

# **SJ300 / L300P**

## **Network**

## **Register Maps**



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In This Appendix . . . . .	page
• SJ300 and L300P Network Register Maps . . . . .	2
• Bit-level Definitions for I/O Registers . . . . .	13

## SJ300 and L300P Network Register Maps

The tables in this appendix list the mapping of SJ300 / L300P inverter parameters to corresponding registers in popular factory networks. The networks include Modbus, DirectNet, and DF1. The network registers containing I/O terminal data have expanded bit-level definitions in the next section.

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300 / L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40001	V2000	N7:0	Read	N/A	Network Control Flag	0=Keypad Control	Numeric Code	Used Only by SC-OPE (not sent to inverter)
40002	V2001	N7:1	R/W	N/A	Watchdog Timeout Value	0=Disabled or 100 — 30000	ms	Used Only by SC-OPE (Not Sent to inverter)
40003	V2002	N7:2	R/W	N/A	Watchdog Timeout Action (only applicable when control is from network and motor is running)	0 = Stop Motor 1 = Stop Motor And Disable Network Control 2 = Continue Running	Numeric Code	Used Only by SC-OPE (Not Sent to inverter)
40004	V2003	N7:3	Write	N/A	Store to EEPROM (stores any changed drive parameters into drive's EEPROM)	0 = Do Nothing 1 = Store to EEPROM	—	Will prevent monitor data from being updated for 5 seconds
40005	V2004	N7:4	Write	White	Run Command	0=Stop 1=Run Forward 2=Run Reverse	Numeric Code	Valid Regardless of Motor Selected (1st, 2nd, 3rd)
40006	V2005	N7:5	R/W	R/W	Preset Frequency	0 — 40000	.01 Hz	Valid Regardless of Motor Selected (1st, 2nd, 3rd)
40007	V2006	N7:6	R/W	R/W	Acceleration Time	1 — 36000	.1 s	Valid Regardless of Motor Selected (1st, 2nd, 3rd)
40008	V2007	N7:7	R/W	R/W	Deceleration Time	1 — 36000	.1 s	Valid Regardless of Motor Selected (1st, 2nd, 3rd)

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300/ L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40009	V2010	N7:8	Read	Run Status	Run Status	Bits 2-1-C: State 0=0=Stopped 0=1=Decelerating 0=1=Constant Speed 1=0=Accelerating Bit 4-3: Not Used Bit 5: Inverter Comm Error 0=OK, 1= No Comm Bit 6: Trip Flag 0=No Trip, 1=Tripped Bit 7: Run Flag 0=Stopped, 1=Running	Bit Flag	
40010	V2011	N7:9	Read	D001	Output Frequency	0 — 40000	.01 Hz	
40011	V2012	N7:10	Read	D002	Output Current	0 — 65535	.1 A	
40012	V2013	N7:11	Read	D003	Direction of Output	0=Stopped 1=Forward 2=Reverse	—	
40013	V2014	N7:12	Read	D004	PID Feedback	0 — 65535	%	
40014	V2015	N7:13	Read	D005	Intelligent Input Status	Bit 0: Input Terminal 1 Bit 1: Input Terminal 2 Bit 2: Input Terminal 3 Bit 3: Input Terminal 4 Bit 4: Input Terminal 5 Bit 5: Input Terminal 6 Bit 6: Input Terminal 7 Bit 7: Input Terminal 8 Bit 8: Input Terminal FW	Bit Flag 0=Off, 1=On	
40015	V2016	N7:14	Read	D006	Intelligent Output Status	Bit 0: Output Terminal 11 Bit 1: Output Terminal 12 Bit 2: Output Terminal 13 Bit 3: Output Terminal 14 Bit 4: Output Terminal 15 Bit 5: Output Terminal AL	Bit Flag 0=Off, 1=On	
40016	V2017	N7:15	Read	D007	Frequency Conversion Monitor	0 — 65535	.01 units	
40017	V2020	N7:16	Read	D012	Output Torque	-300 — +300	%	(SJ300 Only)
40018	V2021	N7:17	Read	D013	Output Voltage	0 — 65535	.1 V	

# SJ300 / L300P Network Register Maps

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300/L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40019	V2022	N7:18	Read	Read	Input Voltage	0 — 65535	.1 V	
40020	V2023	N7:19	Read	Read	P-N Voltage	0 — 65535	.1 V	
40021	V2024	N7:20	Read	Read	Terminal Set Frequency	0 — 65535	.01 Hz	
40022	V2025	N7:21	Read	D014	Input Power	0 — 65535	.1 kW	
40023	V2026	N7:22	Read	D016	Accumulated Run Time	0 — 65535	Days	
40024	V2027	N7:23	Read	D017	Accum. Power On Time	0 — 65535	Days	
40025	V2030	N7:24	Read	D080	Number of Trips	0 — 65535	Count	
40026	V2031	N7:25	Read	D081	Trip 1 Factor (Most Recent)	0 — 79	Error Number	
40027	V2032	N7:26	Read	D081	Trip 1 Frequency	0 — 65535	.01 Hz	
40028	V2033	N7:27	Read	D081	Trip 1 Output Current	0 — 65535	.01 A	
40029	V2034	N7:28	Read	D081	Trip 1 P-N Voltage	0 — 65535	.1 V	
40030	V2035	N7:29	Read	D081	Trip 1 Run Time	0 — 65535	Days	
40031	V2036	N7:30	Read	D081	Trip 1 Power On Time	0 — 65535	Days	
40032	V2037	N7:31	Read	D082	Trip 2 Factor	0 — 79	Error Number	
40033	V2040	N7:32	Read	D082	Trip 2 Frequency	0 — 65535	.01 Hz	
40034	V2041	N7:33	Read	D082	Trip 2 Output Current	0 — 65535	.01 A	
40035	V2042	N7:34	Read	D082	Trip 2 P-N Voltage	0 — 65535	.1 V	
40036	V2043	N7:35	Read	D082	Trip 2 Run Time	0 — 65535	Days	
40037	V2044	N7:36	Read	D082	Trip 2 Power On Time	0 — 65535	Days	
40038	V2045	N7:37	Read	D083	Trip 3 Factor	0 — 79	Error Number	
40039	V2046	N7:38	Read	D083	Trip 3 Frequency	0 — 65535	.01 Hz	
40040	V2047	N7:39	Read	D083	Trip 3 Output Current	0 — 65535	.01 A	
40041	V2050	N7:40	Read	D083	Trip 3 P-N Voltage	0 — 65535	.1 V	

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300 / L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40042	V2051	N7:41	Read	D083	Trip 3 Run Time	0 — 65535	Days	
40043	V2052	N7:42	Read	D083	Trip 3 Power On Time	0 — 65535	Days	
40044	V2053	N7:43	Read	D084	Trip 4 Factor	0 — 79	Error Number	
40045	V2054	N7:44	Read	D084	Trip 4 Frequency	0 — 65535	.01 Hz	
40046	V2055	N7:45	Read	D084	Trip 4 Output Current	0 — 65535	.01 A	
40047	V2056	N7:46	Read	D084	Trip 4 P-N Voltage	0 — 65535	.1 V	
40048	V2057	N7:47	Read	D084	Trip 4 Run Time	0 — 65535	Days	
40049	V2060	N7:48	Read	D084	Trip 4 Power On Time	0 — 65535	Days	
40050	V2061	N7:49	Read	D085	Trip 5 Factor	0 — 79	Error Number	
40051	V2062	N7:50	Read	D085	Trip 5 Frequency	0 — 65535	.01 Hz	
40052	V2063	N7:51	Read	D085	Trip 5 Output Current	0 — 65535	.01 A	
40053	V2064	N7:52	Read	D085	Trip 5 P-N Voltage	0 — 65535	.1 V	
40054	V2065	N7:53	Read	D085	Trip 5 Run Time	0 — 65535	Days	
40055	V2066	N7:54	Read	D085	Trip 5 Power On Time	0 — 65535	Days	
40056	V2067	N7:55	Read	D086	Trip 6 Factor (Least Recent)	0 — 79	Error Number	
40057	V2070	N7:56	Read	D086	Trip 6 Frequency	0 — 65535	.01 Hz	
40058	V2071	N7:57	Read	D086	Trip 6 Output Current	0 — 65535	.01 A	
40059	V2072	N7:58	Read	D086	Trip 6 P-N Voltage	0 — 65535	.1 V	
40060	V2073	N7:59	Read	D086	Trip 6 Run Time	0 — 65535	Days	
40061	V2074	N7:60	Read	D086	Trip 6 Power On Time	0 — 65535	Days	
40062	V2075	N7:61	R/W	F002	Acceleration time	0 — 36000	.1 s	
40063	V2076	N7:62	R/W	F202	2nd Acceleration time	0 — 36000	.1 s	
40064	V2077	N7:63	R/W	F302	3rd Acceleration time	0 — 36000	.1 s	(SJ300 Only)

## SJ300 / L300P Network Register Maps

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300/L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40065	V2100	N7:64	R/W	F003	Deceleration time	0 — 36000	.1 s	
40066	V2101	N7:65	R/W	F203	2nd Deceleration time	0 — 36000	.1 s	
40067	V2102	N7:66	R/W	F303	3rd Deceleration time	0 — 36000	.1 s	(SJ300 Only)
40068	V2103	N7:67	R/W	A005	AT Terminal Selection	0 = Changing O and O! 1= Changing O and O2	—	
40069	V2104	N7:68	R/W	A020	Multi-Speed 0	0 — 40000	.01 Hz	
40070	V2105	N7:69	R/W	A220	2nd Multi-Speed 0	0 — 40000	.01 Hz	
40071	V2106	N7:70	R/W	A320	3rd Multi-Speed 0	0 — 40000	.01 Hz	(SJ300 Only)
40072	V2107	N7:71	R/W	A021	Multi-Speed 1	0 — 40000	.01 Hz	
40073	V2110	N7:72	R/W	A022	Multi-Speed 2	0 — 40000	.01 Hz	
40074	V2111	N7:73	R/W	A023	Multi-Speed 3	0 — 40000	.01 Hz	
40075	V2112	N7:74	R/W	A024	Multi-Speed 4	0 — 40000	.01 Hz	
40076	V2113	N7:75	R/W	A025	Multi-Speed 5	0 — 40000	.01 Hz	
40077	V2114	N7:76	R/W	A026	Multi-Speed 6	0 — 40000	.01 Hz	
40078	V2115	N7:77	R/W	A027	Multi-Speed 7	0 — 40000	.01 Hz	
40079	V2116	N7:78	R/W	A028	Multi-Speed 8	0 — 40000	.01 Hz	
40080	V2117	N7:79	R/W	A029	Multi-Speed 9	0 — 40000	.01 Hz	
40081	V2120	N7:80	R/W	A030	Multi-Speed 10	0 — 40000	.01 Hz	
40082	V2121	N7:81	R/W	A031	Multi-Speed 11	0 — 40000	.01 Hz	
40083	V2122	N7:82	R/W	A032	Multi-Speed 12	0 — 40000	.01 Hz	
40084	V2123	N7:83	R/W	A033	Multi-Speed 13	0 — 40000	.01 Hz	
40085	V2124	N7:84	R/W	A034	Multi-Speed 14	0 — 40000	.01 Hz	
40086	V2125	N7:85	R/W	A035	Multi-Speed 15	0 — 40000	.01 Hz	
40087	V2126	N7:86	R/W	A071	PID selection	0=Invalid, 1=Valid	Code	
40088	V2127	N7:87	R/W	A072	PID-P gain	2 — 50	.1 units	

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300 / L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40089	V2130	N7:88	R/W	A073	PID-I gain	0 — 36000	.1 s	
40090	V2131	N7:89	R/W	A074	PID-D gain	0 — 10000	.01 s	
40091	V2132	N7:90	R/W	A075	PID scale	1 — 9999	.01 units	
40092	V2133	N7:91	R/W	A076	PID feedback selection	0=Feedback OI, 1=Feedback O	—	
40093	V2134	N7:92	R/W	P014	Orientation Stop Position	0 — 4095	Pulse	(SJ300 Only)
40094	V2135	N7:93	R/W	P015	Orientation Speed Setting	50 — 6000	.01 Hz	(SJ300 Only)
40095	V2136	N7:94	R/W	P016	Orientation Direction	0=Forward 1=Reverse	—	(SJ300 Only)
40096	V2137	N7:95	R/W	P017	Orientation Completion Range	0 — 10000	Pulse	(SJ300 Only)
40097	V2140	N7:96	R/W	P018	Orientation Completion Delay Time	0 — 999	.01 s	(SJ300 Only)
40098	V2141	N7:97	R/W	P020	Electronic Gear Numerator	1 — 9999	1-9999	(SJ300 Only)
40099	V2142	N7:98	R/W	P021	Electronic Gear Denominator	1 — 9999	1-9999	(SJ300 Only)
40100	V2143	N7:99	Read	—	Output Terminal Information Word 1	See table on page D-15	Bit Flag 0=Off, 1=On	
40101	V2144	N7:100	Read	—	Output Terminal Information Word 2	See table on page D-13	Bit Flag 0=Off, 1=On	
40102	V2145	N7:101	Read	—	Input Terminal Information Word 1	See table on page D-13	Bit Flag 0=Off, 1=On	
40103	V2146	N7:102	Read	—	Input Terminal Information Word 2	See table on page D-13	Bit Flag 0=Off, 1=On	
40104	V2147	N7:103	Read	—	Input Terminal Information Word 3	See table on page D-14	Bit Flag 0=Off, 1=On	

**SJ300 / L300P  
Network Register Maps**

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300/L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40105	V2150	N7:104	Read	—	Input Terminal Information Word 4	See table on page D-14 0=16-Stage 4-Terminals 1=8-Stage 7-Terminals	Bit Flag 0=Off, 1=On	
40106	V2151	N7:105	R/W	A019	Multi-Speed Select	0=16-Stage 4-Terminals 1=8-Stage 7-Terminals	—	
40107	V2152	N7:106	R/W	A038	Jogging Frequency	0 — 999	.01 Hz	
40108	V2153	N7:107	R/W	A039	Jogging selection	0=Free run/invalid on run 1=Stop decel/invalid on run 2=DC brake/invalid on run 3=Free run/valid on run 4=Stop decel/valid on run 5=DC brake/valid on run	—	
40109	V2154	N7:108	R/W	A092	Acceleration time2	0 — 36000	.1 s	
40110	V2155	N7:109	R/W	A292	2nd Acceleration time2	0 — 36000	.1 s	
40111	V2156	N7:110	R/W	A392	3rd Acceleration time2	0 — 36000	.1 s	(SJ300 Only)
40112	V2157	N7:111	R/W	A095	Acceleration frequency2	0 — 40000	.01 Hz	
40113	V2160	N7:112	R/W	A295	2nd Acceleration frequency2	0 — 40000	.01 Hz	
40114	V2161	N7:113	R/W	A097	Acceleration pattern selection	0=Straight Line 1=S-Curve 2=U-Curve 3=Reverse U-Curve	—	
40115	V2162	N7:114	R/W	A131	Acceleration curve constant	1 — 10	1-10	
40116	V2163	N7:115	R/W	A093	Deceleration time 2	0 — 36000	.1 s	
40117	V2164	N7:116	R/W	A293	2nd Deceleration time2	0 — 36000	.1 s	
40118	V2165	N7:117	R/W	A393	3rd Deceleration time2	0 — 36000	.1 s	(SJ300 Only)
40119	V2166	N7:118	R/W	A096	Deceleration frequency2	0 — 40000	.01 Hz	.01 Hz
40120	V2167	N7:119	R/W	A296	2nd deceleration frequency	0 — 40000	.01 Hz	
40121	V2170	N7:120	R/W	A098	Deceleration pattern selection	0=Straight Line 1=S-Curve 2=U-Curve 3=Reverse U-Curve	—	

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300/ L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40122	V2171	N7:121	R/W	A132	Deceleration curve constant	1 — 10		1-10
40123	V2172	N7:122	R/W	A001	Frequency setting selection	0=VR 1=Terminal 2=Operator 3=RS485 4=Option 1 5=Option 2	—	
40124	V2173	N7:123	R/W	A002	Operation setting selection	1=Terminal 2=Operator 3=RS485 4=Option 1 5=Option 2	—	
40125	V2174	N7:124	R/W	A003	Base frequency setting	30 — 400	Hz	
40126	V2175	N7:125	R/W	A203	2nd Base frequency	30 — 400	Hz	
40127	V2176	N7:126	R/W	A303	3rd Base Frequency	30 — 400	Hz	(SJ300 Only)
40128	V2177	N7:127	R/W	A004	Maximum Frequency	30 — 400	Hz	
40129	V2200	N7:128	R/W	A204	2nd M Maximum frequency	30 — 400	Hz	
40130	V2201	N7:129	R/W	A304	3rd M maximum frequency	30 — 400	Hz	(SJ300 Only)
40131	V2202	N7:130	R/W	A082	Motor voltage selection	0=200,1=215,2=220,3=230, 0,4=240,5=380,6=400,7=415,8=440,9=460,10=480,11=575,12=600	—	
40132	V2203	N7:131	R/W	B083	Carrier frequency setting	5 — 120	.1 Hz	
40133	V2204	N7:132	R/W	C001	Intelligent input 1 setting	See table on page D-16	—	
40134	V2205	N7:133	R/W	C002	Intelligent input 2 setting	See table on page D-16	—	
40135	V2206	N7:134	R/W	C003	Intelligent input 3 setting	See table on page D-16	—	
40136	V2207	N7:135	R/W	C004	Intelligent input 4 setting	See table on page D-16	—	
40137	V2210	N7:136	R/W	C005	Intelligent input 5 setting	See table on page D-16	—	
40138	V2211	N7:137	R/W	C006	Intelligent input 6 setting	See table on page D-16	—	(SJ300 Only)
40139	V2212	N7:138	R/W	C007	Intelligent input 7 setting	See table on page D-16	—	(SJ300 Only)

# SJ300 / L300P Network Register Maps

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300/L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40140	V2213	N7:139	R/W	C008	Intelligent input 8 setting	See table on page D-16	—	(SJ300 Only)
40141	V2214	N7:140	R/W	C011	Intelligent input 1 a/b (NO/NC) selection	0=Normally Open 1=Normally Closed	—	
40142	V2215	N7:141	R/W	C012	Intelligent input 2 a/b (NO/NC) selection	0=Normally Open 1=Normally Closed	—	
40143	V2216	N7:142	R/W	C013	Intelligent input 3 a/b (NO/NC) selection	0=Normally Open 1=Normally Closed	—	
40144	V2217	N7:143	R/W	C014	Intelligent input 4 a/b (NO/NC) selection	0=Normally Open 1=Normally Closed	—	
40145	V2220	N7:144	R/W	C015	Intelligent input 5 a/b (NO/NC) selection	0=Normally Open 1=Normally Closed	—	
40146	V2221	N7:145	R/W	C016	Intelligent input 6 a/b (NO/NC) selection	0=Normally Open 1=Normally Closed	—	(SJ300 Only)
40147	V2222	N7:146	R/W	C017	Intelligent input 7 a/b (NO/NC) selection	0=Normally Open 1=Normally Closed	—	(SJ300 Only)
40148	V2223	N7:147	R/W	C018	Intelligent input 8 a/b (NO/NC) selection	0=Normally Open 1=Normally Closed	—	(SJ300 Only)
40149	V2224	N7:148	R/W	C019	Input PV a/b (No/NC) selection	0=Normally Open 1=Normally Closed	—	
40150	V2225	N7:149	R/W	C021	Intelligent output 11 setting	See table on page D-17	—	
40151	V2226	N7:150	R/W	C022	Intelligent output 12 setting	See table on page D-17	—	
40152	V2227	N7:151	R/W	C023	Intelligent output 13 setting	See table on page D-17	—	(SJ300 Only)
40153	V2230	N7:152	R/W	C024	Intelligent output 14 setting	See table on page D-17	—	(SJ300 Only)
40154	V2231	N7:153	R/W	C025	Intelligent output 15 setting	See table on page D-17	—	(SJ300 Only)
40155	V2232	N7:154	R/W	C026	Alarm relay output	See table on page D-17	—	
40156	V2233	N7:155	R/W	C031	Intelligent output 11 a/b	0=Normally Open 1=Normally Closed	—	
40157	V2234	N7:156	R/W	C032	Intelligent output 12 a/b	0=Normally Open 1=Normally Closed	—	

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300/ L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40158	V2235	N7:157	R/W	C033	Intelligent output 13 a/b	0=Normally Open 1=Normally Closed	—	(SJ300 Only)
40159	V2236	N7:158	R/W	C034	Intelligent output 14 a/b	0=Normally Open 1=Normally Closed	—	(SJ300 Only)
40160	V2237	N7:159	R/W	C035	Intelligent output 15 a/b	0=Normally Open 1=Normally Closed	—	(SJ300 Only)
40161	V2240	N7:160	R/W	C036	Alarm relay output a/b	0=Normally Open 1=Normally Closed	—	
40162	V2241	N7:161	R/W	A061	1st frequency upper limiter	0 — 40000	.01 Hz	
40163	V2242	N7:162	R/W	A261	2nd frequency upper limiter	0 — 40000	.01 Hz	
40164	V2243	N7:163	R/W	A062	1st frequency lower limiter	0 — 40000	.01 Hz	
40165	V2244	N7:164	R/W	A262	2nd frequency lower limiter	0 — 40000	.01 Hz	
40166	V2245	N7:165	R/W	A063	Jump frequency1	0 — 40000	.01 Hz	
40167	V2246	N7:166	R/W	A064	Jump frequency Width 1	0 — 1000	.01 Hz	
40168	V2247	N7:167	R/W	A065	Jump frequency 2	0 — 40000	.01 Hz	
40169	V2250	N7:168	R/W	A066	Jump frequency width 2	0 — 1000	.01 Hz	
40170	V2251	N7:169	R/W	A067	Jump frequency 3	0 — 40000	.01 Hz	
40171	V2252	N7:170	R/W	A068	Jump frequency width 3	0 — 1000	.01 Hz	
40172	V2253	N7:171	R/W	A069	Acceleration stop frequency	0 — 40000	.01 Hz	
40173	V2254	N7:172	R/W	A070	Acceleration stop time	0 — 600	.1 s	
40174	V2255	N7:173	R/W	A041	Torque boost selection	0=Manual, 1=Automatic	—	
40175	V2256	N7:174	R/W	A241	2nd Torque boost selection	0=Manual, 1=Automatic	—	
40176	V2257	N7:175	R/W	A042	Manual torque boost	0 — 200	.1 %	
40177	V2260	N7:176	R/W	A242	2nd Manual torque boost	0 — 200	.1 %	
40178	V2261	N7:177	R/W	A342	3rd Manual torque boost	0 — 200	.1 %	(SJ300 Only)
40179	V2262	N7:178	R/W	A043	Manual torque boost point	0 — 500	.1 %	

**SJ300 / L300P  
Network Register Maps**

Modbus Reg. #	Direct-Net Reg. #	DF1 Reg. #	Access Type	SJ300 / L300P #Reg. #	SJ300 / L300P Parameter	Range / Value	Units	Notes
40180	V2263	N7:179	R/W	A243	2nd Manual torque boost point	0 — 500		.1 %
40181	V2264	N7:180	R/W	A343	3rd Manual torque boost point	0 — 500		.1 % (SJ300 Only)
40182	V2265	N7:181	R/W	A044	1st control	0=VC, 1=VP2=Free V/F, 3=SLV, 4=0Hz-SLV, 5=V2	—	
40183	V2266	N7:182	R/W	A244	2nd control	0=VC, 1=VP2=Free V/F, 3=SLV, 4=0Hz-SLV	—	
40184	V2267	N7:183	R/W	A344	3rd control	0=VC, 1=VP2=Free V/F,	—	(SJ300 Only)
40185	V2270	N7:184	R/W	A045	Output voltage gain	20 — 100	%	

## Bit-level Definitions for I/O Registers

### Input Terminal Information

Input Terminal Information (Word 1)			
Bit	Description	Bit	Description
0	Position Train Position Command Input Enable	8	Not Used
1	Not Used	9	Not Used
2	Not Used	10	Not Used
3	Not Used	11	Not Used
4	Not Used	12	Not Used
5	Not Used	13	Not Used
6	Not Used	14	Not Used
7	Not Used	15	Not Used

Input Terminal Information (Word 2)			
Bit	Description	Bit	Description
0	Multi-Speed Bit1	8	Torque Limit Enable
1	Multi-Speed Bit2	9	Torque Limit Selection, Bit 1
2	Multi-Speed Bit3	10	Torque LimitSelection, Bit 2
3	Multi-Speed Bit4	11	Proportional / Proportional/Integral Selection
4	Multi-Speed Bit5	12	Brake Confirmation Signal
5	Multi-Speed Bit6	13	Orientation (Home Search)
6	Multi-Speed Bit7	14	LAC : LAD Cancel
7	Overload Restriction	15	Position Deviation Reset

Input Terminal Information (Word 3)			
Bit	Description	Bit	Description
0	Analog Input Voltage/Current Select	8	PID Reset
1	Set 3rd Motor data	9	Not Used
2	Reset Inverter	10	Control Gain Setting
3	Not Used	11	Remote Control UP Function
4	Start (3-Wire Interface)	12	Remote Control DOWN Function
5	Stop (3-Wire Interface)	13	Remote Control Data Clearing
6	FWD. REV (3-Wire Interface)	14	Not Used
7	PID Disable	15	Operator Control

Input Terminal Information (Word 4)			
Bit	Description	Bit	Description
0	Not Used	8	Set 2nd Motor
1	Reverse Run/Stop	9	2-Stage Accel and Decel
2	Multi-speed select, bit1	10	Not Used
3	Multi-speed select, bit 2	11	Free-run Stop
4	Multi-speed select, bit 3	12	External Trip
5	Multi-speed select, bit 4	13	Unattended Start Protection
6	Jogging	14	Commercial Power Source
7	External DC Braking	15	Software Lock

## Output terminal Information

Output Terminal Information (Word 1)			
Bit	Description	Bit	Description
0	Not Used	8	Frequency Arrival Type 4 – over-frequency 2
1	Not Used	9	Frequency Arrival Type 5 – at-frequency (2)
2	Not Used	10	Overload Advance Notice Signal (2)
3	Brake Release Signal	11	Not Used
4	Brake Error Signal	12	Not Used
5	Zero Speed Detect	13	Not Used
6	Speed Deviation Maximum	14	Not Used
7	Position Completion	15	Not Used

Output Terminal Information (Word 2)			
Bit	Description	Bit	Description
0	Run Signal	8	Instantaneous Power Failure Signal
1	Frequency Arrival Type1 – Constant Speed	9	Under-voltage Signal
2	Frequency Arrival Type 2 – Over-frequency	10	In Torque Limit
3	Overload Advance Notice Signal (1)	11	Operation Time Over
4	Output Deviation for PID Control	12	Plug-in Time Over
5	Alarm Signal	13	Thermal Alarm Signal
6	Frequency Arrival Type 3 – at frequency	14	Not Used
7	Over-torque Signal	15	Not Used

## Intelligent Input Setting Codes

Intelligent Input Terminal Setting Codes			
Code	Description	Code	Description
01	RV: Reverse Run/Stop	26	CAS: Control Gain Setting
02	CF1: Multi-speed select, bit 0	27	UP: Remote Control UP Function
03	CF2: Multi-Speed select, bit 1	28	DWN: Remote Control DOWN Function
04	CF3: Multi-speed select, bit 2	29	UDC: Remote Control Data Clearing
05	CF4: Multi-speed select, bit 3	30	Not Used
06	JG: Jogging	31	OPE: Operator Control
07	DB: External DC Braking	32	SF1: Multi-Speed Bit1
08	SET: Set 2nd Motor Data	33	SF2: Multi-Speed Bit2
09	2CH: 2-Stage Accel and Decel	34	SF3: Multi-Speed Bit3
10	Not Used	35	SF4: Multi-Speed Bit4
11	FRS: Free-run Stop	36	SF5: Multi-Speed Bit5
12	EXT: External Trip	37	SF6: Multi-Speed Bit6
13	USP: Unattended Start Protection	38	SF7: Multi-Speed Bit7
14	CS: Commercial Power Source	39	OLR: Overload Restriction
15	SFT: Software Lock	40	TL: Torque Limit Enable
16	AT: Analog Input Voltage/Current Selection	41	TRQ1: Torque Limit Selection, Bit 1
17	SET3: Set 3rd Motor Data	42	TRQ2: Torque Limit Selection, Bit 2
18	RS: Reset Inverter	43	PPI: Proportional Proportional/Integral Mode Selection
19	Not Used	44	BOK: Brake Confirmation
20	STA: Start (3-Wire Interface)	45	ORT: Orientation (Home Search)
21	STP: Stop (3-Wire Interface)	46	LAC: LAD Cancel
22	F/R: FWD/REV (3-Wire Interface)	47	PCLR: Position Deviation Reset
23	PID: PID Disable	48	STAT: Pulse Train Position Command Input Enable
24	PIDC: PID Reset	—	—
25	Not Used	255	NO: No Assignment to Terminal

## Intelligent Output Setting Codes

Intelligent Output Terminal Setting Codes			
Code	Description	Code	Description
00	RUN: Run Signal	14	Not Used
01	FA1: Frequency Arrival Type 1 – constant speed	15	Not Used
02	FA2: Frequency Arrival Type 2 – over-frequency	16	Not Used
03	OL: Overload Advance Notice Signal (1)	17	Not Used
04	OD: Output Deviation for PID Control	18	Not Used
05	AL: Alarm Signal	19	BRK: Brake Release Signal
06	FA3: Frequency Arrival type 3 – at frequency	20	BER: Brake Error Signal
07	OTQ: Over-torque Signal	21	ZS: Zero Speed Detect Signal
08	IP: Instantaneous Power Failure Signal	22	DSE: Speed Deviation Maximum
09	UV: Under-voltage Signal	23	POK: Positioning Completion
10	TRQ: In Torque Limit	24	FA4: Frequency Arrival type 4 – over-frequency (2)
11	RNT: Operation Time Over	25	FA5: Frequency Arrival Type 5 – at frequency (2)
12	ONT: Plug-in Time Over	26	OL2: Overload Advance Notice Signal (2)
13	THM: Thermal Alarm Signal	—	—

