

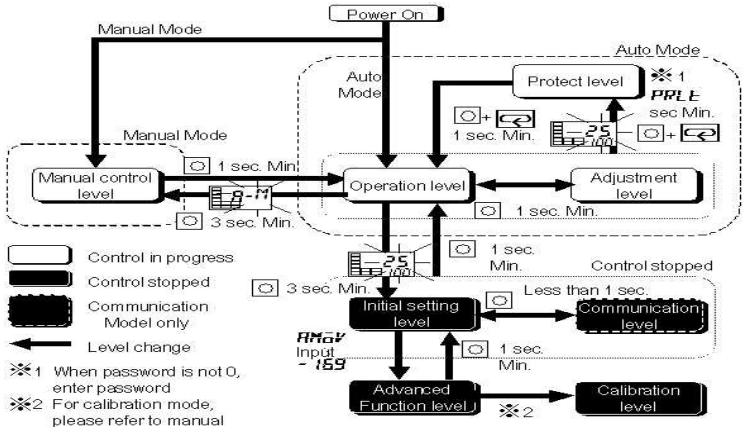
new E5CN-D Parameter List

NO.	MODE	DISPLAY	FUNCTION	RANGE	UNIT	DEFAULT	USER	REMARKS	
1		PHGV	MOVE TO PROTECT LEVEL	-1999 to 9999	-	0	-	*3 Only available when password <= zero (0)	
2	PROTECT LEVEL	oRPL	OPERATION / ADJUSTMENT PROTECTION	0 to 3	-	0	-	*3 Protect level of parameter (0=Low 3=High)	
3		LCPL	INITIAL SETTING / COMMUNICATION PROTECT	0 to 2	-	1	-	*3 Protect level of levels (0=Low 2=High)	
4		HLPL	SETTING CHANGE PROTECTION	oFF / oN	-	oFF	-	*3	
5		PMsk	PARAMETER MASK	oFF / oN	-	oN	-	*3 Displayed only when setting parameter mask. off shows all parameter	
6		PRPL	MOVE TO PROTECT LEVEL PASSWORD	-1999 to 9999	-	0	-	*3 press "level" key with up/down key to change password	
7		OPERATION LEVEL	M-M	AUTO/MANUAL SELECT	-	-	-	-	Pid control only, displayed when "Additional Auto/Manual select" is on
8	M-SP		MULTI SETPOINT (SETPOINT 0-3)	0 to 3	-	0	-	Gives the number of the current active setvalue (0-3)	
9	SP-M		SETPOINT DURING SP RAMP	READ ONLY	-	E.U.	-	-	Current setvalue while sv is ramping up to target sv
10	CL1 CL2		HEATER CURRENT 1 AND 2 VALUE MONITOR	READ ONLY	-	A	-	-	Reads the heater current trough CT in conduction (MV <= 0%)
11	LCR1 LCR2		LEAKAGE CURRENT 1 AND 2 VALUE MONITOR	READ ONLY	-	A	-	-	Reads the heater current trough CT when MV = 0%
12	PPSt		PROGRAM START	PSEt / StRPt	-	-	PSEt	-	Programmer idle (PSEt) or running (StRPt)
13	SHtP		SOAK TIME REMAINING	0 - 9999	-	m/h	-	-	Reads the remaining soak time before program end
14	R-5		RUN / STOP MODE	RUN / StoP	-	-	RUN	-	StoP = No control, only PV measurement and alarms
15	ALARM LEVEL		AL-1	ALARM VALUE 1	-1999 to 9999	E.U.	0	-	*3 Set Alarm value X for AL-1 = 2, 3, 6, 7, 8, 9, 10 and 11
16			AL-H	ALARM VALUE 1 UPPER LIMIT	-1999 to 9999	E.U.	0	-	*3 Set Alarm value H for AL-1 = 1, 4 and 5
17			AL-L	ALARM VALUE 1 LOWER LIMIT	-1999 to 9999	E.U.	0	-	*3 Set Alarm value L for AL-1 = 1, 4 and 5
18			AL-2	ALARM VALUE 2	-1999 to 9999	E.U.	0	-	*3 Set Alarm value X for AL-2 = 2, 3, 6, 7, 8, 9, 10 and 11
19		AL-2H	ALARM VALUE 2 UPPER LIMIT	-1999 to 9999	E.U.	0	-	*3 Set Alarm value H for AL-2 = 1, 4 and 5	
20		AL-2L	ALARM VALUE 2 LOWER LIMIT	-1999 to 9999	E.U.	0	-	*3 Set Alarm value L for AL-2 = 1, 4 and 5	
21	AL-3	ALARM VALUE 3	-1999 to 9999	E.U.	0	-	*3 Set Alarm value X for AL-3 = 2, 3, 6, 7, 8, 9, 10 and 11		
22	AL-3H	ALARM VALUE 3 UPPER LIMIT	-1999 to 9999	E.U.	0	-	*3 Set Alarm value H for AL-3 = 1, 4 and 5		
23	AL-3L	ALARM VALUE 3 LOWER LIMIT	-1999 to 9999	E.U.	0	-	*3 Set Alarm value L for AL-3 = 1, 4 and 5		
24	o	MV MONITOR (OUT1)	READ ONLY	-	%	-	-	Read PID heat output value	
25	Co	MV MONITOR (OUT2)	READ ONLY	-	%	-	-	Read PID cool output value	
26	ADJUSTMENT LEVEL	LAdJ	ADJUSTMENT LEVEL	READ ONLY	-	-	-	Displayed one time when moving to adjustment level	
27		At	AUTO TUNE EXECUTE/CANCEL	oFF / oN	-	-	oFF	-	Performs a one shot autotune
28		CMWt	COMMUNICATION WRITING ALLOWED	oFF / oN	-	-	oFF	-	Parameter writing through serial comms allowed
29		CL1 CL2	HEATER CURRENT 1 AND 2 VALUE MONITOR	READ ONLY	-	A	-	-	Reads the heater current trough CT in conduction (MV <= 0%)
30		LCR1 LCR2	LEAKAGE CURRENT 1 AND 2 VALUE MONITOR	READ ONLY	-	A	-	-	Reads the heater current trough CT when MV = 0%
31		Hb1	HEATER BURNOUT DETECTION 1	0.0 to 50.0	A	0.0	0.0	-	Set low current detection level (0 = OFF)
32		Hb2	HEATER BURNOUT DETECTION 2	0.0 to 50.0	A	0.0	0.0	-	Set low current detection level (0 = OFF)
33		Hs1	HEATER SHORT SSR DETECTION 1	0.0 to 50.0	A	0.0	0.0	-	Set high leakage current detection level (50 = OFF)
34		Hs2	HEATER SHORT SSR DETECTION 2	0.0 to 50.0	A	50.0	50.0	-	Set high leakage current detection level (50 = OFF)
35		SP-0	SET POINT 0	SETPOINT UPPER to LOWER	-	E.U.	0	-	-
36		SP-1	SET POINT 1	SETPOINT UPPER to LOWER	-	E.U.	0	-	-
37		SP-2	SET POINT 2	SETPOINT UPPER to LOWER	-	E.U.	0	-	-
38	SP-3	SET POINT 3	SETPOINT UPPER to LOWER	-	E.U.	0	-	-	
39	ADJUSTMENT LEVEL	oNS	TEMPERATURE INPUT SHIFT	-199.9 to 999.9	E.U.	0.0	-	Trim the PV to match an external reference source, linear 1 point method	
40		oNSH	TEMPERATURE INPUT SHIFT UPPER LIMIT	-199.9 to 999.9	E.U.	0.0	-	Trim the PV to match an external reference source, high point	
41		oNSL	TEMPERATURE INPUT SHIFT LOWER LIMIT	-199.9 to 999.9	E.U.	0.0	-	Trim the PV to match an external reference source, low point	
42		P	PROPORTIONAL BAND	0.1 to 999.9	E.U.	8.0	-	*4 with E5CN-xxxL : P = 10% f.s.	
43		I	INTEGRAL TIME	0 TO 3999	SEC	233	-	If "I" = 0 then "oF-R" (line 47) is 50% by default	
44		d	DIFFERENTIAL TIME	0 TO 3999	SEC	40	-	When RT is on (line 119) range is 0.0 to 999.9	
45	Co-5C	COOLING COEFFICIENT	0.01 to 99.99	-	1.00	-	Only Heat/Cool operation. Balance control by adjusting cool output gain		
46	Co-db	DEAD BAND	-199.9 to 999.9 (-19.99 to 99.99 *4)	E.U.	0.0	-	Only Heat/Cool operation. Area around 0% MV where MV is forced to 0%		
47	oF-R	MANUAL RESET VALUE	0.0 to 100.0	%	50.0	-	Remove PV-SV offset in P or PD operation (available when I=0)		
48	HYS	HYSTERESIS (OUT1)	0.1 to 999.9 (0.01 to 99.99 *4)	E.U.	1.0	-	Only On/Off operation. Output OFF at SV, Output ON at SV - hys (0.1 for *4)		
49	Co-HYS	HYSTERESIS (OUT2)	0.1 to 999.9 (0.01 to 99.99 *4)	E.U.	1.0	-	Only On/Off operation. Output OFF at SV, Output ON at SV + hys (0.1 for *4)		
50	SoRK	PROGRAM SOAK TIME	1 - 9999	m/h	0	-	Set time for Soak/Dwell here		
51	Wt-b	PROGRAM WAIT BAND	OFF, 0.1 to 999.9	E.U.	oFF	-	When the PV goes outside the band the Soak time is on WAIT		
52	MV-5	MANUAL VALUE AT STOP	MV UPPER to LOWER LIMIT	-	%	0.0	-	Forced output % when the controller is stopped (RUN/STOP)	
53	MV-E	MANUAL VALUE AT PV ERROR	MV UPPER to LOWER LIMIT	-	%	0.0	-	Forced output % when the sensor error break alarm is active	
54	SPRt	SP RAMP SET VALUE	OFF, 1 to 9999	E.U.	oFF	-	-	Maximum change of SV per minute or second (set with parameter #84)	
55	oL-H	MV UPPER LIMIT	0.0 to 105.0	%	105.0	-	-	0.0 is not valid when using standard control (-0.1 or 0.1 is used)	
56	oL-L	MV LOWER LIMIT	(-105.0) -5.0 to 0.0 (or oL-H)	%	-5.0 105.0	-	-	DEPENDING ON standard OR Heat & Cool Control	
57	INITIAL SETTING LEVEL	oN-t	INPUT TYPE	0 to 23	-	5	-	*3 *4 For Analogue Input Type (E5CN-xxxL) range = 0 - 4 default is 0	
58		oN-H	SCALING UPPER LIMIT	SCALE LOW+1 to 9999	E.U.	100	-	*1 Analogue input only	
59		oN-L	SCALING LOWER LIMIT	-1999 to SCALE HIGH -1	E.U.	0	-	*1 Analogue input only	
60		dP	DECIMAL POINT	0 to 1	-	0	-	Setting provides xxxx or xxx.x display (*4 = 0 to 4 decimal places)	
61		d-U	TEMPERATURE UNIT SELECTION	C / F	-	C	-	Select degree Centigrade of Fahrenheit	
62		SL-H	SETVALUE UPPER LIMIT	SL-L+1 to SENSOR High	-	1300	-	*1 (Default Pt100 setting = 850 Default *4 setting 100)	
63		SL-L	SETVALUE LOWER LIMIT	SENSOR Low to SL-H-1	-	-200	-	*1 (Default *4 setting 0)	
64		CoML	CONTROL: PID - ON/OFF	Pc/d / oN/oF	-	oN/oF	-	Pc.d = 2PID - oN/oF = ON/OFF	
65		5-HC	CONTROL: STANDARD - HEAT&COOL	StNd / H-C	-	StNd	-	StNd=Standard H-C=Heat&Cool (with H&C 2 alarms max, not 3)	
66		St	ST SELF TUNING	oFF / oN	-	oN	-	oN Starts AT on power-up and when <= St-b (line 95)	
67		PLRN	PROGRAM PATTERN TYPE	oFF / StoP / CoMnt	-	oFF	-	type of programmer, OFF or Continue (run) / Stop (run) at end of soak/dwell	
68		CP	CONTROL PERIOD (OUT1)	0.5, 1 to 99 (steps of 1 sec)	SEC	20	-	OUT1 duty cycle at 100% MV (heat)	
69	Co-CP	CONTROL PERIOD (OUT2)	0.5, 1 to 99 (steps of 1 sec)	SEC	20	-	OUT2 duty cycle at 100% MV (cool)		
70	oREV	DIRECT / REVERSE OPERATION	oP-R / oP-D	-	oP-R	-	Usually REVERSE is for heat and DIRECT is for cool applications		
71	ALt1	ALARM 1 TYPE	0 to 12	-	2	-	*3 Alarm Type 1 is not shown when PLRN(line 67) is in use (Cont or Stop)		
72	ALt2	ALARM 2 TYPE	0 to 11	-	2	-	*3		
73	ALt3	ALARM 3 TYPE	0 to 11	-	2	-	*3		
74	oP-t	TRANSFER OUTPUT TYPE	oFF SP SP-M PV MV Co-MV	-	oFF	-	-	Only for Linear Output models (E5CN-Cxxx-xxx)	
75	oP-H	TRANSFER OUTPUT UPPER LIMIT	low to high of SP, MV or PV	-	100.0	-	-	Only for Linear Output models (E5CN-Cxxx-xxx)	
76	oP-L	TRANSFER OUTPUT LOWER LIMIT	low to high of SP, MV or PV	-	0.0	-	-	Only for Linear Output models (E5CN-Cxxx-xxx)	
77	oI-t	LINEAR OUTPUT TYPE	0-20 / 4-20	mA	4-20	-	-	Only for Linear Output models (E5CN-Cxxx-xxx)	
78	RMGV	MOVE TO ADVANCED FUNCTION SETTING LEVEL	-1.999 to 9.999	-	0	-	-	Move to ADVANCED level with -169 (default factory setting)	

		0	1	2	3
operation level	PV	R	R	R	R
	SV	RW	RW	RW	R
	other	RW	RW	X	X
Adjustment level		RW	X	X	X

	0	1	2
Initial setting level	Y	Y	N
Communications setting level	Y	Y	N
Advanced function setting level	Y	N	N

	off	on
set-up can be changed by key	Y	
set-up cannot be changed by key		Y



NOT ALL PARAMETERS ARE SHOWN AT ALL TIMES !! (DEPEND ON FUNCTION AVAILABLE OR SELECTED)

* 1 AFTER THE TEMPERATURE INPUT TYPE IS SET, THE UPPER AND LOWER SCALING VALUES CAN BE SET

* 2 PV IS FIXED RED OR FIXED GREEN OR GREEN-RED ON ALM1 OR RED-GREEN ON ALM1 OR GREEN WITHIN STABLE BAND AND RED OUTSIDE OR AMBER BELOW, GREEN WITHIN AND RED ABOVE BAND

* 3 MORE DETAILS AT THE BOTTOM OF THIS OR THE OTHER SIDE PAGE

* 4 Valid for E5CN-xxxL-500 linear input models

NEW CN

- BLUE: Input and PV
- GREEN: Control / PID
- PURPLE: Alarms
- GREY: MV / Output
- YELLOW: SetValue SV/SP
- ORANGE: HA Heater Alarm (Burnout and SSR short)



new E5CN-D Parameter List

NO.	MODE	DISPLAY	FUNCTION	RANGE	UNIT	DEFAULT	USER	REMARKS
79		INI	PARAMETER INITIALIZE	OFF / FACL / USER	-	OFF		OFF keep settings, FACL return to factory defaults, USER reset cust defaults
80		EV-M	NUMBER OF MULTI SP USED	0 to 2	-	1		0= No SP via event 1= 1 event I/P for (2)SP 2= 2 event I/P for (4)SP
81		EV-1	EVENT INPUT ASSIGNMENT 1	NGNE / StOP / MANU / PRSt	-	NGNE		if Event I/P closed, control=stopped, Manual MV=selected or program=started
82		EV-2	EVENT INPUT ASSIGNMENT 2	NGNE / StOP / MANU / PRSt	-	StOP		if selected and Event I/P closed, control is stopped or program is stratred
83		HSPU	MULTI SP USES	OFF / ON	-	OFF		OFF means only one setvalue (SP) available ON means 4 SP available
84		SPRU	SETPOINT RAMP TIME UNIT	Seconds / Minutes	-	M		Amount of E.U. per second or per minute of SP ramp
85		RESL	STANDBY SEQUENCE RESET METHOD	A / b	-	A		In mode b the alarm stand-by condition is only reset on power up
86		AL IN	ALARM 1 OPEN IN ALARM	N-a / N-C	-	N-a		N-a Close relay in Alarm N-C Open relay in Alarm
87		ALH1	ALARM 1 HYSTERESIS	0.1 - 999.9	E.U.	0.2		Difference between switch ON and Switch OFF alarm. (E5CN-xxL type 0.02)
88		AL2N	ALARM 2 OPEN IN ALARM	N-a / N-C	-	N-a		N-a Close relay in Alarm N-C Open relay in Alarm
89		ALH2	ALARM 2 HYSTERESIS	0.1 - 999.9	E.U.	0.2		Difference between switch ON and Switch OFF alarm. (E5CN-xxL type 0.02)
90		AL3N	ALARM 3 OPEN IN ALARM	N-a / N-C	-	N-a		N-a Close relay in Alarm N-C Open relay in Alarm
91		ALH3	ALARM 3 HYSTERESIS	0.1 - 999.9	E.U.	0.2		Difference between switch ON and Switch OFF alarm. (E5CN-xxL type 0.02)
92		HbU	HBA (HEATER BURNOUT ALARM) USED	OFF / ON	-	ON		HBA alarm enabled
93		HbL	HBA LATCH	OFF / ON	-	OFF		HBA alarm latched (alarm is hold until operator resets the alarm)
94		HbH	HBA HYSTERESIS	0.1 to 50.0	A	0.1		Difference between switch ON and Switch OFF alarm.
95		St-b	ST (SELF TUNE) STABLE RANGE	0.1 to 999.9	°C / °F	15.0		When PV goes out of stable range, tune is started if St is on (line 66)
96		ALFA	ALFA: SETVALUE CHANGE FEED FORWARD	0.00 to 1.00	-	0.65		OMRON's unique 2PID control feature, 0.65 is good for most applications
97		INF	INPUT FILTER	0.0 - 999.9	SEC	0.0		Digital first order input filter with time constant to be set
98		PVAd	ADDITIONAL PV DISPLAY	OFF / ON	-	OFF		When set to ON it is possible to show PV without SV
99		o-dP	MANIPULATED VARIABLE (MV) DISPLAY	OFF / ON	-	OFF		When set to ON it is possible to show mv in scroll list
100		REt	AUTOMATIC RETURN OF DISPLAY MODE	OFF , 1 to 99	SEC	OFF		Automatic fall back to operator level (time set)
101		AL1t	ALARM 1 LATCH	OFF / ON	-	OFF		To reset latch: power on/off or move in/out of setting level
102		AL2t	ALARM 2 LATCH	OFF / ON	-	OFF		To reset latch: power on/off or move in/out of setting level
103		AL3t	ALARM 3 LATCH	OFF / ON	-	OFF		To reset latch: power on/off or move in/out of setting level
104		PRLt	PROTECT LEVEL MOVE TIME	1 to 30	SEC	3		Key pressing time required to move to protect level
105	ADVANCED	SErE	INPUT SENSOR ERROR ALARM	OFF / ON	-	OFF		When set to on alarm 1 becomes "or" with this alarm
106	FUNCTION	CJC	COLD JUNCTION COMPENSATION METHOD	OFF / ON	-	ON		ON =Internal CJC OFF External CJC
107	SETTING	RLRV	MB COMMAND LOGIC SWITCHING	OFF / ON	-	OFF		When set to ON communication is according to E5_J
108	LEVEL	CLPR	PV COLOR CHANGE FUNCTION	-->	-	Red		*2 oRG Red GRN R-G G-R R-GR G-oR o-GR
109		PV-b	PV COLOR CHANGE STABLE BAND	0.1 to 999.9	E.U.	5.0		PV display is green when PV is within the stable band
110		AL1N	ALARM 1 ON DELAY	0 - 999	SEC	0		Set the time for the alarm condition to be present before the alarm is active
111		AL2N	ALARM 2 ON DELAY	0 - 999	SEC	0		Set the time for the alarm condition to be present before the alarm is active
112		AL3N	ALARM 3 ON DELAY	0 - 999	SEC	0		Set the time for the alarm condition to be present before the alarm is active
113		AL1F	ALARM 1 OFF DELAY	0 - 999	SEC	0		Set the time for the alarm condition to be present before the alarm is deactive
114		AL2F	ALARM 2 OFF DELAY	0 - 999	SEC	0		Set the time for the alarm condition to be present before the alarm is deactive
115		AL3F	ALARM 3 OFF DELAY	0 - 999	SEC	0		Set the time for the alarm condition to be present before the alarm is deactive
116		CSbP	INPUT SHIFT TYPE	CNS1 / CNS2	-	CNS1		One point (linear offset) or Two point input shift (offset & gain alternative)
117		MVSE	MV AT SENSOR ERROR & STOP SELECT	OFF / ON	-	OFF		When OFF MV at error is 0%, when ON MV value is set at line 52/53
118		AMAd	AUTO/MANUAL SELECT ADDITIONAL	OFF / ON	-	ON		Shows or Hide the Auto/Manual selection display in the operator list
119		RL	RT (robust tuning)	OFF / ON	-	OFF		New style auto tuning, use when PV hunting is becomes a problem
120		HSA	HSA (HEATER SSR SHORT ALARM) USED	OFF / ON	-	OFF		Heater/SSR Short alarm enabled
121		HSL	HSA LATCH	OFF / ON	-	OFF		HSA alarm latched (alarm is hold until operator resets the alarm)
122		HSH	HSA HYSTERESIS	0.1 to 50.0	A	0.1		Difference between switch ON and Switch OFF alarm.
123		LbAL	LBA (LOOP BREAK ALARM) DETECTION TIME	0 - 9999	SEC	0		0 means LBA is off. For E5CN-xxL types range = 0.00 to 99.99
124		LbAL	LBA LEVEL	0.1 to 999.9 (0.01 to 99.99 *4)	E.U.	0		set this value the same as the P value, For E5CN-xxL type default is 10% f.s.
125		LbAB	LBA BAND	0.0 to 999.9	E.U.	3		For E5CN-xxL type default is 0.20
126		oUe1	CONTROL OUTPUT 1 ASSIGNMENT	*4 + *5	-	o		Select function for output 1 : none, output, alarm, or Program end
127		oUe2	CONTROL OUTPUT 2 ASSIGNMENT	*4	-	NGNE		Select function for output 2 : none, output, alarm, or Program end
128		ALM1	SUB / AUX / ALM OUTPUT 1 ASSIGNMENT	*4	-	ALM1		Select function for sub output 1 : none, output, alarm, or Program end
129		ALM2	SUB / AUX / ALM OUTPUT 2 ASSIGNMENT	*4	-	ALM2		Select function for sub output 2 : none, output, alarm, or Program end
130		CSEL	CHARACTER SELECT	OFF / ON	-	ON		use 11 of 7 segments display, set of off if you need old style 7 segment
131		t-U	SOAK TIME UNIT	Minute / Hour	-	M		
132		ALSP	ALARM SETPOINT SELECTION	SP-H / SP	-	SP-H		alarm react on target SP or on SP during ramp
133		CMaV	CALIBRATION MOVE PARAMETER	-1.999 to 9.999	-	0		Move to calibration mode
134		PSEL	PROTOCOL SELECT	CNF / Mod	-	CNF		select communications protocol, CompowayF or Modbus RTU
135	COMMUNICA-	U-NG	COMMUNICATIONS UNIT NO.	0 - 99	-	1		Controller's address
136	TIONS	bPS	BAUD RATE	12 24 48 96 192 384	kbps	96		Communication speed
137	SETTING	LEN	COMMUNICATIONS DATA LENGTH	7 / 8	BITS	7		To set the length of data
138	LEVEL	Stb	COMMUNICATIONS STOP BIT	1 / 2	BITS	2		Number of stop bits
139		PRbY	COMMUNICATIONS PARITY	NGNE EVEN odd	-	EVEN		To set the parity check bit
140		SDtL	SEND DATA WAIT TIME	0 - 99	ms	20		time wait before reply is given

Input type	Name	Set Value	Input Temperature Range		
Temperature input type	Platinum resistance thermometer	PT100	0	-200 to 850 (°C)	-300 to 1500 (°F)
			1	-199.9 to 500.0 (°C)	-199.9 to 900.0 (°F)
			2	0.0 to 100 (°C)	0.0 to 210.0 (°F)
		JPT100	3	-199.9 to 500.0 (°C)	-199.9 to 900.0 (°F)
		4	0.0 to 100 (°C)	0.0 to 210.0 (°F)	
Thermocouple	K	5	-200 to 1300 (°C)	-300 to 2300 (°F)	
		6	-20.0 to 500.0 (°C)	0.0 to 900.0 (°F)	
		J	7	-100 to 850 (°C)	-100 to 1500 (°F)
		8	-20 to 400.0 (°C)	0.0 to 750 (°F)	
		T	9	-200 to 400 (°C)	-300 to 700 (°F)
		10	-199.9 to 400.0 (°C)	-199.9 to 700 (°F)	
		E	11	0 to 600 (°C)	0 to 1100 (°F)
		L	12	-100 to 850 (°C)	-100 to 1500 (°F)
		U	13	-200 to 400 (°C)	-300 to 700 (°F)
		14	-199.9 to 400.0 (°C)	-199.9 to 700 (°F)	
		N	15	-200 to 1300 (°C)	-300 to 2300 (°F)
		R	16	0 to 1700 (°C)	0 to 3000 (°F)
		S	17	0 to 1700 (°C)	0 to 3000 (°F)
		B	18	100 to 1800 (°C)	300 to 3200 (°F)
Infrared temperature sensor ES1A	K10 to 70°C	19	0 to 90 (°C)	0 to 190 (°F)	
	K80 to 120°C	20	0 to 120 (°C)	0 to 240 (°F)	
	K115 to 165°C	21	0 to 165 (°C)	0 to 320 (°F)	
	K160 to 260°C	22	0 to 260 (°C)	0 to 500 (°F)	
Analog input	0 to 50 mV	23	One of following ranges depending on the result of scaling: -1999 to 9999, -199.9 to 999.9		

Input type	Name	Set Value	Input Temperature Range		
Linear input type	Linear	mA	0	4-20mA	-1999 to 9999
			1	0-20mA	-199.9 to 999.9
		V	2	1-5 Volt	-19.99 to 99.99
			3	0-5 Volt	-1.999 to 9.999
		4	0-10 Volt	-1.999 to 9.999	

Set Value	Alarm Type	Alarm Output Operation	
		When X is positive	When X is negative
0	Alarm function OFF	Output OFF	
1	Upper- and lower-limit (deviation)		*2
2	Upper-limit (deviation)		
3	Lower-limit (deviation)		
4	Upper- and lower-limit range (deviation)		*2
5	Upper- and lower-limit with standby sequence (deviation)		*2
6	Upper-limit with standby sequence (deviation)		
7	Lower-limit with standby sequence (deviation)		
8	Absolute-value upper-limit		
9	Absolute-value lower-limit		
10	Absolute-value upper-limit with standby sequence		
11	Absolute-value lower-limit with standby sequence		
12	Loop break alarm (RLt only)		

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 * 1 AFTER THE TEMPERATURE INPUT TYPE IS SET, THE UPPER AND LOWER SCALING VALUES CAN BE SET
 * 2 PV is FIXED ORANGE or FIXED RED or FIXED GREEN or RED>GREEN on ALM1 or GREEN>RED on ALM1 or GREEN within stable band and RED outside or GREEN below, ORANGE within and RED above or ORANGE below GREEN within and RED above
 * 3 MORE DETAILS AT THE BOTTOM OF THIS OR THE OTHER SIDE PAGE
 * 4 NGNE o [-o ALM1 ALM2 ALM3 PEnd *5 E5CN-xxL type NGNE o [-o only

NEW CN

- BLUE: Input and PV
- GREEN: Control / PID
- PURPLE: Alarms
- GREY: MV / Output
- YELLOW: SetValue SV/SP
- ORANGE: HA Heater Alarm (Burnout and SSR short)

