

AC-SERIES

Phase-Dimmable AC Transformer

Specification Sheet

INPUT: 277VAC
OUTPUT: 12 / 24V

The AC-SERIES is the most compact magnetic core dimmable transformer on the market, making it the perfect choice for landscape and other indoor or outdoor lighting applications. Encased in a high-quality metal enclosure that includes multiple 7/8" knockouts for easy installation. Each unit is equipped with circuit breakers to protect both the driver and the load. All of our magnetic transformers are phase-dimmable with a standard leading edge MLV TRIAC dimmer.



- Installation:** Integrated junction box with multiple 7/8" knockouts
- Driver Type:** Class 2 and higher power single-tap options
- Dimming:** Phase-dimmable with leading (forward) edge MLV TRIAC dimmer only
- Input Voltage:** 277VAC, 50/60Hz
- Output Voltage:** 12VAC or 24 VAC
- Environmental:** Dry and damp
- Listing:** ETL Listed
- Certifications:** Conforms to UL2108, C22.2 No. 223
- Warranty:** 5 year

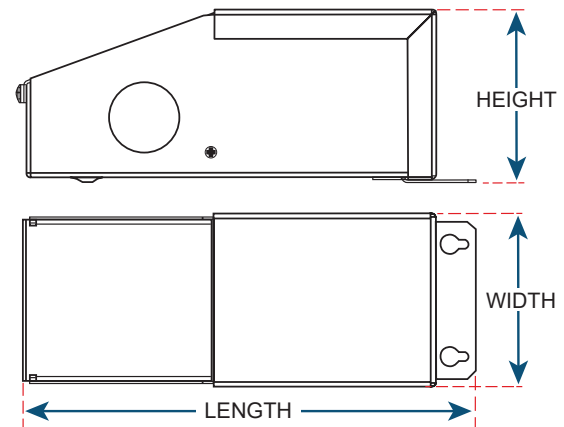


AC-SERIES (INPUT: 277VAC) is also available in:
 AC-SERIES (INPUT: 120VAC)
 Please refer to magnitudeinc.com for more information.

ORDERING GUIDE				
MANUAL RESET BREAKERS				
TYPE	MAX POWER	LISTING	OUTPUT	INPUT
M – Magnetic	20 ¹ – 20W ¹ 40 ¹ – 40W ¹ 60 ¹ – 60W ¹	L – ETL Listed	12 – 12VAC	277 – 277VAC
" "	150 – 150W 200 – 200W 300 – 300W	" "	SOD – 12VAC	" "
" "	20 ¹ – 20W ¹ 40 ¹ – 40W ¹ 60 ¹ – 60W ¹ 96 ¹ – 96W ¹	" "	24 – 24VAC	" "
" "	150 – 150W 200 – 200W 300 – 300W	" "	S24OD – 24VAC	" "

¹Class 2

PRODUCT MEASUREMENTS				
	20W / 40W	60W	150W / 200W	300W
LENGTH	5.60" (142.2mm)	6.55" (166.37mm)	9.80" (248.9mm)	9.80" (248.9mm)
WIDTH	2.10" (53.34mm)	2.55" (64.77mm)	3.00" (76.2mm)	4.20" (106.7mm)
HEIGHT	2.10" (53.34mm)	2.55" (64.77mm)	3.00" (76.2mm)	3.50" (88.9mm)



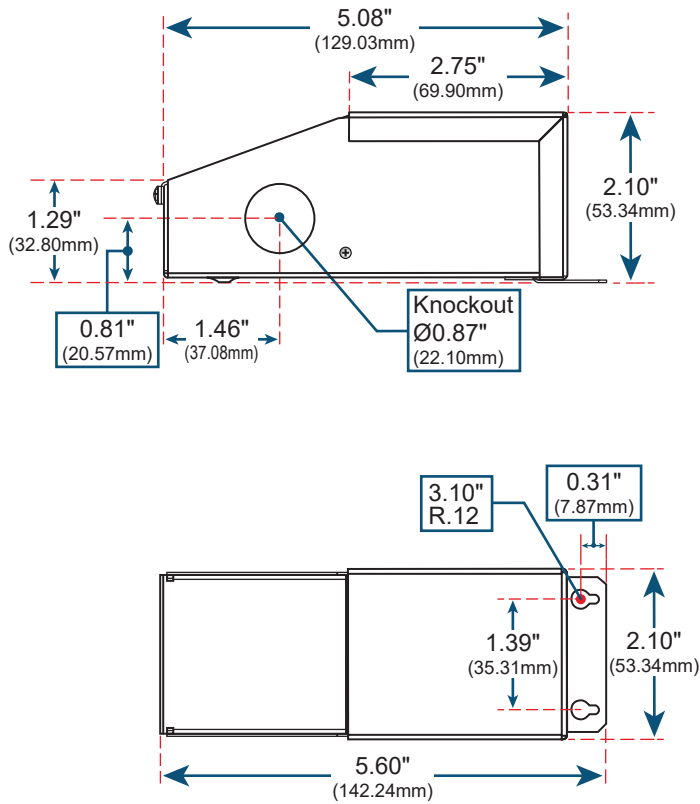
SPECIFICATIONS
20 to 96 Watts

MAX LOAD	20W	40W	60W	96W
INPUT				
Input Voltage Range	277VAC ± 5%	277VAC ± 5%	277VAC ± 5%	277VAC ± 5%
Input Frequency	50 / 60Hz	50 / 60Hz	50 / 60Hz	50 / 60Hz
Input Current	0.195A (12VAC) 0.195A (24VAC)	0.36A (12VAC) 0.35A (24VAC)	0.54A (12VAC) 0.54A (24VAC)	0.96A
Efficiency	> 89.8% (12VAC) 88.61 (24VAC)	> 90.3% (12VAC) > 88.6% (24VAC)	> 89.2% (12VAC) > 90.5% (24VAC)	> 91.2%
OUTPUT				
Max Load	20W	40W	60W	96W
Output Voltage @ Max Load	11.4 VAC 23.0 VAC	11.4 VAC 23.0 VAC	11.5 VAC 23.0 VAC	23.0 VAC
Output Current @ Max Load	1.65A (12VAC) 850mA (24VAC)	3.32A (12VAC) 1.60A (24VAC)	4.80A (12VAC) 2.17A (24VAC)	4.30A
Open Circuit Output Voltage	12.5 VAC 25.0 VAC	12.5 VAC 25.0 VAC	12.5 VAC 25.0 VAC	25.0 VAC
ENVIRONMENTAL				
Operating Temperature	-30°C to +50°C (-22°F to 122°F)	-30°C to +50°C (-22°F to 122°F)	-30°C to +50°C (-22°F to 122°F)	-30°C to +50°C (-22°F to 122°F)
Min. Installation Spacing	5"	5"	5"	5"
Thermal Class	B130°C	B130°C	B130°C	B130°C
DIMMING				
Minimum Dimming Level	1%	1%	1%	1%
PROTECTION				
Circuit Breaker	Secondary Manual Push to Reset			
MECHANICAL HOUSING				
Primary Leads	18 AWG	18 AWG	18 AWG	18 AWG
Secondary Leads	16 AWG (12VAC) 18 AWG (24VAC)	16 AWG (12VAC) 18 AWG (24VAC)	14 AWG (12VAC) 16 AWG (24VAC)	14 AWG
Length	5.60" (142.2mm)	5.60" (142.2mm)	6.55" (166.4mm)	6.62" (168.15mm)
Width	2.10" (53.34mm)	2.10" (53.34mm)	2.55" (64.8mm)	2.58" (65.6mm)
Height	2.10" (53.34mm)	2.10" (53.34mm)	2.55" (64.8mm)	2.33" (59.1mm)
Weight	35 oz. (990g)	35 oz. (990g)	50 oz. (1.4kg)	50 oz. (1.4kg)
Housing Material	Coated Metal	Coated Metal	Coated Metal	Coated Metal
Housing Color	Black	Black	Black	Black
Junction Box	Yes	Yes	Yes	Yes
Mounting	Two-hole Flange Mount	Two-hole Flange Mount	Two-hole Flange Mount	Two-hole Flange Mount
APPROVAL MARKINGS				
Certificates/Approval Signs	ETL Listed, Conforms to UL2108			

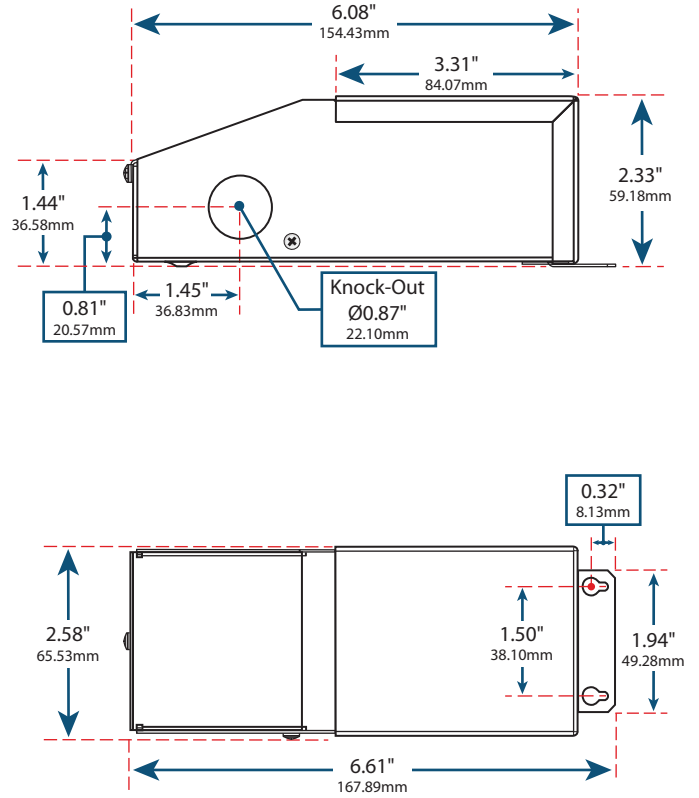
SPECIFICATIONS			
150 to 300 Watts			
MAX LOAD	150W	200W	300W
INPUT			
Input Voltage Range	277VAC ± 5%	277VAC ± 5%	277VAC ± 5%
Input Frequency	50 / 60Hz	50 / 60Hz	50 / 60Hz
Input Current	1.27A (12VAC) 1.27A (24VAC)	1.66A (12VAC) 1.66A (24VAC)	2.5A (12VAC) 2.5A (24VAC)
Efficiency	> 91.5%	> 91.5%	> 92.0%
OUTPUT			
Max Load	150W	200W	300W
Output Voltage @ Max Load	11.5 VAC 23.0 VAC	11.5 VAC 12.5 VAC Boost 23.0 VAC 25.0 VAC Boost	11.5 VAC 12.5 VAC Boost 23.0 VAC 25.0 VAC Boost
Output Current @ Max Load	12.50A (12VAC) 6.25A (24VAC)	12.50A (12VAC) 10.90A (24VAC)	25.00A (12VAC) 12.50A (24VAC)
Open Circuit Output Voltage	12.5 VAC 23.0 VAC	12.5 VAC 13.5 VAC Boost 23.0 VAC 25.0 VAC Boost	12.5 VAC 13.5 VAC Boost 23.0 VAC 25.0 VAC Boost
ENVIRONMENTAL			
Operating Temperature	-30°C to +50°C (-22°F to 122°F)	-30°C to +50°C (-22°F to 122°F)	-30°C to +50°C (-22°F to 122°F)
Min. Installation Spacing	5"	5"	5"
Thermal Class	B130°C	B130°C	B130°C
DIMMING			
Minimum Dimming Level	1%	1%	1%
PROTECTION			
Circuit Breaker	Secondary Manual Push to Reset		
MECHANICAL HOUSING			
Primary Leads	18 AWG	18 AWG	18 AWG
Secondary Leads	12 AWG (12VAC) 14 AWG (24VAC)	12 AWG	12 AWG
Length	9.80" (248.9mm)	9.80" (248.9mm)	9.80" (248.9mm)
Width	3.00" (76.2mm)	3.00" (76.2mm)	4.20" (106.7mm)
Height	3.00" (76.2mm)	3.00" (76.2mm)	3.50" (88.8mm)
Weight	87 oz.	87 oz.	140 oz.
Housing Material	Coated Metal	Coated Metal	Coated Metal
Housing Color	Black	Black	Black
Junction Box	Yes	Yes	Yes
Mounting	Two-hole Flange Mount	Two-hole Flange Mount	Two-hole Flange Mount
APPROVAL MARKINGS			
Certificates/Approval Signs	ETL Listed, Conforms to UL2108		

MECHANICAL DIAGRAMS

20W / 40W

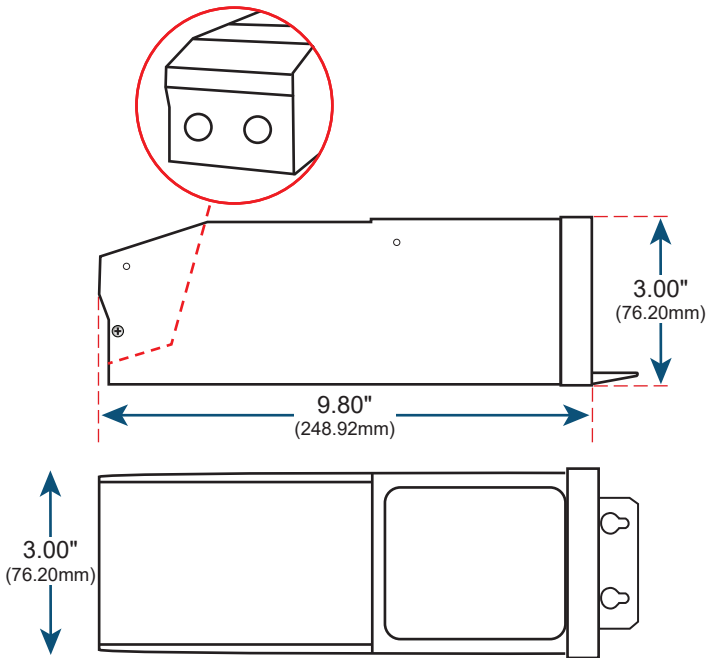


60W / 96W

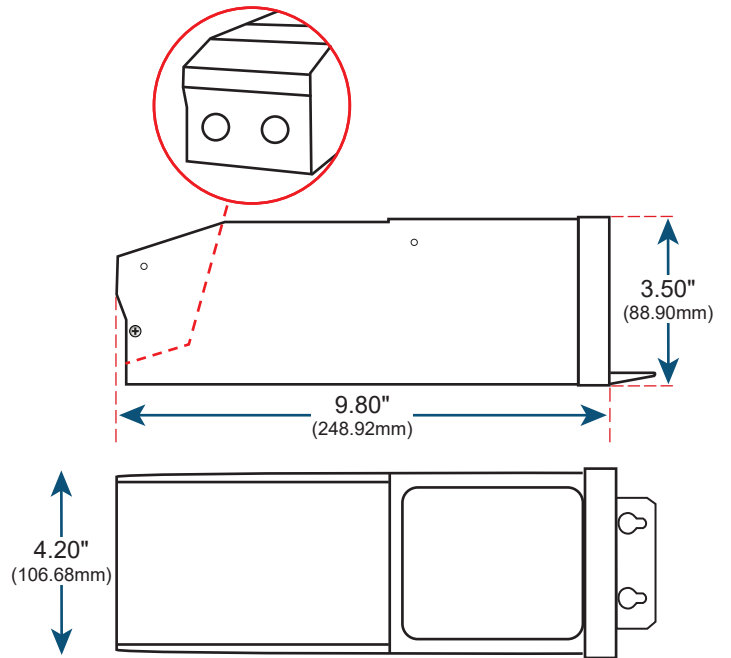


MECHANICAL DIAGRAMS

150W / 200W



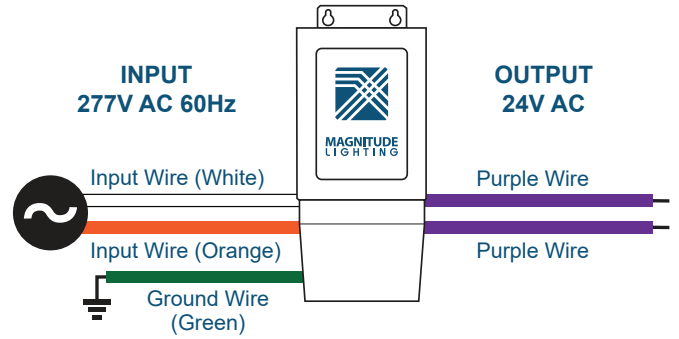
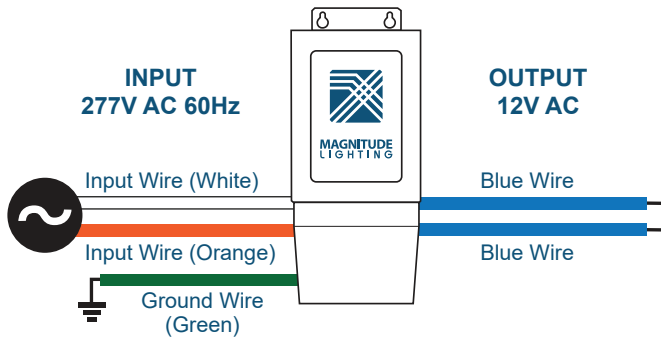
300W



WIRING DIAGRAMS

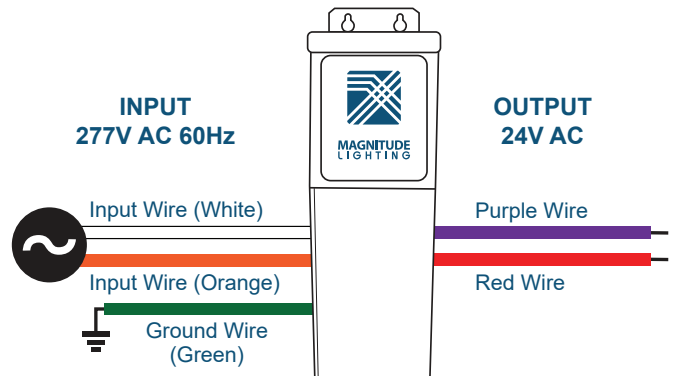
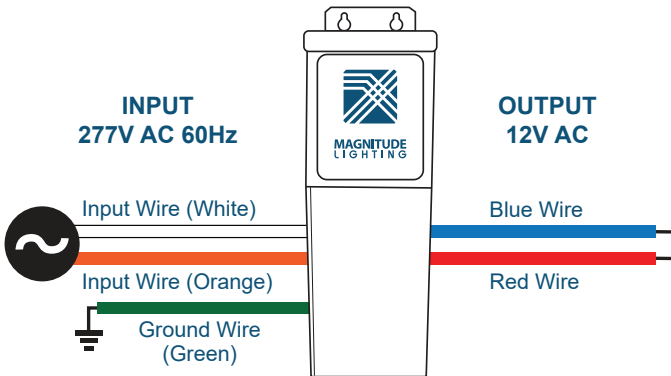
12V AC OUTPUT: 20W - 100W MODELS

24V AC OUTPUT: 20W - 96W MODELS



12V AC OUTPUT: 150W - 300W MODELS

24V AC OUTPUT: 150W - 300W MODELS



12V AC OUTPUT

24V AC OUTPUT

