Modbus Register UFC24-2

Version May 16, Rev. 2

Registers List - Modbus RTU (Default)
Slave 1-127, Time Out 100ms, Baud 9600, parity none, 8 bit, 1 stop bit
All Registers Signed Integer 16 bit (Holding Registers 4XXXX)
Commands: 0x03 = Read Holding Registers / 0x06 = Preset Single Register / 0x10 = Preset Multiple Registers.

Registers 400XX	Value	Description		R/W	Default	Remarks	Function Fire Damper in the UFC24-2 Software	Function Smoke Damper in the UFC24-2 Software
0	702...702	Software Version		R				
1	1-On , 0-Off	DI.1 - ManualOverride-Physical Input	Damper 1	R	0-off	effective	indicates input of the DI1 (on/off) Manual Override	indicates input of the DI1 (on/off) Manual Override
2	1-On , 0-Off	DI.2 - ManualOverride-Physical Input	Damper 2	R	0-off	efffective	indicates input of the DI2 (on/off) Manual Override	indicates input of the DI2 (on/off) Manual Override
3	1-On , 0-Off	LED_Close	Damper 1	R			Indicates close position of the actuator 1	Indicates close position of the actuator 1
4	1-On , 0-Off	LED_Close	Damper 2	R			Indicates close position of the actuator 2	Indicates close position of the actuator 2
5	1-On , 0-Off	LED_Open	Damper 1	R			Indicates open position of the actuator 1	Indicates open position of the actuator 1
6	1-On , 0-Off	LED_Open	Damper 2	R			Indicates open positionof the actuaoor 2	Indicates open positionof the actuaoor 2
7	1-On , 0-Off	Relay Damper	Damper 1	R/W	0-Off		If relay off - actuator 1 is moving to open position, if relay on - damper closing, if power off - damper closing (spring)	If relay on (power) the damper 1 is moving over the end switch and goes back to close position. Once UFC24 got a control signal - this is stored and the smoke damper after power loss will always move to the position of the last command as soon as power is back
8	1-On , 0-Off	Relay Damper	Damper 2	R/W	0-Off		If relay off - actuator 2 is moving to open position, if relay on - damper closing, if power off - damper closing (spring)	If relay on (power) the damper 1 is moving over the end switch and goes back to close position. Once UFC24 got a control signal - this is stored and the smoke damper after power loss will always move to the position of the last command as soon as power is back
9	1-On , 0-Off	DI_ManualOverride_Normally Close/Open	Damper 1	R/W	0-N.Open		If the manual override 1 is activated the a relay is switched off, the power is interrupted and the damper 1 is closing	If the manual override 1 is activated the signal for the damper actuator is changed and the damper actuator is moving to the opposite position
10	1-On , 0-Off	DI_ManualOverride_Normally Close/Open	Damper 2	R/W	0-N.Open		If the manual override 2 is activated the a relay is switched off, the power is interrupted and the damper 2 is closing	If the manual override 2 is activated the signal for the damper actuator is changed and the damper actuator is moving to the opposite position
11	1-On , 0-Off	Dip Switch Selection – Fire Application	Damper 1	R		Selection functionality on Conf dip switch bar		
12	1-On , 0-Off	Dip Switch Selection – Fire Application	Damper 2	R		Selection functionality on Conf dip switch bar		
13	1-On , 0-Off	Dip Switch Selection – Smoke Application	Damper 1	R		Selection functionality on Conf dip switch bar		
14	1-On , 0-Off	Dip Switch Selection – Smoke Application	Damper 2	R		Selection functionality on Conf dip switch bar		
15	1-On , 0-Off	Manual Override_Effective	Damper 1	R		Shows the real position		
16	1-On , 0-Off	Manual Override_Effective	Damper 2	R		Shows the real position		
17	1-On , 0-Off	Damper Moving	Damper 1	R		Actuator 1 is between the two end switches		
18	1-On , 0-Off	Damper Moving	Damper 2	R		Actuator 2 is between the two end switches		
19	1-On , 0-Off	Test Button	Damper 1	R		Test button on the UFC24-2 for on site testing	- Power on the UFC24-2: actuator (damper) opening until end position is reached - Pushing test button will interrupt the power supply (UFC24-2 relay 1) to the actuator 1. Spring is closing the actuator - As soon as test button is released the power comes back and the damper will open again	- Pushing test button 1: the smoke damper 1 is moving in the opposite direction - release the test button 1: the smoke damper 1 is moving back into original position
20	1-On , 0-Off	Test Button	Damper 2	R		Test button on the UFC24-2 for on site testing	- Power on the UFC24-2: actuator (damper) opening until end position is reached - Pushing test button will interrupt the power supply (UFC24-2 relay 2) to the actuator 2. Spring is closing the actuator - As soon as test button is released the power comes back and the damper will open again	- Pushing test button 2: the smoke damper 1 is moving in the opposite direction - release the test button 2: the smoke damper 1 is moving back into original position
21	1-On , 0-Off	Damper Close	Damper 1	R		Feedback damper position, indicated by the end switches of the actuator 1		
22	1-On , 0-Off	Damper Open	Damper 1	R		Feedback damper position, indicated by the end switches of the actuator 1		
23	1-On , 0-Off	Dampers Close	Damper 2	R		Feedback damper position, indicated by the end switches of the actuator 2		
24	1-On , 0-Off	Damper Open	Damper 2	R		Feedback damper position, indicated by the end switches of the actuator 2		
25	1-On , 0-Off	FullAutoTest	Damper 1	R/W	0-Normal	Activation of a full automatic test run of the actuator	The fire damper actuator 1 is closing (spring) and remains in the closed position as long as the damper check time is set. After the time passed the actuator will open again until the end switch has been reached. If one of the end switches is not reached within the damper check time (register 34) - an error message is sent.	The fire damper actuator 1 is moving to the opposite direction and remains in that position as long as the damper check time is set (i.e. 90 sec = the process has to be finished after 90 seconds) . After the time passed the actuator will move back to the original position until the end switch has been reached (90 seconds for the 2nd move again). If one of the end switches is not reached within the damper test time (register 35) in a test move - an error message is sent.
26	1-On , 0-Off	FullAutoTest	Damper 2	R/W	0-Normal	Activation of a full automatic test run of the actuator	The fire damper actuator 2 is closing (spring) and remains in the closed position as long as the damper check time is set. After the time passed the actuator will open again until the end switch has been reached. If one of the end switches is not reached within the damper check time (register 35) - an error message is sent.	The fire damper actuator 2 is moving to the opposite direction and remains in that position as long as the damper check time is set (i.e. 90 sec = the process has to be finished after 90 seconds) . After the time passed the actuator will move back to the original position until the end switch has been reached (90 seconds for the 2nd move again). If one of the end switches is not reached within the damper test time (register 35) in a test move - an error message is sent.
27	1-On , 0-Off	SetFactoryDefault		R/W		If activated all settings going back to factory default values		
28	1-On , 0-Off	Clear Message	Both	R/W		Reset messages indicated		
29	0....180 Sec	DI_ManualOverride_OnDelay	Damper 1	R/W	0-Sec	Delay functionality	Choosable between 0-180''	Choosable between 0-180''
30	0....180 Sec	DI_ManualOverride_OnDelay	Damper 2	R/W	0-Sec	Delay functionality	Choosable between 0-180''	Choosable between 0-180''
31	960-1920-3840-7680	BaudRate		R				
32	0-50-100 %	DamperPosition	Damper 1	R		Indicates damper position	0%= damper actuator 1 end switch closed is active; 50% = no damper actuator switch is activated; actuator is moving or stands between the end switches; 100% damper actuator end switch open is active	0%= damper actuator 1 end switch closed is active; 50% = no damper actuator switch is activated; actuator is moving or stands between the end switches; 100% damper actuator end switch open is active
33	0-50-100 %	DamperPosition	Damper 2	R		Indicates damper position	0%= damper actuator end switch 2 closed is active; 50% = no damper actuator switch is activated; actuator is moving or stands between the end switches; 100% damper actuator end switch open is active	0%= damper actuator 2 end switch closed is active; 50% = no damper actuator switch is activated; actuator is moving or stands between the end switches; 100% damper actuator end switch open is active
34	0...360 Sec	DamperCheckTime	Damper 1	R/W	90-Sec	Time to control running time of the actuator between the end switches, can be adapted.	Command by the controls that the actuator 1 has to close/open. If the actuator does not reach the other end switch within the dedicated time an error message is sent. Automatic run time test done by activating the automatic test run - see detailed description of reg 25.	Command by the controls that the actuator has to close/open. If the actuator does not reach the other end switch within the dedicated time an error message is sent. Automatic run time test done by activating the automatic test run - see detailed description of reg 25.
35	0...360 Sec	DamperCheckTime	Damper 2	R/W	90-Sec	Time to control running time of the actuator between the end switches, can be adapted.	Command by the controls that the actuator 2 has to close/open. If the actuator does not reach the other end switch within the dedicated time an error message is sent. Automatic run time test done by activating the automatic test run - see detailed description of reg 26.	Command by the controls that the actuator has to close/open. If the actuator does not reach the other end switch within the dedicated time an error message is sent. Automatic run time test done by activating the automatic test run - see detailed description of reg 26.
36	1....8	System Status	Damper 1	R		Error messages 1-8 indicate the system message and activate the error LED:		
37	1....8	System Status	Damper 2	R		Error messages 1-8 indicate the system message and activate the error LED:		
38	0...1024	InternalParameters	Damper 1	R		Internal Use Only		
39	0...1024	InternalParameters	Damper 2	R		Internal Use Only		
40	804XXX	Device Instant - Not In Use In Modbus		R				
41	0....360	Delay Alarm Communication		R/W	120-Sec	Bus Monitoring Delay	If reg 41 activated the damper will move into close position after the time indicated (sec) at reg 41 and remain there until the bus communication comes back	No functionality for the smoke damper
42	0..1	Logic Alarm Communication		R/W	0-Disable	Bus Monitoring on/off	If reg 42 activated (1) the damper will move into close position after the time indicated (sec) at reg 41 and remain there until the bus communication comes back. If not activated the damper remains in open position until triggered from any other source (thermoel. tripping device, smoke detector, digital input)	No functionality for the smoke damper

System Message	1. Normal
	2. Actuator Not Reached End Position
	3. Not In Use
	4. Not In Use
	5. Any Other Error
	6. Test In Progress
	7. Test Report Normal
	8. Test Report Error

1. Normal	indicates normal position, it is not an error message but belongs as normal or standard value into this list	indicates normal position, it is not an error message but belongs as normal or standard value into this list
2. Actuator Not Reached End Position	indicates that the actuator has not reached the end position, the upper end switch of the actuator is not activated	indicates that the actuator has not reached the end position, the upper end switch of the actuator is not activated
3. No Functionality		
4. No Functionality		
5. Any Other Error		
6. Test In Progress		
7. Test Report Normal		
8. Test Report Error		