

ELR 9000 3D / EL 9000 B register list for devices with KE firmware from V2.24 (standard) or V2.08 (with GPIB)
(check the installed version in your device's MENU in item ABOUT HW, SW)

		3)			10)	
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Modbus address				Access				Data type				Data length in bytes				Number of registers				Osta				Profibus slot / Profnet subsl				EtherCAT SDOPDO?			
Read coils (0x01)				Write single coil (0x05)				Write multiple registers (0x10)				Description																			
0	x			R	uint(16)	2	1	Colts : Remote	0x0000 = off; 0xFF00 = on	2	1	x																			
21	x			R	string	40	20	ASCII	ELR 9000-170	1	1	x																			
41	x			R	string	40	20	ASCII	ELR 9000-170	1	2	x																			
81	x			R	string	40	20	ASCII	ELR 9000-170	1	3	x																			
81	x			R	string	40	20	ASCII	ELR 9000-170	1	4	x																			
101	x			R	string	40	20	ASCII	ELR 9000-170	1	5	x																			
101	x			R	string	40	20	ASCII	ELR 9000-170	1	6	x																			
121	x			R	float	4	2	Floating point number IEEE754	80	1	7	x																			
123	x			R	float	4	2	Floating point number IEEE754	170	1	8	x																			
125	x			R	float	4	2	Floating point number IEEE754	3500	1	9	x																			
127	x			R	float	4	2	Floating point number IEEE754	12	1	10	x																			
129	x			R	float	4	2	Floating point number IEEE754	0.005	1	11	x																			
131	x			R	string	40	20	ASCII	33230401	1	12	x																			
171	x			R	string	40	20	ASCII	10001002	1	13	x																			
171	x		x	RW	string	40	20	ASCII	UDC	0	1	14	x																		
191	x			R	string	40	20	ASCII	V2.01 05.09.2012	1	15	x																			
211	x			R	string	40	20	ASCII	V2.02 13.08.2012	1	16	x																			
231	x			R	string	40	20	ASCII	V1.5.6	1	17	x																			
402	x		x	RW	uint(16)	2	1	Colts : Remote	0x0000 = off; 0xFF00 = on	2	1	x																			
405	x		x	RW	uint(16)	2	1	Colts : Input	0x0000 = off; 0xFF00 = on	2	4	x																			
407	x		x	RW	uint(16)	2	1	Colts : Auto-On	0x0000 = off; 0xFF00 = auto-on	2	30	x																			
408	x		x	RW	uint(16)	2	1	Colts : Power-On	0xFFFE = restore	2	6	x																			
409	x		x	RW	uint(16)	2	1	Colts : Operation mode	0x0000 = LUP; 0xFF00 = LUR	2	7	x																			
410	x			W	uint(16)	2	1	Colts : Restart	0x0000 = execute	2	8	x																			
411	x		x	W	uint(16)	2	1	Colts : Alarms	0xFF00 = acknowledge	2	9	x																			
416	x		x	RW	uint(16)	2	1	Colts : VREF	0x0000 = 10V; 0xFF00 = 5V	2	14	x																			
417	x		x	RW	uint(16)	2	1	Colts : REM-SB Level	0x0000 = normal; 0xFF00 = inverted	2	36	x																			
418	x		x	RW	uint(16)	2	1	Colts : REM-SB Action	0x0000 = DC off; 0xFF00 = DC auto	2	37	x																			
422	x		x	RW	uint(16)	2	1	Colts : Controller speed	0x0000 = slow; 0xFF00 = fast	2	38	x																			
425	x		x	RW	uint(16)	2	1	Colts : Condition	0x0000 = off; 0xFF00 = unchanged	2	38	x																			
440	x		x	RW	uint(16)	2	1	Alarms 1	0x0000 = OVP (default); 0x0001 = OCP; 0x0002 = OPP; 0x0003 = OVP + OCP; 0x0004 = OVP + OCP; 0x0005 = OCP + OPP; 0x0006 = OVP + OCP + OCP + OCP;	2	28	x																			
441	x		x	RW	uint(16)	2	1	Alarms 2	0x0000 = OT + PF (default); 0x0001 = OT; 0x0002 = PF; 0x0000 = CV; 0x0001 = DC output status	2	28	x																			
442	x		x	RW	uint(16)	2	1	Status DC		2	28	x																			
502	x		x	RW	uint(16)	2	1	0x0000 - 0x00E5 (0 - 102%)	Voltage value (for translation see programming guide)	2	23	x																			
501	x		x	RW	uint(16)	2	1	0x0000 - 0x00E5 (0 - 102%)	Current value (for translation see programming guide)	2	24	x																			
502	x		x	RW	uint(16)	2	1	0x0000 - 0x00E5 (0 - 102%)	Power value (for translation see programming guide)	2	25	x																			
503	x		x	RW	uint(16)	2	1	variable - 0x00CC (x - 100%)	Resistance value (for translation see programming guide)	2	26	x																			
505	x			R	uint(32)	4	2	Bit 0 - 4: Control location	0x00 = free; 0x01 = local; 0x03 = USB; 0x04 = analog; 0x05 = Profibus; 0x06 = Ethernet; 0x08 = Master/Slave; 0x09 = RS232; 0x10 = CANopen; 0x12 = Modbus TCP 1P; 0x13 = Profinet 1P; 0x14 = Ethernet 1P; 0x15 = Ethernet 2P; 0x16 = Modbus TCP 2P; 0x17 = Profinet 2P; 0x18 = GPRS; 0x19 = CAN; 0x1A = EtherCAT	2	27	x																			
507	x			R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual voltage (for translation see programming guide)	2	28	x																			
508	x			R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual current (for translation see programming guide)	2	29	x																			
509	x			R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual power (for translation see programming guide)	2	30	x																			
520	x			R	uint(16)	2	1	0x0000 - 0xFFFF	Count	3	20	x																			
521	x			R	uint(16)	2	1	0x0000 - 0xFFFF	Count	3	21	x																			
522	x			R	uint(16)	2	1	0x0000 - 0xFFFF	Count	3	22	x																			
523	x			R	uint(16)	2	1	0x0000 - 0xFFFF	Count	3	23	x																			
524	x			R	uint(16)	2	1	0x0000 - 0xFFFF	Count	3	24	x																			
550	x		x	RW	uint(16)	2	1	ELR 0x000 - 0xE147 (0 - 110%)	OVP threshold (for translation see programming guide)	3	0	x																			
553	x		x	RW	uint(16)	2	1	ELR 0x000 - 0xE147 (0 - 110%)	OCP threshold (for translation see programming guide)	3	3	x																			
556	x		x	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OPP threshold (for translation see programming guide)	3	6	x																			
559	x		x	RW	uint(16)	2	1	0x0000 - 0x00E5 (0 - 102%)	UVD threshold (for translation see programming guide)	3	9	x																			
563	x		x	RW	uint(16)	2	1	Adjustable UVD notification	0x0000 = nothing; 0x0001 = signal; 0x0002 = warning; 0x0003 = alarm	3	12	x																			
561	x		x	RW	uint(16)	2	1	0x0000 - 0x00E5 (0 - 102%)	OVD threshold (for translation see programming guide)	3	11	x																			
562	x		x	RW	uint(16)	2	1	Adjustable OVD notification	0x0000 = nothing; 0x0001 = signal; 0x0002 = warning; 0x0003 = alarm	3	12	x																			
563	x		x	RW	uint(16)	2	1	0x0000 - 0x00E5 (0 - 102%)	UCD threshold (for translation see programming guide)	3	13	x																			
564	x		x	RW	uint(16)	2	1	Adjustable UCD notification	0x0000 = nothing; 0x0001 = signal; 0x0002 = warning; 0x0003 = alarm	3	14	x																			
565	x		x	RW	uint(16)	2	1	0x0000 - 0x00E5 (0 - 102%)	OC threshold (for translation see programming guide)	3	15	x																			
566	x		x	RW	uint(16)	2	1	Adjustable OCD notification	0x0000 = nothing; 0x0001 = signal; 0x0002 = warning; 0x0003 = alarm	3	16	x																			
567	x		x	RW	uint(16)	2	1	0x0000 - 0x00E5 (0 - 102%)	OPD threshold (for translation see programming guide)	3	17	x																			
568	x		x	RW	uint(16)	2	1	Adjustable OPD notification	0x0000 = nothing; 0x0001 = signal; 0x0002 = warning; 0x0003 = alarm	3	18	x																			
650	x		x	RW	uint(16)	2	1	Colts : Mode	0x0000 = Slave; 0xFF00 = Master	4	0	x																			
652	x		x	RW	uint(16)	2	1	Colts : Link mode of Share-Bus	0x0000 = Slave; 0xFF00 = Master	4	2	x																			
653	x		x	RW	uint(16)	2	1	Colts : MS on/off	0x0000 = off; 0xFF00 = on	4	3	x																			
654	x		x	W	uint(16)	2	1	Colts : MS start init	0xFF00 = Start init	4	4	x																			
655	x		x	R	uint(16)	2	1	Reg : MS status	0x0000 = not initialised; 0x0001 = init running; 0x0003 = set defaults; 0x0004 = setup interface; 0x0005 = assigned; 0xFFFC = disrupted; 0xFFFD = different models detected; init not OK; 0xFFFE = error; 0xFFFF = init OK	4	5	x																			
656	x			R	float	4	2	Floating point number IEEE754	500	4	6	x																			
658	x			R	float	4	2	Floating point number IEEE754	850	4	7	x																			
660	x			R	float	4	2	Floating point number IEEE754	16.50	4	8	x																			
662	x			R	uint(16)	2	1	1-9		4	9	x																			
850	x		x	RW	uint(16)	2	1	Colts : Start/Stop	0x0000 = Stop; 0xFF00 = Start	5	0	x																			
851	x		x	RW	uint(16)	2	1	Colts : U	0x0000 = not assigned; 0xFF00 = Assign function to voltage	5	1	x																			
852	x		x	RW	uint(16)	2	1	Colts : I	0x0000 = not assigned; 0xFF00 = Assign function to current	5	2	x																			
854	x		x	RW	uint(16)	2	1	Colts : L-I	0x0000 = not assigned; 0xFF00 = Assign function to L-I curve	5	4	x																			
855	x		x	RW	uint(16)	2	1	Colts : L-U	0x0000 = not assigned; 0xFF00 = Assign function to L-U curve	5	5	x																			
858	x			W	uint(16)	2	1	Colts : Submit for XY	0xFF00 = Submit curve data	5	8	x																			
860	x		x	RW	uint(16)	2	1	0x0001 - 0x0003	0x0001 = 0x0003	5	9	x																			
863	x		x	RW	uint(16)	2	1	0x0001 - 0x0003	0x0000 = infinite	5	10	x																			
861	x		x	RW	uint(16)	2	1	0x0000 - 0x00E7	0x0000 = infinite	5	11	x																			
900	x		x	RW	float	32	16	Bytes 0-3: U/I/I(A/C) in V	Floating point number in IEEE754 format, see device manual for value range, chapter about function generator	6	0	x																			
901	x		x	RW	uint(16)	2	1	Bytes 4-7: U/I/I(A/C) in V	Integer in IEEE754 format: 0 - 10000 Hz	6	1	x																			
902	x		x	RW	uint(16)	2	1	Bytes 8-11: I/I(1/I) in Hz	Integer in IEEE754 format: 0 - 10000 Hz	6	2	x																			
903	x		x	RW	uint(16)	2	1	Bytes 12-15: I/I(1/I) in Hz	Integer in IEEE754 format: 0 - 10000 Hz	6	3	x																			
904	x		x	RW	uint(16)	2	1	Bytes 16-19: Angle in degrees	Integer in IEEE754 format: 0 - 360°	6	4	x																			
905	x		x	RW	uint(16)	2	1	Bytes 20-23: U/I/I(DC) in V	Floating point number in IEEE754 format, see device manual for value range, chapter about function generator	6	5	x																			
906	x		x	RW	uint(16)	2	1	Bytes 24-27: U/I/I(DC) in V	Floating point number in IEEE754 format	6	6	x																			
907	x		x	RW	uint(16)	2	1	Bytes 28-31: Sequence time in µs	ELR 9000: 100 µs...36.000.000.000 µs While current mode: EL 9000 B: 10 µs...36.000.000.000 µs	6	7	x																			
2468	x		x	R																											