	(2) x CR-070
	100	75	SJ700-750HFUF2	(2) x HBU-4045	(2) x CR-071
125	90	SJ700-900HFUF2	(2) x HBU-4045	(2) x CR-072	
150	110	SJ700-1100HFUF2	(3) x HBU-4045	(3) x CR-071	
200	150	SJ700-1500HFUF2	(3) x HBU-4045	(3) x CR-072	

Service of 25 Cycles per Hour with Average 100% Load
Typical Cycle Definition:
 Raise for 24 seconds @ 100% load
 Traverse for 24 seconds @ 100% load
 Lower for 24 seconds @ 10% load
 Raise for 24 seconds @ 10% load
 Traverse for 24 seconds @ 10% load
 Traverse Decel: 3 seconds/160% braking torque

NOTE: Cells highlighted in YELLOW signify MULTIPLE DB units and MULTIPLE resistors. ONE resistor is required for EACH DB unit.

NOTES:

- 1) Resistors shown are TYPICAL values based on the CMAA Class definition. Your specific hoist design and usage profile may dictate different values.
- 2) These selection tables assume a non-load brake hoist.
- 3) Chart is based on CLOSED loop drives.

HOIST - CLOSED LOOP
No Load Brake
CMAA CRANE CLASS F



	MOTOR HP	kW	INVERTER MODEL	DB UNIT MODEL	RESISTOR
					MODEL
230 Volts	1	0.7	SJ700-007HFUF2	INTERNAL	CR-036
	2	1.5	SJ700-015HFUF2	INTERNAL	CR-016
	3	2.2	SJ700-022HFUF2	INTERNAL	CR-081
	5	3.7	SJ700-040HFUF2	INTERNAL	CR-039
	7.5	5.5	SJ700-055HFUF2	INTERNAL	CR-082
	10	7.5	SJ700-075HFUF2	INTERNAL	CR-083
	15	11	SJ700-110LFUF2	INTERNAL	CR-043
	20	15	SJ700-150LFUF2	INTERNAL	CR-084
	25	18.5	SJ700-185LFUF2	INTERNAL	CR-085
	30	22	SJ700-220LFUF2	INTERNAL	CR-086
	40	30	SJ700-300LFUF2	HBU-2030	CR-045
	50	37	SJ700-370LFUF2	(2) x HBU-2015	(2) x CR-085
	60	45	SJ700-450LFUF2	(2) x HBU-2030	(2) x CR-086
75	55	SJ700-550LFUF2	(2) x HBU-2030	(2) x CR-045	
460 Volts	1	0.7	SJ700-007HFUF2	INTERNAL	CR-087
	2	1.5	SJ700-015HFUF2	INTERNAL	CR-088
	3	2.2	SJ700-022HFUF2	INTERNAL	CR-089
	5	4	SJ700-040HFUF2	INTERNAL	CR-090
	7.5	5.5	SJ700-055HFUF2	INTERNAL	CR-091
	10	7.5	SJ700-075HFUF2	INTERNAL	CR-092
	15	11	SJ700-110HFUF2	INTERNAL	CR-093
	20	15	SJ700-150HFUF2	INTERNAL	CR-094
	25	18.5	SJ700-185HFUF2	INTERNAL	CR-095
	30	22	SJ700-220HFUF2	INTERNAL	CR-096
	40	30	SJ700-300HFUF2	HBU-4030	CR-097
	50	37	SJ700-370HFUF2	HBU-4030	CR-098
	60	45	SJ700-450HFUF2	HBU-4045	CR-099
	75	55	SJ700-550HFUF2	HBU-4045	CR-100
	100	75	SJ700-750HFUF2	(2) x HBU-4030	(2) x CR-098
	125	90	SJ700-900HFUF2	(2) x HBU-4045	(2) x CR-099
	150	110	SJ700-1100HFUF2	(2) x HBU-4220	(2) x CR-100
200	150	SJ700-1500HFUF2	(3) x HBU-4220	(3) x CR-099	

Continuous Severe Service
With Loads Near Rated Capacity
Typical Cycle Definition:
 Raise 100% load
 Traverse @ 100% load
 Lower @ 100% load
 Raise @ 100% load
 Traverse @ 100% load
 Traverse Decel: 2 seconds/175% braking torque

NOTE: Cells highlighted in YELLOW signify MULTIPLE DB units and MULTIPLE resistors. ONE resistor is required for EACH DB unit.

NOTES:

- 1) Resistors shown are TYPICAL values based on the CMAA Class definition. Your specific hoist design and usage profile may dictate different values.
- 2) These selection tables assume a non-load brake hoist.
- 3) Chart is based on CLOSED loop drives.

HBU Series Braking Unit Specifications

HBU-	Peak (A)	Continuous (A)
2015	50	15
2030	90	30
4015	25	8
4030	50	15
4045	75	25
4220	250	80