

EPFCB - REGISTERS MODBUS

30-11-2017 - FW 01.07

READ REGISTERS (INPUT REGISTERS)

ADDRESS	FORMAT	MULTIPLIER	UNIT	PARAMETERS
0000	USHORT	0.001	-	Actual cosφ (x1000)
0001	USHORT	1	V	RMS voltage
0002	ULONG	0.01	A	RMS current
0004	LONG	1	var	Actual reactive power (Negative = Capacitive)
0006	LONG	1	var	Reactive power demand
0008	LONG	1	W	Actual active power
000A	USHORT	1	%	THD I
000B	USHORT	1	%	THD V
000C	USHORT	-	bits	General alarms (0 = Disabled, 1 = Enabled)
				bit 0 Voltage too high
				bit 1 Voltage too low
				bit 2 Current too high
				bit 3 Current too low
				bit 4 Overcompensation
				bit 5 Undercompensation
				bit 6 Over temperature
				bit 7 High THD V
				bit 8 High THD I
				bit 9 Minimum cosφ
				bit 10 Ext. over temperature
				bit 31 Wrong Frequency
000E	USHORT	-	bits	Eeprom alarms (0 = Disabled, 1 = Enabled)
				bit 0 Setup parameters error
				bit 1 Calibration parameters error
				bit 2 Various parameters error
				bit 3 Erase eeprom Error
000F	USHORT	-	bits	Actual output steps status (bit0 = Step 1, ... , bit12 = Step 13)
0010	ULONG	1	var	Real reactive power - Step 1
0012	ULONG	1	var	Real reactive power - Step 2
0014	ULONG	1	var	Real reactive power - Step 3
0016	ULONG	1	var	Real reactive power - Step 4
0018	ULONG	1	var	Real reactive power - Step 5
001A	ULONG	1	var	Real reactive power - Step 6
001C	ULONG	1	var	Real reactive power - Step 7
001E	ULONG	1	var	Real reactive power - Step 8
0020	ULONG	1	var	Real reactive power - Step 9
0022	ULONG	1	var	Real reactive power - Step 10
0024	ULONG	1	var	Real reactive power - Step 11
0026	ULONG	1	var	Real reactive power - Step 12
0028	ULONG	1	var	Real reactive power - Step 13
002A	USHORT	1	s	Seconds of discharge - Step 1
002B	USHORT	1	s	Seconds of discharge - Step 2
002C	USHORT	1	s	Seconds of discharge - Step 3
002D	USHORT	1	s	Seconds of discharge - Step 4
002E	USHORT	1	s	Seconds of discharge - Step 5
002F	USHORT	1	s	Seconds of discharge - Step 6
0030	USHORT	1	s	Seconds of discharge - Step 7
0031	USHORT	1	s	Seconds of discharge - Step 8
0032	USHORT	1	s	Seconds of discharge - Step 9
0033	USHORT	1	s	Seconds of discharge - Step 10
0034	USHORT	1	s	Seconds of discharge - Step 11
0035	USHORT	1	s	Seconds of discharge - Step 12
0036	USHORT	1	s	Seconds of discharge - Step 13
0037	USHORT	0.1	°C / °F	Internal temperature
0038	USHORT	1	-	Maximum number of steps
0039	USHORT	-	-	Firmware checksum
003A	USHORT	-	-	Actual quadrant (1 = IND-LOAD, 2 = IND-GEN, 3 = CAP-GEN, 4 = CAP-LOAD)
003B	ULONG	1	hrs	Total working hours
003D	USHORT	1	V	Maximum RMS voltage measured
003E	ULONG	0.01	A	Maximum RMS current measured
0040	USHORT	1	%	Maximum THD I measured
0041	USHORT	1	%	Maximum THD V measured
0042	USHORT	1	°C / °F	Maximum internal temperature measured
0043	USHORT	1	°C / °F	Maximum external temperature measured

READ / WRITE REGISTERS (HOLDING REGISTERS)

ADDRESS	FORMAT	MULTIPLIER	UNIT	RANGE	PARAMETERS
0000	USHORT	-	-	0 ... 1	Mode (0= Manual, 1= Auto)
0001	USHORT	-	Bits	0 ... 8191	Set manual combination step (bit0 = Step 1, ... , bit12 = Step 13)
0002	SHORT	0.01	-	85 ... 100 -90 ... -99	Desired $\cos\phi$ (Negative = Capacitive)
0003	USHORT	1	s/steps	5 ... 600	Sensitivity
0004	USHORT	1	-	0 ... 2	Languages (0= English, 1= Italian, 2= Spanish)
0005	USHORT	1	A	0 / 5 ... 10000	P.01 CT current
0006	USHORT	0.01	var	40 ... 10000	P.02 TV ratio
0007	USHORT	1	V	80 ... 65000	P.03 Nominal voltage capacitor
0008	USHORT	1	s	1 ... 600	P.04 Step reconnection time
0009	SHORT	0.01	-	0 / 80 ... 100 -80 ... -99	P.05 Desired $\cos\phi$ in generator mode (negative = capacitive) (0= Disabled)
000A	LONG	1	var	-3 ... 10000000	Step 1 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
000C	LONG	1	var	-3 ... 10000000	Step 2 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
000E	LONG	1	var	-3 ... 10000000	Step 3 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
0010	LONG	1	var	-3 ... 10000000	Step 4 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
0012	LONG	1	var	-3 ... 10000000	Step 5 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
0014	LONG	1	var	-3 ... 10000000	Step 6 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
0016	LONG	1	var	-3 ... 10000000	Step 7 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
0018	LONG	1	var	-3 ... 10000000	Step 8 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
001A	LONG	1	var	-3 ... 10000000	Step 9 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
001C	LONG	1	var	-3 ... 10000000	Step 10 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
001E	LONG	1	var	-3 ... 10000000	Step 11 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
0020	LONG	1	var	-3 ... 10000000	Step 12 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
0022	LONG	1	var	-3 ... 10000000	Step 13 (0= Disabled, >0= kvar, -1= NCA, -2= NOA, -3= FAN)
0024	USHORT	-	-	0 ... 1	A.01 Mains connection (0= Three-phase, 1= Single-phase)
0025	USHORT	1	V	220 ... 440	A.01 Mains voltage (at step of 5)
0026	USHORT	-	-	1 ... 6	A.02 Sense of CT current (1 = L1 Direct, 2 = L1 Inverse) (3 = L2 Direct, 4 = L2 Inverse) (5 = L3 Direct, 6 = L3 Inverse)
0027	USHORT	-	-	1 ... 2	A.03 Frequency (1=50Hz, 2=60Hz)
0028	USHORT	1	-	0 ... 1	A.04 Communication data (0=RS485, 1=Ethernet)
0029	USHORT	-	-	0 ... 199	A.05 Serial address (0=Disabled, 1-199=Enabled (adress)
002A	USHORT	-	-	0 ... 1	A.05 Serial protocol (0=Proprietary, 1=Modbus)
002B	USHORT	-	Bd	2 ... 6	A.05 Baud (2= 1200, 3=2400, 4=4800, 5=9600, 6=19200)
002C	USHORT	-	-	0 ... 2	A.05 Parity (0= None, 1= Odd, 2= Even)
002D	ULONG	1	-	0 ... 4294967295	A.06 Ethernet IP address
002F	ULONG	1	-	0 ... 4294967295	A.06 Ethernet IP address gateway
0031	USHORT	1	-	0 ... 65535	A.06 Ethernet IP port
0032	USHORT	-	-	0 ... 1	A.07 Temperature scale (0= °C, 1= °F)
0033	USHORT	1	°C	1 ... 240	A.07 Minimum temperature threshold for disabling fan relay
0034	USHORT	1	°C	1 ... 240	A.07 Maximum temperature threshold for disabling fan relay
0035	USHORT	-	-	0 ... 12	A.08 Fixed step number
0036	USHORT	-	-	0 ... 1	A.08 Fixed step type (0= Normal, 1= With calculations)
0037	SHORT	0.01	-	0 / 90 ... 100 -95 ... -99	A.09 Antihunting threshold (0= Disabled)
0038	USHORT	0.1	s	10 ... 50	A.10 Delay between steps
0039	USHORT	1	s	0 / 5 ... 180	A.11 Time to return Home Page (0= Disabled)
003A	USHORT	-	-	0 ... 1	A.12 Keyboard illumination (0= Enabled, 1= Disabled)
003B	USHORT	1	-	0 ... 2	A.13 External input setting (0= Disabled) (1 = External temperature probe) (2 = Activation desired 2nd $\cos\phi$)
003C	SHORT	0.01	-	85 ... 100 -90 ... -99	A.13 Desired 2nd $\cos\phi$ (Negative = Capacitive)
003D	USHORT	1	%	0 / 5 ... 100	Alarm threshold "voltage too high" (0= Disabled)
003E	USHORT	1	%	0 / 5 ... 100	Alarm threshold "voltage too low" (0= Disabled)
003F	USHORT	1	%	0 / 100 ... 200	Alarm threshold "current too high" (0= Disabled)
0040	USHORT	0.1	%	0 / 10 ... 1000	Alarm threshold "current too low" (0= Disabled)
0041	USHORT	-	-	0.1	Alarm threshold "overcompensation" (0= Disabled)
0042	USHORT	-	-	0.1	Alarm threshold "undercompensation" (0= Disabled)

0043	USHORT	1	°C	0 / 35 ... 158	Alarm threshold "over temperature" (0 = Disabled)
0044	USHORT	1	-	0 / 1 ... 150	Alarm threshold "high THD V" (0 = Disabled)
0045	USHORT	1	-	0 / 1 ... 150	Alarm threshold "high THD I" (0 = Disabled)
0046	USHORT	0.01	-	0 / 50 ... 95	Alarm threshold "minimum cosφ" (0 = Disabled)
0047	USHORT	1	°C	0 / 35 ... 158	Alarm threshold "external probe over temperature" (0 = Disabled)
004D	USHORT	1	s	1 ... 64799	Delay time alarm "voltage too high"
004E	USHORT	1	s	1 ... 64799	Delay time alarm "voltage too low"
004F	USHORT	1	s	1 ... 64799	Delay time alarm "current too high"
0050	USHORT	1	s	1 ... 64799	Delay time alarm "current too low"
0051	USHORT	1	s	1 ... 64799	Delay time alarm "overcompensation"
0052	USHORT	1	s	1 ... 64799	Delay time alarm "undercompensation"
0053	USHORT	1	s	1 ... 64799	Delay time alarm "over temperature"
0054	USHORT	1	s	1 ... 64799	Delay time alarm "high THD V"
0055	USHORT	1	s	1 ... 64799	Delay time alarm "high THD I"
0056	USHORT	1	s	1 ... 64799	Delay time alarm "minimum cosφ"
0057	USHORT	1	s	1 ... 64799	Delay time alarm "external probe over temperature"
005D	USHORT	1	s	1 ... 64799	Steps disconnection time on alarm "current too low"
005E	ULONG	-	bits	0 ... 4294967295	Alarm relay on/off (0 = Disabled, 1 = Enabled)
					bit 0 Voltage too high
					bit 1 Voltage too low
					bit 2 Current too high
					bit 3 Current too low
					bit 4 Overcompensation
					bit 5 Undercompensation
					bit 6 Over temperature
					bit 7 High THD V
					bit 8 High THD I
					bit 9 Minimum cosφ
					bit 10 Ext. over temperature
					bit 31 Wrong Frequency
0060	ULONG	-	bits	0 ... 4294967295	Alarm disconnect steps (0 = Disabled, 1 = Enabled)
					bit 0 Voltage too high
					bit 1 Voltage too low
					bit 2 Current too high
					bit 3 Current too low
					bit 4 Overcompensation
					bit 5 Undercompensation
					bit 6 Over temperature
					bit 7 High THD V
					bit 8 High THD I
					bit 9 Minimum cosφ
					bit 10 Ext. over temperature
					bit 31 Wrong Frequency
0062	ULONG	1	-	0 ... 4294967295	Step 1 insertions number
0064	ULONG	1	-	0 ... 4294967295	Step 2 insertions number
0066	ULONG	1	-	0 ... 4294967295	Step 3 insertions number
0068	ULONG	1	-	0 ... 4294967295	Step 4 insertions number
006A	ULONG	1	-	0 ... 4294967295	Step 5 insertions number
006C	ULONG	1	-	0 ... 4294967295	Step 6 insertions number
006E	ULONG	1	-	0 ... 4294967295	Step 7 insertions number
0070	ULONG	1	-	0 ... 4294967295	Step 8 insertions number
0072	ULONG	1	-	0 ... 4294967295	Step 9 insertions number
0074	ULONG	1	-	0 ... 4294967295	Step 10 insertions number
0076	ULONG	1	-	0 ... 4294967295	Step 11 insertions number
0078	ULONG	1	-	0 ... 4294967295	Step 12 insertions number
007A	ULONG	1	-	0 ... 4294967295	Step 13 insertions number
007C	ULONG	1	s	0 ... 4294967295	Step 1 insertion time
007E	ULONG	1	s	0 ... 4294967295	Step 2 insertion time
0080	ULONG	1	s	0 ... 4294967295	Step 3 insertion time
0082	ULONG	1	s	0 ... 4294967295	Step 4 insertion time
0084	ULONG	1	s	0 ... 4294967295	Step 5 insertion time
0086	ULONG	1	s	0 ... 4294967295	Step 6 insertion time
0088	ULONG	1	s	0 ... 4294967295	Step 7 insertion time
008A	ULONG	1	s	0 ... 4294967295	Step 8 insertion time
008C	ULONG	1	s	0 ... 4294967295	Step 9 insertion time
008E	ULONG	1	s	0 ... 4294967295	Step 10 insertion time
0090	ULONG	1	s	0 ... 4294967295	Step 11 insertion time
0092	ULONG	1	s	0 ... 4294967295	Step 12 insertion time
0094	ULONG	1	s	0 ... 4294967295	Step 13 insertion time
0096	ULONG64	0.001	W	0 ... 1.8 ^{E19}	Active energy
009A	ULONG64	0.001	var	0 ... 1.8 ^{E19}	Reactive energy
009E	ULONG64	0.001	VA	0 ... 1.8 ^{E19}	Apparent energy
00A2	USHORT	1	-	55 ... 63	A.14 Display contrast
00A3	USHORT	1	A	1,5	Secondary TA current
00A4	USHORT	1	-	0 ... 2	Voltage input connection (0 = L1-L2, 1 = L2-L3, 2 = L3-L1)
00A5	USHORT	1	%	100 ... 200	Second threshold for overcurrent capacitor alarm
00A6	USHORT	1	s	0 ... 3599	Overcurrent alarm off time

available optional communication module PC-USB / RS485 / TTL

Order Code: SCUSB485