Row	Item Number	Modbus Memory Address	Memory Address Name (Item Name)	Type of Communication (Type of Item)	Parameter Value	Description of Modbus
1	101	00	Position given to the actuator	R/W	0-FULL	In this memory you can move to the command actuator. This command can be values from 0 to full numbers. If you want to read this memory, it returns the previous value you gave it, so the value of this memory is not necessarily equal to the current position of the actuator. By default, the value of this memory is 0.
2	102	01	Actuator position	R	0-FULL	By reading this memory, you can reach the current and instantaneous position of the actuator. The value of this memory can be from 0 to a full number.
3	103	02	Positioner value	R	50-4000	This item contains the raw number of the positioner. You can use this number to calibrate the actuator.
4	104	03	Encoder value	R	0-4600	In this memory, the number of pulse encoders is located from the position when the actuator was fully open or closed to the current position.
5	111	04	Zero	R/W	50-4000	This memory is used to calibrate the lower limit (zero limit). It should be noted that the input of this memory is the raw number of the positioner. After placing the valve in the desired closed position, the raw number of the positioner should be placed in this memory.
6	112	05	Span	R/W	40-4000	This memory is used to calibrate the upper limit (maximum limit). It should be noted that the input of this memory is the raw number of the positioner. After placing the valve in the desired open position, the raw number of the positioner should be placed in this memory.
7	113	06	High and low limit difference	R	10-3950	There is a difference between the upper and lower limits of this memory. The type of this number is the raw value of the positioner.
8	105	07	Maximum allowable encoder pulse per cycle	R	0-4600	The number of pulses that the internal encoder of the actuator must count in each complete operating cycle is stored in this memory to ensure the operation of the actuator in each operating cycle.

9	121	08	Actuator position measurement unit (FULL)	R/W	0-1000	In this memory, the unit for measuring the position of the actuator can be entered, for example, if you want the actuator to calculate the position in terms of degree (when the actuator is installed on a quadruple valve), the number of this memory must be 90. In this way, the actuator divides a complete work cycle between 90 parts and the position is calculated in terms of 0 to 90 degrees. Thus, if the number of this memory is 100, the work cycle is calculated as a percentage. By default, the number of this memory is 100. The maximum adjustable value is 1000. Obviously, the larger this number, the larger the work cycle is divided and the more accurate the actuator. For example, when the number of this memory is 1000, you can adjust the position of the actuator with 0.1% accuracy. It should be noted that the accuracy of work does not necessarily lead to the correctness of the operation and the correctness of the operation of the actuator depends on factors such as loop coupling, the accuracy of the internal positioner and
10	401	09	Loosen the actuator shaft relative to the value (output)	R/W	0-0.1*FULL	With this memory, you can specify the amount of coupling looseness between the actuator and the valve. The input measurement unit of this memory is FULL number. For example, if the actuator is set as a percentage and the coupling is 2% loose, by placing the number 2 in this memory, the actuator is in the desired position, taking into account the 2% looseness. When the correctness of the operation of the actuator is important to you, by placing a suitable number in this memory, the accuracy of the desired operation can be achieved to some extent. The maximum input value of this memory is one tenth of the FULL number. By default, the value of this memory is 0.
11	411	10	Adjust actuator speed	R/W	0-100 (%)	In this memory you can adjust the speed of the actuator. The input of this memory is in percent. 100% means maximum speed and 0% means the engine is off. By default, the value of this memory is 100.
12	412	11	Adjust current speed	R	0-32000 (mRPM)	In this memory, the instantaneous speed of the actuator is set in milliseconds per minute. This memory is read-only.

13	413	12	Minimum actuator speed while working so far	R	0-32000 (mRPM)	This memory contains the minimum speed that the actuator has reached momentarily during its lifetime. Usually, when an additional load is applied to the actuator, the actuator speed decreases, so the minimum speed is specified at the maximum load that the actuator experiences.
14	503	13	How long the actuator has been on	R	(day)	In this memory, the length of time the actuator is on (not necessarily the engine is on) is determined by the number of days.
15	521	14	The number of times the actuator has worked so far	R	-	This memory contains the number of times the actuator motor has started.
16	201	15	Actuator input voltage	R	0-3000 (mV)	In this memory, the instantaneous input voltage of the actuator can be read in millivolts.
17	211	16	Actuator motor current	R	0-4600 (mA)	In this memory, the amount of instantaneous current of the actuator motor is in milliamperes.
18	202	17	Minimum allowable input voltage	R/W	0-30000 (mV)	This memory controls the voltage of the actuator. In this memory you can specify the minimum allowable voltage. If this input voltage is lower than the voltage specified in this memory, the actuator will issue a warning message and the actuator motor will turn off if it is on. This warning can be read by reading memory number 59 as well as displaying the warning on the actuator display.
19	212	18	Maximum allowable motor current	R/W	600-4600 (mA)	This memory controls the operation of the actuator motor. In this memory, you can specify the maximum allowable motor current. If this motor current exceeds the current specified in this memory, the actuator will issue a warning message and the motor will shut down if it is on. This warning can be read by reading memory number 59. This warning can also be seen from the way the LEDs flash and the actuator beeps, so that both the LEDs and the actuator horn are turned on and off once every 1 second. The FAULT switch is also activated.
20	203	19	Maximum input voltage so far	R	0-30000 (mV)	In this memory, the maximum input voltage of the actuator is located.

21	213	20	Maximum motor current so far	R	600-4600 (mA)	In this memory, the maximum current drawn by the actuator motor is located.
22	204	21	Average input voltage so far	R	0-3000 (mV)	In this memory, the average input voltage of the actuator is located.
23	214	22	Average motor consumption current so far	R	600-4600 (mA)	In this memory is the average current drawn by the actuator motor.
24	221	23	Actuator current temperature	R	0-80 (C°)	In this memory, the instantaneous temperature of the actuator can be read.
25	231	24	Actuator motor current temperature	R	0-120 (C°)	In this memory, the instantaneous temperature of the actuator motor can be read.
26	222	25	Maximum allowable actuator temperature	R/W	0-80 (C°)	This memory controls the temperature of the actuator. In this memory you can specify the maximum internal temperature of the actuator. If the temperature exceeds the temperature specified in this memory, the actuator issues a warning message. This warning can be read by reading memory number 59. By default, the value of this memory is 70.
27	232	26	Maximum allowable engine temperature	R/W	0-120 (C°)	This memory controls the temperature of the actuator motor. In this memory, you can specify the maximum temperature of the actuator motor. If the temperature exceeds the temperature specified in this memory, the actuator will issue a warning message and the actuator motor will turn off if it is on. This warning can be read by reading memory number 59. From the flashing of the LEDs and the beeping of the actuator, it can be understood that this warning exists in such a way that once every 100 milliseconds, both the LED and the actuator beep turn on and off. Temper switch is also activated. By default, the value of this memory is 70.
28	223	27	Maximum actuator temperature so far	R	0-80 (C°)	In this memory, the maximum internal temperature of the actuator is located.
29	233	28	Maximum engine temperature so far	R	0-120 (C°)	In this memory, the maximum temperature of the actuator motor is located so far.

			Actuator temperature	_	0-80	In this memory, the average internal temperature of the actuator has been
30	224	29	so far	R	(C°)	set so far.
31	234	30	Average engine	R	0-120	In this memory, the average temperature of the actuator motor is located so
31	234	30	temperature so far	ĸ	(C°)	far.
32	235	31	Average engine temperature at work so far	R	0-120 (C°)	In this memory, the average temperature of the actuator motor is in motion.
33	236	32	Actuator temperature	R/W	0-120	In this memory is the temperature at which the actuator restarts after the
33	230	32	restarts	IX/ VV	(C _°)	warning. The default value of this memory is 60.
34	402	33	Actuator start limit	R/W	0-0.1*FULL	This memory is to set the limit on starting the engine. By inserting a number in this memory, the engine will not start until the input changes exceed this number. The input value of this function is between 0 and 0.1 full numbers and its unit is in full numbers. For example, if the full number is 100 and the number 2 is in this memory, the engine will not start until the input changes are more than 2%. This memory is inserted to prevent successive start-stops in the engine when noise or small changes are applied to the input (especially when the input is analog). By default, the value of this memory is 1.
35	421	34	Maximum continuous operating time of the actuator motor	R/W	0-120 (second)	This memory is used to prevent damage to the actuator motor when an internal problem arises for the actuator or if the actuator is used continuously for more than 20 minutes, which increases the amortization of the actuator. The default value of this memory is 900. If the operating time of the actuator motor exceeds the number of this memory, the actuator will issue a warning message and the actuator motor will shut down. This warning can be read by reading memory number 59. This warning can also be seen from the way the LEDs flash and the actuator beeps, so that both the LEDs and the actuator horn are turned on and off twice every 1 second at intervals of 50 milliseconds. The FAULT switch is also activated.
36	422	35	Maximum actuator movement time in one direction	R/W	0-120 (second)	This memory is used to prevent the actuator motor from malfunctioning when an internal problem arises for the actuator that causes the actuator to move in one direction beyond the allowable time. By default, the amount of

						this memory is different for different models. If the operating time of the actuator motor in one direction of movement exceeds the number of this memory, the actuator will issue a warning message and the actuator motor will shut down. This warning can be read by reading memory number 59. From the flashing of the LEDs and the beeping of the actuator, it can be understood that this warning exists in such a way that every 1 second, both the LED and the actuator beep turn on and off at intervals of 50 milliseconds. The FAULT switch is also activated.
37	511	36	The maximum time the actuator has rotated counterclockwise so far	R	0-120 (second)	In this memory is the longest time it has ever taken for the actuator to move counterclockwise.
38	512	37	The maximum time the actuator has rotated clockwise so far	R	0-120 (second)	In this memory is located the longest time ever the actuator has moved in a clockwise direction.
39	513	38	The average time the actuator has rotated counterclockwise so	R	0-120 (second)	In this memory is the average time it has taken for the actuator to move counterclockwise.
40	514	39	The average time the actuator has rotated clockwise so far	R	0-120 (second)	In this memory is the average time it has taken for the actuator to move clockwise.
41	311	40	Closed switch limit value	R/W	0-FULL	In this memory you can set the value you want to activate the closed limit switch. This switch is activated when the actuator position is less than this memory number. The unit for assigning this memory is a full number. By default, the value of this memory is 1.
42	312	41	The amount of open switch limit	R/W	0-FULL	In this memory you can set the value you want to activate the open limit switch. This switch is activated when the actuator position exceeds the number of this memory. The unit for assigning this memory is the full number. By default, the value of this memory is 99.

43	312	42	Closed switch limit cut- off limit	R/W	0-FULL	In this memory you can set the value that you want the packet switch limit to be disabled. When the actuator position is greater than the sum of this memory and memory 40, this switch is deactivated. The unit for assigning this memory is a full number. The default value of this memory is 2. Thus, considering the number 1 in memory number 40 and the number 2 in memory number 42, when the actuator position reaches 1%, the limit of the closed switch is activated and when the actuator position is greater than 3%, this switch is deactivated.
44	314	43	Open switch limit cut- off limit	R/W	0-FULL	In this memory you can set the value you want to disable the open switch limit. This switch is deactivated when the actuator position is smaller than memory 41 minus 43. The unit for assigning this memory is the full number. The default value of this memory is 2. Thus, considering the number 99 in memory number 41 and the number 2 in memory number 43, when the actuator position reaches 99%, the open switch limit is activated and when the actuator position is less than 97%, this switch is deactivated.
45	315	44	Enable or disable switch limit	R/W	0-1	With this memory you can enable or disable limit switches. The number 1 means activated and the number 0 means deactivated. By default, the limit switches are on and when the switch occurs, the output of this switch is available through the terminals.
46	321	45	Enable or disable the temper switch limit	R/W	0-1	With this memory you can enable or disable the temper switch. The number 1 means activated and the number 0 means deactivated. By default, the switch is on, and when the switch occurs, the output of this switch is available through the terminals.
47	322	46	Enable or disable the torque switch	R/W	0-1	With this memory you can activate or deactivate the switch torque. The number 1 means activated and the number 0 means deactivated. By default, the torque of the switch is active, and when the switch occurs, the output of this switch is available through the terminals.
48	251	47	Maximum allowable output torque	R/W	0-2700 (N.m)	This memory controls the output torque of the actuator. In this memory you can specify the maximum allowable torque of the actuator output. If this torque exceeds the torque specified in this memory, the actuator will issue

						a warning message and the actuator motor will turn off if it is on. This warning can be read by reading memory number 59. This warning can also be seen from the way the LEDs flash and the actuator beeps, so that both the LEDs and the actuator horn are turned on and off once every 2 seconds. The crack switch is also activated.
49	252	48	Maximum output torque ever	R	0-2700 (N.m)	This memory contains the maximum torque that the output actuator has.
50	253	49	Current output torque	R	0-2700 (N.m)	In this memory, the current output torque of the actuator is located.
51	331	50	Analog input value (4-20 mA)	R	0-100 %	If you have purchased the actuator with a 4-20 mA input option, the amount of analog input can be read as a percentage in this memory.
52	301	51	Analog output value (4-20 mA)	R/W	0-2000 (CA)	This memory is for testing analog output You can specify the amount of analog output by inserting numbers between 400 and 2000 in this memory to ensure its correct operation. (To prevent decimal numbers from being entered, the numbers must be multiplied by 100 so that this one can be quantified to the nearest hundredth). By placing the number 0 in this memory, the analog output is taken out of manual mode and assumes the value of the actuator position.
53	541	52	Get the actuator model	R	-	In this memory are the models of actuators: 7:AP007a 10:AM010a 14:AP014a 28:AP028a 40:AM050a 100:AP100a 120:AM120a 250:AP250a 500:AP500a
54	361	53	Set the type of communication	R/W	1-7	In this memory, how to communicate with the actuator in terms of communication model available in the terminals, is:

			(controllability) with the			1- Communication via more or less (on / off)
			actuator			2- Communication via Modbus
						3- Analog communication (4-20mA)
						4- Communication via more or less and Modbus
						5- Communication through more or less and analog
						6- Communication via Modbus and analog
						7- Communication through three methods
						8- Communication via 0-10 volts
						9- Communication via more or less and 0-10 volts
						10- Communication via Modbus and 0-10 volts
						11- Communication via Modbus and more or less and 0-10 volts
						12- Timer mode
						13- Communication via more or less and timer mode
						14- Communication via Modbus and timer mode
						15- Communication via more or less, Modbus and timer mode
55	431	54	ID	R/W	0-255	In this memory, the Modbus ID of the actuator is located and the number is
33	451	34	lD	IV) VV	0-233	1 by default.
						This memory contains the Baud Rate. This memory only accepts certain
56	432	55	BaudRate	R/W	1200-57600	values:
30	432	33	Dauditate	IV) VV	(Bits/s)	56800, 38400, 19200, 9600, 4800, 2400, 1200
						By default, the value of this memory is 9600.
						The values of this memory can include 0 meaning none parity (no parity), 1
57	433	56	Parity	R/W	0-2	meaning even parity (even parity) and 2 meaning odd parity (odd parity). By
						default, the value of this memory is 0.
58	434	57	StopBits	R/W	0-1	The values of this memory can include 0 meaning Stop Bits = 1 and 1
30	707	<u> </u>	·	17/ 44	0 1	meaning Stop Bits = 1. By default, the value of this memory is 0.
59	302	58	Enable and disable	R/W	0-1	In this memory you can enable or disable analog output, 0 means inactive
39	302	50	output (4-20 mA)	I V/ VV	0-1	and 1 means active.

60	531	59	Read the actuator warning	R	0-9	In the event of a warning to the actuator, the type of warning can be obtained by reading this memory. If the number of this memory is 0, it means that there is no warning, otherwise: 1) Warning of excessive flow of internal devices of the actuator 2) Excessive flow of the actuator motor 3) Excessive increase of actuator temperature 4) Excessive increase of actuator motor temperature 5) Actuator full shutdown warning 6) Actuator full opening warning 7) Warning of rotation of the actuator in one direction more than the allowed time 8) Warning that the actuator motor is on more than the allowed time 9) Excess torque warning 10) Potentiometer failure warning 11) Warning that the motor of the encoder is operating too much
61	532	60	Remove the warning from the actuator memory	W	0-1	By entering the number 1 in this memory, you can clear the alerts that have been generated for the actuator.
62	303	61	Analog output offset (4-20 mA)	R/W	0-4096	By inserting a suitable number in this memory, the analog output can be calibrated the number of this memory is 3300 by default. This number is directly related to the maximum analog output and by default the maximum analog output is 20 mA.
63	332	62	Analog input low limit offset (4-20 mA)	R/W	500-4096	By placing a suitable number in this memory, the analog input can be calibrated. The number of this memory is 580 by default. This number is directly related to the analog input minimum and the analog input minimum is considered to be 4 mA by default.
64	333	63	Analog input high limit offset (4-20 mA)	R/W	500-4096	By placing a suitable number in this memory, the analog input can be calibrated the number of this memory is 3130 by default. This number is directly related to the analog input maximum and the maximum analog input maximum of 20 mA is considered.

65	226	64	Actuator temperature sensor offset	R/W	132-152	In this memory, the actuator's temperature sensor can be calibrated by placing a suitable number. By default, the number of this memory is 133.
66	114	65	Move counterclockwise	W	0-4600	In this memory you can command the actuator to move counterclockwise regardless of the calibrated limit of the actuator by giving the number of pulses that the encoder should count to this memory and the actuator to start the same number of pulses he does. The usage of this memory is determined when you want to calibrate the actuator.
67	115	66	Move clockwise	W	0-4600	In this memory you can command the actuator to move clockwise regardless of the calibrated limit of the actuator by giving the number of pulses that the encoder should count to this memory and the actuator starts moving with the same number of pulses. The use of this memory is determined when you want to calibrate the actuator.
68	116	67	Save the positioner number as the lower limit	W	1	By placing the number 1 in this memory, the actuator stores the numeric value of the positioner as the lower limit and henceforth the lower limit is considered in this position.
69	117	68	Save the positioner number as the upper limit	W	1	By placing the number 1 in this memory, the actuator stores the numeric value of the positioner as the upper limit, and henceforth the upper limit is considered in this position.
70	334	69	Invert analog input (4-20 mA)	R/W	0-1	By default, when the input of the actuator is 4-20 mA, 4 mA is 0% and 20 mA is 100%. By entering the number 1 in this memory, the actuator considers the inverse of the input and by applying 4 mA, the actuator goes to the 100% position and by applying 20 mA, the actuator goes to the 0% position.
71	304	70	Invert analog output (4-20 mA)	R/W	0-1	By default, when the 4-20 mA output is active, 4 mA stands for 0% and 20 mA stands for 100%. 4 mA means 100% position and 20 mA means 0% position.
72	441	71	Bass fashion lock	R	0-1	Access to this memory is only available to the manufacturer and the user can only read this memory. If this memory is 0, the Modbus lock is open and if it is 1, the Modbus lock is active. If this lock is enabled, memory numbers 17, 18, 25, 26, 32, 33, 34, 35, 42, 43, 47, 53, 54, 55, 56, 57, 58, 64, 69, 70, 72,

						73, 74, 75, 76, 77, 78, 86, 87. It is out of the user's reach and can only read them.
73	442	72	Bass fashion password	W	0-9999	If there is 1 in memory number 71 (Modbus is locked), you can unlock Modbus by entering the password in this memory. The Modbus password should be requested from the company when purchasing.
74	443	73	Change the bass fashion password	W	0-9999	After unlocking the Modbus, the password can be changed by this memory by first unlocking it (inserting the original password into memory 72) and then inserting the new password into this memory, and then the previous password to the new password will change.
75	414	74	Enable or disable the encoder sensor	R/W	0-1	With this memory you can activate or deactivate the encoder sensor. The number 1 means activated and the number 0 means deactivated. By default, the encoder is active. In the actuators, the encoder is responsible for measuring the speed, measuring the output torque, protecting the positioning potentiometer, and so on.
76	225	75	Activating or deactivating the actuator temperature sensor	R/W	0-1	With this memory you can activate or deactivate the actuator temperature sensor. The number 1 means activated and the number 0 means deactivated. By default, the actuator temperature sensor is active.
77	237	76	Activating or deactivating the motor temperature sensor	R/W	0-1	With this memory you can activate or deactivate the actuator motor temperature sensor. The number 1 means activated and the number 0 means deactivated. By default, the actuator's motor temperature sensor is active.
78	205	77	Activating or deactivating the actuator voltage sensor	R/W	0-1	With this memory you can activate or deactivate the actuator voltage sensor. The number 1 means activated and the number 0 means deactivated. By default, the actuator voltage sensor is active.
79	215	78	Activating or deactivating the motor current sensor	R/W	0-1	With this memory you can activate or deactivate the actuator current sensor. The number 1 means activated and the number 0 means deactivated. By default, the actuator current sensor is active.

80	501	79	Seconds the actuator is on	R	0-3600	In this memory, the number of seconds is the number of times the actuator has been on, and when it reaches 3600, this memory becomes 0 and 1 unit is added to the number of hours of memory (memory 80).
81	502	80	Actuator clock time is on	R	0-24	In this memory, the number of the hourglass is the time when the actuator has been on until now, and when it reaches the number 24, this memory becomes 0 and the number of the daily memory (memory 13) is added by 1 unit.
82	504	81	Seconds the engine is on	R	0-3600	In this memory, the number of seconds is the number of times the motor of the actuator is on, and when it reaches the number 3600, this memory becomes 0 and 1 unit of the motor clock (memory 82) is added to the memory number.
83	505	82	Engine clock time is on	R	0-24	In this memory, the clock number of the time when the actuator motor has been on is located, and when it reaches the number 24, this memory becomes 0 and the day memory number of the motor number (memory 83) is added by 1 unit.
84	506	83	How long the actuator motor has been running	R	(day)	In this memory, the length of time the actuator is on (not necessarily the engine is on) is determined by the number of days.
85	341	84	Input value 0-10 volts	R	0-100%	If you have purchased the actuator with an input option of 0-10 volts, in this memory, the amount of voltage input can be read in percentage.
86	342	85	Voltage input offset volts 0-10	R/W	2000-3500	By inserting a suitable number in this memory, the analog input can be calibrated the number of this memory is 2740 by default.
87	343	86	Invert the voltage input	R/W	0-1	By default, when the input is 0-10 volts, 0 volts is 0 percent and 10 volts is 100 percent. By placing the number 1 in this memory, the inverter actuator considers the input, and by applying 0 volts, the actuator goes to the 100% position, and by applying 10 volts, the actuator goes to the 0% position.
88	241	87	Actuator gearbox current temperature	R	0-120 (C°)	In this memory, the instantaneous temperature of the actuator gearbox can be read. (This option is only available on multi-turn actuators).
89	242	88	Maximum allowable gearbox temperature	R/W	0-120 (C°)	This memory controls the temperature of the actuator gearbox. In this memory, you can specify the maximum operating gearbox temperature. If

						the temperature exceeds the temperature specified in this memory, the actuator will issue a warning message and the actuator motor will turn off if it is on. This warning can be read by reading memory number 59. From the flashing of the LEDs and the beeping of the actuator, it can be understood that this warning exists in such a way that every 100 milliseconds, both the LED and the actuator beep turn on and off. By default, the value of this memory is 70 (This option is only available on multi-turn actuators).
90	243	89	Maximum gearbox temperature so far	R	0-120 (C°)	In this memory, the maximum temperature of the actuator gearbox has been placed so far (This option is only available on multi-turn actuators).
91	244	90	Average gearbox temperature so far	R	0-120 (C°)	In this memory, the average temperature of the actuator gearbox has been placed so far (This option is only available on multi-turn actuators).
92	245	91	Average gearbox temperature when working so far	R	0-120 (C°)	In this memory, the average temperature of the actuator gearbox is in motion (This option is only available on multi-turn actuators).
93	246	92	Gearbox temperature to start the actuator again	R/W	0-120 (C°)	With this memory you can activate or deactivate the actuator gearbox temperature sensor. The number 1 means activated and the number 0 means deactivated. By default, the gearbox temperature sensor is mounted on multi-turn actuators and this memory is active (This sensor is not present in part-turn (quarter-round) actuators.
94	247	93	Activate or deactivate the actuator gearbox temperature sensor	R/W	0-1	With this memory, you can activate or deactivate the actuator gearbox temperature sensor. The number 1 means activated and the number 0 means deactivated. By default, the gearbox temperature sensor is mounted on the multi-turn actuators and this memory is active (Part-turn actuators do not have this sensory).
95	461	94	Activate the heater	R/W	0-1	With this memory you can activate or deactivate the actuator heater. The number 1 means activated and the number 0 means deactivated. By default, the heater is installed on multi-turn actuators and this memory is active (This option does not exist in part-turn actuators).
96	462	95	Heater status	R	0-1	If this memory is 1, the heater actuator is on and if it is 0, it is off.
97	254	96	Average torque	R	0-2700	In this memory, the average torque applied to the actuator.

98	316	97	Closed switch limit status	R	0-1	If this memory is 1, the packet switch limit is active.	
99	317	98	Switch limit status open	R	0-1	If this memory is 1, the open switch limit is active.	
100	324	99	Temper switch	R	0-1	If this memory is 1, the temper switch is active.	
101	325	100	Switch status	R	0-1	If this memory is 1, leaving the switch is active.	
102	323	101	FAULT switch status	R	0-1	If this memory is 1, the packet switch limit is active.	
103	326	102	Enable or disable FAULT switch	R/W	0-1	With this memory you can enable or disable the FAULT switch. The number 1 means activated and the number 0 means deactivated. By default, the FAULT switch is active, and when the switch occurs, the output of this switch is available through the terminals.	
104	351	103	Closing input status	R	0-1	If this memory is 1, the closing input (contact that is installed to close the actuator as 0 and 1 as input in the actuators) is active.	
105	352	104	Opening input status	R	0-1	If this memory is 1, the opening input (contact that is installed to open the actuator as 0 and 1 as input in the actuators) is active.	
106	451	105	Read the item password	R	0-9999	In this memory, the item code is inserted, which is 1234 by default.	
107	452	106	Changing item password	W	0-9999	You can change the item code by entering a 4-digit number in this memory	
108	601	107	Condition check lamp	R/W	0-2	If this memory is 2, the actuator check light is on and the actuator service is required. After the service, the actuator can put the number 0 in this memory.	
109	463	108	Heater turn-on temperature	R/W	0-30	In this memory, you can change the temperature at which the actuator heater needs to be turned on. By default, this temperature is 5° C.	
110	464	109	Heater shutdown temperature	R/W	0-60	In this memory, you can change the temperature at which the actuator heater needs to be turned off. By default, this temperature is 40° C.	
111	542	110	Device serial number	R	-	In this memory are the byte values of the device serial number. The serial number of the device is a 32-bit number, so this number is divided into two parts and its bytes are placed in this memory, and you can multiply this	

						number by 65536 and then add it to the real serial number of the device with 111 memory.
112	543	111	Device serial number	R	-	In this memory, the low byte value of the serial number of the device is stored.
113	544	112	Device manufacturing number	R	In this memory are the byte values of the device manufacturing number. To manufacturing number of the device is 32-bit, so this number is divided in two parts and its bytes are placed in this memory, and you can multiply to number by the number 65536 and then add it with the amount of memory. 111 to the real number of the manufacturing number of the device Receipt	
114	545	113	Device manufacturing number	R	-	In this memory, a low byte value is included in the device build number.
115	335	114	Actuator status in case of analog signal interruption	R/W	0-2	In this memory you can specify what the actuator will be in if the analog input of the device is cut off: If the value of this memory is 0, the actuator remains in its position If the value of this memory is 1, the actuator starts closing If the value of this memory is 2, the actuator starts to open. By default, the value of this memory is 0.
116	353	115	Actuator status in digital signal interrupt mode	R/W	0-2	In this memory you can specify what the actuator should be in if the digital input (open and closed inputs) of the device is cut off: If the value of this memory is 0, the actuator remains in its position If the value of this memory is 1, the actuator starts closing If the value of this memory is 2, the actuator starts to open. By default, the value of this memory is 0.
117	471	116	Powersave mode	R/W	0-1	If the number 1 is placed in this memory, the Powersave mode will be activated and, in this case, the actuator display will be turned off and will be turned on only when the position is changed or the ENTER key is pressed. By default, the value of this memory is 0.
118	701	117	Work timer mode	R/W	0-2	With this parameter you can specify how to act if the timer actuator resets: 0: If the number 0 is inside this memory, after each reset of the actuator, the values of the timer are reset and the timer must be set again.

						1: If the number 1 is inside this memory, after each reset of the actuator, the timer count time will be 0 and the timer will start counting again from 0 and the actuator will open and close as before. 2: If the number 2 is inside this memory, after each reset of the actuator, the timer will continue to work according to the previous schedule and its timer will not be reset. By default, the value of this memory is 2.
119	702	118	Repeat times	R/W	0-9999	This memory determines the number of repetitions If the number 0 is in this memory, the actuator opens and closes without interruption according to the specified time. By setting any number other than 0, the actuator executes the timer the same number of times. By default, the value of this memory is 0.
120	703	119	During of being open	R/W	0-9999	In this memory, the length of time that the actuator must remain open can be specified. By default, the value of this memory is 60.
121	704	120	During of being closed	R/W	0-9999	In this memory, the length of time that the actuator must remain closed can be specified. By default, the value of this memory is 60.
122	705	121	Open time unit	R/W	0-3	In this memory, the unit of open time can be specified. By default, the value of this memory is 0. If the number 0 is in this memory, the timer of the actuator is open in seconds (thus the number in memory 119 is calculated in seconds). If the number 1 is in this memory, the timer of the actuator is open in minutes (thus the number in memory 119 is calculated in minutes). If the number 2 is in this memory, the timer of the actuator is open in hours (thus the number in memory 119 is calculated in hours). If the number 3 is in this memory, the timer is open for the actuator in terms of days (thus the number in memory of 119 is calculated in terms of days).
123	706	122	Time unit is closed	R/W	0-3	In this memory, the unit of closing time can be specified. By default, the value of this memory is 0. If the number 0 is in this memory, the actuator closure timer is in seconds (thus the number in memory 120 is calculated in seconds).

						If the number 1 is in this memory, the actuator closure timer is in minutes (thus the number in memory 120 is calculated in minutes). If the number 2 is in this memory, the timer for closing the actuator is in hours (thus the number in memory 120 is calculated in hours). If the number 3 is in this memory, the actuator closure timer is in terms of days (thus the number in memory of 120 is calculated in terms of days).
124	707	123	The remaining time for the valve to remain open	R	0-9999	In this memory, if the actuator is open, returns the time left for the actuator to remain open.
125	708	124	The remaining time for the valve to remain closed	R	0-9999	In this memory, if the actuator is closed, returns the time left for the actuator to remain closed.

Communication through Modbus:

In order to communicate through Modbus, the following should be considered:

- Modbus protocol is of RTU type.
- The initial address of all actuators is 01 and in case of need or networking of several actuators, it should be changed according to the table above.
- The baud rate of the serial connection is 9600 by default, and if necessary, it can be changed according to the table above.
- Stop Bits in the initial setup is 0 and if necessary, it can be changed according to the table above.
- In order to prevent noise in connection with the actuator, the maximum length of the wire should not exceed 1000 meters. For larger lengths of the wire, the issue should be discussed with the company.
- In connection type, R means "read only" and W means "write only" and R/W means both "read and write".
- Function 03 is used to read from the memory and Function 06 is used to write to the memory.

Address	Function	Data	CRC	
Unit	Write	Address of the word	CRC16	
Offit	Word	New value of the word	CRCTO	

Address	Function	Data	CRC
01	06	00h 04h 00h 02h	CRC16

In this example, by sending this code, first the operator with ID 01 is selected and its memory address 04, which is the same as the lower limit of the operator, takes the value 02.