Mitsubishi Drive Parameter, Quick Reference

	OHCD Sumi 30 FPM	OHCD Sumi 40 FPM	OHCD Sumi 30 FPM - Rev 102 OHCD Sumi 40 FPM - Rev 202 (Program revision is stored in parameter 888)		2/29/2024	Red Indicates this parameter is NOT at default value
Parameter Number	Value	Value	Default Value	Description	Units	Notes
0	4.0	4.0	4.0	Torque Boost	Percentage	
1	39.00	52.00	120.0	Maximum Frequency	Hertz	
2	0.00	0.00	0.00	Minimum Frequency	Hertz	
3	60.00	60.00	60.00	Base Frequency	Hertz	
4	60.00	60.00	60.00	Multi-speed Setting (High Speed)	Hertz	
5	30.00	30.00	30.00	Multi-speed Setting (Middle Speed)	Hertz	
6	10.00	10.00	10.00	Multi-speed Setting (Low Speed)	Hertz	
7	3.0	3.0	5.0	Acceleration Time	Seconds	
8	1.8	2.1	5.0	Deceleration Time	Seconds	
9	7.66	7.66	10.00	Electronic Thermal O/L Relay	Amps	
10	3.00	3.00	3.00	DC Injection Brake operation Frequency	Hertz	
11	0.5	0.5	0.5	DC Injection Brake operation Time	Seconds	
12	4.0	4.0	4.0	DC Injection Brake operation Voltage	Volts	
13	0.50	0.50	0.50	Starting Frequency	Hertz	
14	0	0	0	Load Pattern Selection		
15	5.00	5.00	5.00	Jog Frequency	Hertz	
16	0.5	0.5	0.5	Jog Acceleration/Deceleration Time	Seconds	
17	0	0	0	MRS Input Selection		
18	39.00	52.00	120.0	High Speed Maximum Frequency	Hertz	
19	230.0	230.0	9999	Base Frequency Voltage	Volts	
20	60.00	60.00	60.00	Acceleration/Deceleration Reference Frequency	Hertz	
22	200.0	200.0	150.0	Stall Prevention Operation Level	Percentage	
23	9999	9999	9999	Stall Prevention Operation Level Compensation Factor		
24	9999	9999	9999	Multi-speed Setting (Speed 4)		
25	9999	9999	9999	Multi-speed Setting (Speed 5)		
26	9999	9999	9999	Multi-speed Setting (Speed 6)		
27	9999	9999	9999	Multi-speed Setting (Speed 7)		
29	1	1	0	Acceleration/Deceleration Pattern Selection		
30	1	1	0	Regenerative Function Selection		
31	9999	9999	9999	Frequency Jump 1A		
32	9999	9999	9999	Frequency Jump 1B		
33	9999	9999	9999	Frequency Jump 2A		
34	9999	9999	9999	Frequency Jump 2B		
35	9999	9999	9999	Frequency Jump 3A		
36	9999	9999	9999	Frequency Jump 3B		
37	0.000	0.000	0.000	Speed Display		
40	0	0	0	RUN Key Rotation Direction Selection		
41	10.0	10.0	10.0	Up-To-Frequency Sensitivity	Percentage	
42	6.00	6.00	6.00	Output Frequency Detection	Hertz	
43	9999	9999	9999	Output Frequency Detection For Reverse Direction	Hertz	
44	5.0	5.0	5.0	Second Acceleration/Deceleration Time	Seconds	
45	9999	9999	9999	Second Deceleration Time	Seconds	
46	9999	9999	9999	Second Torque Boost	Percentage	
47	9999	9999	9999	Second V/F (Base Frequency)	Hertz	
48	9999	9999	9999	Second Stall Prevention Operation Current	Percentage	
51	9999	9999	9999	Second Electronic Thermal O/L Relay	Amps	
52	9	9	0	DU/PU Main Display Data Selection		Revs 102 & 202, Brake % in 3rd Monitor
55	60.00	60.00	60.00	Frequency Monitoring Reference	Hertz	
56	10.00	10.00	10.00	Current Monitoring Reference	Amps	
57	9999	9999	9999	Restart Coasting Time	Seconds	
58	1.0	1.0	1.0	Restart Cushion Time	Seconds	
59	0	0	0	Remote Function Selection		
60	0	0	0	Energy Saving Control Selection		
65	0	0	0	Retry Selection		
66	60.00	60.00	60.00	Stall Prevention Operation Redfuction Starting Frequency	Hertz	
67	103	103	0	Number of Retries At Fault Occurrence		Revs 101 & 201
68	0.5	0.5	1.0	Retry Waiting Time	Seconds	Revs 101 & 201
69	0	0	0	Retry Count Display Erase		
70	30.0	30.0	0.0	Special Regenerative Brake Duty	Percentage	Revs 101 & 201
71	13	13	0	Applied Motor		
72	15	15	1	PWM Frequency Selection		
73	0	0	1	Analog Input Selection		
74	1	1	1	Input Filter Time Constant		
75	14	14	14	Reset Selection/Disconnected PU Detection/PU Stop		

77	2	2	0	Parameter Write Selection		
78	0	0	0	Reverse Rotation Prevention Selection		
79	2	2	0	Operation Mode Selection		
80	2.20	2.20	9999	Motor Capacity	Kilo-Watts	
82	9999	9999	9999	Motor Excitation Current	Amps	
83	230.0	230.0	200.0	Rated Motor Voltage	Volts	
84	60.00	60.00	60.00	Rated Motor Frequency	Hertz	
90	0.606	0.606	9999	Motor Constant (R1)	Ohms	Value after tuning
96	13	13	0	Auto Tuning Setting/Status		Drive has been tuned to motor
117	0	0	0	PU Communication Station Number		
118	192	192	192	PU Communication Speed		
119	1	1	1	PU Communication Stop Bit Length		
120	2	2	2	PU Communication Parity Check		
121	1	1	1	Number of PU Communication Retries		
122	9999	9999	9999	PU Communication Check Time Interval	Seconds	
123	9999	9999	9999	PU Communication Waiting Time Setting	Milli-Seconds	
124	1	1	1	PU Communication CR/LF Selection		
125	60.00	60.00	60.00	Terminal 2 Frequency Setting Gain Frequency	Hertz	
126	60.00	60.00	60.00	Terminal 4 Frequency Setting Gain Frequency	Hertz	
127	9999	9999	9999	PID Control Automatic Switchover Frequency	Hertz	
128	0	0	0	PID Action Selection		
129	100.0	100.0	100.0	PID Proportional Band	Percentage	
130	1.0	1.0	1.0	PID Integral Time	Seconds	
131	9999	9999	9999	PID Upper Limit	Percentage	
132	9999	9999	9999	PID Lower Limit	Percentage	
133	9999	9999	9999	PID Action Set Point	Percentage	
134	9999	9999	9999	PID Differential Time	Seconds	
145	1	1	1	PU Display Language Selection		
146	xxxx	xxxx	xxxx	Parameter For Manufacturer Setting		Do Not Change
150	150.0	150.0	150.0	Output Current Detection Level	Percentage	
151	0.0	0.0	0.0	Output Current Detection Signal Delay Time	Seconds	
152	5.0	5.0	5.0	Zero Current Detection Level	Percentage	
153	0.50	0.50	0.50	Zero Current Detection Time	Seconds	
154	1	1	1	Voltage Reduction Selection During Stall Prevention …		
156	0	0	0	Stall Prevention Operation Selection		
157	0.0	0.0	0.0	OL Signal Output Timer	Seconds	
158	1	1	1	AM Terminal Function Selection		
160	0	0	0	Extended Function Display Selection		
161	0	0	0	Frequency Setting/Key lock Operation Selection		
162	1	1	1	Automatic Restart After Instantaneous Power Failure		
165	150.0	150.0	150.0	Stall Prevention Operation Level For Restart	Percentage	
166	0.1	0.1	0.1	Output Current Detection Signal Retention Time	Seconds	
167	0	0	0	Output Current Detection Operation Selection		
168	xxxx	xxxx	xxxx	Parameter For Manufacturer Setting		Do Not Change
169	xxxx	xxxx	xxxx	Parameter For Manufacturer Setting		Do Not Change
170	9999	9999	9999	Watt-hour Meter Clear		
171	9999	9999	9999	Operation Hour Meter Clear		
178	60	60	60	STF Terminal Function Selection		
179	61	61	61	STR Terminal Function Selection		
180	0	0	0	RL Terminal Function Selection		
181	1	1	1	RM Terminal Function Selection		
182	2	2	2	RH Terminal Function Selection		
190	0	0	0	RUN Terminal Function Selection		
192	99	99	99	ABC Terminal Function Selection		
197	80	80	80	SO Terminal Function Selection		
232	9999	9999	9999	Multi-speed Setting (Speed 8)	Hertz	
233	9999	9999	9999	Multi-speed Setting (Speed 9)	Hertz	
234	9999	9999	9999	Multi-speed Setting (Speed 10)	Hertz	
235	9999	9999	9999	Multi-speed Setting (Speed 11)	Hertz	
236	9999	9999	9999	Multi-speed Setting (Speed 12)	Hertz	
237	9999	9999	9999	Multi-speed Setting (Speed 13)	Hertz	
238	9999	9999	9999	Multi-speed Setting (Speed 14)	Hertz	
239	9999	9999	9999	Multi-speed Setting (Speed 15)	Hertz	
240	1	1	1	Soft-PWM Operation Selection		
241	0	0	0	Analog Input Display Unit Switchover		
244	1	1	1	Cooling Fan Operation		

245	9999	9999	9999	Rated Slip	Percentage	
246	0.50	0.50	0.50	Slip Compensation Time Constant	Seconds	
247	9999	9999	9999	Constant-power Range Slip Compensation Selection		
249	0	0	0	Earth (Ground) Fault Detection At Start		
250	9999	9999	9999	Stop Selection	Seconds	
251	1	1	1	Output Phase Loss Protection Selection		
255	0	0	0	Life Alarm Status Display		
256	100	100	100	Inrush Current Limit Circuit Life Display	Percentage	
257	100	100	100	Control Circuit Capacitor Life Display	Percentage	
258	100	100	100	Main Circuit Capacitor Life Display	Percentage	
259	0	0	0	Main Circuit Capacitor Life Measuring		
260	0	0	0	PWM Frequency Automatic Switchover		
261	2	2	0	Power Failure Stop Selection		
267	0	0	0	Terminal 4 Input Selection		Revs 101 & 201
268	9999	9999	9999	Monitor Decimal Digits Selection		
269	xxxx	xxxx	xxxx	Parameter For Manufacturer Setting		Do Not Change
295	0.00	0.00	0.00	Magnitude Of Frequency Change Setting		
296	9999	9999	9999	Password Lock level		
297	9999	9999	9999	Password Lock/Unlock		
298	163	163	9999	Frequency Search Gain		Value after tuning
299	0	0	0	Rotation Direction Detection Selection At Restarting		
338	0	0	0	Communication Operation Command Source		
339	0	0	0	Communication Speed Command Source		
340	0	0	0	Communication Startup Mode Selection		
342	0	0	0	Communication EEPROM Write Selection		
343	0	0	0	Communication Error Count		
450	9999	9999	9999	Second Applied Motor		
495	0	0	0	Remote Output Selection		
496	0	0	0	Remote Output Data 1		
502	0	0	0	Stop Mode Selection At Communication Error		
503	0	0	0	Maintenance Timer		
504	9999	9999	9999	Maintenance Timer Alarm Output Set Time		
549	0	0	0	Protocol Selection		
551	9999	9999	9999	PU Mode Operation Command Source Selection		
552	9999	9999	9999	Frequency Jump Range		
555	1.0	1.0	1.0	Current Average Time	Seconds	
556	0.0	0.0	0.0	Data Output Mask Time	Seconds	
557	10.00	10.00	10.00	Current Average Value Monitor Signal Output Reference	Amps	
561	9999	9999	9999	PTC Thermistor Protection Level	Ohms	
563	0	0	0	Energization Time Carry-over Times		
564	0	0	0	Operating Time Carry-over Times		
571	0.1	0.1	9999	Holding Time At a Start	Seconds	
575	1.0	1.0	1.0	Output Interruption Detection Time	Seconds	
576	0.00	0.00	0.00	Output Interruption Detection Level	Hertz	
577	1000	1000	1000	Output Interruption Cancel Level	Percentage	
611	9999	9999	9999	Acceleration Time At a Restart	Seconds	
653	0.0	0.0	0.0	Speed Smoothing Control	Percentage	
665	100.0	100.0	100.0	Regeneration Avoidance Frequency Gain	Percentage	
882	0	0	0	Regeneration Avoidance Operation Selection		
883	400.0	400.0	400.0	Regeneration Avoidance Operation Level	Volts	
885	6.00	6.00	6.00	Regeneration Avoidance Compensation Frequency Limit	Hertz	
886	100.0	100.0	100.0	Regeneration Avoidance Voltage Gain	Percentage	
888	102	202	9999	Free Parameter 1		Used for Program ID
889	9999	9999	9999	Free Parameter 2		
891	9999	9999	9999	Cumulative Power Monitor Digit Shifted Times		
990	1	1	1	PU Buzzer Control		
991	58	58	58	PU Contrast Adjustment		

Omron Drive Parameter, Quick Reference

	CD 500 Leeson Motor	CD 500 Baldor Motor	CD 1000 30 FPM (See Note 4)	CD 1000	OHCD Grove 30 FPM	OHCD Grove 40 FPM	OHCD Sumi 30 FPM	OHCD Sumi 40 FPM	MRL Chain Hi-Eff Motor	MRL Chain Std Motor	7/24/2024		
Parameter	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value	Description	Setting	Notes
P027	0.06	8.01	1.07	1.06	5.03	2.06	3.03	4.03	6.02	7.02	Drive Program Identifier	Elevator . Revision	
A001	01	01	01	01	01	01	01	01	01	01	Frequency Reference Input	Terminal Block	
A002	01	01	01	01	01	01	01	01	01	01	Run Command Input	Terminal Block	
A003	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	Base Frequency	60 Hertz	
A004	60.0	60.0	65.0	65.0	65.0	65.0	60.0	60.0	60.0	60.0	Maximum Frequency	xx.x Hertz	See Note 1
A005	02	02	02	02	02	02	02	02	02	02	FV/FI Selection	FV	
A012	44.0	44.0	**48.5**	65.0	48.8	65.0	39.0	52.0	50.0	50.0	FV End Frequency	xx.x Hertz	See Note 1
A041	01	01	01	01	01	01	01	01	01	01	Torque Boost	Automatic	
A042	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	2.0	Manual Torque Boost	x.x Percent	See Note 1
A044	03	03	03	03	03	03	03	03	03	03	Control Method	Sensorless Vector	
A047	100	100	100	100	100	100	100	100	100	100	Automatic Torque Boost Slip Compensation	100 Percent Gain	
A082	230	230	230	230	230	230	230	230	230	230	Motor Incoming Voltage Selection	230 VAC	
A131	2	2	2	2	2	2	10	10	10	10	Acceleration Curve	Units	See Note 1
B001	01	01	01	01	01	01	01	01	01	01	Retry Selection	0 Hertz Restart	
B002	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	Allowable Momentary Power Interruption	2.0 Seconds	
B003	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Restart Standby Time	0.3 Seconds	
B008	01	01	01	01	01	01	01	01	01	01	Overvoltage/Overcurrent Restart Selection	0 Hertz Restart	
B011	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	Overvoltage/Overcurrent Restart Standby	0.5 Seconds	
B012	10.5	11.0	8.91	8.91	9.03	9.03	8.04	8.04	5.89	6.37	Electronic Thermal Level	Motor Nameplate Amps x 1.05	See Note 2
B013	01	01	01	01	01	01	01	01	01	01	Electronic Thermal Characteristics Selection 1	Constant Torque	
B021	00	00	00	00	00	00	00	00	00	00	Overload Limit 1 Selection	Disabled	
B027	00	00	00	00	00	00	00	00	00	00	Overcurrent Suppression Selection	Disabled	
B037	00	00	00	00	00	00	00	00	00	00	Display Selection	Complete Display	
B038	001	001	001	001	001	001	001	001	001	001	Initial Screen Selection	D001 to D060	
B082	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	Starting Frequency	1.50 Hertz	
B083	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	Carrier Frequency	12.0 Kilohertz	
B085	00	00	00	00	00	00	00	00	00	00	Initialization Data Selection	Use Area "A"	
B089	02	02	02	02	02	02	02	02	02	02	Automatic Carrier Reduction	Depends on Fin Temperature	
B090	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	Usage Rate of Regenerative Braking	30.0 Percent	
B092	02	02	02	02	02	02	02	02	02	02	Cooling Fan Operation	Depends on Fin Temperature	
B095	02	02	02	02	02	02	02	02	02	02	Regenerative Braking Selection	Enabled, running & stopped	
B097	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	Braking Resistor Value	70.0 Ohms	
B130	01	01	01	01	01	01	01	01	01	01	Decel Overvoltage Suppression Function	Enabled	
B131	390	390	390	390	390	390	390	390	390	390	Decel Overvoltage Suppression Level	390 VDC	

C004	11	11	11	11	11	11	11	11	11	11	S4 Pin Function	Free Run Stop	
C026	21	21	21	21	21	21	21	21	21	21	Alarm Relay Function	Output MA/MB at 0 Hz	
C028	00	00	00	00	00	00	00	00	00	00	AM Selection	Output Frequency	
C102	02	02	02	02	02	02	02	02	02	02	Reset Selection	Enabled only during trip	
F001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Output Frequency Setting	0.00 Hertz	
F002	2.00	2.00	**4.00**	3.00	3.00	3.00	4.00	3.00	3.00	3.00	Acceleration Time	x.xx Seconds	See Note 1
F003	3.00	3.00	**3.75**	2.00	2.00	2.00	2.50	2.00	2.00	2.00	Deceleration Time	x.xx Seconds	See Note 1
Motor Auto-Tuning Values													
H002	02	02	02	02	02	02	02	02	02	02	Motor Parameter selection	Use Auto-Tuning Parameters	
H003	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	1.50	1.50	Motor Capacity	x.xx Kilo Watts (kW)	See Note 1
H004	6	6	4	4	4	4	4	4	4	4	Motor Poles	Number of poles	See Note 1
H005	125	100	100	100	100	100	100	100	100	100	Speed Reponse	xxx Units	See Note 1
H030	0.759	0.703	0.609	0.609	0.829	0.829	0.708	0.708	1.118	1.479	Motor Parameter R1 (Auto Tuning)	x.xxx Ohms	See Notes 1 & 3
H031	0.485	0.374	0.394	0.394	0.496	0.496	0.472	0.472	0.877	0.861	Motor Parameter R2 (Auto Tuning)	x.xxx Ohms	See Notes 1 & 3
H032	11.42	12.82	9.46	9.46	11.13	11.13	11.21	11.21	16.72	13.88	Motor Parameter L (Auto Tuning)	xx.xx Millihenry (mH)	See Notes 1 & 3
H033	8.49	9.46	6.36	6.36	6.04	6.04	5.23	5.23	3.83	5.22	Motor Parameter Io (Auto Tuning)	x.xx Amps	See Notes 1 & 3
H034	0.051	0.002	0.021	0.021	0.013	0.013	0.030	0.030	0.021	0.019	Motor Parameter J (Auto Tuning)	x.xxx kgm^2	See Notes 1 & 3

Note 1: This parameter varies with elevator type. Refer to the data in the column that matches your elevator type for the correct value.

Note 2: This parameter varies with elevator type and motor in use. It must match the rating on the motor nameplate Full Load Amperage times 1.05 (FLA) x 1.05.

The CD500 B (Baldor Motor) is rated at 10.6 amps but, 10.6 * 1.05 = 11.13 which is above the drive maximum of 11.0 amps. For this elevator/motor configuration, set B012 to 11.0 amps

Note 3: MRL Chain Elevators may be equipped with either a standard (Std) or a high-efficiency (Hi-Eff) motor. To determine your motor type refer to the rating of your motor nameplate Full Load Amperage (FLA), Std motor is 6.07 amps and Hi-Eff motor is 5.61 amps. Once you have your motor type refer to your matching Std or Hi-Eff column above and verify the Motor Auto-Tuning Values are entered in drive parameters H030 thru H034.