

## ProfiBus DP items of Overcurrent and earth fault relay VAMP 140 using VPA 3CG interface module

ProfiBus slave Ident-Number: 00F7 (hex)  
 ProfiBus slave DDB: VPA\_00F7.GSD  
 VAMP 140 software version: 3.30  
 ( dbiten\ab\_data.db,v 4.1.1.3 )

Table 1. contains the readable data items from the device and Table 2. contains the writeable data items to the device.

Name	Direction	Default activation in continuous mode	Length in bytes	Default offset in continuous mode	Parameter number in request mode	Default scaling (VAMP140 v. ProfiBus DP)	Scaling parameter (See figure 1)	Base parameter
Digital inputs	to bus	On	1	0	0	DI1 = b <sub>0</sub>	-	DI
Frequency	to bus	Off	2	14	1	1.000 Hz = 100	ABs_f	f
Phase current I <sub>L</sub>	to bus	On	2	2	2	1 A = 1	-	IL
Phase current I <sub>L1</sub>	to bus	Off	2	6	3	1 A = 1	-	IL1
Phase current I <sub>L2</sub>	to bus	Off	2	8	4	1 A = 1	-	IL2
Phase current I <sub>L3</sub>	to bus	Off	2	10	5	1 A = 1	-	IL3
I <sub>0</sub> residual current	to bus	Off	2	12	6	1.00 A = 100	-	I <sub>0</sub>
Relative unbalance current I <sub>2</sub> /I <sub>1</sub>	to bus	Off	1	4	7	100% = 100	-	I2DivI1

Name	Direction	Default activation in continuous mode	Length in bytes	Default offset in continuous mode	Parameter number in request mode (index)	Default scaling (VAMP140 v. ProfiBus DP)	Scaling parameter (See figure 1)	Base parameter
State of output relays	to bus	Off	2	16	8	T1 = b <sub>0</sub> T2 = b <sub>1</sub> A1 = b <sub>2</sub> .. A5 = b <sub>6</sub>	-	DO
Continuous second counter	to bus	Off	1	1	9	1 s = 1	-	SecSinceGenesisLSB
Event , millisecs and event code	to bus	OFF (Request mode only)	4	-	10	b <sub>0..7</sub> = Event code b <sub>15</sub> = Overflow flag b <sub>16..31</sub> = ms	-	AnyBusEvent
Event , Hour Min Sec	to bus	OFF (Request mode only)	4	-	10 (1)	b <sub>0..7</sub> = s b <sub>8..15</sub> = min b <sub>16..23</sub> = h b <sub>24..31</sub> = 0	-	AnyBusEvent [1]
Event , year month day	to bus	OFF (Request mode only)	4	-	10 (2)	b <sub>0..7</sub> = day b <sub>8..15</sub> = month b <sub>16..31</sub> = year	-	AnyBusEvent (2)

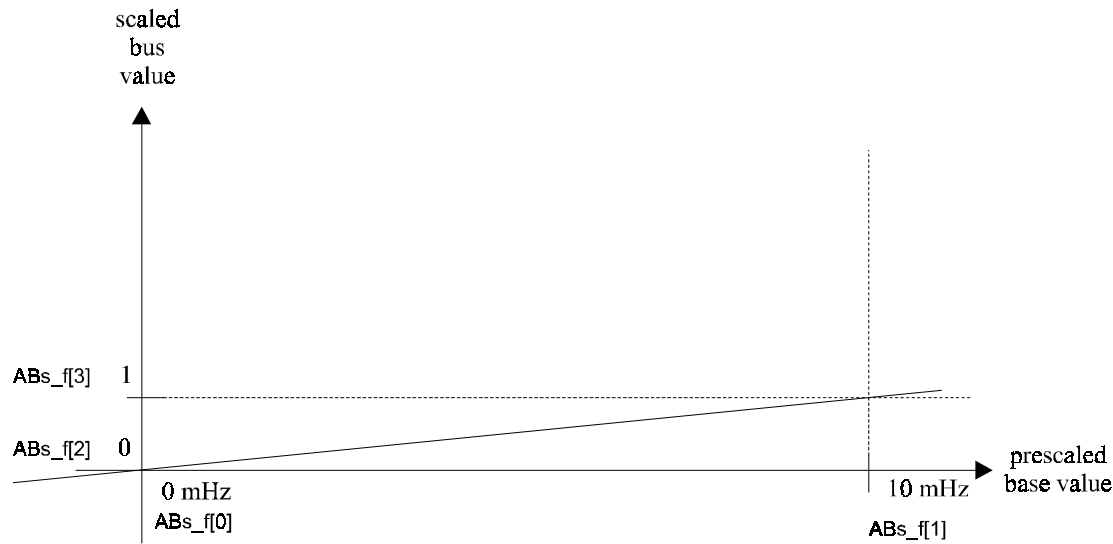


Figure 1. Default scaling for frequency is 10 mHz => 1 (50 Hz equals 5000) corresponding values {0, 10, 0, 1} of the scaling parameter `ABs_f`. By writing different values to the scaling parameter vector `ABs_f[n]` ( $n=0..3$ ), you may change the scaling. E.g. scaling 1 mHz => 1 (50 Hz equals 50000) is achieved by setting `ABs_f[1]=1` instead of 10.

**Table2.** ( contains the writeable data items to the device )

<i>Name</i>	<i>Default activation in continuous mode</i>	<i>Length in bytes</i>	<i>Default offset in continuous mode</i>	<i>Parameter number in request mode (index)</i>	<i>Value range (VAMP140 v. ProfiBus DP)</i>
Release latched relays and indicators	Off	1	30	11	0 = Do nothing 1 = Release latches
Scaling factor for overcurrent stages	Off	1	31	12	100% = 100 Range: 20%..100%
Synchronize minutes	OFF (Request mode only)	1	-	13	1 min = 1 Range: 0 .. 59
Set real time clock hours, minutes and seconds	OFF (Request mode only)	4	-	14	b <sub>0..7</sub> = s b <sub>8..15</sub> = min b <sub>16..23</sub> = h b <sub>24..31</sub> = 0
Set real time clock year, month and day	OFF (Request mode only)	4	-	14 (1)	b <sub>0..7</sub> = day b <sub>8..15</sub> = month b <sub>16..31</sub> = year