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Janitza®	Janiza Janiza Janiza Janiza	Construction of the constr	& wenter		211		& ************************************	7 22 15 22 1	&	
Туре	UMG 103-CBM (UL certified)	UMG 20CM	Module 20CM-CT6	UMG 604-PRO (UL certified) E EP	UMG 605-PRO (UL certified)	UMG 801 (UL certified)	Module 800-CT8-A (UL certified)	UMG 806	UMG 806 Modules 806-EC1 806-ED1 806-EI1	
Part number	G 103-CE	JMG 200	20CM-C	G 604-P	G 605-P	52.31.001	800-CT8	UMG 8	14.02.016 14.02.019 14.02.020 1	
Use in three-phase 4-conductor systems with grounded neutral conductor up to max.	277 V / 480 V AC	230 / 400 V AC	Current measurement only	277 / 480 V AC	277 / 480 V AC	347 / 600 V AC (UL) 480 / 830 V AC (IEC)	Current measurement only	230 / 400 V AC	Ŭ.	
Use in three-phase 3-conductor systems ungrounded up to max.			<u> </u>	480 V AC	480 V AC	690 V AC	de la company de	400 V AC	90	
Supply voltage	-	90 – 276 V AC; 90 – 276 V DC	ĕ -	95 – 240 V AC; 135 – 340 V DC*1	95 - 240 V AC; 135 - 340 V DC*1	24 – 48 V DC, PELV	S	80 – 270 V AC; 80 – 270 V DC	0	
Three conductor / four conductor (L-N, L-L)	-/•	•/•	-/•	•/•	•/•	•/•	_	• / •	<u> </u>	
Quadrants	4	4	4	4	4	4	4	4	5	
Sampling frequency 50/60 Hz	5.4 kHz	20 kHz	60 kHz	20 kHz	20 kHz	51.2 kHz (V) / 25.6 kHz (A)	8.33 kHz	8 kHz	\$	
Meter reading cycle as per PTB-A 50.7			-							
Effective value from periods (50/60 Hz)	10 / 12	10 / 12 20**1	10 / 12 6* ¹¹	10 / 12	10 / 12	10 / 12 4*4	10 / 12	10 / 12		
Residual current inputs Current measuring channels	3	20 **1	6–96 (max. 16 modules)*11	4	- 4	8	8–80 (max. 10 modules)	1	4 *12	
Thermistor input	-	-	-30 (max. 10 modules)	1	1	4 *4	6-60 (max. 10 modules)	1	4	• : Included
Harmonics current V / A	1st – 40th	1st – 63th	1st – 63th	1st – 40th	1st – 63th	1st-127th / 1st-63th	1st, 3rd, 5th 15th	1st – 31th		- : Not included
Distortion factor THD-U / THD-I in %	•	•	THD-I only	•	•	•	THD-I only	•		
Unbalance	-		-	•	•	•		•		*1 Other voltages are also available
Short / long-term flicker	-	<mark>-</mark> -	-		•	•		-		optionally
Transients	-	. [-	> 50 µs	> 50 µs	•		-		*2 Option
Short-term interruptions	-	-	-	• • • • • • • • • • • • • • • • • • • •	•	•	2 = 2/	-		*3 Possible combinations of
Accuracy V; A	0.2%; 0.2%	1%; 1%	-; 0.5%	0.2%; 0.25%	0.2%; 0.25%	0.2%; 0.2%	0.5%	0.2%; 0.2%		inputs and outputs: a) 5 digital outputs
IEC 61000-4-30 Active energy class	- 0.5S (/5 A)	- 1	- 2	0.5S (/5 A)	Class S 0.5S (/5 A)	0.2S (/5 A)	0.5S (/5 A)	0.5S (/5 A)		b) 2 digital outputs and
Digital inputs	0.55 (/5 A)	5	-	2	• ·	0.23 (/5 A)	0.55 (/5 A)	0.55 (/5 A)	4	3 digital inputs
Digital / pulse output		2		2	2	4		1	2 2	*4 Combined function: Optional analog / temperature /
Analog output	-		-		-	1		-		residual current input
Memory for min. / max. values	•	· ·	•	•	й	•	*9	•		*5 2 pulse outputs
Memory size / recording duration (according to factory setting)	4 MB / approx. 3 months	768 KB / approx. 1 month	Only via UMG 20CM	128 MB / approx. 47.97 months	128 MB / approx. 2.37 months	4 GB / no factory setting		4 MB		*6 SNMP for internal
Clock	•	•	Only via UMG 20CM	•	·	•	*9	Ě		Profinet communication only
Integrated logic	Comparator	Current limit values per channel	Current limit values per channel	V 20010 (7 p.g.)	Jasic® (7 prg.)	<u></u>		2		*7 With module + 1 current
Web server / Email		<u> </u>	Σ	•/•	•/•				10	measurement channel
APPs: Measured value monitor, EN 50160 & IEC 61000-2-4 Watchdog Fault recorder function	1	<u>-</u>	<u> </u>	e :	Ž :	<u>-</u>	_			*8 MID certified
Peak load optimisation		<u> </u>	×	*2	5	Ĕ	8	Ĕ	(D	*9 On the basic device
Software for energy management and network analysis	GridVis® Essentials	GridVis® Essentials	GridVis® Essentials	GridVis® Essentials	GridVis® Essentials	GridVis® Essentials	GridVis® Essentials	GridVis® Essentials	GridVis® Essentials	*10 To query the slave devices
Interfaces		e	Σ	3	v)	5	∑	<u>2</u>	5	*11 Combined function:
RS-232	-	-	<u> </u>	• •	• as	3		-	0	Optionally operating or
RS-485	•	ರ •	Only via UMG 20CM	-	· ·	* ·	*9	•	육	residual current
USB		<u>ව</u>	-	9		•	푼	-	5	*12 These are 420 mA signal inputs
D-Sub 9 plug (Profibus)		-	9		•	-	٥		<u>~</u>	
M-Bus Ethernet	<u> </u>	-	<u>-</u>	·	<u> </u>	-		<u></u>	<u> </u>	*13 289 / 500 V AC for MID+ models
Protocols		<u>.</u>	0	•	2	2	0	<u>-</u>	•	*14 Applies to part no. 52.36.021 and 52.36.025
Modbus RTU	<u>စ</u> ်	•	Only via UMG 20CM	× ·	<u> </u>	•	*9	•	<u> </u>	
Modbus gateway	<u> </u>	<u>-</u>	0	· ·	•	•*10	bo	-	<u>о</u>	*15 Partition A: approx. 106 months, partition B: approx. 26 months
Profibus DP V0	<u> </u>	-	×	É ·	•		X		X	*16 approx. 2 months
Modbus TCP/IP, Modbus RTU over Ethernet	5		-	·	흥 .	ModbusTCP/IP	*9	<u> </u>	<u> </u>	.5 approxi 2 months
SNMP	-	<u> </u>	-	<u>유</u>	•	-	<u> </u>	-	<u>-</u>	Comment: For detailed technical
OPC UA		室 -	ન <u>-</u>	<u> </u>		<mark> </mark>	*9	ヺ <u>゠゠゠゠</u>	ぢ	information, please refer to the respective operating manuals and
BACnet IP	Q -	-	2	•*²	6 •*2	9	<u>o</u>	9	Q	the Modbus address lists.
Profinet	-			-	-	_	>		<	

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Use in three-phase 4-conductor systems with grounded

Use in three-phase 3-conductor systems ungrounded up to max.

Memory size / recording duration (according to factory setting)

Software for energy management and network analysis

Modbus TCP/IP. Modbus RTU over Ethernet

APPs: Measured value monitor, EN 50160 & IEC 61000-2-4 Watchdog

Type

Part number

Quadrants

neutral conductor up to max.

Sampling frequency 50/60 Hz

Current measuring channels

Residual current inputs

Harmonics current V / A

Short / long-term flicker

Short-term interruptions

Thermistor input

Unbalance

Transients

Accuracy V: A

IEC 61000-4-30

Analog output

Integrated logic

Interfaces

RS-232

RS-485

M-Bus

Ethernet

Protocols Modbus RTU

SNMP

OPC UA BACnet IP

Profinet

Modbus gateway

Profibus DP V0

USB

Web server / Email

Fault recorder function

Peak load optimisation

D-Sub 9 plug (Profibus)

Clock

Active energy class Digital inputs

Digital / pulse output

Memory for min. / max. values

Three conductor / four conductor (L-N, L-L)

Meter reading cycle as per PTB-A 50.7

Effective value from periods (50/60 Hz)

Distortion factor THD-U / THD-I in %



UMG 96-S2

230 / 400 V AC

90 - 265 V AC; 90 - 250 V DC

- / •

8 kHz

16 / 16

3

1st - 15th

0.2%; 0.2%

0.5S (.../5 A)

1

GridVis® Essentials

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-



22.

P M E CBM PN

277 / 480 V AC

480 V AC

90 - 277 V AC; 90 - 250 V DC*1

21.33/25.6 kHz

10 / 12

3 4 3 4 4 4

- - - 2*4 - 2*4

1st - 40th

.

0.2%: 0.2%

0.5S (.../5 A)

2 6 2 (5)*3 6 (5)*3

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• - • •

Comparator

GridVis® Essentials

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- - - • - 2

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_ _ _ • _ _*6

5 - - - •*2 - -

- - • - •

- - • -

- - •/• - •/-

· 4 - (3)*3 4 (3)*3

- - - 2 -

52. 52.



96-PA 96-PA-MID+

8.13 kHz

10 / 12

3*7

1st - 40th

-

0.2%: 0.2%

0.2S (.../5 A)

8 MB / approx. 3 months (MID+ load

profile: approx.

24 months)

Comparator

-



UMG 96-PQ-L

•/•

13.67 kHz 13.97 kHz

10 / 12

-

3*7

1st - 65th

◆*14

0.2%: 0.2%

Class S*14

0.2S (.../5 A)

3

3

64 MB / partition A:

part. B: approx.

20 months

Comparator

GridVis® Essentials GridVis® Essentials GridVis® Essentials

-

•

approx. 45 months,

600 V AC

347 / 600 V AC (UL)*13 347 / 600 V AC (UL)

417 / 720 V AC (IEC)*13 417 / 720 V AC (IEC)

90 - 277 V AC; 90 - 250 V DC*1



RCM-EL (UL certifie





January Marie and American		Anthre America				
UMG 509-PRO (UL certified)	280	UMG 512-PRO (UL certified)				
52.26.001	JMG 512-PRO	52.17.011				
347 / 600 V AC (UL) 417 / 720 V AC (IEC) 600 V AC	Ž	347 / 600 V AC (UL) 417 / 720 V AC (IEC) 600 V AC				
95 - 240 V AC; 80 - 300 V DC*1		95 – 240 V AC; 80 – 300 V DC*1				
• / • 4		• / • 4				
20 kHz		25.6 kHz				
-		-				
10 / 12		10 / 12				
2		2				
4		4 1				
1st – 63th		1st – 63th				
181 – 03111		181 – 03111				
•		•				
·		•				
> 50 µs	ဗ	> 39 µs				
•	4	•				
0.1%; 0.2%	ė	0.1%; 0.1%				
-	8	Class A				
0.2S (/5 A)	5	0.2S (/5 A)				
2	ပ	2				
2	ш	2				
-	0	-				
•	J.	•				
256 MB / approx. 95.95 months	ver quality analyzer (Class A according to IEC 61000-4-30	256 MB / approx. 3.11 months				
•	ပ္ထို	•				
Jasic® (7 prg.)	4	Jasic [®] (7 prg.)				
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-	ਹੁ	-				
GridVis® Essentials	yzer	GridVis® Essentials				
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Load management for the energy and mobility transition

Modern load management is becoming increasingly important in the context of the energy and mobility transition. Intelligent load management facilitates the avoidance of production downtimes, the development of energy strategies and the reduction of costs.

Load management engineering

Janitza electronics supports you from the analysis of your system environment to the integration of a modern load management approach. Let us assist you in optimizing your systems to achieve your energy goals. With our cross-manufacturer networking, we can integrate your existing production environment and ensure transparency.

Your advantages at a glance:

- Optimize your energy supply
- Detect and reduce peak loads
- One overarching system for all applications
- A uniform data basis for cost analysis
- Future-proof thanks to a wide range of expansion options

Your savings potential in figures:

- Reduction of expensive peak loads by up to 40%
- Reduction of charging costs for electric cars by up to 50%
- Increase the efficiency of your PV system in conjunction with an electric storage unit by up to 100%



Janitza electronics GmbH



Only those who keep a close eye on their energy consumption can reduce costs and increase energy efficiency.

This is a particular focal point for Janitza electronics GmbH. The product range offered by Janitza provides complete system solutions for modern energy data management (e.g. ISO 50001), power quality, load management and residual current monitoring.

Alongside measurement devices and software, Janitza also offers the associated services – a complete solution that guarantees efficient energy management. This includes: Energy measurement technology, class A network quality analyzers compliant with standard EN 50160, energy management systems and many more. Alongside consultation and the development of technical solutions, Janitza also carries out commissioning, courses and training with customers and provides maintenance and support for our systems.

Janitza develops and manufactures the products (hardware and software) at their site in Lahnau, Germany just as they always have.