

# PSR Series

## User's Guide



Thank you for purchasing product of SAMWON ACT.  
Please check model of product that you purchase first, and read this manual prior to use it.

R-R-3WA-PSR020-24  
R-R-3WA-PSR040-24

### Caution for safety

- Warning** Case that results in serious damage in human body or equipment, and fire if user handles this equipment wrongly
- Caution** Case that results in slight damage in human body or equipment, and fire if user handles this equipment wrongly

### Warning

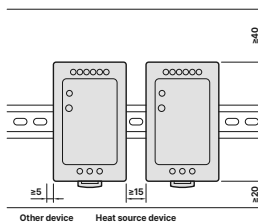
- Make sure that foreign substances such as dust or wire covering do not enter the connection terminals or main body.  
It may cause damage, heat generation, or ignition.
- When performing installation or wiring work, be sure to turn off the upper power source or circuit breaker.  
It may cause electric shock, ignition, or fire.
- Do not touch the terminals while energized.  
There is a risk of electric shock.
- Check the wiring diagram before wiring.  
There is a risk of ignition or fire.
- Do not open or modify the product on your own.  
There is a risk of ignition or fire.

### Caution

- Please use within the specified temperature range indicated in the ratings/specifications.  
It may cause fire or product malfunction.
- Use within the specified voltage and current range.  
It may cause fire, product failure, or shortened product lifespan.
- Do not touch the product during operation or for 30 seconds to 1 minute after stopping.  
It may cause burns due to heat generation or electric shock due to remaining voltage.
- When wiring, use an appropriate tool and tighten to the specified torque.  
Tightening outside this range may cause fire or malfunction due to damaged or loose terminals.

### Installation distance

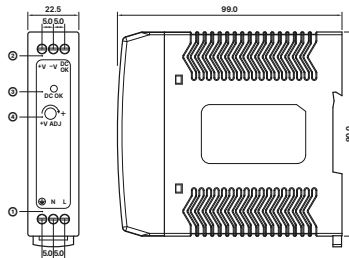
- The device must be installed properly to keep the input terminals at the bottom and the output at the top.
- keep a distance of 40mm above and 20mm below the device as well as a lateral distance of 5mm to other units.
- In case the adjacent device is a heat source, the lateral distance will be 15mm.
- System installation should take the responsibility of system safety after combination.



### Rating/Specification (PSR020-□)

Model	PSR020-05	PSR020-12	PSR020-24
<b>Input parameters</b>			
Input voltage range	85 ~ 264VAC, 120 ~ 370VDC		
AC current	0.55A/115VAC, 0.35A/230VAC		
Frequency range	47 ~ 63Hz		
Inrush current (max)	Cold start : 20A/115VAC, 40A/230VAC		
<b>Output parameters</b>			
DC voltage (V)	5V	12V	24V
Efficiency	76%	80%	83%
Rated current (A)	3A	1.67A	1A
Rated power (W)	15W	20W	24W
Voltage adjustment range	4.75 ~ 5.5V	10.8 ~ 13.2V	21.6 ~ 26.4V
Ripple and Noise (max)	80m Vp-p	120m Vp-p	150m Vp-p
Voltage tolerance	±2%	±1%	±1%
Line regulation	±1%	±1%	±1%
Load regulation	±1%	±1%	±1%
Setup, rise time	500ms 30ms/230VAC 100ms 30ms/115VAC (at full load)		
Hold up time	50ms/230VAC 20ms/115VAC (at full load)		
Status display	Green LED		
<b>Protection</b>			
Overload	110 ~ 150% of rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed.		
Overvoltage (V)	5.75 ~ 6.75V	13.8 ~ 16.2V	27.6 ~ 32.4V
	Protection type : Shut down O/P voltage, re-power on to recover		
<b>Safety and EMC</b>			
Withstand voltage	I/P-O/P : 3KVAC I/P-FG : 1.5KVAC O/P-FG : 0.5KVAC		
Insulation resistance	I/P-O/P, I/P-FG, O/P-FG : 100M Ohms/500VDC/25°C/70%RH		
Safety standards	Design reference EN IEC 62368-1, GB 4943.1		
EMC emission	Design reference EN55032 (Class B), EN61000-3-2, 3-3 (Class A)		
EMC immunity	Design reference EN61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11		
<b>Environmental parameters</b>			
Operating temperature	-20°C ~ +70°C (Refer to "Derating curve")		
Storage temperature	-40°C ~ +85°C		
Storage humidity	10 ~ 95%RH		
Vibration	Component : 10-500Hz, 2G 10 min/1cycle 60 min each along X, Y, Z axis		
<b>The other parameters</b>			
Mean time between failure	236.9K hrs min MIL-HDBK-217F (25°C)		
Installation method	Install on DIN rail TS35		
Protection rating	IP20		
Weight	0.2kg		
W * D * H	22.5 * 100.0 * 90.0mm		

### Dimension (PSR020-□)



Indication	Function
○	Line input : L, N (⊕ PE : Protection Earthing)
○	DC output : +, -
○	LED lamp (LED green : Output voltage OK)
○	Potentiometer (PSR020-□ : 21.6 ~ 26.4V)

Input wiring specification	Output wiring specification	Terminal tightening torque
Input : AWG 12 ~ 24	Output : AWG 12 ~ 24	Screw torque : 0.5N-m

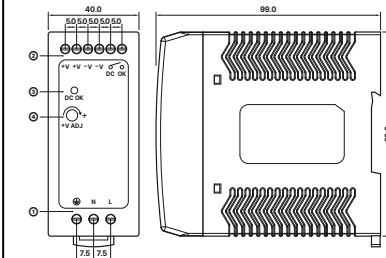
- \* The above specifications are subject to change without notice.
- \* Please contact HQ or branch office where you purchased product for A/S of this product or technique.



### Rating/Specification (PSR040-□)

Model	PSR040-05	PSR040-12	PSR040-24
<b>Input parameters</b>			
Input voltage range	85 ~ 264VAC, 120 ~ 370VDC		
AC current	1.1A/115VAC, 0.7A/230VAC		
Frequency range	47 ~ 63Hz		
Inrush current (max)	Cold start : 30A/115VAC, 60A/230VAC		
<b>Output parameters</b>			
DC voltage (V)	5V	12V	24V
Efficiency	78%	86%	88%
Rated current (A)	6A	3.33A	1.7A
Rated power (W)	30W	40W	40.8W
Voltage adjustment range	5 ~ 6V	12 ~ 15V	24 ~ 30V
Ripple and Noise (max)	80m Vp-p	120m Vp-p	150m Vp-p
Voltage tolerance	±2%	±1%	±1%
Line regulation	±1%	±1%	±1%
Load regulation	±1%	±1%	±1%
Setup, rise time	500ms 30ms/230VAC 500ms 30ms/115VAC (at full load)		
Hold up time	50ms/230VAC 20ms/115VAC (at full load)		
Status display	Green LED		
<b>Protection</b>			
Overload	105 ~ 150% of rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed.		
Overvoltage (V)	6.25 ~ 7.25V	15.6 ~ 18V	31.2 ~ 36V
	Protection type : Shut down O/P voltage, re-power on to recover		
<b>Safety and EMC</b>			
Withstand voltage	I/P-O/P : 3KVAC I/P-FG : 1.5KVAC O/P-FG : 0.5KVAC		
Insulation resistance	I/P-O/P, I/P-FG, O/P-FG : 100M Ohms/500VDC/25°C/70%RH		
Safety standards	Design reference EN IEC 62368-1, GB 4943.1		
EMC emission	Design reference EN55032 (Class B), EN61000-3-2, 3-3 (Class A)		
EMC immunity	Design reference EN61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11		
<b>Environmental parameters</b>			
Operating temperature	-20°C ~ +70°C (Refer to "Derating curve")		
Storage temperature	-40°C ~ +85°C		
Storage humidity	10 ~ 95%RH		
Vibration	Component : 10-500Hz, 2G 10 min/1cycle 60 min each along X, Y, Z axis		
<b>The other parameters</b>			
Mean time between failure	301.7K hrs min MIL-HDBK-217F (25°C)		
Installation method	Install on DIN rail TS35		
Protection rating	IP20		
Weight	0.32kg		
W * D * H	40.0 * 100.0 * 90.0mm		

### Dimension (PSR040-□)



Indication	Function
○	Line input : L, N (⊕ PE : Protection Earthing)
○	DC output : +, -
○	LED lamp (LED green : Output voltage OK)
○	Potentiometer (PSR040-□ : 24 ~ 30V)

Input wiring specification	Output wiring specification	Terminal tightening torque
Input : AWG 14 ~ 24	Output : AWG 14 ~ 24	Screw torque : 0.56N-m

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TEL : 02)837-2230 FAX : 02)837-2228

# PSR Series User's Guide



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R-R-3WA-PSR060-24  
R-R-3WA-PSR100-24

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### Warning

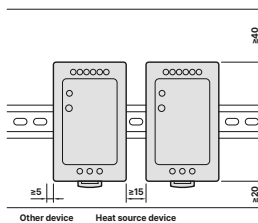
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- When performing installation or wiring work, be sure to turn off the upper power source or circuit breaker.  
It may cause electric shock, ignition, or fire.
- Do not touch the terminals while energized.  
There is a risk of electric shock.
- Check the wiring diagram before wiring.  
There is a risk of ignition or fire.
- Do not open or modify the product on your own.  
There is a risk of ignition or fire.

### Caution

- Please use within the specified temperature range indicated in the ratings/specifications.  
It may cause fire or product malfunction.
- Use within the specified voltage and current range.  
It may cause fire, product failure, or shortened product lifespan.
- Do not touch the product during operation or for 30 seconds to 1 minute after stopping.  
It may cause burns due to heat generation or electric shock due to remaining voltage.
- When wiring, use an appropriate tool and tighten to the specified torque.  
Tightening outside this range may cause fire or malfunction due to damaged or loose terminals.

### Installation distance

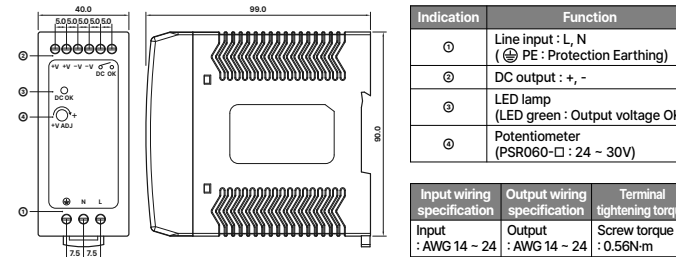
- The device must be installed properly to keep the input terminals at the bottom and the output at the top.
- keep a distance of 40mm above and 20mm below the device as well as a lateral distance of 5mm to other units.
- In case the adjacent device is a heat source, the lateral distance will be 15mm.
- System installation should take the responsibility of system safety after combination.



### Rating/Specification (PSR060-□)

Model	PSR060-12	PSR060-24	PSR060-48
<b>Input parameters</b>			
Input voltage range	85 ~ 264VAC, 120 ~ 370VDC		
AC current	1.8A/115VAC, 1A/230VAC		
Frequency range	47 ~ 63Hz		
Inrush current (max)	Cold start : 30A/115VAC, 60A/230VAC		
<b>Output parameters</b>			
DC voltage (V)	12V	24V	48V
Efficiency	86%	88%	88%
Rated current (A)	5A	2.5A	1.25A
Rated power (W)	60W	60W	60W
Voltage adjustment range	12 ~ 15V	24 ~ 30V	48 ~ 56V
Ripple and Noise (max)	120m Vp-p	150m Vp-p	200m Vp-p
Voltage tolerance	±1%	±1%	±1%
Line regulation	±1%	±1%	±1%
Load regulation	±1%	±1%	±1%
Setup, rise time	500ms 30ms/230VAC 500ms 30ms/115VAC (at full load)		
Hold up time	50ms/230VAC 20ms/115VAC (at full load)		
Status display	Green LED		
<b>Protection</b>			
Overload	105 ~ 150% of rated output power		
	Protection type : Constant current limiting, recovers automatically after fault condition is removed.		
Overvoltage (V)	15.6 ~ 18V	31.2 ~ 36V	57.6 ~ 64.8V
	Protection type : Shut down O/P voltage, re-power on to recover		
<b>Safety and EMC</b>			
Withstand voltage	I/P-O/P : 3KVAC I/P-FG : 1.5KVAC O/P-FG : 0.5KVAC		
Insulation resistance	I/P-O/P, I/P-FG, O/P-FG : 100M Ohms/500VDC/25°C/70%RH		
Safety standards	Design reference EN IEC 62368-1, GB 4943.1		
EMC emission	Design reference EN55032 (Class B), EN61000-3-2, 3-3 (Class A)		
EMC immunity	Design reference EN61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11		
<b>Environmental parameters</b>			
Operating temperature	-20°C ~ +70°C (Refer to "Derating curve")		
Storage temperature	-40°C ~ +85°C		
Storage humidity	10 ~ 95%RH		
Vibration	Component : 10-500Hz, 2G 10 min/1cycle 60 min each along X, Y, Z axis		
<b>The other parameters</b>			
Mean time between failure	299.2K hrs min MIL-HDBK-217F (25°C)		
Installation method	Install on DIN rail TS35		
Protection rating	IP20		
Weight	0.35kg		
W*D*H	40.0*100.0*90.0mm		

### Dimension (PSR060-□)



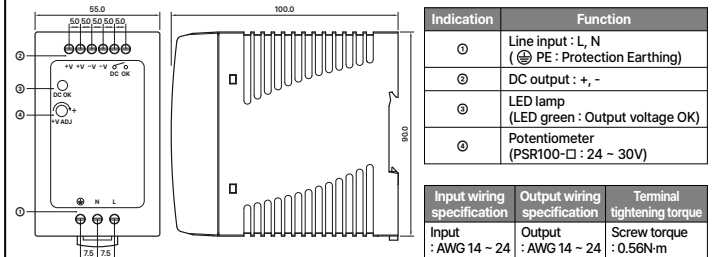
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### Rating/Specification (PSR100-□)

Model	PSR100-12	PSR100-24	PSR100-48
<b>Input parameters</b>			
Input voltage range	85 ~ 264VAC, 120 ~ 370VDC		
AC current	1.3A/115VAC, 0.8A/230VAC		
Frequency range	47 ~ 63Hz		
Inrush current (max)	Cold start : 30A/115VAC, 60A/230VAC		
<b>Output parameters</b>			
DC voltage (V)	12V	24V	48V
Efficiency	82%	85%	86%
Rated current (A)	7.5A	4A	2A
Rated power (W)	90W	96W	96W
Voltage adjustment range	12 ~ 15V	24 ~ 30V	48 ~ 56V
Ripple and Noise (max)	120m Vp-p	150m Vp-p	200m Vp-p
Voltage tolerance	±1%	±1%	±1%
Line regulation	±1%	±1%	±1%
Load regulation	±1%	±1%	±1%
Setup, rise time	3000ms 50ms/230VAC 3000ms 50ms/115VAC (at full load)		
Hold up time	50ms/230VAC 20ms/115VAC (at full load)		
Status display	Green LED		
<b>Protection</b>			
Overload	105 ~ 150% of rated output power		
	Protection type: Hiccup mode, recovers automatically after fault condition is removed.		
Overvoltage (V)	15.6 ~ 18V	31.2 ~ 36V	57.6 ~ 64.8V
	Protection type : Shut down O/P voltage, re-power on to recover		
<b>Safety and EMC</b>			
Withstand voltage	I/P-O/P : 3KVAC I/P-FG : 1.5KVAC O/P-FG : 0.5KVAC		
Insulation resistance	I/P-O/P, I/P-FG, O/P-FG : 100M Ohms/500VDC/25°C/70%RH		
Safety standards	Design reference EN IEC 62368-1, GB 4943.1		
EMC emission	Design reference EN55032 (Class B), EN61000-3-2, 3-3 (Class A)		
EMC immunity	Design reference EN61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11		
<b>Environmental parameters</b>			
Operating temperature	-10°C ~ +60°C (Refer to "Derating curve")		
Storage temperature	-40°C ~ +85°C		
Storage humidity	10 ~ 95%RH		
Vibration	Component : 10-500Hz, 2G 10 min/1cycle 60 min each along X, Y, Z axis		
<b>The other parameters</b>			
Mean time between failure	346K hrs min MIL-HDBK-217F (25°C)		
Installation method	Install on DIN rail TS35		
Protection rating	IP20		
Weight	0.45kg		
W*D*H	55.0*100.0*90.0mm		

### Dimension (PSR100-□)



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# PSR Series

## User's Guide



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R-R-3WA-PSR120-24  
R-R-3WA-PSR180-24

### Caution for safety

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- Caution** Case that results in slight damage in human body or equipment, and fire if user handles this equipment wrongly

### Warning

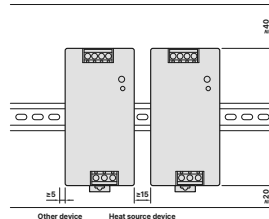
- Make sure that foreign substances such as dust or wire covering do not enter the connection terminals or main body.  
It may cause damage, heat generation, or ignition.
- When performing installation or wiring work, be sure to turn off the upper power source or circuit breaker.  
It may cause electric shock, ignition, or fire.
- Do not touch the terminals while energized.  
There is a risk of electric shock.
- Check the wiring diagram before wiring.  
There is a risk of ignition or fire.
- Do not open or modify the product on your own.  
There is a risk of ignition or fire.

### Caution

- Please use within the specified temperature range indicated in the ratings/specifications.  
It may cause fire or product malfunction.
- Use within the specified voltage and current range.  
It may cause fire, product failure, or shortened product lifespan.
- Do not touch the product during operation or for 30 seconds to 1 minute after stopping.  
It may cause burns due to heat generation or electric shock due to remaining voltage.
- When wiring, use an appropriate tool and tighten to the specified torque.  
Tightening outside this range may cause fire or malfunction due to damaged or loose terminals.

### Installation distance

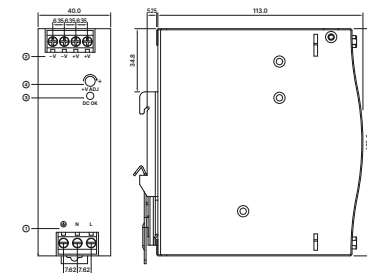
- The device must be installed properly to keep the input terminals at the bottom and the output at the top.
- keep a distance of 40mm above and 20mm below the device as well as a lateral distance of 5mm to other units.
- In case the adjacent device is a heat source, the lateral distance will be 15mm.
- System installation should take the responsibility of system safety after combination.



### Rating/Specification (PSR120-□)

Model	PSR120-12	PSR120-24	PSR120-48
<b>Input parameters</b>			
Input voltage range	96 ~ 264VAC, 120 ~ 370VDC		
AC current	2.25A/115VAC, 1.3A/230VAC		
Frequency range	47 ~ 63Hz		
Inrush current (max)	20A/115VAC, 35A/230VAC		
<b>Output parameters</b>			
DC voltage (V)	12V	24V	48V
Efficiency	84%	87%	88%
Rated current (A)	10A	5A	2.5A
Rated power (W)	120W	120W	120W
Voltage adjustment range	12 ~ 14V	24 ~ 28V	48 ~ 55V
Ripple and Noise (max)	100m Vp-p	120m Vp-p	150m Vp-p
Voltage tolerance	±2%	±1%	±1%
Line regulation	±0.5%	±0.5%	±0.5%
Load regulation	±1%	±1%	±1%
Setup, rise time	1200ms 60ms/230VAC 2500ms 60ms/115VAC (at full load)		
Hold up time	16ms/230VAC 10ms/115VAC (at full load)		
Status display	Green LED		
<b>Protection</b>			
Overload	105 ~ 130% of rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed.		
Overvoltage (V)	14 ~ 17V	29 ~ 33V	56 ~ 65V
	Protection type : Shut down O/P voltage, re-power on to recover		
<b>Safety and EMC</b>			
Withstand voltage	I/P-O/P : 3KVAC I/P-FG : 2KVAC O/P-FG : 0.5KVAC		
Insulation resistance	I/P-O/P, I/P-FG, O/P-FG : 100M Ohms/500VDC/25°C/70%RH		
Safety standards	Design reference EN IEC 62368-1, GB 4943.1		
EMC emission	Design reference EN55032 (Class A), EN61000-3-2, 3-3 (Class A)		
EMC immunity	Design reference EN61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11		
<b>Environmental parameters</b>			
Operating temperature	-20°C ~ +60°C (Refer to "Derating curve")		
Storage temperature	-40°C ~ +85°C		
Storage humidity	10 ~ 95%RH		
Vibration	Component : 10-500Hz, 2G 10 min/1cycle 60 min each along X, Y, Z axis		
<b>The other parameters</b>			
Mean time between failure	474.6K hrs min MIL-HDBK-217F (25°C)		
Installation method	Install on DIN rail TS35		
Protection rating	IP20		
Weight	0.65kg		
W * D * H	40.0 * 113.5 * 125.2mm		

### Dimension (PSR120-□)



Indication	Function
⊙	Line input : L, N (⊕ PE : Protection Earthing)
⊙	DC output : +, -
⊙	LED lamp (LED green : Output voltage OK)
⊙	Potentiometer (PSR120-□ : 24 ~ 28V)

Input wiring specification	Output wiring specification	Terminal tightening torque
Input : AWG 10 ~ 24	Output : AWG 10 ~ 24	Screw torque : 1N·m

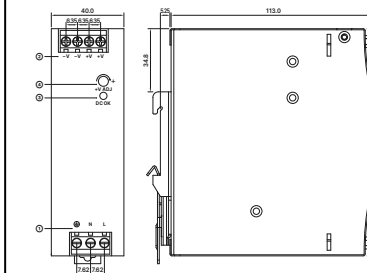
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### Rating/Specification (PSR180-□)

Model	PSR180-24	PSR180-48
<b>Input parameters</b>		
Input voltage range	96 ~ 264VAC, 134 ~ 370VDC	
AC current	3A/115VAC, 2A/230VAC	
Frequency range	47 ~ 63Hz	
Inrush current (max)	20A/115VAC, 35A/230VAC	
<b>Output parameters</b>		
DC voltage (V)	24V	48V
Efficiency	83%	85%
Rated current (A)	7.5A	3.75A
Rated power (W)	180W	180W
Voltage adjustment range	24 ~ 28V	48 ~ 56V
Ripple and Noise (max)	200m Vp-p	200m Vp-p
Voltage tolerance	±1%	±1%
Line regulation	±0.5%	±0.5%
Load regulation	±1%	±1%
Setup, rise time	1500ms 60ms/230VAC 3000ms 60ms/115VAC (at full load)	
Hold up time	16ms/230VAC 10ms/115VAC (at full load)	
Status display	Green LED	
<b>Protection</b>		
Overload	105 ~ 130% of rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed.	
Overvoltage (V)	29 ~ 33V	57.6 ~ 66V
	Protection type : Shut down O/P voltage, re-power on to recover	
<b>Safety and EMC</b>		
Withstand voltage	I/P-O/P : 3KVAC I/P-FG : 1.5KVAC O/P-FG : 0.5KVAC	
Insulation resistance	I/P-O/P, I/P-FG, O/P-FG : 100M Ohms/500VDC/25°C/70%RH	
Safety standards	Design reference EN IEC 62368-1, GB 4943.1	
EMC emission	Design reference EN55032 (Class A), EN61000-3-2, 3-3 (Class A)	
EMC immunity	Design reference EN61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11	
<b>Environmental parameters</b>		
Operating temperature	-20°C ~ +50°C (Refer to "Derating curve")	
Storage temperature	-40°C ~ +85°C	
Storage humidity	10 ~ 95%RH	
Vibration	Component : 10-500Hz, 2G 10 min/1cycle 60 min each along X, Y, Z axis	
<b>The other parameters</b>		
Mean time between failure	472.5K hrs min MIL-HDBK-217F (25°C)	
Installation method	Install on DIN rail TS35	
Protection rating	IP20	
Weight	0.9kg	
W * D * H	40.0 * 113.5 * 125.2mm	

### Dimension (PSR180-□)



Indication	Function
⊙	Line input : L, N (⊕ PE : Protection Earthing)
⊙	DC output : +, -
⊙	LED lamp (LED green : Output voltage OK)
⊙	Potentiometer (PSR180-□ : 24 ~ 28V)

Input wiring specification	Output wiring specification	Terminal tightening torque
Input : AWG 10 ~ 24	Output : AWG 10 ~ 24	Screw torque : 1N·m

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# PSR Series

## User's Guide



Thank you for purchasing product of SAMWON ACT.  
Please check model of product that you purchase first, and read this manual prior to use it.

R-R-3WA-PSR240-24  
R-R-3WA-PSR480-24

### Caution for safety

- Warning** Case that results in serious damage in human body or equipment, and fire if user handles this equipment wrongly
- Caution** Case that results in slight damage in human body or equipment, and fire if user handles this equipment wrongly

### Warning

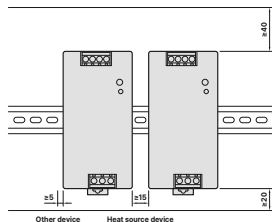
1. Make sure that foreign substances such as dust or wire covering do not enter the connection terminals or main body.  
It may cause damage, heat generation, or ignition.
2. When performing installation or wiring work, be sure to turn off the upper power source or circuit breaker.  
It may cause electric shock, ignition, or fire.
3. Do not touch the terminals while energized.  
There is a risk of electric shock.
4. Check the wiring diagram before wiring.  
There is a risk of ignition or fire.
5. Do not open or modify the product on your own.  
There is a risk of ignition or fire.

### Caution

1. Please use within the specified temperature range indicated in the ratings/specifications.  
It may cause fire or product malfunction.
2. Use within the specified voltage and current range.  
It may cause fire, product failure, or shortened product lifespan.
3. Do not touch the product during operation or for 30 seconds to 1 minute after stopping.  
It may cause burns due to heat generation or electric shock due to remaining voltage.
4. When wiring, use an appropriate tool and tighten to the specified torque.  
Tightening outside this range may cause fire or malfunction due to damaged or loose terminals.

### Installation distance

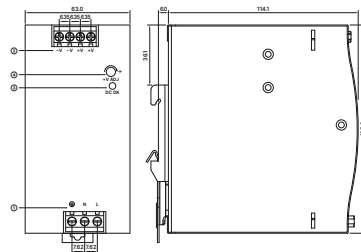
- The device must be installed properly to keep the input terminals at the bottom and the output at the top.
- keep a distance of 40mm above and 20mm below the device as well as a lateral distance of 5mm to other units.
- In case the adjacent device is a heat source, the lateral distance will be 15mm.
- System installation should take the responsibility of system safety after combination.



### Rating/Specification (PSR240-□)

Model	PSR240-24	PSR240-48
<b>Input parameters</b>		
Input voltage range	90 ~ 264VAC, 127 ~ 370VDC	
AC current	2.5A/115VAC, 1.3A/230VAC	
Frequency range	47 ~ 63Hz	
Inrush current (max)	20A/115VAC, 35A/230VAC	
<b>Output parameters</b>		
DC voltage (V)	24V	48V
Efficiency	87%	88%
Rated current (A)	10A	5A
Rated power (W)	240W	240W
Voltage adjustment range	24 ~ 28V	48 ~ 56V
Ripple and Noise (max)	150m Vp-p	240m Vp-p
Voltage tolerance	±1%	±1%
Line regulation	±1%	±1%
Load regulation	±1%	±1%
Setup, rise time	1500ms 100ms/230VAC 3000ms 100ms/115VAC (at full load)	
Hold up time	25ms/230VAC 20ms/115VAC (at full load)	
Status display	Green LED	
<b>Protection</b>		
Overload	105 ~ 130% of rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed.	
Overvoltage (V)	29 ~ 33V	57.6 ~ 66V
	Protection type : Shut down O/P voltage, re-power on to recover	
<b>Safety and EMC</b>		
Withstand voltage	I/P-O/P : 3KVAC I/P-FG : 2KVAC O/P-FG : 0.5KVAC	
Insulation resistance	I/P-O/P, I/P-FG, O/P-FG : 100M Ohms/500VDC/25°C/70%RH	
Safety standards	Design reference EN IEC 62368-1, GB 4943.1	
EMC emission	Design reference EN55032 (Class A), EN61000-3-2, 3-3 (Class A)	
EMC immunity	Design reference EN61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11	
<b>Environmental parameters</b>		
Operating temperature	-20°C ~ +70°C (Refer to "Derating curve")	
Storage temperature	-40°C ~ +85°C	
Storage humidity	10 ~ 95%RH	
Vibration	Component : 10-500Hz, 2G 10 min/1cycle 60 min each along X, Y, Z axis	
<b>The other parameters</b>		
Mean time between failure	230.2K hrs min MIL-HDBK-217F (25°C)	
Installation method	Install on DIN rail TS35	
Protection rating	IP20	
Weight	1kg	
W*D*H	63.0*113.5*125.2mm	

### Dimension (PSR240-□)



Indication	Function
⊙	Line input : L, N (⊕ PE : Protection Earthing)
⊙	DC output : +, -
⊙	LED lamp (LED green : Output voltage OK)
⊙	Potentiometer (PSR240-□ : 24 ~ 28V)

Input wiring specification	Output wiring specification	Terminal tightening torque
Input : AWG 10 ~ 24	Output : AWG 10 ~ 24	Screw torque : 1N·m

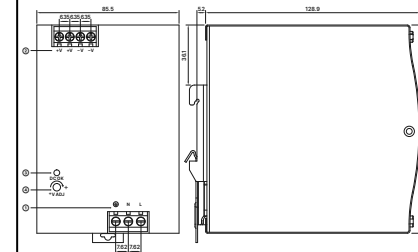
- \* The above specifications are subject to change without notice.
- \* Please contact HQ or branch office where you purchased product for A/S of this product or technique.



### Rating/Specification (PSR480-□)

Model	PSR480-24	PSR480-48
<b>Input parameters</b>		
Input voltage range	96 ~ 264VAC, 120 ~ 370VDC	
AC current	4.8A/115VAC, 2.4A/230VAC	
Frequency range	47 ~ 63Hz	
Inrush current (max)	20A/115VAC, 35A/230VAC	
<b>Output parameters</b>		
DC voltage (V)	24V	48V
Efficiency	90%	90%
Rated current (A)	20A	10A
Rated power (W)	480W	480W
Voltage adjustment range	24 ~ 28V	48 ~ 56V
Ripple and Noise (max)	150m Vp-p	150m Vp-p
Voltage tolerance	±1%	±1%
Line regulation	±0.5%	±0.5%
Load regulation	±1%	±1%
Setup, rise time	1500ms 100ms/230VAC 3000ms 100ms/115VAC (at full load)	
Hold up time	16ms/230VAC 16ms/115VAC (at full load)	
Status display	Green LED	
<b>Protection</b>		
Overload	105 ~ 130% of rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed.	
Overvoltage (V)	29 ~ 33V	56 ~ 65V
	Protection type : Shut down O/P voltage, re-power on to recover	
<b>Safety and EMC</b>		
Withstand voltage	I/P-O/P : 3KVAC I/P-FG : 2KVAC O/P-FG : 0.5KVAC	
Insulation resistance	I/P-O/P, I/P-FG, O/P-FG : 100M Ohms/500VDC/25°C/70%RH	
Safety standards	Design reference EN IEC 60950-1, GB 4943.1	
EMC emission	Design reference EN55032 (Class A), EN61000-3-2, 3-3 (Class A)	
EMC immunity	Design reference EN61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11	
<b>Environmental parameters</b>		
Operating temperature	-25°C ~ +70°C (Refer to "Derating curve")	
Storage temperature	-40°C ~ +85°C	
Storage humidity	10 ~ 95%RH	
Vibration	Component : 10-500Hz, 2G 10 min/1cycle 60 min each along X, Y, Z axis	
<b>The other parameters</b>		
Mean time between failure	146.8K hrs min MIL-HDBK-217F (25°C)	
Installation method	Install on DIN rail TS35	
Protection rating	IP20	
Weight	1.9kg	
W*D*H	85.5*128.5*125.2mm	

### Dimension (PSR480-□)



Indication	Function
⊙	Line input : L, N (⊕ PE : Protection Earthing)
⊙	DC output : +, -
⊙	LED lamp (LED green : Output voltage OK)
⊙	Potentiometer (PSR480-□ : 24 ~ 28V)

Input wiring specification	Output wiring specification	Terminal tightening torque
Input : AWG 10 ~ 24	Output : AWG 10 ~ 24	Screw torque : 1N·m

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