

## Features

- Two Monitored Safety Outputs.
- Two OSSD Safety Inputs.
- Power, Reset and Run Indication.
- Simple 6 way connector to extend RPSMs.
- Can be extended with RPGM up to 20 OSSD devices.
- Improved safety input indication diagnostics.
- Ideal use with Lightcurtains or OSSD safety devices.
- Auto/Monitored Reset X1-X2 / X1-X3.
- Input/Output fault indication.
- 24Vdc Supply.

## Non programmable Safety Relay

RS Stock No.: 0656645



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

## Product Description

*The RPG1/RPGM is an expandable safety control unit designed to monitor multiple OSSD safety devices on a single system (zone). The master control unit (RPG1) can monitor one pair of Lightcurtains (transmitter & receiver) and each additional Light curtain set can be monitored by adding an additional RPGM extender module. This system can also be used to safely monitor other RS PRO products such as O-Series safety switches. **This system does not require programming!***

## Electrical Specifications

Control Unit	
Supply Nominal voltage	24Vac/dc (+/- 15%)
Nominal Power Consumption	100mA
OSSD Safety Inputs	2
Auxiliary Contacts	1 x N/C
Output Contact Rating (Max)	4A/230Vac; 2A/24Vdc(Res.)@Cos=1
Output Contact Rating (Min)	10V/10mA
Output Contact Fuse Rating	AC=5A; DC=2.5A; Quick blow
Drop Out Time	Deactivation by inputs, 13ms
Internal Fuse / Recovery Time	1.6Amp Resettable / >2 Seconds
Reset Circuit	Reset manual X1-X3 / Reset Automatic X1-X2
Max Conductor Size	2 x 1.5mm stranded with sleeves, 2 x 2.5 mm solid
Operating Temperature	0C to +55C (85% Humidity max)
Storage Temperature	-10C to +60C
Housing Material	Polycarbonate Grey
IP Rating	Housing IP30, Terminals IP20
Mounting / Fixing	35mm Symmetric DIN Rail
Extender Unit	
Supply Nominal Voltage	From Control Unit
Nominal Power Consumption	30mA
OSSD Safety Inputs	2
Internal Fuse / Recovery Time	500mA Resettable / >2 Seconds
Max Conductor Size	2 x 1.5mm Stranded with Sleeves, 2 x 2.5mm Solid

Operating Temperature	0C to +55C (85% Humidity Max)
Storage Temperature	-10C to +60C
Housing Material	Polycarbonate Grey
IP Rating	Housing IP30, Terminals IP20
Mounting / Fixing	35mm Symmetric DIN Rail

## Protection Category

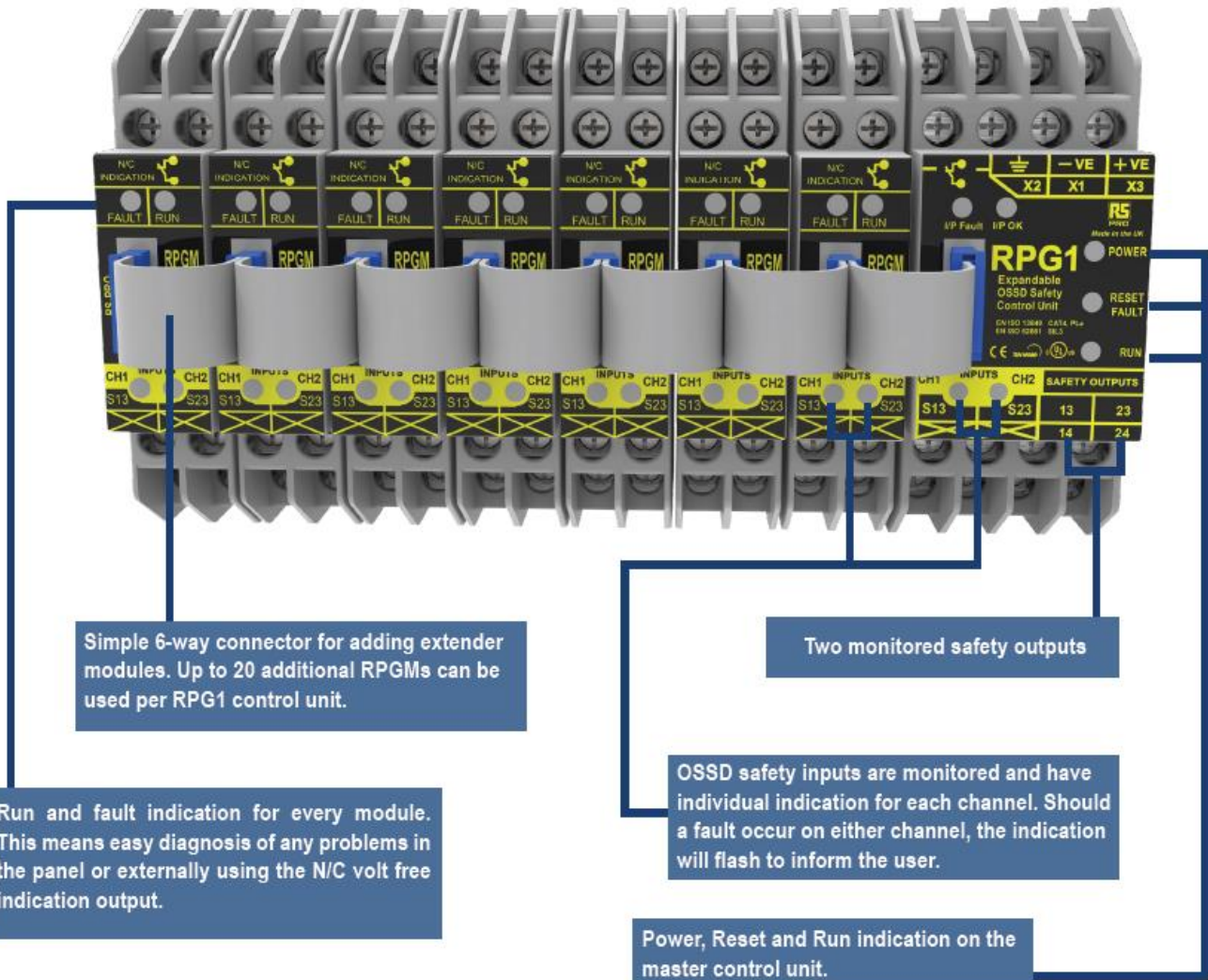
PL in accordance with EN ISO 13849-1	PL-e, CAT 4
SIL CL in accordance with EN IEC 62061	SIL 3
PFHd in accordance with EN IEC 62061	$6.0 \times 10^{-09}$
PFH	$6.52 \times 10^{-09}$
B10d	$2 \times 10^6$
MTTFd	>100 years (Based on usage rate of 360 days/year, 24 hours/day, 10 operations/hour)
TM (mission time)	20 years
DC	99%
SFF	99.50%

## Approvals

Declarations	
CE	Complies with all relevant sections of the CE marking directive
UKCA	Complies with all relevant sections of the UKCA marking directive
TUV	CAT 4 SIL 3 PLe
Standards Met	
EN ISO 13849-1	Safety of Machinery – Safety related parts of control systems
EN ISO 62061	Safety of Machinery – Functional safety of safety related electrical, electronic and programmable electronic control systems
EN 60204	Safety of Machinery – Electrical equipment for machines
EN 60947-5-1	Low voltage switchgear and control gear
EN 14119	Interlocking devices associated with guards
EN 60947-5-3	Safety of Machinery – Specification for low voltage switchgear and control gear

## Similar Products

Stock No.	Brand	Product Name	Attribute 1	Attribute 2	Attribute 3
405.003	RS PRO	RPG1	24VAC/DC	2NO+1NC	LED Indication
405.004	RS PRO	RPGM	Supply from RPG1	2NO	LED Indication



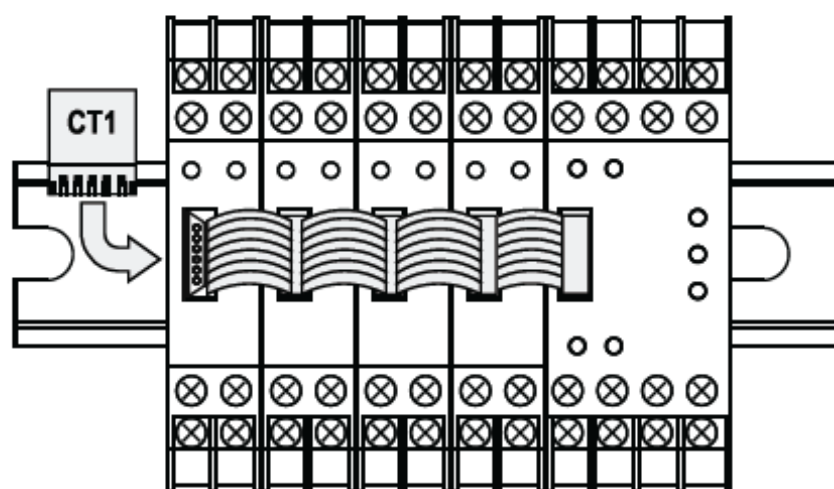
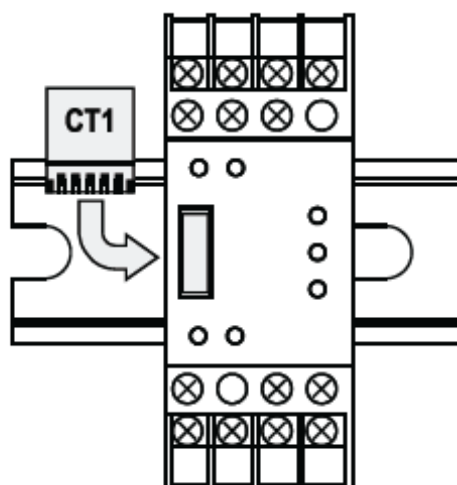
New and improved OSSD input indication displays which channel is faulty by flashing yellow.

Assemble the required number of modules on the DIN-Rail, starting with the RPG1 and clipping the RPGM's to the left of the RPG1.

The RPGM requires 2 x OSSD inputs to operate. The maximum number of modules that can be added is 20.

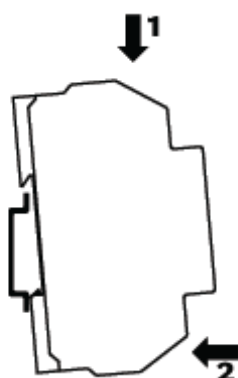
The 'Control Bus' straps on each extender unit connect to the adjacent (right hand side) module as shown.

The 'Control Bus' terminator, CT1 (supplied with the RPG1), must be plugged into the last extender module in the system.



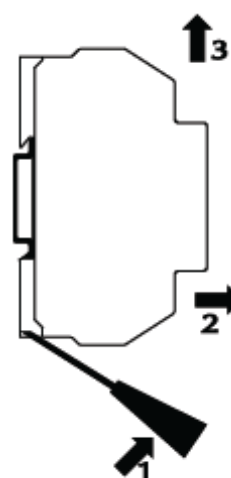
The control modules are designed to be mounted in an IP55 (minimum) control cabinet.

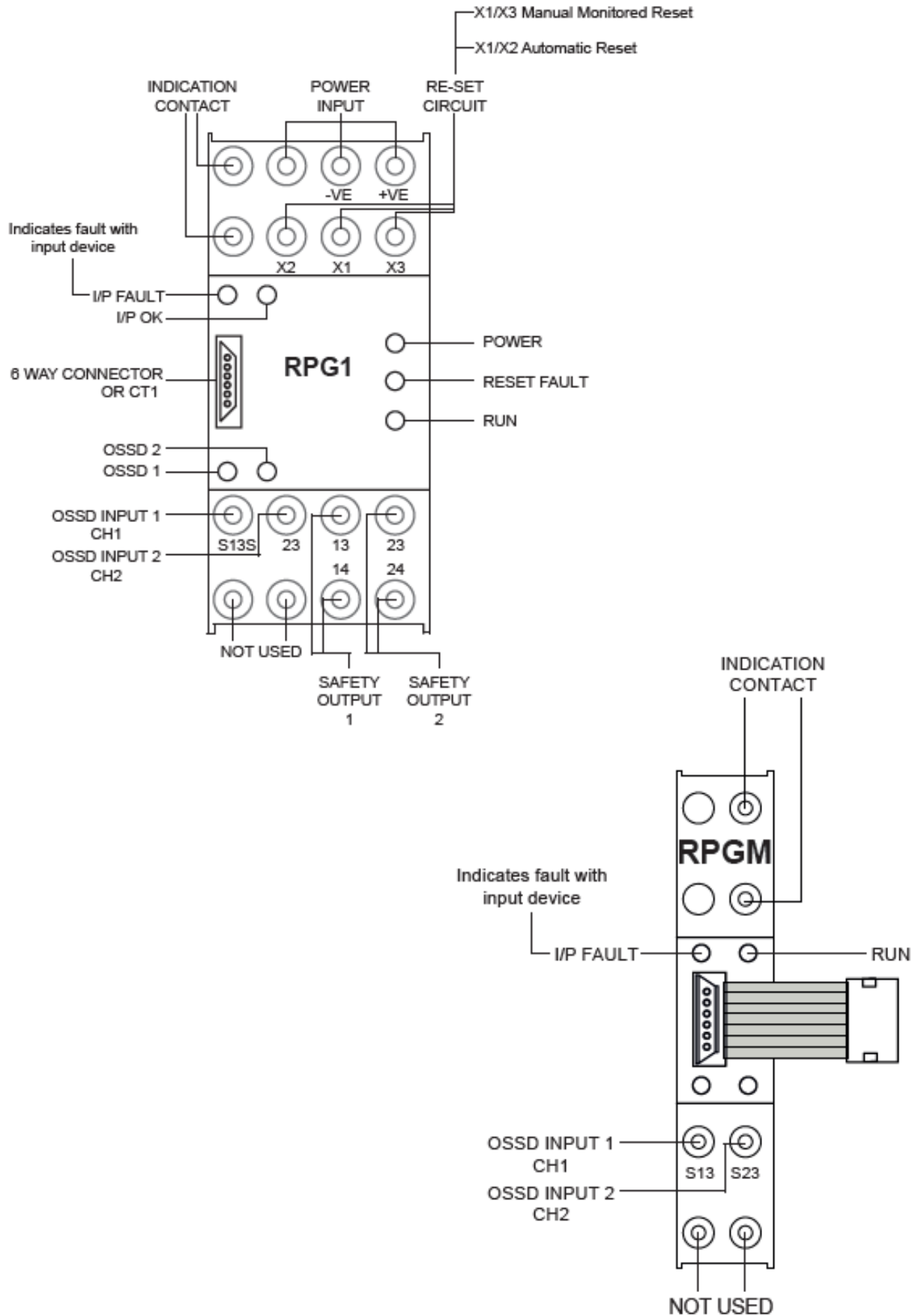
The modules clip on too standard 35 mm symmetric (top hat) DIN-Rail



To remove the modules, gently lever out the DIN clip with a small screwdriver as shown (1).

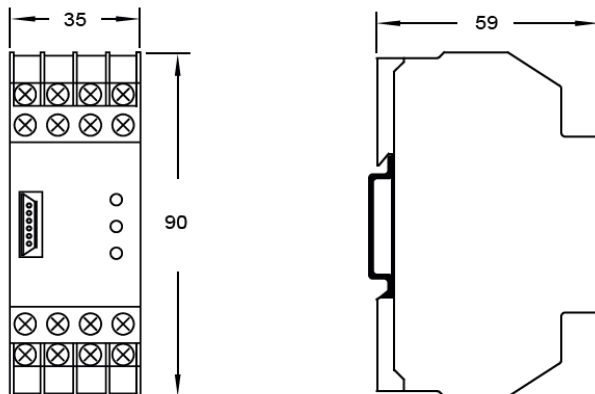
Tilt the unit in the direction (2) and slip the unit off the DIN Rail (3)



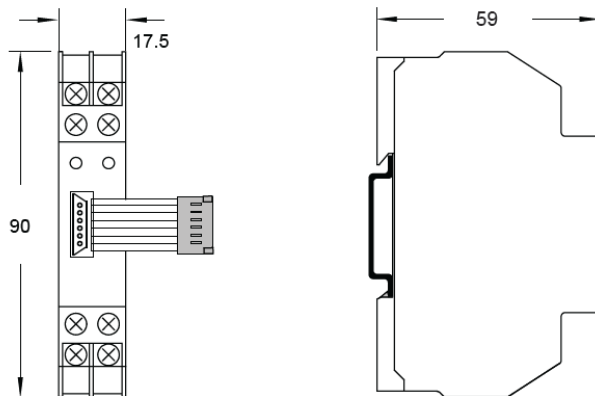


## Dimensions

RPG1 Master Control Unit



RPGM Extender Module



*\*ALL DIMENSIONS IN MM*

## Maintenance

It is recommended to check the safe operation of the switches and look for signs of damage or excessive wear on a weekly basis. Damaged units should be replaced or returned to the manufacturer for repair where practical.

## Notes

In the interest of product development specifications are subject to change without notice.

It is the responsibility of the user to ensure compliance with any acts or by-laws in place.

All information regarding equipment is believed to be accurate at the time of printing. Responsibility cannot be accepted for errors or omissions.

All dimensions are approximate.