



WORI Series Single Phase AC Output

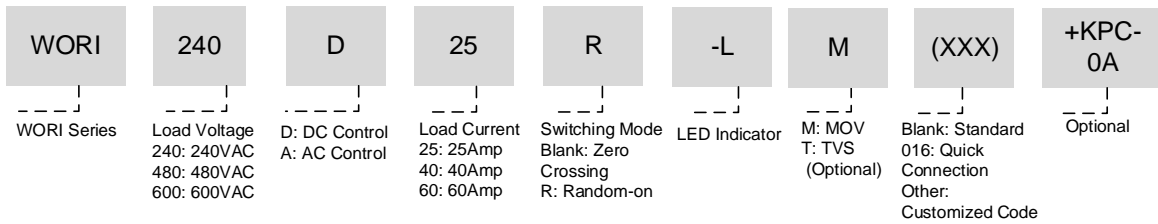
Product Description

- Zero-crossing or Random-on Switching
- Load current: 25A-60A@48-660VAC
- TRIAC or SCR Output
- AC or DC Input Control
- Dielectric Strength: 4000Vrms
- LED Indicator
- Internal MOV/TVS Protection (Optional)
- Protective cover KPC-0A (Optional)



Note:(1) Suffix T series products (TVS protection products) without TUV certification

Ordering Information



Note:

1. The feature number (016) series is the structure of fast connection terminal, the current optional range is 25A~40A, among which the products of WORI(240,380)xxx25xxx(016) series are TRIAC output, the products of WORI(480,600)xxx25xxx(016) series and WORI(480,600)xxx40xxx(016) series are SCR output.

2. Conventional WORI series are bolt structure, and the current range is 25A~60A, among which WORI(240,380)xxx25xxx series products are TRIAC output, WORI(480,600)xxx25xxx series products and WORIxxx40xxx series products and WORIxxx60xxx series products are SCR output.

Note: Part numbers available are listed in the table below.

Control Voltage	25A	40A	60A
D:4-32VDC	WORI240D25-L	WORI240D40-L	WORI240D60-L
	WORI240D25R-L	WORI240D40R-L	WORI240D60R-L
	WORI480D25-L	WORI480D40-L	WORI480D60-L
	WORI480D25R-L	WORI480D40R-L	WORI480D60R-L
	WORI600D25-L	WORI600D40-L	WORI600D60-L

Control Voltage	25A	40A	60A	
D:4-32VDC	WORI600D25R-L	WORI600D40R-L	WORI600D60R-L	
	WORI240D25-LT	WORI240D40-LT	WORI240D60-LT	
	WORI240D25R-LT	WORI240D40R-LT	WORI240D60R-LT	
	WORI480D25-LT	WORI480D40-LT	WORI480D60-LT	
	WORI480D25R-LT	WORI480D40R-LT	WORI480D60R-LT	
	WORI600D25-LT	WORI600D40-LT	WORI600D60-LT	
	WORI600D25R-LT	WORI600D40R-LT	WORI600D60R-LT	
	WORI240D25-LM	WORI240D40-LM	WORI240D60-LM	
	WORI240D25R-LM	WORI240D40R-LM	WORI240D60R-LM	
	WORI480D25-LM	WORI480D40-LM	WORI480D60-LM	
	WORI480D25R-LM	WORI480D40R-LM	WORI480D60R-LM	
	WORI600D25-LM	WORI600D40-LM	WORI600D60-LM	
	WORI600D25R-LM	WORI600D40R-LM	WORI600D60R-LM	
	A:90-280VAC	WORI240A25-L	WORI240A40-L	WORI240A60-L
		WORI240A25R-L	WORI240A40R-L	WORI240A60R-L
WORI480A25-L		WORI480A40-L	WORI480A60-L	
WORI480A25R-L		WORI480A40R-L	WORI480A60R-L	
WORI600A25-L		WORI600A40-L	WORI600A60-L	
WORI600A25R-L		WORI600A40R-L	WORI600A60R-L	
WORI240A25-LT		WORI240A40-LT	WORI240A60-LT	
WORI240A25R-LT		WORI240A40R-LT	WORI240A60R-LT	
WORI480A25-LT		WORI480A40-LT	WORI480A60-LT	
WORI480A25R-LT		WORI480A40R-LT	WORI480A60R-LT	
WORI600A25-LT		WORI600A40-LT	WORI600A60-LT	
WORI600A25R-LT		WORI600A40R-LT	WORI600A60R-LT	
WORI240A25-LM		WORI240A40-LM	WORI240A60-LM	
WORI240A25R-LM		WORI240A40R-LM	WORI240A60R-LM	
WORI480A25-LM		WORI480A40-LM	WORI480A60-LM	
WORI480A25R-LM		WORI480A40R-LM	WORI480A60R-LM	
WORI600A25-LM		WORI600A40-LM	WORI600A60-LM	
WORI600A25R-LM		WORI600A40R-LM	WORI600A60R-LM	

WORI (016) Series

Control Voltage	25A	40A
D:4-32VDC	WORI240D25-L (016)	WORI240D40-L (016)
	WORI240D25R-L(016)	WORI240D40R-L(016)
	WORI480D25-L (016)	WORI480D40-L (016)
	WORI480D25R-L (016)	WORI480D40R-L (016)
	WORI600D25-L (016)	WORI600D40-L (016)
	WORI600D25R-L (016)	WORI600D40R-L (016)
	WORI240D25-LT(016)	WORI240D40-LT(016)
	WORI240D25R-LT (016)	WORI240D40R-LT (016)
	WORI480D25-LT (016)	WORI480D40-LT (016)
	WORI480D25R-LT (016)	WORI480D40R-LT (016)
	WORI600D25-LT (016)	WORI600D40-LT (016)
	WORI600D25R-LT (016)	WORI600D40R-LT (016)
	WORI240D25-LM (016)	WORI240D40-LM (016)
	WORI240D25R-LM (016)	WORI240D40R-LM (016)
	WORI480D25-LM (016)	WORI480D40-LM (016)
	WORI480D25R-LM (016)	WORI480D40R-LM (016)
	WORI600D25-LM(016)	WORI600D40-LM(016)
	WORI600D25R-LM (016)	WORI600D40R-LM (016)

Technical parameters

Input Specifications (Ta=25℃)		
Control Voltage Range	DC Control	4-32VDC (2)
	AC Control	90-280VAC
Must Turn-on Voltage	DC Control	4VDC
	AC Control	90VAC
Must Turn-off Voltage	DC Control	1VDC
	AC Control	10VAC
Maximum Input Current	DC Control	25mA(32VDC)
	AC Control	25mA(@280VAC/50Hz)

Note: (2) WORI240Dxxx Series Control Voltage Range: 3-32VDC or 4-32VDC

Output Specifications (Ta=25°C)		
Load Voltage Range(47~63Hz)	240VAC	48-280VAC
	480VAC	48-530VAC
	600VAC	48-660VAC
Load Current Range	25A	0.1~25A
	40A	0.1~40A
	60A	0.1~60A
Maximum Turn-on Time	Random-on	1ms
	Zero Crossing	1/2cycle+1ms
	AC Control	40ms
Maximum Turn-off Time	DC Control	1/2cycle+1ms
	AC Control	40ms
Maximum Surge Current (@10ms)	25A	250A
	40A	500A
	60A	700A
Maximum I ² t for Fusing (@10ms)	25A	312A ² s
	40A	1250A ² s
	60A	2450A ² s
Transient Overvoltage	WORI240D/AXXX-LXXX Series	600Vpk
	WORI480D/AXXX-LXXX Series	1200Vpk
	WORI600D/AXXX-LXXX Series	1600Vpk
Maximum Operating Voltage Allowed By Varistors	WORI240D/AXXX-LMXXX Series	300VAC
	WORI480D/AXXX-LMXXX Series	550VAC
	WORI600D/AXXX-LMXXX Series	680VAC
MOV Varistor Voltage Range	WORI240D/AXXX-LTXXX Series	423~517V
	WORI480D/AXXX-LTXXX Series	819~1001V
	WORI600D/AXXX-LTXXX Series	990~1210V
TVS Breakdown Voltage Range	WORI240D/AXXX-LTXXX Series	480V
	WORI480D/AXXX-LTXXX Series	960V
	WORI600D/AXXX-LTXXX Series	1100V
Maximum Off-State Leakage Current@Rated Load Voltage	10mA	
Maximum On-State Voltage Drop@Rated Current	1.7Vrms	
Maximum Off-State Leakage Current@Rated Load Voltage	TRIAC Output	200V/μs

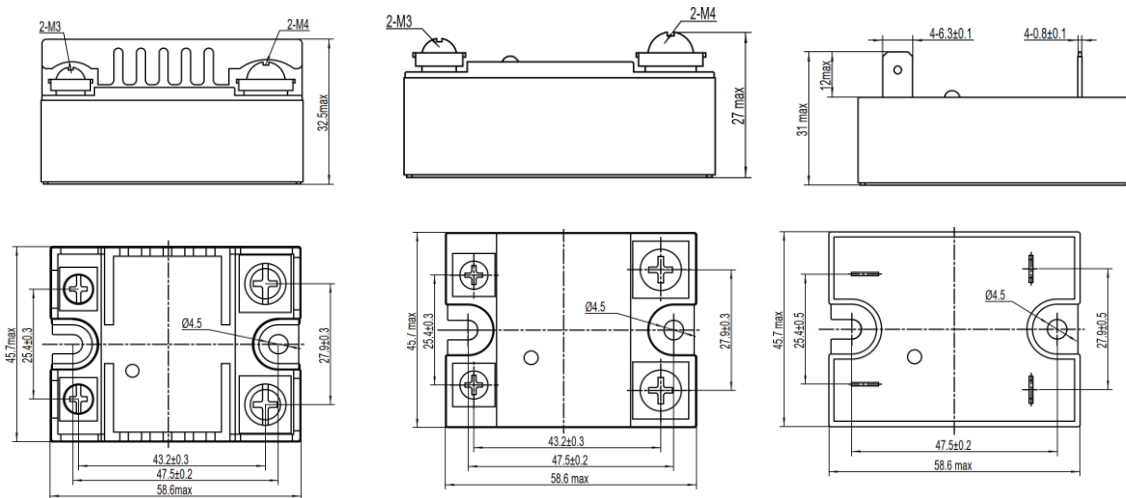
	SCR Output	500V/ μ s
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General Specifications (Ta=25 °C)		
Dielectric Strength (50/60Hz)	Input/Output	4000Vrms
	Input, output/Base	2500Vrms
Minimum Insulation Resistance (@500VDC)	1000M Ω	
Ambient Temperature Range	-30 °C ~ +80 °C	
Storage Temperature Range	-30 °C ~ +100 °C	
Weight (Typical)	Standard Version	96g
	Suffix with (016)	100g

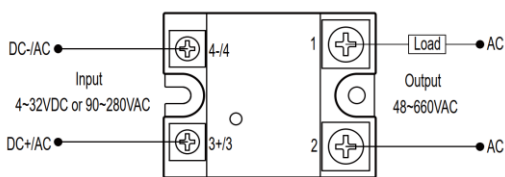
Applications

Suitable for temperature chamber, oiler, air conditioning, lighting, fountain controller and other occasions.

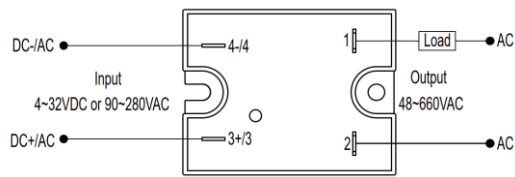
Outline Dimensions



Wiring Diagram

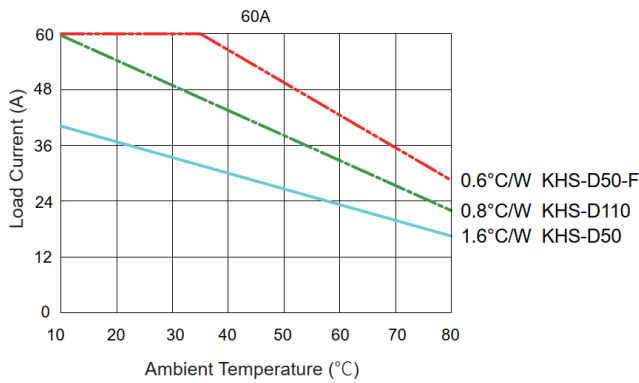
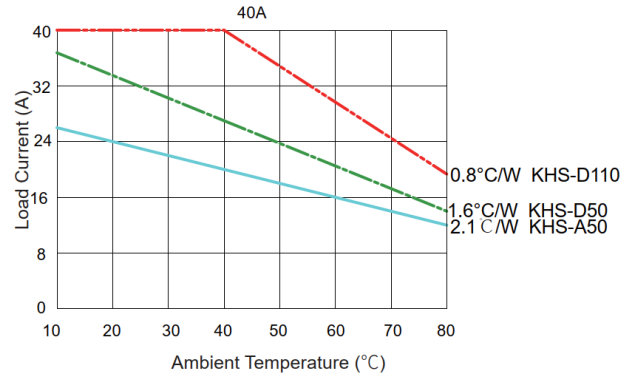
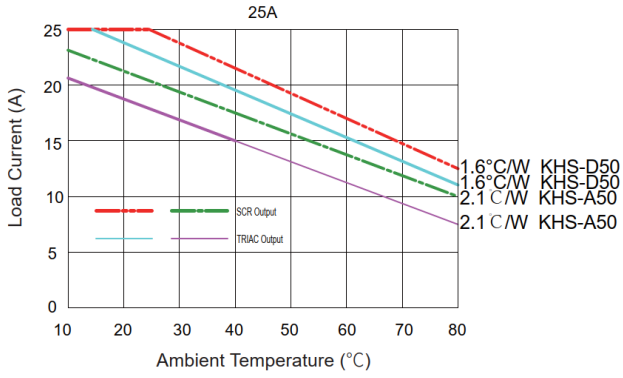


WORI / WORI(083)

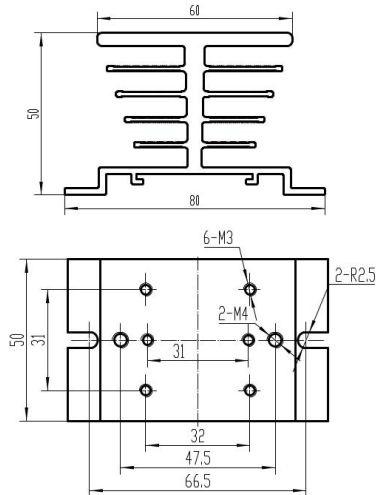


WORI(016)

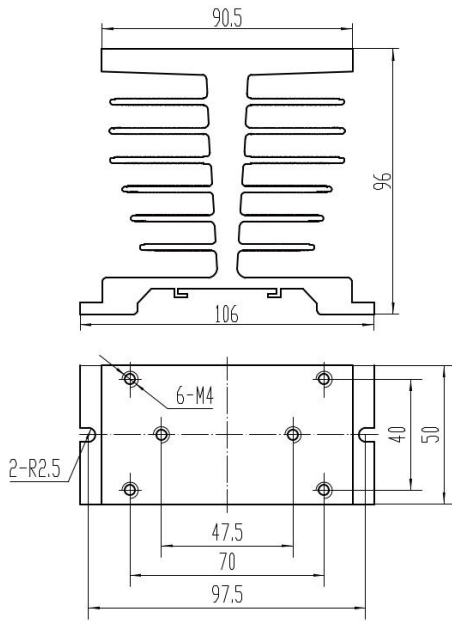
Thermal Derating Curve



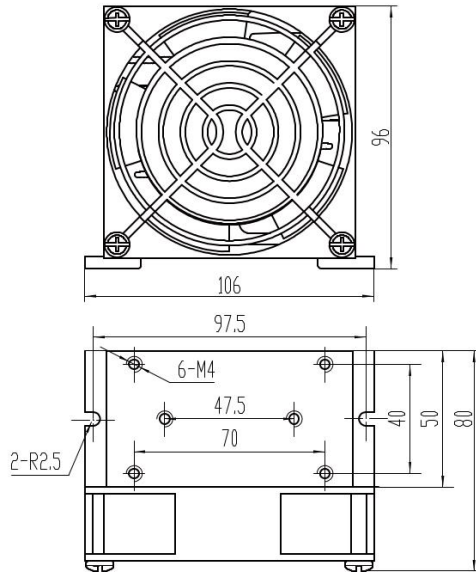
The above temperature curve is configured with radiator models as follows:



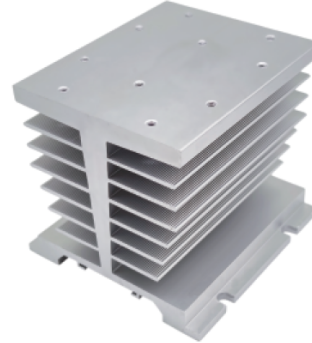
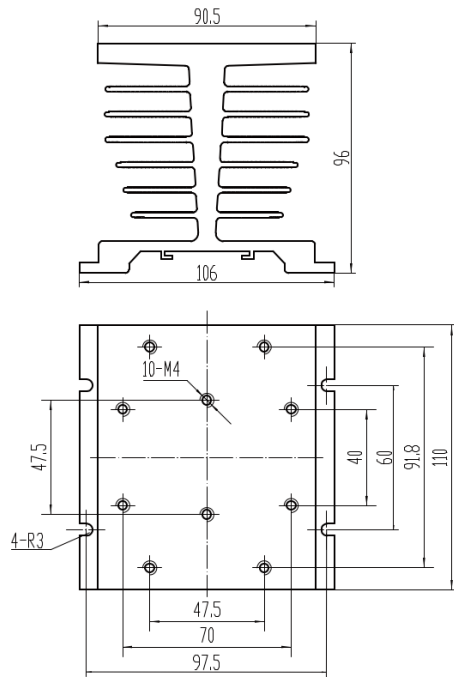
KHS-A50



KHS-D50



KHS-D50-F



KHS-D110

General Notes

1. Relay must be mounted to proper sized heat sink based on thermal curves. Thermal grease or a thermal pad must be used between relay and heat sink and be torqued down to 18-20/2.0-2.2in-lb/Nm.
2. When connection wiring to SSR, please ensure screws are torqued down properly (0.58~0.98) N • m, output (0.98~1.37) N•m.
3. SSR's carrying load capacity is related to the operation ambient temperature and heat dissipation condition, please refer to the Thermal Derating Curve for derating.!

Warnings

1. The product's side panels may be hot, allow the product to cool before touching.
2. Disconnect all power before installing or working with this equipment.
3. Verify all connections and replace all covers before turning on power.

CONTACT INFORMATION

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For additional information, please contact your local Sales Representative.

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Product Specification Statement

1. The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.
2. The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. WAYON shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and WAYON assumes no responsibility for the application of the product.
3. WAYON strives to provide accurate and up-to-date information to the best of our ability. However, due to technical, human, or other reasons, WAYON cannot guarantee that the information provided in the product specification is entirely accurate and error-free. WAYON shall not be held responsible for any losses or damages resulting from the use or reliance on any information in these product specifications. WAYON reserves the right to revise or update the product specification and the products at any time without prior notice, and the user's continued use of the product specification is considered an acceptance of these revisions and updates. Prior to purchasing and using the product, users should verify the above information with WAYON to ensure that the product specification is the most current, effective, and complete. If users are particularly concerned about product parameters, please consult WAYON in detail or request relevant product test reports. Any data not explicitly mentioned in the product specification shall be subject to separate agreement.
4. Users are advised to pay attention to the parameter limit values specified in the product specification and maintain a certain margin in design or application to ensure that the product does not exceed the parameter limit values defined in the product specification. This precaution should be taken to avoid exceeding one or more of the limit values, which may result in permanent irreversible damage to the product, ultimately affecting the quality and reliability of the system or equipment.
5. The design of the product is intended to meet civilian needs and is not guaranteed for use in harsh environments or precision equipment. It is not recommended for use in systems or equipment such as medical devices, aircraft, nuclear power, and similar systems, where failures in these systems or equipment could reasonably be expected to result in personal injury. WAYON shall assume no responsibility for any consequences resulting from such usage.
6. Users should also comply with relevant laws, regulations, policies, and standards when using the product specification. Users are responsible for the risk and liabilities arising from the use of the product specification and must ensure that it is not used for illegal purposes. Additionally, users should respect the intellectual property rights related to the product specification and refrain from infringing upon any third-party legal rights. WAYON shall assume no responsibility for any disputes or controversies arising from the above-mentioned issues in any form.