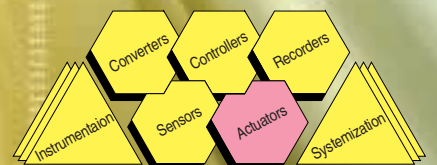


Solid State Relays

PGM10N/F



Compact Body
Superior
Heat Control



A wide variety of High Quality - Compact – Robust models are available for creating a highly reliable and maintenance-free temperature control.



The PGM10N/F are solid state relays with zero-cross functions for single phase power. It is used to control heating in conjunction with time proportioning voltage pulse output controllers.

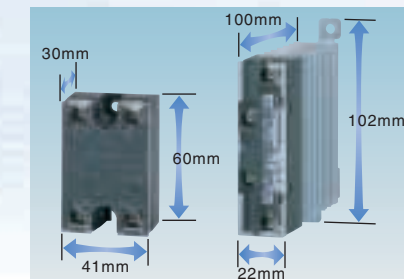
Wide variation

Two models are available, the PGM10N without heat sink and the PGM10F with heat sink. The lineup of this variation provides suitable selection according to the application needs.



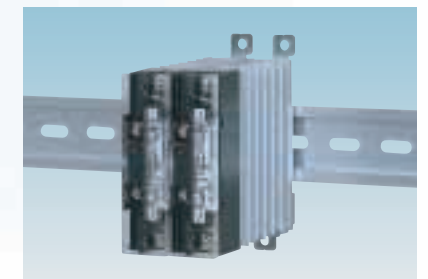
Compact & slim body

The PGM10N/F is compact and superior for supporting temperature control. The mounting is easy even in a restricted space. The compact body is easily applicable to the equipment down-sizing year by year.



Easy mounting

The PGM10F body with heat sink is thin and can be easily mounted on the DIN rail. This model can be gang-mounted largely contributing to space saving. The PGM10N without heat sink has the unified mounting dimensions.



Solid State Relays PGM10N/F

COMPACT & WIDE VARIATION

Lineup

Type	Model without heat sink			Model with heat sink	
	PGM10N015	PGM10N025	PGM10N045	PGM10F015	PGM10F025
Appearance					
Model No.	PGM10N015	PGM10N025	PGM10N045	PGM10F015	PGM10F025
Maximum load current	15A	25A	45A	15A	25A
Input voltage range	3.5 to 30V	○	○	—	—
	4.5 to 30V	—	—	○	○
Mounting	Screw	○	○	○	○
	DIN rail	—	—	○	○
Operation indicator	○	○	○	○	○
Varistor	Built-in	Built-in	Built-in	Built-in	Built-in
Terminal cover	Attached	Attached	Attached	Attached	Attached

Wide input voltage range

The PGM10N/F offers a wide voltage range for the input signal. The PGM10N/F can be easily connected to the Yamatake's SDC Series controllers (voltage pulse output type).

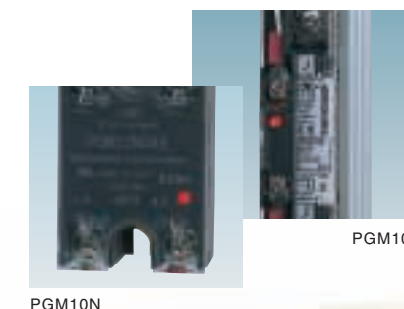


Number of units connectable in parallel (for one output)

Model No. of Yamatake's controller	Model No. of Yamatake's solid state relay (SSR)	
	PGM10N015 PGM10N025 PGM10N045	PGM10F015 PGM10F025
SDC15/25/26/35/36	2 units	2 units
SDC40A	—	—
DCP551/552	2 units	1 units
DCP31/32	—	—
DMC10	3 units	2 units

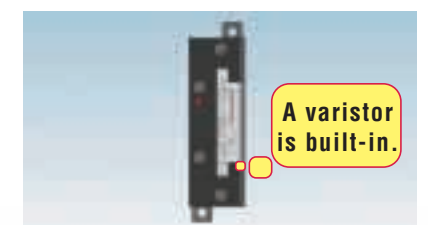
At-a-glance easy confirmation of operation

An operation indicator is provided in all the PGM10N/F models (with/without heat sink). The operation status can be quickly confirmed.



Surge absorption by a built-in varistor

A varistor is incorporated as a standard unit in the PGM10N/F. The varistor is effective for absorbing the surge coming from the external circuit enabling the prevention of PGM damage.



Specifications

Model without heat sink

Maximum load current	15A	25A	45A
Input voltage range	3.5 to 30V		
Input current	10mA max.		
Pick-up voltage	3.5Vdc max.		
Drop-out voltage	1Vdc min.		
Load voltage range	35 to 264Vac		
Max. surge current for 1 cycle	150A	225A	440A
Dielectric strength	3000Vac		
Operating temperature range	-20 to +80°C		
Applicable standards	UL, cUL		
Weight	Approx. 65g		Approx. 100g

Model with heat sink

Maximum load current	15A	25A
Input voltage range	4.5 to 30V	
Input current	12mA max.	
Pick-up voltage	4.5Vdc max.	
Drop-out voltage	1Vdc min.	
Load voltage range	60 to 280Vac	
Max. surge current for 1 cycle	150A	250A
Dielectric strength	2500Vac	
Operating temperature range	-20 to +80°C	
Applicable standards	UL, cUL, CE, TUV	
Weight	Approx. 220g	

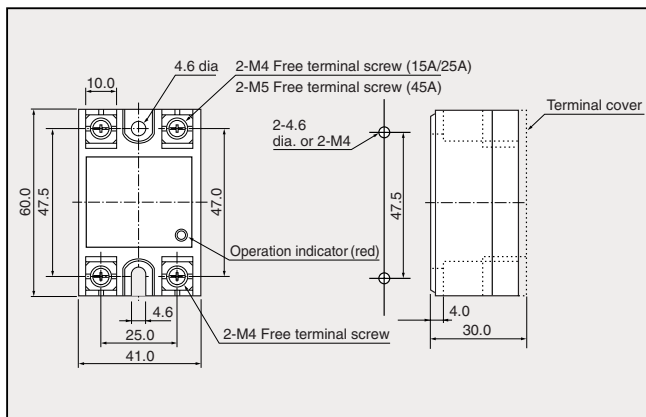
Selection Guide

Example: PGM10N015

Table	Selection	Description
I	Basic model No. PGM10N ↓	SSR without heat sink
	PGM10F ↓	SSR with heat sink
II	Capacity 015 ○ ○	Load current: 15A
	025 ○ ○	Load current: 25A
	045 ○ —	Load current: 45A

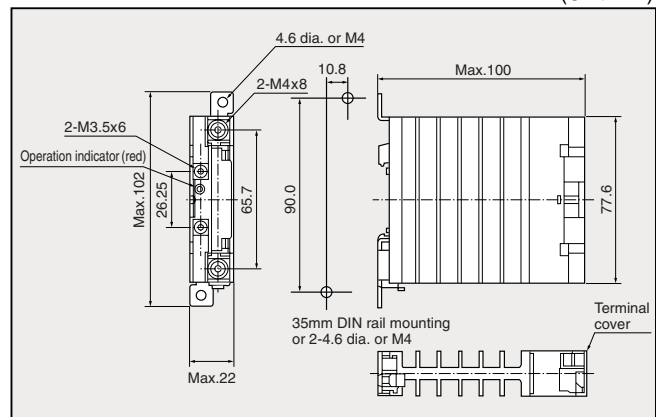
Dimensions

Model without heat sink



Model with heat sink

(Unit:mm)



⚠ RESTRICTIONS ON USE

This product has been designed, developed and manufactured for general-purpose application in machinery and equipment. Accordingly, when used in applications outlined below, special care should be taken to implement a fail-safe and/or redundant design concept as well as a periodic maintenance program.

- Safety devices for plant worker protection
- Start/stop control devices for transportation and material handling machines
- Aeronautical/aerospace machines
- Control devices for nuclear reactors

Never use this product in applications where human safety may be put at risk.



Specifications are subject to change without notice.

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This has been printed on 100% recycled paper.

(02)

Printed in Japan.(SZ)
1st Edition: Issued in April.2004