

PSBE 9000 register list for devices with KE firmware from V2.29 (standard) (check the installed version in your device's MENU in item INFO HW, SW)

Modbus address (dec)		Modbus address (hex)	Read coils (0x01)	Read holding registers (0x03)	Write single coil (0x05)	Write single register (0x06)	Write multiple registers (0x10)	Description	Access	Data type	Data length in bytes	Number of registers	Data	Example	Profibus slot / Profinet subslot	Profibus/Profinet Index in slot	EtherCAT SDO/PDO?
0	0x0000	x						Device class	R	uint(16)	2	1	64 = PSBE 9000 Series	1	0	x	
1	0x0001	x						Device type	R	char	40	20	ASCII	1	1	x	
21	0x0015	x						Manufacturer	R	char	40	20	ASCII	1	2	x	
41	0x0029	x						Manufacturer address	R	char	40	20	ASCII	1	3	x	
61	0x003D	x						Manufacturer ZIP code	R	char	40	20	ASCII	1	4	x	
81	0x0051	x						Manufacturer phone number	R	char	40	20	ASCII	1	5	x	
101	0x0065	x						Manufacturer website	R	char	40	20	ASCII	1	6	x	
121	0x0079	x						Nominal voltage	R	float	4	2	Floating point number IEEE754	80	1	7	x
123	0x007B	x						Nominal current	R	float	4	2	Floating point number IEEE754	360	1	8	x
125	0x007D	x						Nominal power	R	float	4	2	Floating point number IEEE754	15000	1	9	x
127	0x007F	x						Max. internal resistance	R	float	4	2	Floating point number IEEE754	10	1	10	x
129	0x0081	x						Min. internal resistance	R	float	4	2	Floating point number IEEE754	0.006	1	11	x
131	0x0083	x						Article no.	R	char	40	20	ASCII	30000325	1	12	x
151	0x0097	x						Serial no.	R	char	40	20	ASCII	1234560001	1	13	x
171	0x00AB	x				x		User text	RW	char	40	20	ASCII		1	14	x
191	0x00BF	x						Firmware version (KE)	R	char	40	20	ASCII		1	15	x
211	0x00D3	x						Firmware version (HM)	R	char	40	20	ASCII		1	16	x
231	0x00E7	x						Firmware version (DR)	R	char	40	20	ASCII		1	17	x
402	0x0192	x		x				Remote mode	RW	uint(16)	2	1	Coil : Remote	0x0000 = off; 0xFF00 = on	2	1	x
405	0x0195	x		x				DC output/input	RW	uint(16)	2	1	Coil : Output	0x0000 = off; 0xFF00 = on	2	4	x
407	0x0197	x		x				Condition of DC output/input after power fail alarm	RW	uint(16)	2	1	Coil : Auto-On	0x0000 = off; 0xFF00 = auto	3	30	x
408	0x0198	x		x	x			Condition of DC output/input after powering the device	RW	uint(16)	2	1	Reg : Power-On	0xFFFF = off; 0xFFFE = restore	2	6	x
410	0x019A	x		x				Restart of the device (warm start)	W	uint(16)	2	1	Coil : Restart	0xFF00 = execute	2	8	x
411	0x019B	x		x				Acknowledge alarms	W	uint(16)	2	1	Coil : Alarms	0xFF00 = acknowledge	2	9	x
416	0x01A0	x		x				Analog interface: Reference voltage (pin VREF)	RW	uint(16)	2	1	Coil : VREF	0x0000 = 10V; 0xFF00 = 5V	2	14	x
417	0x01A1	x		x				Analog interface: REM-SB level	RW	uint(16)	2	1	Coil : REM-SB Level	0x0000 = normal; 0xFF00 = inverted	2	36	x
418	0x01A2	x		x				Analog interface: REM-SB action	RW	uint(16)	2	1	Coil : REM-SB Action	0x0000 = off; 0xFF00 = auto	2	37	x
425	0x01A9	x		x				Condition of DC output after leaving remote	RW	uint(16)	2	1	Coil : Condition	0x0000 = off; 0xFF00 = unchanged	2	42	x
432	0x01B0	x		x				Reset device to factory settings	RW	uint(16)	2	1	Coil : Condition	0xFF00 = Trigger reset	2	43	x
440	0x01B8		x			x		Analog interface: Pin 14 configuration	RW	uint(16)	2	1	Alarms 1 0x0000 = OVP (default); 0x0001 = OCP; 0x0002 = OPP; 0x0003 = OVP + OCP; 0x0004 = OVP + OPP; 0x0005 = OCP + OPP; 0x0006 = OVP + OCP + OPP		2	44	x
441	0x01B9		x			x		Analog interface: Pin 6 configuration	RW	uint(16)	2	1	Alarms 2 0x0000 = OT + PF (default); 0x0001 = OT; 0x0002 = PF		2	45	x
442	0x01BA		x			x		Analog interface: Pin 15 configuration	RW	uint(16)	2	1	Status DC / reg. mode 0x0000 = CV; 0x0001 = DC output status		2	46	x
443	0x01BB		x			x		Analog interface: Pins 9 and 10 configuration	RW	uint(16)	2	1	Current and voltage monitor 0x0000 = Default (VMON on pin 9 and CMON on Pin 10 / Pin 10 signals current from source or sink); 0x0001 = Pin 10 (CMON) only signals sink current (EL); 0x0002 = Pin 10 (CMON) only signals source current (PS); 0x0003 = Current mode A [source current (PS) on pin 9 and sink current (EL) on pin 10 (full range)]; 0x0004 = Current mode B [source current (PS) on pin 10 and sink current (EL) on pin 9 (full range)]; 0x0005 = Pin 10 (CMON) signals EL/PS current (0...10 V ~ -100%...0...100%, half range signal)		2	50	x
498	0x01F2		x			x		Sink mode: Set power value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Power value (for translation see programming guide)	2	21	x
499	0x01F3		x			x		Sink mode: Set current value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide)	2	20	x
500	0x01F4		x			x		Set voltage value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Voltage value (for translation see programming guide)	2	23	x
501	0x01F5		x			x		Source mode: Set current value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide)	2	24	x
502	0x01F6		x			x		Source mode: Set power value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Power value (for translation see programming guide)	2	25	x
505	0x01F9		x					Device state	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 = GPB; 0x19 = CAN; 0x1A = EtherCAT		2	27	x
								Bit 6 : Master-slave type					0 = Slave; 1 = Master				
								Bit 7 : Output state					0 = off; 1 = on				
								Bit 9-10 : Regulation mode					00 = CV; 10 = CC; 11 = CP				
								Bit 12 : PSB/PSBE 9000 operation mode					0 = source; 1 = sink				
								Bit 14 : External sense					0 = off; 1 = on				
								Bit 15 : Alarms					0 = none; 1 = active				
								Bit 16 : OVP					0 = none; 1 = active				
								Bit 17 : OCP					0 = none; 1 = active				
								Bit 18 : OPP					0 = none; 1 = active				
								Bit 19 : OT					0 = none; 1 = active				
								Bit 21-23: Power fail					0 = none; 1 = active				
								Bit 22 : Power fail 2					0 = none; 1 = active				
								Bit 23 : Power fail 3					0 = none; 1 = active				
								Bit 29 : MSP					0 = OK; 1 = Master-slave protection				
								Bit 30 : REM-SB					0 = DC enabled; 1 = REM-SB disables power output				
								Bit 31 : OCP/OPP-OCD/OPD cause					0 = source mode; 1 = sink mode				
507	0x01FB		x					Actual voltage	R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual voltage (for translation see programming guide)	2	28	x
508	0x01FC		x					Actual current	R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual current (for translation see programming guide)	2	29	x
509	0x01FD		x					Actual power	R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual power (for translation see programming guide)	2	30	x
520	0x0208		x					Count of OV alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF		3	20	x
521	0x0209		x					Source mode: Count of OC alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF		3	21	x
522	0x020A		x					Source mode: Count of OP alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF		3	22	x
523	0x020B		x					Count of OT alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF		3	23	x
524	0x020C		x					Count of PF alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF		3	24	x
525	0x020D		x					Sink mode: Count of PF alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF		3	25	x
526	0x020E		x					Sink mode: Count of OP alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF		3	26	x
550	0x0226		x			x		Overvoltage protection threshold (OVP)	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OVP threshold (for translation see programming guide)	3	0	x
553	0x0229		x			x		Source mode: Overcurrent protection threshold (OCP)	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OCP threshold (for translation see programming guide)	3	3	x
556	0x022C		x			x		Source mode: Overpower protection threshold (OPP)	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OPP threshold (for translation see programming guide)	3	6	x
569	0x0239		x			x		Sink mode: Overcurrent protection threshold OCP	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OCP threshold (for translation see programming guide)	3	4	x
570	0x023A		x			x		Sink mode: Overpower protection threshold OPP	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OPP threshold (for translation see programming guide)	3	7	x
577	0x0241		x			x		Condition of DC output after OT alarm	RW	uint(16)	2	1	Reg. Condition 0x0000 = off; 0x0001 = restore (default)		3	37	
650	0x028A		x			x		Master-slave: Link mode on MS bus	RW	uint(16)	2	1	Coil: Mode 0x0000 = Slave; 0xFF00 = Master		4	0	x
653	0x028D		x					Master-slave: Enable MS	RW	uint(16)	2	1	Coil: MS on/off 0x0000 = off; 0xFF00 = on		4	3	x
654	0x028E					x		Master-slave: Init MS	W	uint(16)	2	1	Coil: MS start init 0xFF00 = Start init		4	4	x
655	0x028F					x		Master-slave: Condition	R	uint(16)	2	1	Reg: MS status 0x0000 = not initialised; 0x0001 = init running; 0x0003 = set defaults; 0x0004 = setup interface; 0x0005 = assignment; 0xFFFC = disrupted; 0xFFFD = different models detected; init not OK; 0xFFFE = error; 0xFFFF = init OK		4	5	x
656	0x0290		x					Master-slave: Total voltage in V	R	float	4	2	Floating point number IEEE754	500	4	6	x
658	0x0292		x					Master-slave: Total current in A	R	float	4	2	Floating point number IEEE754	300	4	7	x
660	0x0294		x					Master-slave: Total power in W	R	float	4	2	Floating point number IEEE754	150000	4	8	x
662	0x0296		x					Master-slave: Number of initialised slaves	R	uint(16)	2	1	1...35		4	9	x
9000	0x2328		x			x		Upper limit of voltage set value (U-max)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Voltage value (for translation see programming guide)	2	31	x
9001	0x2329		x			x		Lower limit of voltage set value (U-min)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Voltage value (for translation see programming guide)	2	32	x
9002	0x232A		x			x		Source mode: Upper limit of current set value (I-max)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide)	2	33	x
9003	0x232B		x			x		Source mode: Lower limit of current set value (I-min)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide)	2	34	x
9004	0x232C		x			x		Source mode: Upper limit of power set value (P-max)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Power value (for translation see programming guide)	2	35	x
9005	0x232D		x			x		Sink mode: Upper limit of power set value (P-max)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Power value (for translation see programming guide)	2	36	x
9008	0x2330		x			x		Sink mode: Upper limit of current set value (I-max)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide)	2	40	x
9009	0x2331		x			x		Sink mode: Lower limit of current set value (I-min)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide)	2	41	x
10007	0x2717		x			x		Ethernet TCP: Keep-alive timeout	RW	uint(16)	2	1	Coil: Keep-alive on/off 0x0000 = off; 0xFF00 = on				
10008	0x2718		x			x		Ethernet/Profinet/Modbus TCP: DHCP	RW	uint(16)	2	1	Coil: DHCP on/off 0x0000 = off; 0xFF00 = on				
10010	0x271A		x			x		Protocol: Modbus	RW	uint(16)	2	1	Coil: MODBUS on/off 0x0000 = off; 0xFF00 = on				
10011	0x271B		x			x		Protocol: SCPI	RW	uint(16)	2	1	Coil: SCPI on/off 0x0000 = off; 0xFF00 = on				
10012	0x271C		x			x		Restart interface card	RW	uint(16)	2	1	Coil: Restart 0xFF00 = Trigger restart				
10013	0x271D		x			x		Modbus specification compliance	RW	uint(16)	2	1	Coil: Mode 0x0000 = Limited (default); 0xFF00 = Full				
10020	0x2724			x				AnyBus module: Type	R	uint(16)	2	1	Reg. Type 0x0005 = Profibus				