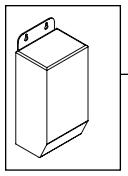


TR SERIES

Magnetic Transformer

PROJECT:	
TYPE:	
CATALOG NUMBER:	
SOURCE:	
NOTES:	

CATALOG NUMBER LOGIC

Example **TR150** - **120**

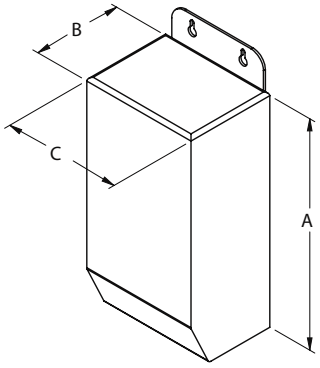
Series

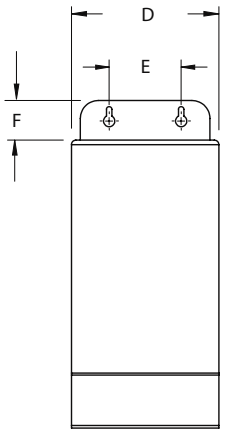
- **TR150** - 150W Magnetic Transformer
- **TR300** - 300W Magnetic Transformer
- **TR600** - 600W Magnetic Transformer

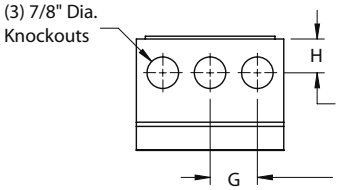
Input Voltage

- **120** - 120 Volt
- **277** - 277 volt

DIMENSIONS







TRANSFORMER DATA

Series	Input Voltage	Max. Load	Weight	Height A	Depth B	C	D	E	F	G	H
TR150	120V	150W	6 lbs.	8"	3-3/32"	4-3/32"	5-1/2″	4-1/8"	1-1/8"	1-5/16"	15/16"
TR300	120V	300W	7.13 lbs.	8"	3-3/32"	4-3/32"	5-1/2"	4-1/8"	1-1/8"	1-5/16"	15/16"
TR600	120V	600W	14.9 lbs.	9-13/32"	4-3/32"	4-19/32"	5-3/4"	4-5/8"	1-1/16"	1-1/2"	1-1/4"
TR150	277V	150W	6 lbs.	8"	3-3/32"	4-3/32"	5-1/2″	4-1/8"	1-1/8"	1-5/16"	15/16"
TR300	277V	300W	7.13 lbs.	8"	3-3/32"	4-3/32"	5-1/2″	4-1/8"	1-1/8"	1-5/16"	15/16"
TR600	277V	600W	14.9 lbs.	9-13/32"	4-3/32"	4-19/32"	5-3/4"	4-5/8"	1-1/16"	1-1/2"	1-1/4

SPECIFICATIONS

Housing
Stainless steel, NEMA Outdoor 3R rated enclsosure. [3] bottom entry 1/2" knockouts provide access to wiring compartment. Riveted, hinged cover opens vertically from bottom to top for service access.

Transformer
Fully encapsulated, 150VA, 300VA, and 600VA Class B insulated, low voltage magnetic transformer. 120VAC or 277VAC input. 12VAC output (fully loaded). 0.6A (120VAC) or 0.3A (277VAC) maximum no load input current. Manual thermal reset. 25A secondary circuit breaker. Enclosure temperature <65° C when fully loaded (in 40° C ambient).

For use with halogen and BIGSSL SOLID STATE LIGHTING products. Fully dimmable with halogen loads utilizing magnetic low voltage dimmers.

Fpr output Wiring
See B-K Lighting Low Voltage Design Guide.

Warranty
Limited five year warranty.

Certification and Listings
Nema Type 3R Enclosure. Suitable for indoor and outdoor use. UL Listed to ANSI/UL Standard 1012.

c UL us

B-K LIGHTING

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SUBMITTAL DATE	SUBMITTAL NUMBER
11-15-12	TR-SERIES

Low Voltage Guide

Many B-K LIGHTING fixtures operate on 12 volts. Taking advantage of these energy-saving fixtures requires appropriate care in planning the electrical wiring system. To maintain expected lamp performance, we recommend the following procedures in sizing your low-voltage wiring system.

SIZING OF LOW VOLTAGE WIRING

1. Locate and plot fixtures on plan. Choose the lighting equipment necessary to create the desired lighting effects. Mark lamp wattage for each fixture location.

2. Identify potential transformer locations. The ideal locations are those which provide for the shortest possible low voltage distances (inconspicuous areas, behind rocks, shrubbery, etc., within the landscape). UPM, Power Pipe™, Power Pipe II™, or, if available, transformers integral in the fixture are good ways to hide the transformer and reduce voltage drop problems.

3. Add the total wattage for the proposed low voltage run. Measure the wire lengths from the transformer to the fixture locations. Find the distance to the "CENTER OF LOAD" of the low voltage run.

$$\text{CENTER OF LOAD} = \frac{\text{Distance from first to last fixture}}{\text{(2) Two}} + \text{Distance from transformer to first fixture}$$

4. Using the B-K LIGHTING Wire Selection Table, select the wattage column which applies. Look down the column stopping at a distance, in feet, that is equal or greater than the "CENTER OF LOAD" distance. Look across to find the proper wire size for your layout.

Note: In the event of multiple runs from a given transformer, treat each run separately.

12-VOLT WIRE SELECTION TABLE

WIRE SIZE	TOTAL WATTAGE																
	12	20	24	35	40	50	60	70	80	100	105	120	140	150	160	200	250
12	178	106	89	60	53	42	35	30	26	21	20	17	15	13	—	—	—
10	283	169	141	96	85	67	56	48	42	33	32	28	24	22	19	17	13
8	450	269	225	154	135	107	90	77	67	54	51	45	38	36	31	27	21
6	715	428	357	245	214	171	143	122	107	85	81	71	61	57	49	42	34
	CENTER OF LOAD WIRING DISTANCES IN FEET																

The Wire Selection Table provided is based on a maximum allowable voltage drop of 5%. Electrical designs which allow greater than 5% voltage drop, reduce rated light output beyond acceptable levels.

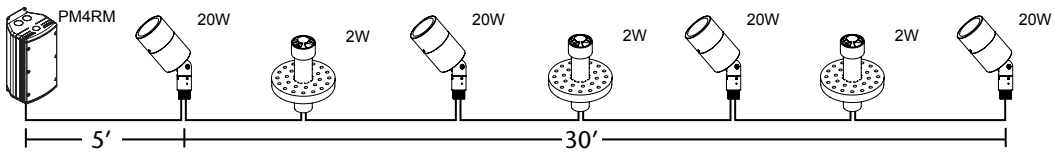
The importance of the proper wire selection is demonstrated below. Both examples have the same total watts and identical overall lengths of wire run, yet require different wire sizes, or multiple wire runs, to operate within the 5% maximum voltage drop B-K LIGHTING criteria.

EXAMPLE:

Total wattage:
(20w x 4) + (2w x 3) = 86 watts

CENTER OF LOAD:
$(\frac{30'}{2})$ + 5' = 20'

SINGLE WIRE RUN:
12 gauge

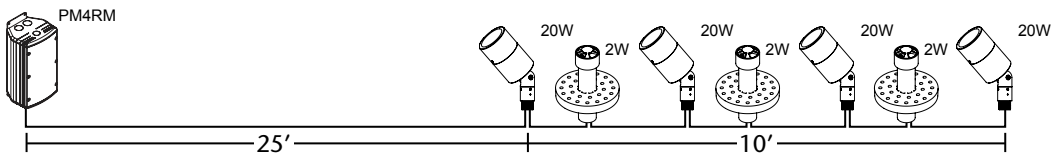


EXAMPLE:

Total wattage:
(20w x 4) + (2w x 3) = 86 watts

CENTER OF LOAD:
$(\frac{10'}{2})$ + 25' = 30'

SINGLE WIRE RUN:
10 gauge



TRANSFORMERS

For areas which are far reaching from fixtures, running 120 volt power to each fixture location with individual transformers, such as TRSS75 or TRSS150, provides an excellent economic solution to voltage drop. These transformers can also be specified in the UPM, Power Pipe™, and Power Pipe II™ transformer housings.

Note: Installations should be in accordance with the National Electric Code and applicable local codes.