

# CONDENSER FAN SPEED CONTROLLERS

Type RGE

SAGInoMIYA

## GENERAL DESCRIPTION

- The most suitable for controlling the condenser fan speed of freezing or refrigeration condensing units, package air conditioners, or other units which are operated throughout the year.
- Keep condensing pressure constant in winter and intermediate seasons for stable operation.
- Following modes are selectable during low-speed operation.
  - Minimum Speed Operation
  - Cut off Operation
- Excellent electrical noise-resistant design.
- Applicable to the external forced operation switch.

CE mark applicable



UL listed (available upon request)



Single-phase type



Three-phase type

## SPECIFICATIONS

- Max. working pressure: 4.7MPa
- Control method: Phase control
- Enclosure: IP54

## TYPE NUMBER SELECTION

Catalog No.	*1 F.V.S. Setting (MPa)			*2 E.P.B. (MPa)	Refrigerants	Electrical Ratings	Function	Ambient Temp. (°C)	Operation	Wt. (kg)									
	Factory Set	Adjusting Range																	
		Min.	Max.			Ampere													
RGE-Z1L4-7	1.9	0.8	2.8	Fixed 0.6	R22, R404A, R407C	Single phase 200 to 240V. AC 50/60Hz	0.2 to 3A	At approx. 45% (50Hz) at approx. 35% (60Hz) Cut Off or Minimum Speed function is selectable with changeover switch.  Default setting: Cut Off	-20 to 55	①	0.36								
RGE-Z1L6-7	3.2	1.6	3.9	Fixed 0.9	R410A		0.2 to 4A					0.5							
RGE-Z1N4-7	1.9	0.8	2.8	Fixed 0.4	R22, R404A, R407C		0.2 to 6A						0.54						
RGE-Z1N6-7	3.2	1.6	3.9	Fixed 0.8	R410A		0.2 to 8A							0.58					
RGE-Z1P4-7	1.9	0.8	2.8	Fixed 0.4	R22, R404A, R407C		Three phase 200 to 240V. AC 50/60Hz								0.2 to 5A	-20 to 50	②	1.4	
RGE-Z1P6-7	3.2	1.6	3.9	Fixed 0.8	R410A										0.2 to 7A				1.53
RGE-Z1Q4-7	1.9	0.8	2.8	Fixed 0.4	R22, R404A, R407C										Three phase 380 to 415V. AC 50/60Hz				
RGE-Z1Q6-7	3.2	1.6	3.9	Fixed 0.8	R410A														
RGE-Z3R4-7	1.6	0.8	2.8	Fixed 0.4	R22, R404A, R407C														
RGE-Z3R6-7	3.2	1.6	3.9	Fixed 0.8	R410A														
RGE-Z3T4-7	1.6	0.8	2.8	Fixed 0.6	R22, R404A, R407C														
RGE-Z3T6-7	3.2	1.6	3.9	Fixed 0.8	R410A														
RGE-X3R4-7	1.6	0.8	2.8	Fixed 0.4	R22, R404A, R407C														
RGE-X3R6-7	3.2	1.6	3.9	Fixed 0.8	R410A														

\* 1: The pressure at which the control delivers 95% output effective voltage (VRMS).

\* 2: Pressure width where effective voltage corresponds to the minimum speed or causes cut off operation

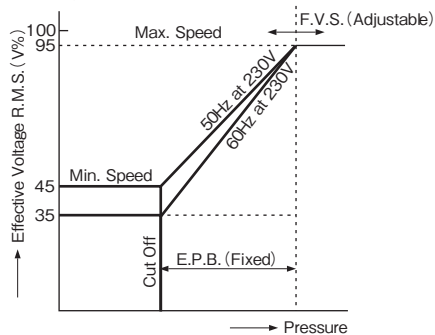
• Min. speed: Fan motor will be kept running at the specific value (V%) when pressure band increase more than E.P.B.

• Cut off: Fan motor will be stopped when pressure decrease to the specific value (V%) for R.M.S.

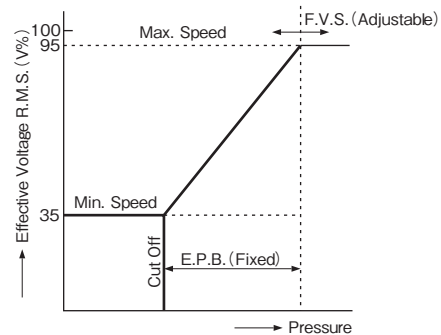
• For other pressure set values or min. speed/cut off set values, please contact us.

## OPERATION

① Single-phase type



② Three-phase type

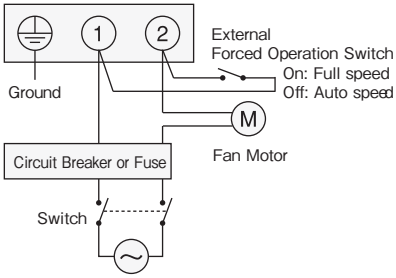


The operating characteristics may vary according to the voltage, frequency, and fan motor characteristics.

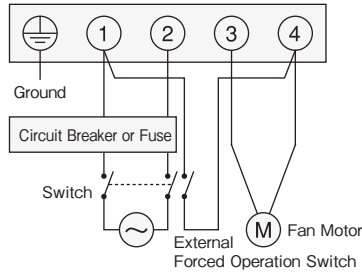
# WIRING

## Single-phase type

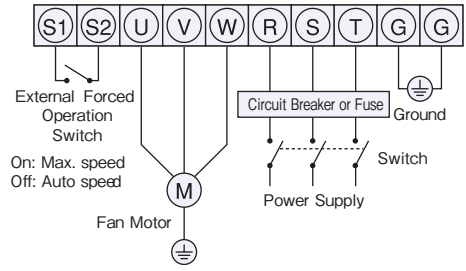
for 2A (RGE-Z1)



for 4A, 6A, 8A (RGE-Z1)



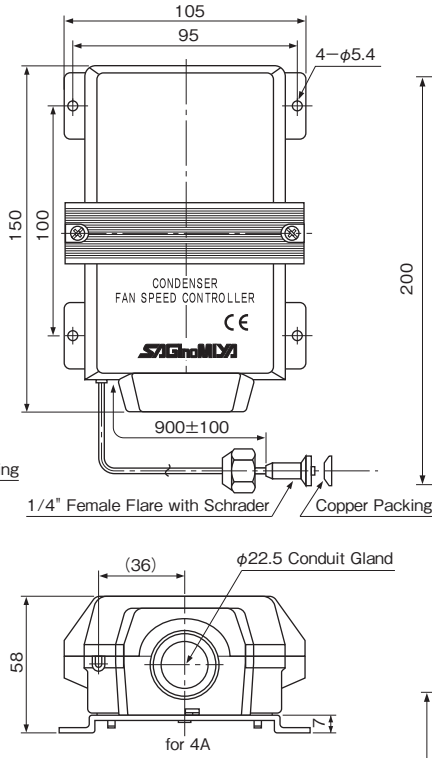
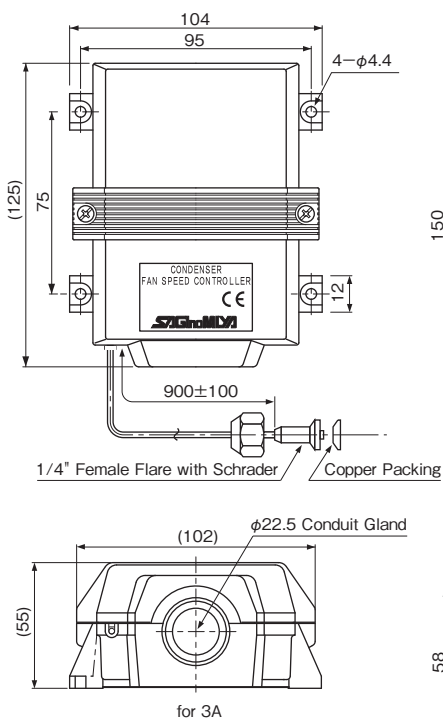
## Three-phase type



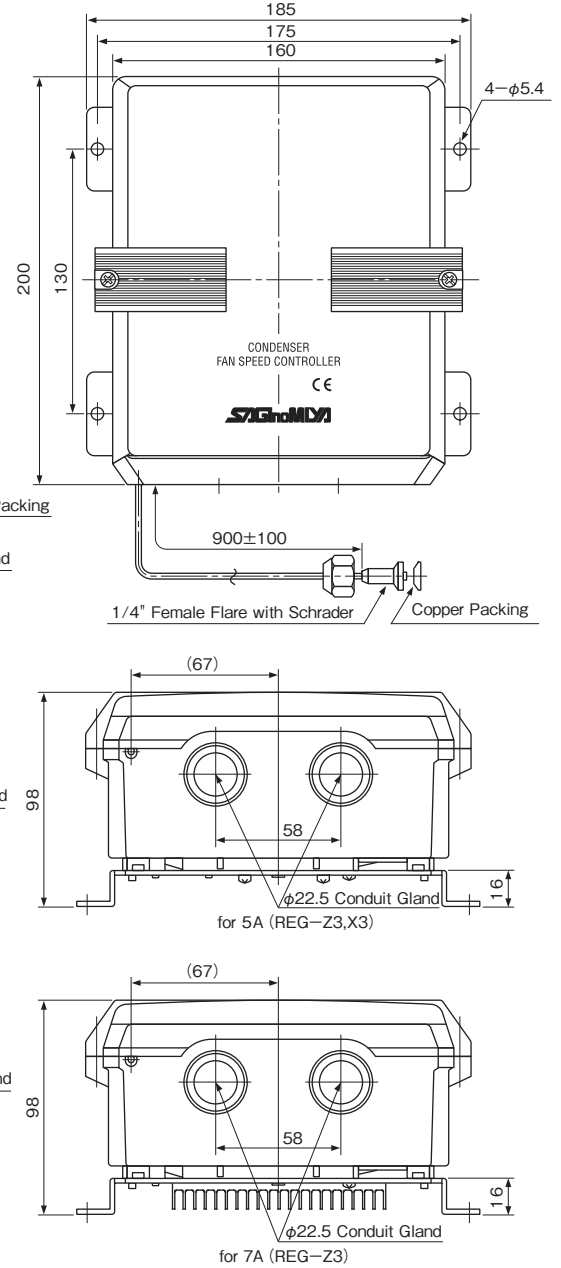
Use external forced operation switch that is able to reduce current consumption of fan motors. Use a forced operation switch with non-voltage contact signal.

# DIMENSIONS

## Single-phase type



## Three-phase type



Unit: mm