

Table of the CVs (Configuration Variables)

CV	Description	Range	Default
1	Address	DCC 1-127 Mot 1-80	3
2	Minimal speed	1-63	2
3	Acceleration The value per increment is 5ms for a speed change of 1 For an internal speed setting of 200 (CV 5=50 or CV 94=200) the acceleration will be 1 second	1-63	2
4	Deceleration (same factor as CV 3)	1-63	2
5	Maximal speed (must be greater than CV 2)	1-63	63
6	Intermediate speed (must be greater than CV 2 and lesser than CV 5)	1-63	30
7	Version number (The used controller can be updated.)	-	various
8	Manufacturer ID	-	85
17	Extended address	1-9999	2000
18	17 = high byte / 18 = low byte	192-231 / 0-255	199 / 208
19	Consist Address (doubleheading) 0 = no consist if bit 7=1 direction inversion will occur, desired CADR + 128 = direction inversion	1-127	0
29	Configuration per DCC-specification Bit 0=0 Normal direction Bit 0=1 Inverted direction Bit 1=0 14 Speed steps Bit 1=1 28 Speed steps Bit 2=0 Digital operation only Bit 2=1 automatic analog-/digital recognition Bit 3 n/a Bit 4 n/a Bit 5=0 Short address (CV 1) Bit 5=1 extended address (CV 17/18) Bit 6/7 n/a	Value 0 * 1 0 2 * 0 4 * - 0 * 32	0-255 6
49	Decoder configuration Bit 0=0 compensation on Bit 0=1 compensation off Bit 3=0 data format DCC and Motorola** Bit 3=1 data format DCC only Bit 4=0 data format DCC and Motorola Bit 4=1 data format only Motorola Bit 6=0 Analog recognition Bit 6=1 Digital operation only with braking section Bit 7=0 braking invoked by signal Bit 7=1 braking invoked by analog voltage <i>Attention: If data format Motorola** with Bit 3 and DCC data format with Bit 4 are inactivated, the decoder will not respond to any signal and can only be programmed</i>	Value 0 * 1 0 * 8 0 * 16 0 * 64 0 * 128	0-255 0
50	Dimming of Lighting	0-31	16
51	Analog operation 1 = AC only 2 = DC only 3 = AC/DC with automatic recognition	1-3	3
53	Sampling rate for compensation reduce if the loco runs erratically	1-255	40
54	Decoder Configuration Setting for 12 V motor Setting for 14 V motor Setting for 16 V motor Repetition rate of motor control constantly Repetition rate of motor control dependent on speed steps slower at high speed steps <i>Bit 3-7 have not to be modified!</i>	Wert 0 * 1 3 0 4 *	0-255 132
58	Time slot for ADC sampling Enlarge value, if the loco runs erratically at slow speed; reduce value, when with reduced value of CV 53 the maximum speed of the loco is to slow	0-255	8
59	Reset to factory default CV = 1	0, 1	0

CV	Description	Range	Default
60	Overload monitor (do NOT change) 0 = off, 45 = active	0, 45	45
65	Offset-Register for CV-progr. using a Motorola** central unit	0-255	0
66	Page Register for CV-progr. using a Motorola** central unit	0-255	0
100	Error storage 0 = no error (Reset error storage) 1 = short-circuit motor 2 = short-circuit light	0-2	0

* **Factory defaults**