

**Functional
Devices, Inc.™**

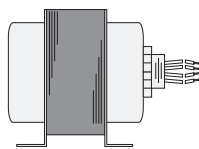


2016

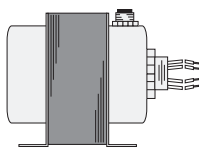
TRANSFORMERS

TRANSFORMERS

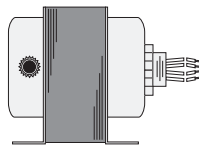
20 VA - 375 VA



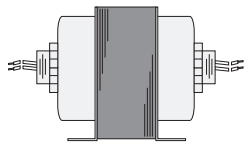
Style 1
Single Hub
& Foot Mount



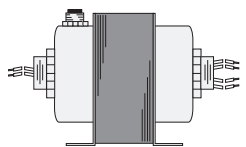
Style 2
Single Hub
& Foot Mount
with Circuit Breaker



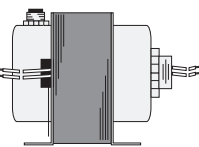
Style 3
Single Hub
& Foot Mount
with Circuit Breaker



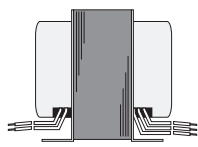
Style 4
Dual Hub
& Foot Mount



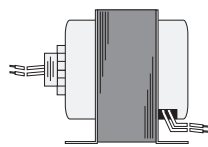
Style 5
Dual Hub
& Foot Mount
with Circuit Breaker



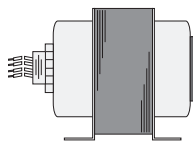
Style 6
Single Hub
& Side Opening
with Circuit Breaker



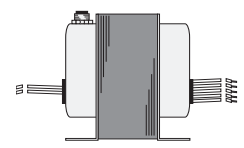
Style 7
Two Bottom Openings
& Foot Mount



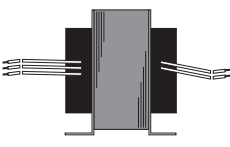
Style 8
Single Hub,
Side Opening
& Foot Mount



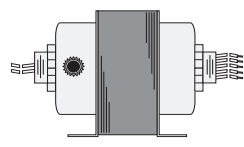
Style 9
Single Hub
& Dual Terminal
Secondary



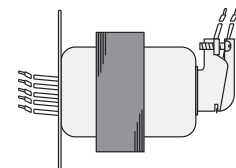
Style 10
Two End-Bell Openings,
& Foot Mount
with Circuit Breaker



Style 11
Two Side Openings
& Foot Mount



Style 12
Dual Hub
& Foot Mount
with Circuit Breaker



Style 13
90° Conduit Connector
& Mounting Plate
Opening

- Transformers may be foot mount, hub mount, or both. Transformers with the hub mount option will have either a single threaded hub or dual threaded hubs. Several transformers are provided with a circuit breaker and many are Class 2. Pigtail wires are standard on most models and are typically 8.00" in length¹. All transformers utilize split-bobbin construction, making them inherently isolated. Custom transformers are also available (contact factory).

Frequency: 50/60 Hz

Hub Style: .5" NPT Hub

Wire Length: 8" Typical with .5" Strip¹

Operating Temperature: -30 to 140° F

Humidity Range: 5 to 95% (noncondensing)

MTBF: 100,000 Hours @ 77° F

Construction: Split-Bobbin

Approvals: CE approved, RoHS. See chart for UL approvals.

- ¹ = • TR40VA022 = 8" Primary, 30" Secondary, with .5" Strip
• TR50VA019 = 28" Typical with .5" Strip
• TR100VA002-20 = 8" Primary, 20" Secondary, with .5" Strip

- Instructions inside product box include wire colors/voltages.

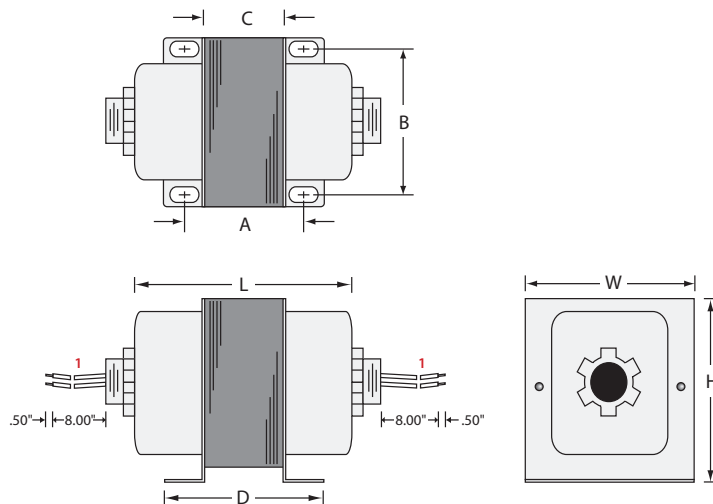
- Additional information on voltage and wire colors is available in individual data sheets on website.

<http://www.functionaldevices.com/building-automation/transformers.php>

Or scan QR code with your smart phone.



DIMENSIONS: SEE CHART.



TRANSFORMERS

40 VA - 100 VA | US Manufactured



Made in the U.S.A.
Meets the "Buy American" provisions of Section 1605 of the American Recovery and Reinvestment Act of 2009 (ARRA).

US Manufactured Control Transformers

Functional Devices, Inc.™

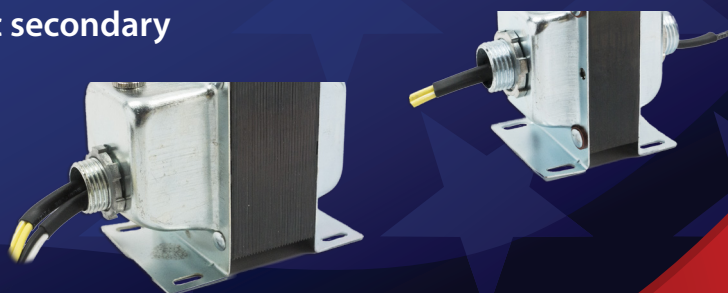


- 40 VA through 100 VA
- Single and dual hub
- Foot or hub mountable
- Circuit breaker models
- Class 2 UL Listed
- 24 Vac secondary

- Single and multi-tap primaries
- Meets the "Buy American" provisions of Section 1605 of the American Recovery and Reinvestment Act of 2009 (ARRA).
ARRA Certificates available upon request.



Made in USA



TRANSFORMERS

US MANUFACTURED TRANSFORMERS

MODEL #	MADE IN USA ¹	UL	VA RATING	STYLE	OVER CURRENT PROTECTION	CLASS 2	PRIMARY VOLTAGE (VAC)	SEC. VOLTAGE (VAC)	FOOT MOUNT	HUBS	L	W	H	A	B	C	WEIGHT
TR40VA001US	•	•	40VA	1	Inherent	•	120	24	•	1 Threaded	2.380"	2.200"	2.930"	1.720"	1.750"	.980"	1.80 lbs.
TR40VA002US	•	•	40VA	4	Inherent	•	120	24	•	2 Threaded	2.380"	2.200"	2.920"	1.720"	1.750"	.980"	1.80 lbs.
TR50VA001US	•	•	50VA	1	Fuse	•	120	24	•	1 Threaded	2.750"	2.200"	2.910"	2.060"	1.750"	1.330"	2.20 lbs.
TR50VA005US	•	•	50VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	3.270"	2.525"	3.250"	2.210"	2.000"	1.130"	2.60 lbs.
TR50VA022US NEW	•	•	50VA	5	Circuit Brkr.	•	480/277/240/208/120	24	•	2 Threaded	3.260"	2.525"	3.290"	2.190"	2.000"	1.120"	2.65 lbs.
TR100VA001US	•	•	96VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	3.780"	2.500"	3.290"	2.740"	2.000"	1.630"	3.40 lbs.
TR100VA002US	•	•	96VA	5	Circuit Brkr.	•	120	24	•	2 Threaded	3.750"	2.500"	3.290"	2.690"	2.000"	1.600"	3.40 lbs.
TR100VA009US NEW	•	•	96VA	5	Circuit Brkr.	•	480/277/240/208/120	24	•	2 Threaded	3.500"	2.500"	3.250"	2.720"	2.000"	1.630"	3.60 lbs.

¹ = Made in USA. Meets "Buy American" of ARRA 2009

FOR MORE TRANSFORMERS, SEE NEXT PAGE.

TRANSFORMERS

MODEL #	UL	VA RATING	STYLE	OVER CURRENT PROTECTION	CLASS 2	PRIMARY VOLTAGE (VAC)	SEC. VOLTAGE (VAC)	FOOT MOUNT	HUBS	L	W	H	A	B	C	D	WEIGHT
TR20VA001	•	20VA	1	Inherent	•	120	24	•	1 Threaded	2.226"	1.877"	2.595"	1.612"	1.619"	1.013"	2.125"	1.20 lbs.
TR20VA002	•	20VA	4	Inherent	•	208	24	•	2 Threaded	2.296"	1.902"	2.616"	1.604"	1.665"	1.020"	2.114"	1.40 lbs.
TR20VA003	•	20VA	1	Inherent	•	24	24	•	1 Threaded	2.272"	1.900"	2.628"	1.635"	1.686"	1.023"	2.153"	1.40 lbs.
TR20VA004	•	20VA	4	Inherent	•	277/240/208/120	24	•	2 Threaded	2.310"	1.890"	2.625"	1.540"	1.625"	1.000"	2.100"	1.40 lbs.
TR20VA007	•	20VA	1	Inherent	•	277	24	•	1 Threaded	2.302"	1.895"	2.607"	1.608"	1.685"	1.019"	2.107"	1.20 lbs.
TR40VA001	•	40VA	1	Inherent	•	120	24	•	1 Threaded	2.607"	2.169"	2.906"	2.020"	1.786"	1.204"	2.545"	2.00 lbs.
TR40VA002	•	40VA	4	Inherent	•	120	24	•	2 Threaded	2.634"	2.177"	2.886"	2.007"	1.775"	1.206"	2.564"	2.00 lbs.
TR40VA003	•	40VA	1	Inherent	•	24	24	•	1 Threaded	2.653"	2.171"	2.882"	2.033"	1.779"	1.185"	2.580"	2.00 lbs.
TR40VA004	•	40VA	4	Inherent	•	277/240/208/120	24	•	2 Threaded	2.631"	2.177"	2.882"	1.998"	1.774"	1.189"	2.553"	2.20 lbs.
TR40VA013	•	40VA	2	Circuit Brkr.	•	480/277/240/208	120	•	1 Threaded	3.267"	2.505"	3.000"	1.699"	1.986"	1.114"	2.325"	2.65 lbs.
TR40VA015	•	40VA	1	Internal Thermal	•	240/208/120	24	•	1 Threaded	2.628"	2.175"	2.907"	2.040"	1.780"	1.188"	2.590"	2.20 lbs.
TR40VA022 #	•	40VA	4	Inherent	•	120	24	•	2 Threaded	2.660"	2.172"	2.891"	1.980"	1.786"	1.201"	2.526"	2.00 lbs.
TR40VA040 ^	•	40VA	9	Internal Thermal	•	240/208/120	24	•	1 Threaded	2.728"	2.171"	2.890"	1.995"	1.792"	1.215"	2.550"	2.20 lbs.
TR50VA001	•	50VA	1	Fuse	•	120	24	•	1 Threaded	2.677"	2.178"	2.879"	2.109"	1.793"	1.253"	2.664"	2.00 lbs.
TR50VA002	•	50VA	4	Fuse	•	120	24	•	2 Threaded	2.696"	2.181"	2.908"	2.053"	1.788"	1.278"	2.614"	2.00 lbs.
TR50VA003	•	50VA	4	Fuse	•	240/208	24	•	2 Threaded	2.695"	2.181"	2.899"	2.082"	1.778"	1.294"	2.646"	2.00 lbs.
TR50VA004	•	50VA	5	Circuit Brkr.	•	480/277/240/120	24	•	2 Threaded	3.475"	2.513"	3.014"	1.858"	1.970"	1.291"	2.490"	3.00 lbs.
TR50VA005	•	50VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	3.489"	2.515"	3.008"	1.870"	1.971"	1.294"	2.463"	2.40 lbs.
TR50VA006	•	50VA	1	Fuse	•	277	24	•	1 Threaded	2.763"	2.182"	2.898"	2.135"	1.790"	1.322"	2.698"	2.00 lbs.
TR50VA007	•	50VA	4	Fuse	•	277	24	•	2 Threaded	2.715"	2.173"	2.886"	2.148"	1.784"	1.276"	2.661"	2.00 lbs.
TR50VA008	•	50VA	5	Circuit Brkr.	•	480/277/240/208	120	•	2 Threaded	3.440"	2.510"	3.012"	1.932"	1.945"	1.346"	2.523"	3.04 lbs.
TR50VA009	•	50VA	5	Circuit Brkr.	•	240/208/120	24	•	2 Threaded	3.412"	2.504"	3.014"	1.864"	1.961"	1.313"	2.485"	2.80 lbs.
TR50VA014	•	50VA	2	Circuit Brkr.	•	277	24	•	1 Threaded	3.479"	2.509"	3.009"	1.873"	1.965"	1.285"	2.480"	2.60 lbs.
TR50VA015	•	50VA	2	Circuit Brkr.	•	480/277/240/208/120	24	•	1 Threaded	3.405"	2.517"	3.013"	1.875"	1.985"	1.316"	2.484"	2.80 lbs.
TR50VA016	•	50VA	2	Circuit Brkr.	•	240/208/120	24	•	1 Threaded	3.345"	2.510"	3.028"	1.842"	1.978"	1.325"	2.454"	2.80 lbs.
TR50VA017	•	50VA	2	Circuit Brkr.	•	480/277/208	24	•	1 Threaded	3.470"	2.520"	3.031"	1.880"	1.872"	1.292"	2.460"	2.40 lbs.
TR50VA018	•	50VA	13			480/277/240/208	120		1, 90° Conduit Connector, 1 Mounting Plate Opening	Refer to data sheet on website.							3.00 lbs.
TR50VA019 #	•	50VA	11	Inherent	•	277/120	24	•	2 Side Openings	2.470"	2.170"	2.896"	1.850"	1.740"	1.130"	2.512"	2.00 lbs.
TR75VA001	•	75VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	3.743"	2.506"	3.016"	2.256"	1.974"	1.711"	2.873"	3.40 lbs.
TR75VA002	•	75VA	5	Circuit Brkr.	•	120	24	•	2 Threaded	3.890"	2.508"	3.013"	2.290"	1.952"	1.701"	2.882"	3.60 lbs.
TR75VA003	•	75VA	2	Circuit Brkr.	•	277	24	•	1 Threaded	3.875"	2.507"	3.037"	2.269"	1.978"	1.684"	2.860"	3.60 lbs.
TR75VA004	•	75VA	6	Circuit Brkr.	•	480/240/208/120	24	•	1 Threaded 1 Side Opening	3.802"	2.515"	3.050"	2.244"	1.990"	1.665"	2.850"	3.60 lbs.
TR75VA005	•	75VA	2	Circuit Brkr.	•	480/240/208/120	24	•	1 Threaded	3.880"	2.515"	3.030"	2.270"	1.975"	1.700"	2.854"	3.80 lbs.
TR75VA007	•	75VA	5	Circuit Brkr.	•	480/240/208/120	24	•	2 Threaded	3.883"	2.504"	3.034"	2.287"	1.981"	1.708"	2.887"	3.97 lbs.
TR100VA001	•	100VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	4.085"	2.515"	3.030"	2.486"	1.975"	1.900"	3.082"	3.80 lbs.
TR100VA002	•	100VA	5	Circuit Brkr.	•	120	24	•	2 Threaded	4.077"	2.504"	3.023"	2.470"	1.975"	1.888"	3.095"	4.00 lbs.
TR100VA002-20 #	•	100VA	5	Circuit Brkr.	•	120	24	•	2 Threaded	3.973"	2.518"	3.033"	2.486"	1.865"	1.924"	3.060"	4.00 lbs.
TR100VA004	•	100VA	5	Circuit Brkr.	•	480/277/240/120	24	•	2 Threaded	4.173"	2.523"	3.041"	2.647"	1.976"	2.086"	3.268"	4.40 lbs.
TR100VA005	•	100VA	2	Circuit Brkr.	•	480/277/240/120	24	•	1 Threaded	4.258"	2.510"	3.030"	2.670"	1.968"	2.065"	3.260"	4.40 lbs.
TR100VA008	•	100VA	5	Circuit Brkr.	•	480/277/240/208	120	•	2 Threaded	4.220"	2.525"	3.022"	2.690"	1.970"	2.082"	3.272"	4.40 lbs.
TR100VA009 NEW	•	100VA	5	Circuit Brkr.	•	480/277/240/208/120	24	•	2 Threaded	4.270"	2.500"	3.060"	2.750"	1.975"	2.000"	2.252"	4.40 lbs.
TR100VA015 NEW	•	100VA	2	Circuit Brkr.	•	480/277/240/208/120	24	•	1 Threaded	4.270"	2.500"	3.060"	2.699"	2.030"	2.065"	2.252"	4.74 lbs.
TR150VA001	•	150VA	3	Circuit Brkr.	•	120	24	•	1 Threaded	3.650"	3.800"	3.183"	2.560"	3.150"	1.438"	3.514"	5.00 lbs.
TR150VA002	•	150VA	5	Circuit Brkr.	•	120	24	•	2 Threaded	3.620"	3.785"	3.160"	2.568"	3.147"	1.456"	3.511"	5.00 lbs.
TR150VA008	•	150VA	12	Circuit Brkr.	•	480/277/240/208	120	•	2 Threaded	4.283"	3.786"	3.161"	3.211"	3.260"	2.116"	4.177"	7.20 lbs.
TR175VA001	•	175VA	7			240/208	24	•	2 Bottom Openings	3.801"	3.790"	3.163"	3.264"	3.141"	2.151"	4.197"	7.00 lbs.
TR175VA002	•	175VA	4			120	24	•	2 Threaded	3.800"	3.790"	3.189"	3.220"	3.150"	2.100"	4.180"	7.10 lbs.
TR175VA003	•	175VA	1	Thermal Fuse on Primary		120	24	•	1 Threaded	4.030"	3.786"	3.161"	3.189"	3.155"	2.127"	4.153"	7.44 lbs.
TR240VA001	•	240VA	8			120	24	•	1 Threaded 1 Bottom Opening	3.957"	3.750"	4.530"	3.350"	3.180"	1.932"	4.025"	8.60 lbs.
TR300VA002	•	300VA	10	Circuit Brkr.	•	480/240/208/120	24	•	2 End-Bell Openings	5.499"	3.750"	4.500"	3.859"	3.187"	2.526"	4.526"	11.60 lbs.
TR375VA001	•	375VA	7			120	24	•	2 Bottom Openings	4.592"	3.747"	4.504"	3.933"	3.181"	2.516"	4.630"	11.20 lbs.

UL = UL Listed : UL5085-2 or UL5085-3 ; USA & Canada

UL = UL Component Recognized : UL5085-2 or UL5085-3 ; USA & Canada

= Refer to website for more wire length information.

^ = Dual Terminal Secondary

