

## ModBus of Motor protection Relay VAMP 150

Software version: **3.47**

**Table 1.** ModBus data items in RTU master mode.

<i>Name</i>	<i>Default scaling Device = ModBus</i>	<i>Scaleable</i>	<i>Default ModBus</i>	<i>Active by default address</i>	<i>Default dead band</i>	<i>Direction</i>
ModBus alive indicator (increments by one every second)	1 s = 1	no	402001	YES	-	to bus
Digital input	0 .. 63 = 0 .. 63	no	402002	YES	-	to bus
Phase current I <sub>L</sub>	1 A = 1	no	402003	YES	1 A	to bus
Phase current I <sub>L1</sub>	1 A = 1	no	402004	YES	1 A	to bus
Phase current I <sub>L2</sub>	1 A = 1	no	402005	YES	1 A	to bus
Phase current I <sub>L3</sub>	1 A = 1	no	402006	YES	1 A	to bus
Residual current I <sub>0</sub>	1 A = 1	no	402007	YES	1 A	to bus
Relative I <sub>2</sub> /I <sub>1</sub>	1 = 1	no	402008	no	-	to bus
Frequency	50.00 Hz = 5000	YES	402009	YES	0,010 Hz	to bus
Output relays	0 .. 1	No	402010	YES	-	to bus
Temperature	1,0 °C = 10	no	402011	YES	0,5 °C	to bus
Release latched relays and indicator LEDs (Only a change from value 0 to 1 will do the release.)	1 = 1	no	402030	YES	-	from bus

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**Table 1.** (continued) ModBus data items in RTU master mode.

<b>Name</b>	<b>Default scaling Device = ModBus</b>	<b>Scaleable</b>	<b>Default ModBus</b>	<b>Active by default address</b>	<b>Default dead band</b>	<b>Direction</b>
Event request flag	1 = 1	no	402031	YES	-	from bus
Event sent flag	1 = 1	no	402032	YES	-	to bus
Event code and seconds of time stamp Upper byte = event code Lower byte = seconds	1 = 1	no	402033	YES	-	to bus
Event time stamp, milliseconds	1 = 1	no	402034	YES	-	to bus
Event time stamp Upper byte = minute Lower byte = hour	1 = 1	no	402035	YES	-	to bus
Event time stamp Upper byte = day Lower byte = month	1 = 1	no	402036	YES	-	to bus
Event time stamp, year	1 = 1	no	402037	YES	-	to bus
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Real time clock minute synchronization (Values 59, 0 and 1 are ignored. Only a change of value will cause a synchronization.)	1 = 1	no	402038	No	-	from bus
Ambient temperature	1 °C = 1	No	402040	No	-	to bus

**Table 2.** Available data items in ModBus RTU slave mode.

<b>Name</b>	<b>Default scaling Device = ModBus</b>	<b>Scaleable</b>	<b>Register</b>	<b>Direction</b>
ModBus alive indicator (0..255, increments once in a second)	1 s = 1	No	402001	to bus
Digital inputs (positive logic) DI1 = bit <sub>0</sub> .. DI6 = bit <sub>5</sub>	0 .. 63 = 0 .. 63	No	402007	to bus
Event code and seconds of time stamp Upper byte = event code Lower byte = seconds	1 = 1	no	402002	to bus
Event time stamp, milliseconds	1 = 1	no	402003	to bus
Event time stamp Upper byte = minute Lower byte = hour	1 = 1	no	402004	to bus
Event time stamp Upper byte = day Lower byte = month	1 = 1	no	402005	to bus
Event time stamp, year	1 = 1	no	402006	to bus
Phase current I <sub>L</sub>	1 A = 1	no	402008	to bus
Phase current I <sub>L1</sub>	1 A = 1	no	402009	to bus
Phase current I <sub>L2</sub>	1 A = 1	no	402010	to bus
Phase current I <sub>L3</sub>	1 A = 1	no	402011	to bus
Residual current I <sub>0</sub>	1 A = 1	no	402012	to bus
Relative I <sub>2</sub> /I <sub>1</sub>	1 = 1	no	402013	to bus
Frequency	50.00 Hz = 5000 *	YES	402014	to bus

Appendix A

**Table 2.** (continued) Available data items in ModBus RTU slave mode.

<i>Name</i>	<i>Default scaling Device = ModBus</i>	<i>Scaleable</i>	<i>Register</i>	<i>Direction</i>
Relays (Decimal value for the status of relays T1,T2, A1,A2 and A3)	0 .. 1	no	402015	to bus
Temperature	1,0 °C = 10	no	402016	to bus
Harmonics of IL1 402202 = 1. harmonic 402208 = 7. harmonic	1.0 % = 10		402202 – 402208 **	to bus
Harmonics of IL2	1.0 % = 10		402222 – 402228 **	to bus
Harmonics of IL3	1.0 % = 10		402242 – 402248 **	to bus
Last event	1 = 1	no	402495	to bus
Last event timestamp, millisecond	1 = 1	no	402496	to bus
Last event timestamp, Upper byte = minute Lower byte = hour	1 = 1	no	402497	to bus
Last event timestamp Upper byte = day Lower byte = month	1 = 1	no	402498	to bus
Last event timestamp, year	1 = 1	no	402499	to bus

Appendix A

**Table 2.** (continued) Available data items in ModBus RTU slave mode.

Release latched relays and indicator LEDs (Only a change from value 0 to 1 will do the release.)	1 = 1	no	402501	from bus
Real time clock minute synchronization (Values 59, 0 and 1 are ignored. Only a change of value will cause synchronization.)	1 = 1	no	402502	from bus
Set seconds of the real time clock	1 = 1	no	402504	from bus
Set real time clock Upper byte = minute Lower byte = hour	1 = 1	no	402505	from bus
Set real time clock Upper byte = day Lower byte = month	1 = 1	no	402506	from bus
Set year of the real time clock	1 = 1	no	402507	from bus
Set ambient temperature	1 °C = 1	No	402508	from bus

Notes:

\* Check default scaling in Vampset (Default: 0 10 0 1 → 50.00 Hz - 500)

\*\* In Vampset the Modbus slave register mentioned for the parameter Harmonics of IL1, IL2 and IL3 is meant to read the correspondent DC component of each current.