

EEV CONTROLLERS / Type YNE



Type YNE

FEATURES

- Dedicated controller for PKV/GKV type electronic expansion valves.
- Together with an EEV, a solenoid valve, and a temperature sensor, it constitutes a superheat control system.
- Connect up to 4 controllers to manage multiple electronic expansion valves.
- Impressive load-following capabilities allow for stable control even with large variations in cooling load.

APPLICATIONS

- Cold storage
- Food processing plants
- Environment test chambers, etc.

COMMON SPECIFICATIONS

- Power supply voltage : 85 to 264V.AC 50/60Hz
- Power consumption : 15VA or less
- Ambient temperature : 0 to 50°C
- Weight : 0.3kg

DESCRIPTION OF CATALOG NO.

YNE – SN 20 Q
I II III IV

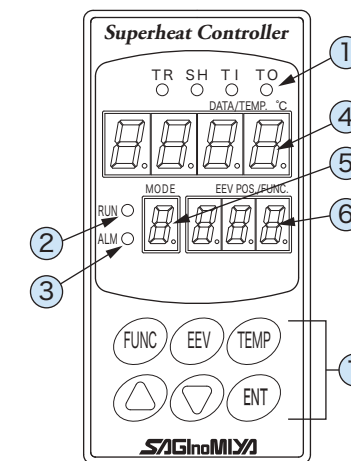
I	Type
II	Power supply voltage
III	Temperature
IV	Special specification (Language : EN)

TYPE NUMBER SELECTION

Catalog No.	Function	Display	* 3 Settings	Alarm	Master-Slave communication system
YNE-SN20Q	• Room temp. control * 1 • Superheat control	• Room temp. * 2 • Operating superheat • EEV position • Detected error • Address of each unit etc.	• Room temp. • Superheat • Upper / lower-limit alarm temp. • Slaver units settings etc.	• Upper / lower-limit temperature • Sensor error • EEV error • Liquid floodback	Up to three slave units can be connected to one master unit.

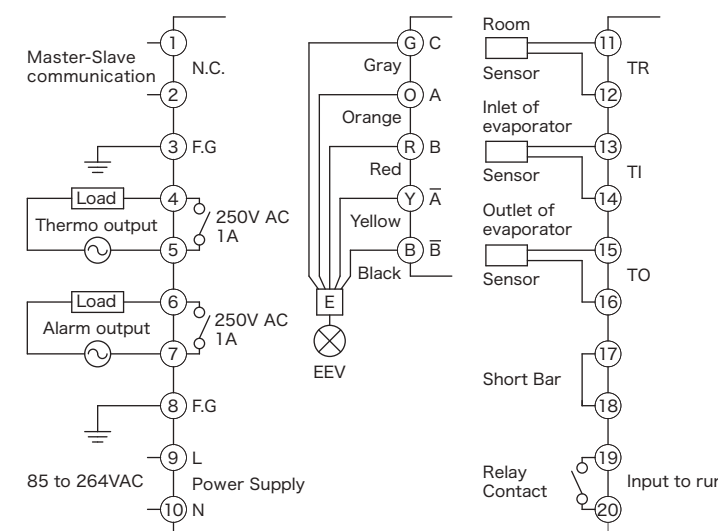
- * 1 When using the built-in thermostat or an external thermostat (contact input).
- * 2 When using a room temperature sensor.
- * 3 Parameter data backup : EEPROM

DISPLAY PANEL

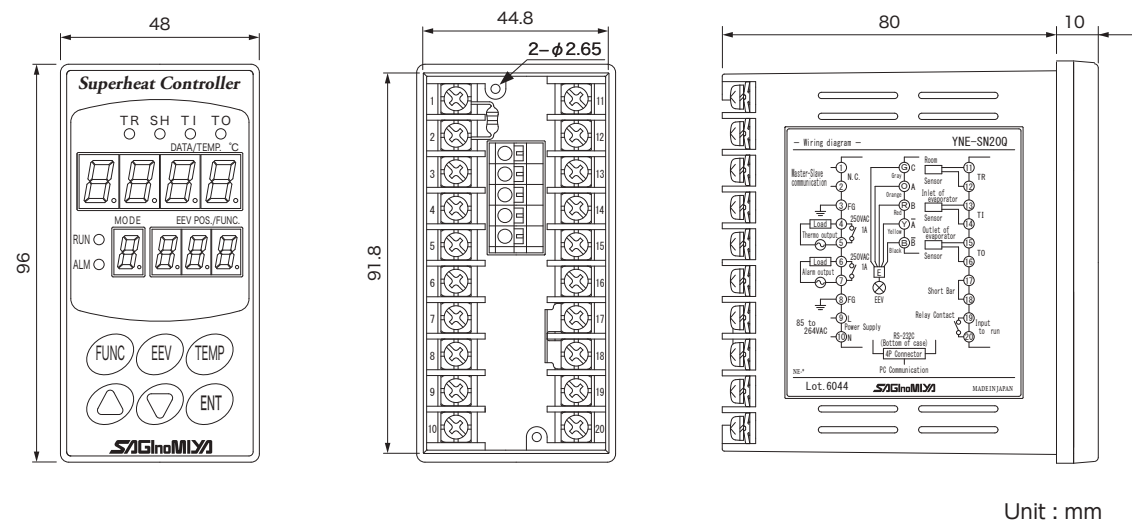


No.	Name	Note
①	TR	Room temperature indicator light (Red) Range : -70.0 to 20.0°C (Blinks "20.0" at 20.0°C or more)
	SH	Superheat indicator light (Red) Range : -99.9 to 99.9
	TI	Evaporator inlet temp. indicator light (Red) Range : -70.0 to 20.0°C (Blinks "20.0" at 20.0°C or more)
	TO	Evaporator outlet temp. indicator light (Red) Range : -70.0 to 20.0°C (Blinks "20.0" at 20.0°C or more)
The indicator light corresponding to the displayed temperature (④) is lit. It blinks when detecting an error on each sensor.		
②	RUN	RUN LED (Green) Lit when the controller is operating.
③	ALM	ALM LED (Red) Blinks when a warning is active.
④	DATA / TEMP Display	(Operation mode) Displays the temperature corresponding to ①. (Setup mode) Displays the setting value of each control parameter.
⑤	MODE Display	Displays the control status. Normal operation □, Address of master-slave communication / to 4, communication error □, Inlet temp. > Outlet temp. □ etc.
⑥	EEV POS. / FUNC. Display	(Operation mode) Displays the EEV position. (Setup mode) Displays the setting numbers of each control parameter.
⑦	FUNC Key	To select the control parameters
	EEV Key	To switch to manual operation or set address of the controller
	TEMP Key	To select the temperature to be displayed on ④ TEMP display
	▲ Key	To increase value / To open the EEV during manual operation
	▼ Key	To decrease value / To close the EEV during manual operation
ENT Key	To set the entered control parameter	

WIRING DIAGRAM

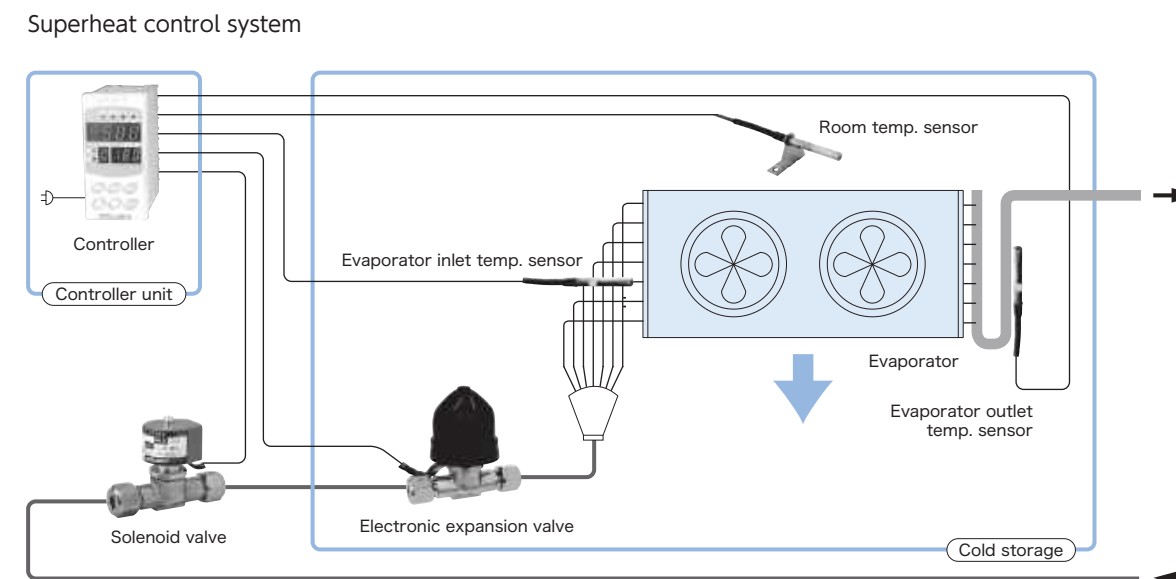


DIMENSIONS



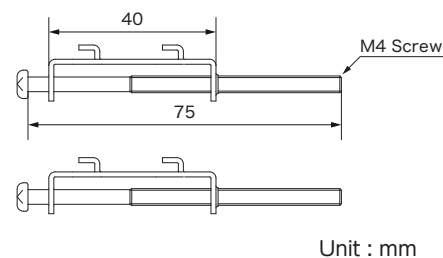
Unit : mm

SYSTEM CONFIGURATION



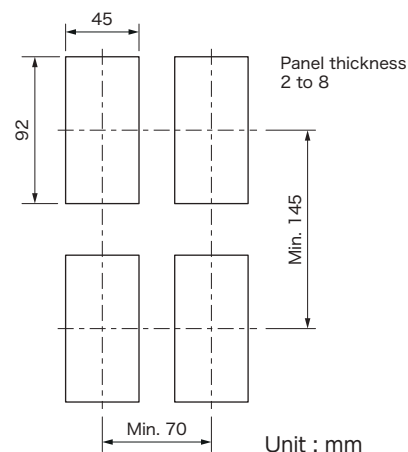
STANDARD ACCESSORY

- Mounting adapters (2 pcs)



Unit : mm

PANEL CUTOUT DIMENSIONS



Unit : mm

OVERVIEW OF THE SYSTEM COMPONENTS

- Electronic expansion valve
Please refer to each product page.

Type PKV	Pages 7 to 8
Type GKV	Pages 9 to 10

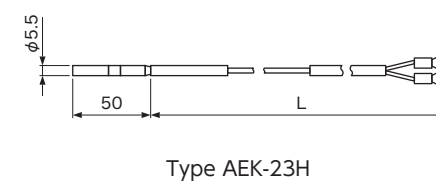
- Solenoid valve
For type SEV solenoid valves, please refer to pages 7 to 12 of our product catalog "SOLENOID VALVES Series".

Compatibility table for EEVs and solenoid valves

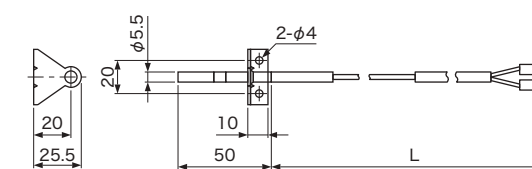
EEV Catalog No.	Solenoid valve Catalog No.
PKV-14BS	SEV-303BYF SEV-303DYF
PKV-18BS	SEV-603BYF SEV-603DYF
PKV-24BS	
GKV-18BS	SEV-1004BYF SEV-1004DYF
PKV-30BS	
GKV-34BS	
GKV-60BS	

- Temperature sensor

Catalog No.	Usage	Lead wire length (L) (mm)	Temperature sensing element	Accuracy (°C)	Working temp. (°C)	Wt. (kg)
AEK-23H538	For evaporator inlet / outlet temperature	5100	Copper RTD Ro = 2000 Ω	± 0.5	-75 to 100	0.07
AEK-23H539		10100				0.12
AEK-23K510	For room temperature	5100				0.07
AEK-23K511		10100				0.12



Type AEK-23H



Type AEK-23K

Unit : mm