HSR-3SL

Three-phase solid state relay

- Din rail install type
- Optimal heat dissipation design, semi-permanent life
- It is the slimmest type among the 3-phase solid state relays under the same rating (79 ㎜)
- Zero Cross / Random switching

CE

Specification

Model			HSR-3SLD152Z	HSR-3SLD252Z	HSR-3SLD402Z
		High	HSR-3SLD154Z	HSR-3SLD254Z	HSR-3SLD404Z
Load	Rated LoadVoltage	Low	90 - 264 V a.c.		
		High	90 - 480 V a.c.		
	Peak Voltage (Non-repetition)	Low	600V		
		High	800V	1,200V	
	Rated loadcurrent		15 A (40°C)	25 A (25°C)	40 A (25°C)
	Frequency		50/60 ㎐(Dual usage)		
	Surge current (8.3 msNo repetition)	Low	170 A	260 A	420 A
		High	170 A	250 A	370 A
	Leakage current		Max. 20 ㎃		
	Output ONvoltage dropping		Max. 1.6 V (R.M.S)		
Input	Rated Voltage		5 - 24 V d.c.		
	Operating VoltageRange		4 - 32 V d.c.		
	Impedance		Max. 4 ㏀		
	Operation Voltage		Min. 3 V d.c.		
	Reset Voltage		Max. 1.5 V d.c.		
	Input Current		Constant-current system : 10 ㎃ (±3)		
Response Time			Max. 1/2 Cycle + 1 ms (“R”type Max. 1 ms)		
Insulating Resistance			500 V d.c., 100 ㏁ (Between the input / output and case)		
Dielectric strength			3,000 V a.c. (For 1 min at 60 ㎐)		
Vibration resistance			10 - 55 ㎐, Double amplitude : 1.5 ㎜, X·Y·Z in each direction for 2 hours		
Shock resistance			1,000 ㎨, X·Y·Z in each direction 3 times		
Storage Temperature			-30 ~ 90 °C		
Ambient Temperature			-20 ~ 80 °C (But without frostiness)		
Ambient Humidity			45 ~ 85 % R.H.		
Weight			1,000g		1,300g

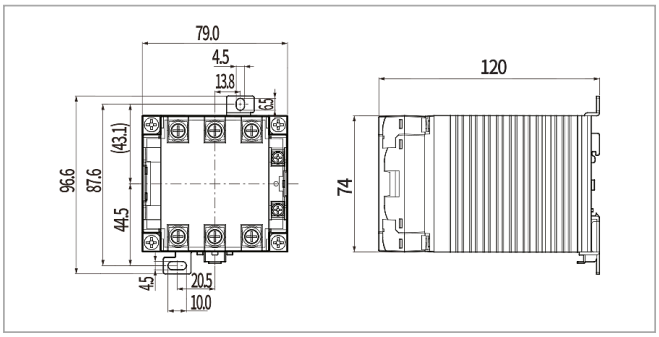
Suffix code

Model	Code				Content
HSR-3SL	□	□	□	□	Slim Type 3-Phase Solid State Relay
Input Operating Voltage	D				4 - 32 V d.c.
Rated load current		15			15 A
		25			25 A
		40			40 A
Rated load voltage			2		90 - 264 V a.c. (Low voltage)
			4		90 - 480 V a.c. (High voltage)
Operation method (Switching Mode)				Z	Zero Cross Switching (Standard product)
				R	Random Switching

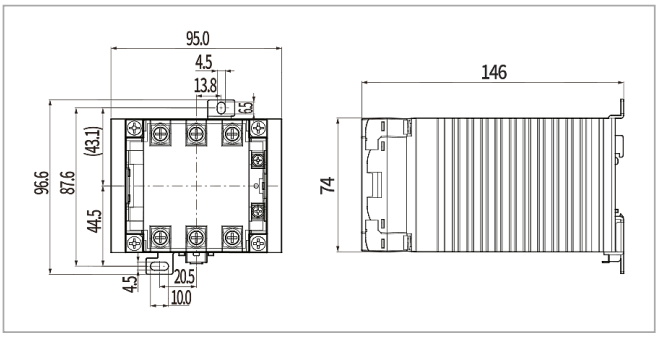
Dimension

[Unit : ㎜]

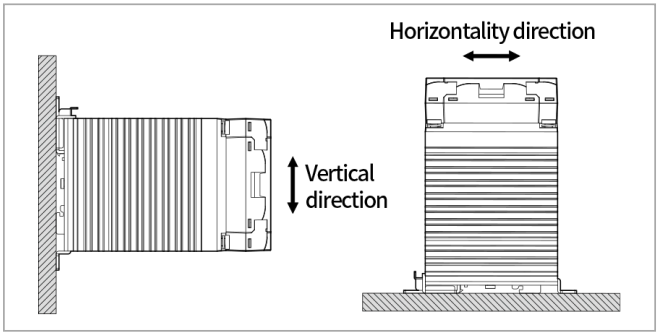
▪ **15A, 25A**



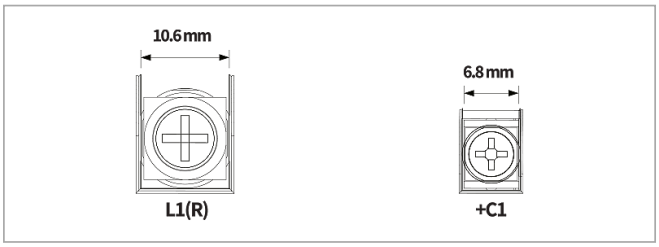
▪ **40A**



How to install

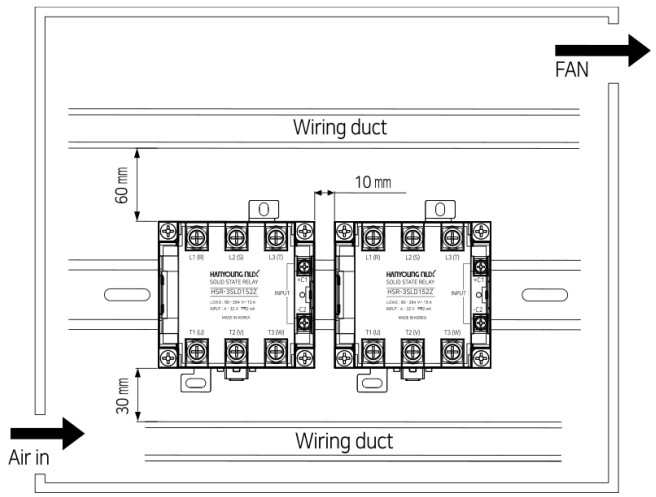


- Please install HSR in the vertical direction.
- Otherwise, production performance may be reduced to less than 50 %.
- When installing DIN rail, please install it stably since the product is heavy.



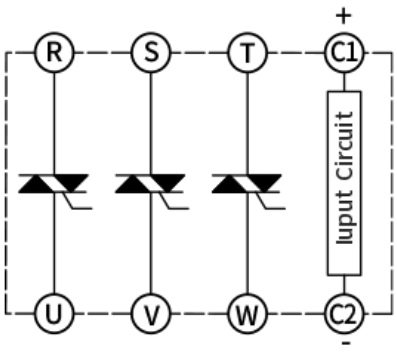
- The width of Load's output terminal is as follows. So, assemble strongly by using the terminal shorter than the width and wire it.

Installation intervals

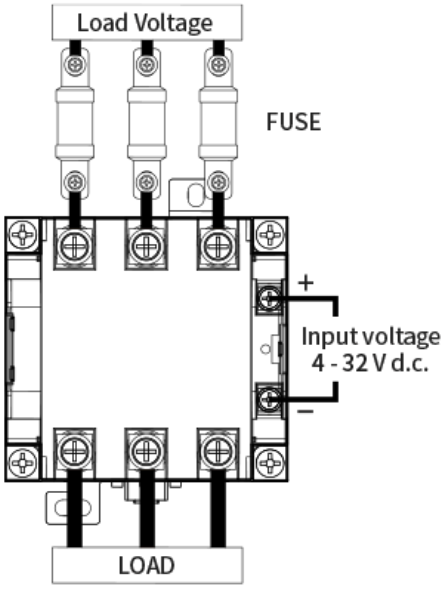


- Like the following picture, leave an interval over the dimension shown in the picture when installing.
- Install the wiring duct at the lower than the half of the height of heat sink for not blocking the flow of air.
- The ambient temperature of Hanyoung Nux's HSR is different depending on the products when using the maximum rated load. So, you always need to use it in the condition under the standard temperature after checking out the ambient temperature in the specification.

Equivalent Circuit



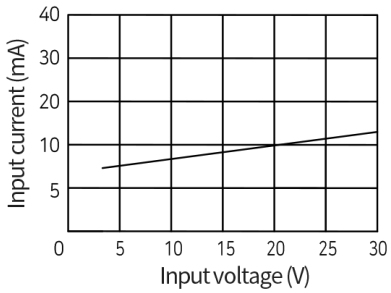
Connection diagram



※ Fuse is not installed inside this product. We suggest you to use fasr-acting fuse outside separately like the picture.

Input/Surge current Characteristics

+ Input current Characteristics



+ Surge current Characteristics