

M-Bus data telegram description of GWF encoder registers

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2 M-Bus Loads

Slave	Current [mA]	M-Bus Loads
GWF UNICocoder® Q3 2,5	3.0	2
GWF UNICocoder® Q3 4	3.0	2
GWF MTKcoder®	3.0	2
GWF MTWcoder®	3.0	2
GWF UNICocoder® MP	3.0	2
GWF MTKcoder® MP	3.0	2
GWF MTWcoder® MP	3.0	2

3 GWF UNICocoder® Q3 2,5

GWF UNICocoder® Q₃ 2,5

Cold water up to 30°C

Warm water up to 90°C

	Field	Hex	Remark
	Start	0x68	Start character long frame
	L-Field	0x1B	Length
	L-Field	0x1B	Length
	Start	0x68	Start character long frame
	C-Field	0x08	Sending "requested data"
	Adress-Field	0x01	Primary address = 1 or 253 for secondary addressing
	CI-Field	0x72	Answer with variable data frame
Fixed Data Header 12 Byte	Identification Number	0x78	8 Digit BCD e.g. 12345678
		0x56	
		0x34	
		0x12	
	Manufacturer Identification	0xE6	According to IEC 870
		0x1E	GWF
	Version	0x36	e.g. V5.4
	Medium	0x06 / 0x07	Warm water / Cold water
	Access Number	0x13	Access counter e.g. 19
	Status	0x00 / 0x02	No Error / Any application error
Signature	0x00	Default 0	
	0x00	Default 0	
Variable Format Data	DIF	0x0C	Data format 0x0C / 8 Digit BCD
	VIF	0x78	Serial number
	Serial Number	0x78	12345678
		0x56	
		0x34	
		0x12	
	DIF	0x0C	Data format 8 Digit BCD
	VIF	0x15	Volume, Multiplier = 10⁻¹
	Volume	0x21	Volume = 54321 * 10 ⁻¹ = 5432,1 m ³
		0x43	
0x05			
0x00			
CS	CS	Checksum	
Stop	0x16	Stop	

4 GWF UNICocoder® Q3 4

GWF UNICocoder® Q3 4

Cold water up to 30°C

Warm water up to 90°C

Field	Hex	Remark	
Start	0x68	Start character long frame	
L-Field	0x1B	Length	
L-Field	0x1B	Length	
Start	0x68	Start character long frame	
C-Field	0x08	Sending "requested data"	
Adress-Field	0x01	Primary address = 1 or 253 for secondary addressing	
CI-Field	0x72	Answer with variable data frame	
Fixed Data Header 12 Byte	Identification Number	0x78	8 Digit BCD e.g. 12345678
		0x56	
		0x34	
		0x12	
	Manufacturer Identification	0xE6	According to IEC 870
		0x1E	GWF
	Version	0x36	e.g. V5.4
	Medium	0x06 / 0x07	Warm water / Cold water
	Access Number	0x13	Access counter e.g. 19
	Status	0x00 / 0x02	No Error / Any application error
Signature	0x00	Default 0	
	0x00	Default 0	
Variable Format Data	DIF	0x0C	Data format 0x0C / 8 Digit BCD
	VIF	0x78	Serial number
	Serial Number	0x78	12345678
		0x56	
		0x34	
		0x12	
	DIF	0x0C	Data format 8 Digit BCD
	VIF	0x16	Volume, Multiplier = 10⁰
	Volume	0x21	Volume = 54321 * 10 ⁰ = 54321 m ³
		0x43	
0x05			
0x00			
CS	CS	Checksum	
Stop	0x16	Stop	

5 GWF MTKcoder® / MTWcoder®

GWF MTKcoder® (Cold water up to 30°C)

GWF MTWcoder® (Warm water up to 90°C)

Field	Hex	Remark	
Start	0x68	Start character long frame	
L-Field	0x1B	Length	
L-Field	0x1B	Length	
Start	0x68	Start character long frame	
C-Field	0x08	Sending "requested data"	
Adress-Field	0x01	Primary address = 1 or 253 for secondary addressing	
CI-Field	0x72	Answer with variable data frame	
Fixed Data Header 12 Byte	Identification Number	0x78	8 Digit BCD e.g. 12345678
		0x56	
		0x34	
		0x12	
	Manufacturer Identification	0xE6	According to IEC 870
		0x1E	GWF
	Version	0x36	e.g. V5.4
	Medium	0x06 / 0x07	Warm water / Cold water
	Access Number	0x13	Access counter e.g. 19
	Status	0x00 / 0x02	No Error / Any application error
Signature	0x00	Default 0	
	0x00	Default 0	
Variable Format Data	DIF	0x0C	Data format 0x0C / 8 Digit BCD
	VIF	0x78	Serial number
	Serial Number	0x78	12345678
		0x56	
		0x34	
		0x12	
	DIF	0x0C	Data format 8 Digit BCD
	VIF	0x16	Volume, Multiplier = 10⁰
	Volume	0x21	Volume = 54321 * 10 ⁰ = 54321 m ³
		0x43	
0x05			
0x00			
CS	CS	Checksum	
Stop	0x16	Stop	

6 GWF UNICocoder[®] MP / MTKcoder[®] MP / MTWcoder[®] MP

GWF UNICocoder[®] MP (Cold water up to 30°C and Warm water up to 90°C)

GWF MTKcoder[®] MP (Cold water up to 30°C)

GWF MTWcoder[®] MP (Warm water up to 90°C)

Field	Hex	Remark	
Start	0x68	Start character long frame	
L-Field	0x1B	Length	
L-Field	0x1B	Length	
Start	0x68	Start character long frame	
C-Field	0x08	Sending "requested data"	
Adress-Field	0x01	Primary address = 1 or 253 for secondary addressing	
CI-Field	0x72	Answer with variable data frame	
Fixed Data Header 12 Byte	Identification Number	0x78	8 Digit BCD e.g. 12345678
		0x56	
		0x34	
		0x12	
	Manufacturer Identification	0xE6	According to IEC 870
		0x1E	GWF
	Version	0x3C	e.g. V6.0
	Medium	0x06 / 0x07	Warm water / Cold water
	Access Number	0x13	Access counter e.g. 19
	Status	0x00 / 0x02	No Error / Any application error
Signature	0x00	Default 0	
	0x00	Default 0	
Variable Format Data	DIF	0x0C	Data format 0x0C / 8 Digit BCD
	VIF	0x78	Serial number
	Serial Number	0x78	12345678
		0x56	
		0x34	
		0x12	
	DIF	0x0C	Data format 8 Digit BCD
	VIF	0x13	Volume, Multiplier = 10⁻³
	Volume	0x78	Volume = 12345678 * 10 ⁻³ = 12345,678 m ³
		0x56	
0x34			
0x12			
CS	CS	Checksum	
Stop	0x16	Stop	