



Generating set controllers

RGAM 10



General characteristics

- VAC inputs: mains L1-L2/N-L3, generator L1-L2/N
- 4 digital inputs, 5 relay outputs.

Viewed measures and data

- Voltage and frequency of mains and generator
- Battery voltage
- Engine hours.

Most significant functions

- Alphanumeric display for alarm and parameter texts (English only)
- Mains and generator supervision: min-max voltage, min-max frequency, phase sequence (for mains only) and voltage asymmetry (for mains only)
- Inputs, outputs and alarms, all with programmable properties
- Wide selection of functions to satisfy particular application requirements
- Quick set-up and commissioning with set-up software via RS232 port.

RGAM 20



General characteristics

- VAC inputs: mains L1-L2/N-L3, generator L1-L2/N
- 6 digital inputs, 6 relay outputs.

Viewed measures and data

- Voltage and frequency of mains and generator
- Battery voltage
- Engine speed
- Running and maintenance hours (stored in a non-volatile memory).

Most significant functions

- Alphanumeric display for alarm and parameter texts (5 languages)
- Mains and generator supervision: min-max voltage, min-max frequency, phase sequence (for mains only) and voltage asymmetry (for mains only)
- Inputs, outputs and alarms, all with programmable properties
- Automatic generator test at predefined time period or by external inputs
- Quick commissioning with set-up software and status supervision with remote control software via RS232 port
- Modem support with "Autocall" function for automatic email and SMS sending at predefined events.

General characteristics

- VAC inputs: mains L1-L2/N-L3, generator L1-L2/N
- 8 digital inputs, 7 relay outputs.

Viewed measures and data

- Voltage of mains and generator lines
- Generator frequency
- Battery voltage
- Running and maintenance hours (stored in a non-volatile memory).

Most significant functions

- Wide selection of functions to satisfy particular application requirements
- Quick commissioning with set-up software and status supervision with remote control software
- Modem support with "Autocall" function for automatic email and SMS sending at predefined events.



..for a total control

RGAM 40 - RGAM 41 - RGAM 42



General characteristics

- VAC inputs: mains L1-L2-L3-N, generator L1-L2-L3-N
- Current inputs L1-L2-L3
- 8 digital inputs, 7 relay outputs.

Viewed measures and data

- Voltage, current, power, power factor and frequency of mains and generator lines
- Active and reactive energy
- Battery voltage
- Engine speed
- Oil pressure, engine temperature and fuel level
- Running and maintenance hours
- Number of starts and percentage of successful starts
- Event log of the last 255 events.

Most significant functions

- 5-language support for alarms, events and parameters
- Generator overload protection
- Dummy load control
- Automatic generator test by means of programmable real time clock (RGAM 41 and RGAM 42 only)
- CANbus – J1939 interface (RGAM 42 only)
- Programmable and customisable inputs, outputs and alarms
- Quick commissioning with set-up software and status supervision with remote control software
- Modem support with “Autocall” function for automatic email and SMS sending at predefined events.



General characteristics

- RGK 50 is a control and protection device for generating sets, suitable for remote start applications
- RGK 60 is a control and protection device for generating sets, equipped with Automatic Mains Failure (AMF) function
- VAC inputs: mains L1-L2-L3-N, generator L1-L2-L3-N
- Current inputs L1-L2-L3
- 12 digital inputs, 7 relay outputs.

Viewed measures and data

- Voltage, current, power, power factor and frequency of mains and generator lines
- Active and reactive energy
- Battery voltage
- Engine speed
- Oil pressure, engine temperature and fuel level
- Running and maintenance hours
- Number of starts and percentage of successful starts
- Event log of the last 255 events.



Most significant functions

- 5-language support for alarms, events, parameters and help messages
- All texts are user-customisable
- On-line help in case of alarm or during parameter setting
- Generator overload protection
- Slots for expansion boards: RS485 interface, clock calendar, digital I/O, etc.
- Programmable and customisable inputs, outputs and alarms
- Quick commissioning with set-up software and status supervision with remote control software
- Modem support with “Autocall” function for automatic email and SMS sending at predefined events.

Technical characteristics

	RGAM 10	RGAM 20	RGAM 12 RGAM 12RC RGAM 24 RGAM 24 RC	RGAM 40 RGAM 41 RGAM 42	RGK 50 RGK 60
Battery rated voltage	12/24VDC	12/24VDC	12VDC or 24VDC	12/24VDC	12/24VDC
Operating supply range	9...35VDC	9...35VDC	9...16VDC or 13...32VDC	9...35VDC	9...33VDC
Mains voltage control	L1-L2/N-L3	L1-L2/N-L3	L1-L2/N-L3	L1-L2-L3-N	L1-L2-L3-N (RGK 60)
Generator voltage control	L1-L2/N	L1-L2/N	L1-L2/N	L1-L2-L3-N	L1-L2-L3-N
Rated voltage	100...415VAC	100...415VAC	100...480VAC	100...480VAC	100...480VAC
Current control	-	-	-	L1-L2-L3	L1-L2-L3
Rated frequency	50/60Hz	50/60Hz	50/60Hz	50/60/400Hz	50/60/400Hz
VT programming	-	YES	-	YES	YES
Input current	-	-	-	0.05...6A	0.05...6A
Engine running pick-up input	-	-	-	YES	YES ③
TRMS voltage measure	YES	YES	YES	YES	YES
TRMS current measure	-	-	-	YES	YES
Display	4 alphanumeric character LED	4 alphanumeric character LED	3 digit LED	Graphic backlit LCD, 128x64 pixels	Graphic backlit LCD, 192x64 pixels
LEDs	16	19	16	9	8 (RGK 50) 10 (RGK 60)
Digital inputs	4	6	8	8	12
Relay outputs	5	6	7	7	7
Rated relay output	8A AC1	8A AC1	8A AC1	8A AC1	8A AC1
Engine running inputs	"D+" and "AC"	"D+" and "AC"	"D+" and "AC"	"D+" and "AC"	"D+" and "AC"
Engine speed input	-	"W"	-	"W" or "Pick-Up"	"W" or "Pick-Up" ③
Analog input: Level-Pressure-Temp	-	-	-	YES	YES
Non-volatile memory for data storage	-	YES	-	YES	YES
I/O expansion	-	-	-	-	YES
RS232 port	YES	YES	YES	YES	YES
RS485 port	-	-	YES (RGAM...RC only)	YES (RGAM 41 only)	YES ③
Remote control ①	-	YES	YES	YES	YES
CANbus interface	-	-	-	YES (RGAM 42 only)	YES ③
Event logging	-	YES ②	YES ②	YES	YES
Data recording	-	YES	YES	YES	YES
RTC (Real Time Clock)	-	-	-	YES (RGAM 41 - RGAM 42 only)	YES ③
Number of parameters	110	163	80	177	161 (RGK 50) 182 (RGK 60)
Number of I/O functions	25	50	8	67	67 (RGK 50) 71 (RGK 60)
Number of alarms	18	31	17	43	45 (RGK 50) 47 (RGK 60)
User alarms	-	4	4	4	8
Alarm property customisation	-	YES	-	YES	YES
Texts for alarms, events and parameters	YES	YES	-	YES	YES
Number of languages	1	5	-	5	5
Text customisation	-	-	-	-	YES
Degree of protection	IP54 ④	IP54 ④	IP41 ④	IP41 ④	IP54 ④
Plug-in removable terminal connections	YES	YES	YES	YES	YES

① Remote control means: ASCII proprietary and Modbus® RTU protocols, GSM modem management, AUTOCALL function (SMS and email sending, etc), remote control software with ETHERNET communication by means of TCP/IP protocol.

② Events in volatile memory.

③ Optional board.

④ Degree of protection on front. IP20 at rear.



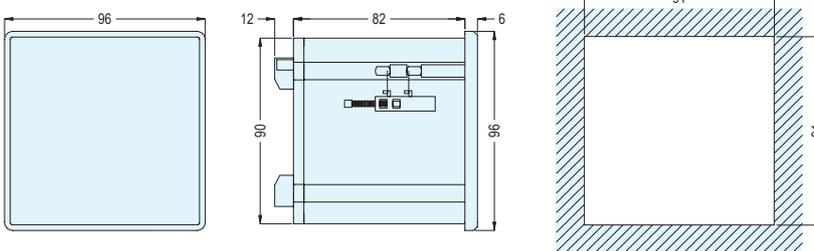
Comfort and safety 24 hours a day

How to order

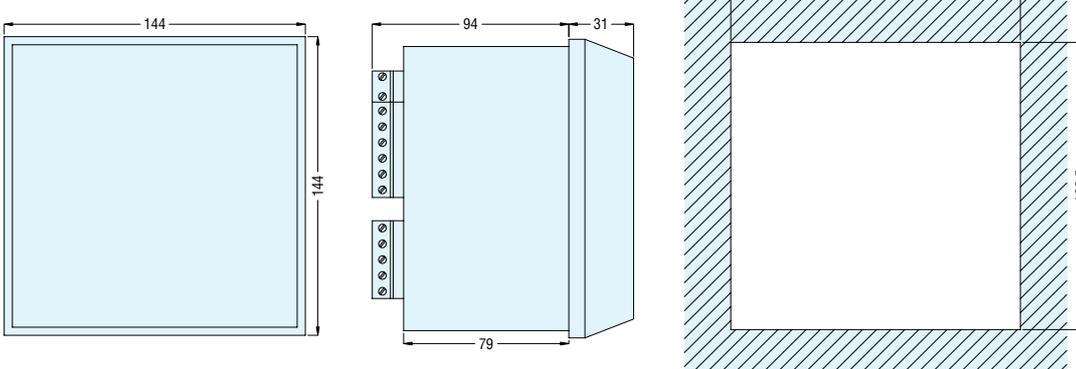
Order code	Description	Weight [kg]
Generating set controllers		
RGAM 10	Gen-set controller, 12/24VDC, 4 alphanumeric character display, with RS232 port (for set-up only)	0.480
RGAM 20	Gen-set controller, 12/24VDC, 4 alphanumeric character display, with RS232 port	0.460
31 RGAM 12	Gen-set controller, 12VDC, 3 digit LED display, with RS232 port	0.900
31 RGAM 24	Gen-set controller, 24VDC, 3 digit LED display, with RS232 port	0.900
31 RGAM 12RC	Gen-set controller, 12VDC, 3 digit LED display, with RS485 port	1.000
31 RGAM 24RC	Gen-set controller, 24VDC, 3 digit LED display, with RS485 port	1.000
RGAM 40	Gen-set controller, 12/24VDC, graphic LCD, with RS232 port	0.830
RGAM 41	Gen-set controller, 12/24VDC, graphic LCD, with RTC ❶, RS232 and RS485 ports	0.840
RGAM 42	Gen-set controller, 12/24VDC, graphic LCD, with RTC ❶, RS232 and CANbus ports	0.840
RGK 50	Gen-set controller, 12/24VDC, graphic LCD, with RS232 port (without AMF function)	0.750
RGK 60	Gen-set controller, 12/24VDC, graphic LCD, with RS232 port	0.750
Interface software		
31 RGAM SW	Remote control communication software for RGAM 12 - RGAM 12RC - RGAM 24 - RGAM 24RC units	0.246
RGK SW10	Set-up software for RGK 50 - RGK 60 and RGAM 10 - RGAM 20 - RGAM 4... units	0.246
RGK SW20	Remote control software (includes RGK SW10) for RGK 50 - RGK 60 and RGAM 20 - RGAM 4... units	0.400
Accessories		
RGK X01	Option board (clock calendar, RS485 port and 2 digit outputs) for RGK 50 - RGK 60 units	0.050
RGK X21	Option board (pick-up function, 2 digital outputs and 4 digital inputs) for RGK 50 - RGK 60 units	0.090
RGK X22	Option board (4 relay outputs) for RGK 50 - RGK 60 units	0.110
51 MODEMUSR5630	Modem 3Com-U.S.Robotics 56k FAX MODEM with PC cable	0.800
51 C2	Cable for PC - RS232 connection, 1.8m long	0.090
51 C3	Cable for PC - GSM Modem connection, 1.8m long	0.210
51 C4	Cable for PC - PX1/RS232 converter connection, 1.8m long	0.147
51 C5	Cable for modem - controller connection, 1.8m long	0.111
51 C7	Cable for GSM modem - controller connection, 1.8m long	0.100

❶ RTC = Real Time Clock with backup battery.

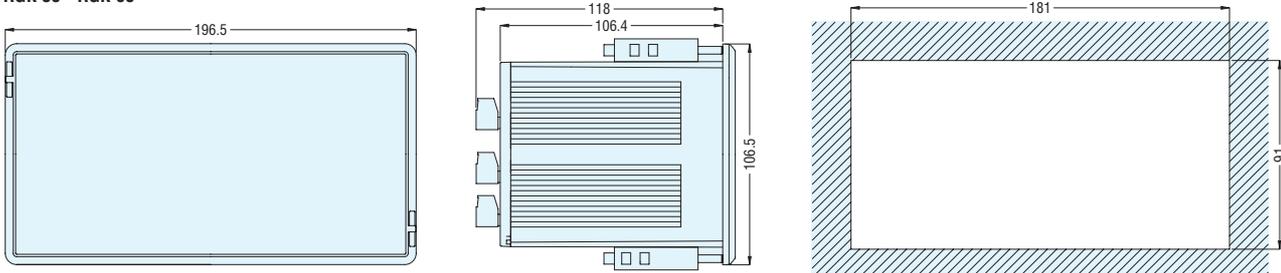
RGAM 10 - RGAM 20



RGAM 12 - RGAM 12RC - RGAM 24 - RGAM 24RC - RGAM 40 - RGAM 41 - RGAM 42



RGK 50 - RGK 60



orange



Contactors



Push buttons and selectors



Rotary cam switches

moduLo



Protection relays



Digital instruments



Automatic battery chargers



Automatic transfer switches

Planet-SWITCH

- Motor protection circuit breakers
- Switch disconnectors
- Contactors
- Motor protection relays
- Electromechanical starters
- Push buttons and selectors
- Limit, micro and foot switches
- Rotary cam switches

Planet-DIN

- Modular contactors
- Time relays
- Protection relays
- Level control relays
- Earth leakage relays

Planet-LOGIC

- Digital metering instruments and current transformers
- Soft starters
- AC motor drives
- Automatic power factor controllers
- Automatic battery chargers
- Automatic transfer switches
- Programmable logic relays
- Generating set controllers

The products described in this publication are subject to be revised or improved at any moment. Catalogue descriptions and details, such as technical and operational data, drawings, diagrams and instructions, etc., do not have any contractual value. In addition, products should be installed and used by qualified personnel and in compliance with the regulations in force for electrical systems in order to avoid damages and safety hazards.