

# Capabilities



**FROM AC AND DC CONTROL**



**TO POWER AND FILTERING**

**Micron Industries Corporation** is a manufacturer of control magnetics and custom windings headquartered in Oak Brook IL with manufacturing facilities in Sterling IL. Best known for the ImperviTRAN™ brand 600 volt class control transformer, Micron has developed into an industry leader in DIN Rail mount industrial power supplies and converters as well as NEMA 3R transformers. Banking on our history of providing non-catalog products within the same 10 day lead time as catalog standards, Micron has recently added specialty reactors and custom wound coils to its growing product portfolio.



**Oak Brook IL Headquarters**

Over its nearly 50 year history as a transformer manufacturer, Micron has become the supplier of choice to the majority of the motor control and drive industry. Besides maintaining rapid response inventories on over 250 catalog items, Micron's active SKU file exceeds 4,500 additional part numbers which are available in a maximum of 15 working days.



**Sterling IL Manufacturing**

## **Manufacturing Capabilities**

**Control Transformers:** The ImperviTRAN™ product offering is available from 25VA through 5,000VA in any 600 volt class voltage combination. All designs meet UL, cUL, CSA or EN61558-2-2 and can be built in 105°C, 130°C, 155°C or 180°C designs

**Power Supplies and Converters:** The *DINergy*™ product offering encompasses power supplies from 18 watt single phase through 960 watt three-phase in the most popular industrial output voltages. The majority also operate as converters with 120 VDC input capability. Low profile, PCB and panel mount supplies and converters on special order.

**NEMA 3R Products:** Micron can furnish virtually all combinations of 600 volt class single and three-phase catalog designs both as encapsulated and ventilated. Included in this selection are transformers capable of providing voltage adjustments as buck-boost designs.

**Specialty Designs and Coils:** Micron can provide an average 20 day turn-around on your magnetics needs

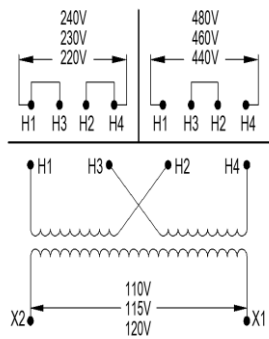
- Specialty coils both stick and bobbin configurations
- Single-phase 600 volt class transformers and chokes built on E-I laminations
- Custom three-phase open construction 600 volt class transformers through 150kVA
- Custom three-phase load bank reactors from 0.25kvar through 150kvar
- Custom three-phase line and load reactors from fractional through 250HP
- Custom capacitor detuning reactors through 75kvar
- Medium voltage power, control and metering accuracy transformers through 14,400V

You can rely on Micron's engineering expertise to design a product that suits **your** exact needs.

**Contact Micron's customer service department at 1.800.664.4660 and press 1!**

## Control Transformers:

25VA – 5Kva



## Why Choose Micron?

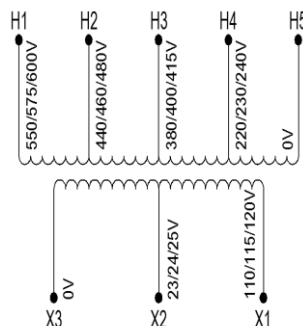
**Micron** chose to encapsulate its control transformer designs over 40 years ago and still does so today.

Why? Encapsulation provides the following:

- More even heat dissipation from the core.
- Windings and solder connections protected from corrosion which means longer transformer life. The average MTBF of our 600 volt class Impervi**TRAN**™ is 192,720 hours.
- Encapsulation and robust terminal block construction greatly reduces the chance of freight and installation damage.

From the beginning, Micron designed a user-centric product that stood the test of time.

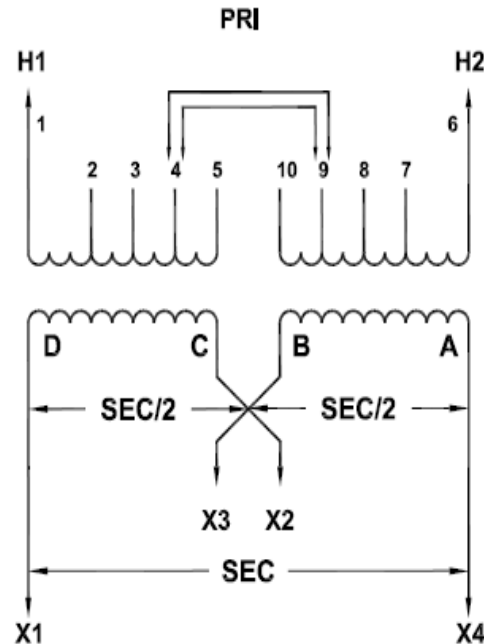
- Compact terminal spacing.
- Integral secondary fusing capability.
- Primary fusing capability for nearly 40 years! Now simplified by the factory installed Impervi**MOUNT**™ accessory mounting plate.
- Impervi**MOUNT**™ comes standard on all Series 2 designs and is optional on all Micron transformer products, thus allowing the installer an additional accessory mounting location.
- Philslot/pressure plate terminal screws simplify the wiring process.



This user-centric philosophy is visible in all Micron products, from control transformers and general purpose to DC power supplies and reactors and coils.

## General Purpose, Power and Buck-Boost Transformers: 50VA – 750Kva

### TYPICAL EXAMPLES

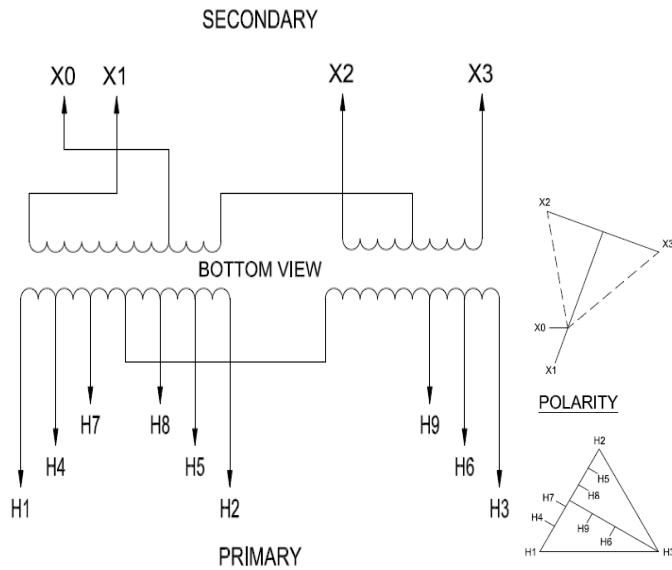


WDG	VOLTS	CONNECT	LINE
PRI	480	H2-H3	H1-H4
	240	H1H3-H2H4	
SEC	240	X2-X3	X1-X4
	120	X1X3-X2X4	
	120/240	X2-X3*	



**Buck-Boost Transformers** are used to provide an economical method of correcting a lower or higher voltage to a voltage rating more suitable for efficient operation of electrical equipment. Buck-Boost applications are primarily used for motor operation and should not be used for motor control circuits, correction of fluctuating voltages or obtaining a neutral on a Delta system.





### Three Phase D.O.E 2016 Compliant

KVA	CATALOG NUMBER	TAPS FCAN	TAPS FCBN	DESIGN TYPE	TEMP RISE °C	H	W	D	WEIGHT LBS	FRAME NUMBER	WIRING DIAGRAM	WEATHER SHIELD
GROUP "M": PRI: 480Δ SEC: 480Y/277 60HZ												
75	G075K5QQ2A04	6	6	3V	150	43.00	30.50	24.00	447	942	QQ	WS59MI
112.5	G112K5QQ2A04	6	6	3V	150	51.00	34.50	31.50	650*	943	QQ	WS60MI
150	G150K5QQ2A04	6	6	3V	150	51.00	34.50	31.50	770*	943	QQ	WS60MI
225	G225K5QQ2A04	6	6	3V	150	60.00	38.00	33.50	1300*	944	QQ	WS61MI
300	G300K5QQ2A04	6	6	3V	150	66.18	42.18	33.50	2400*	945	QQ	WS62MI

(8) 2 @+2.5%, 2 @-2.5%; (6) 2 @+2.5%, 4@-2.5%;

### Buck-Boost

Need Single Phase 230Volts, 60Hz (Selection Table Number 3)

Units Req'd	Unit Kva	Use Catalog Number	Have Available Voltage Of																			
			199		203		207		209		216		219		242		246		253		260	
			Max Load																			
			Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps		Kva-Amps	
1	.05	J050A1EA1A01	-	-	-	-	0.43	1.88	0.48	2.08	-	-	0.96	4.16	1.00	4.38	-	-	0.53	2.29	-	-
1	.05	J050A1EB1A01	0.31	1.36	0.36	1.56	-	-	-	-	0.72	3.12	-	-	-	-	0.77	3.34	-	-	0.41	1.77
1	.10	J100A1EA1A01	-	-	-	-	0.86	3.75	0.96	4.17	-	-	1.92	8.33	2.01	8.75	-	-	1.05	4.58	-	-
1	.10	J100A1EB1A01	0.62	2.71	0.72	3.12	-	-	-	-	1.44	6.25	-	-	-	-	1.53	6.67	-	-	0.82	3.54
1	.15	J150A1EA1A01	-	-	-	-	1.29	5.62	1.44	6.25	-	-	2.87	12.5	3.02	13.1	-	-	1.58	6.87	-	-
1	.15	J150A1EB1A01	0.93	4.06	1.08	4.69	-	-	-	-	2.16	9.37	-	-	-	-	2.30	10	-	-	1.22	5.31
Connection Diagram			G		F		G		F		E		E		E		E		F		F	

Diagram E

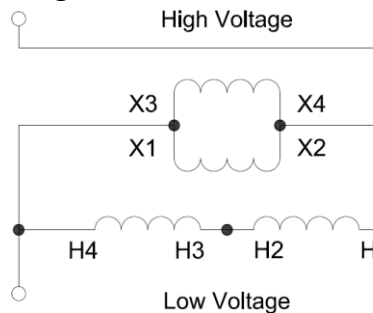


Diagram F

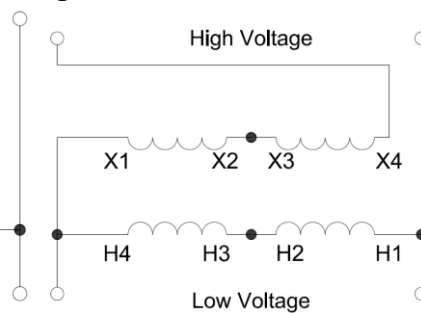
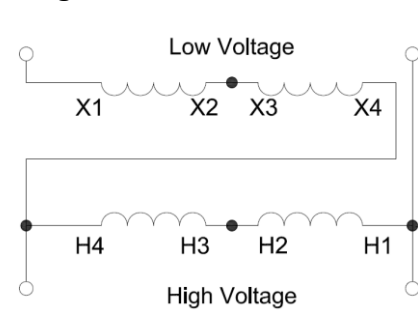


Diagram G



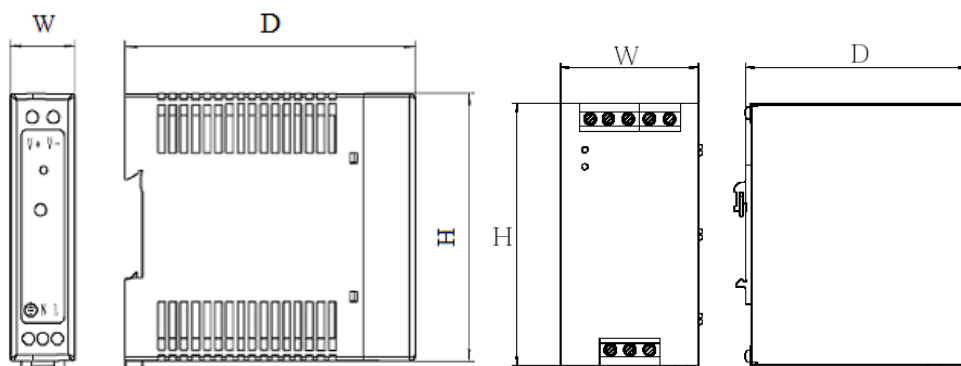
## Power Supplies and Converters:

18 Watts – 960 Watt Three-Phase Standard DIN-Mount and Building Automation Style

### TYPICAL EXAMPLES



Industrial DIN-Mount power supplies are used in an ever increasing number of automation applications. 480 volt and three-phase capability offers even more user flexibility.



Need it today?  
Contact Micron's  
customer service  
department at  
**1.800.664.4660**  
and press 1!

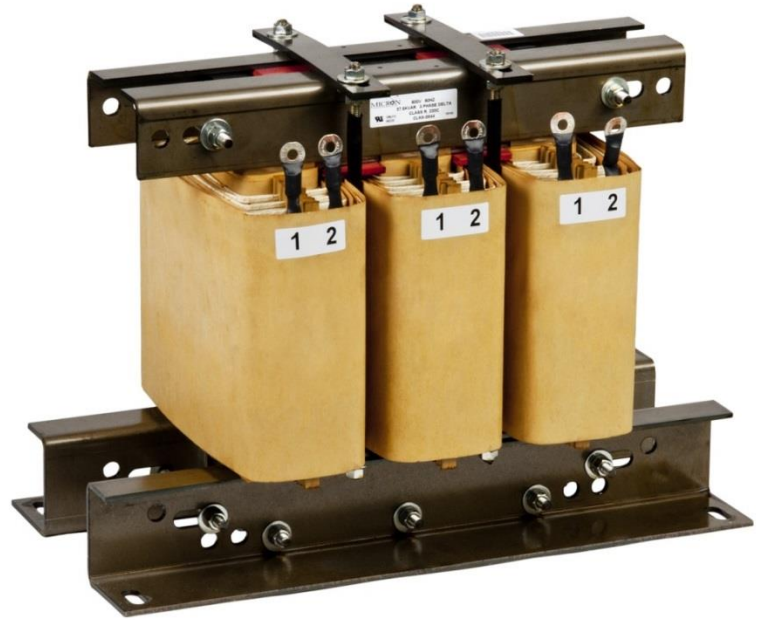
## Some of the industries smallest packages

### Model Comparison

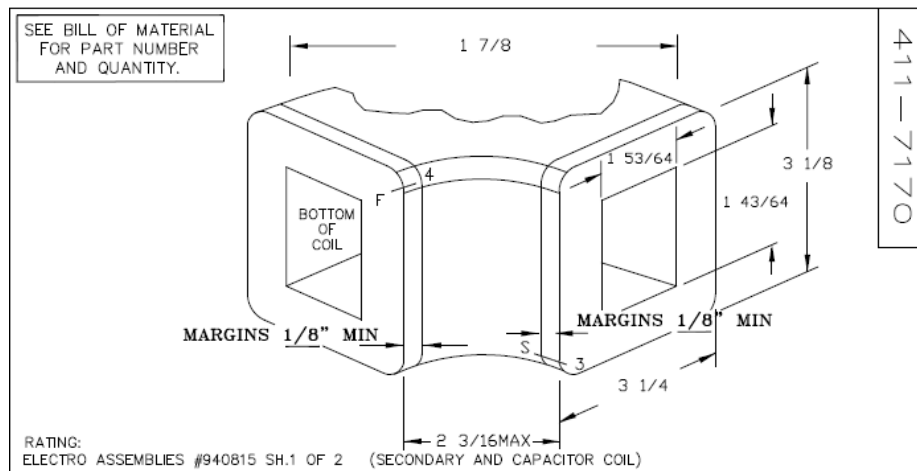
Model	W (Width)	D (Depth)	H (Height)	Max Amps @ 24Vdc	Agency Listings
MDP18	0.89" (22.5)	4.49" (114)	3.60" (90)	0.94	UL 508, 1310, ISA 12.12..01, CE
MDP30	0.89" (22.5)	3.94" (100)	3.60" (90)	1.36	UL 508, 1310 (-1C), ISA 12.12.01, CE
MDP50	1.26" (32)	4.02" (102)	3.60" (90)	2.27	UL 508, CE
MDP60	1.59" (40.5)	4.49" (114)	3.60" (90)	3.00	UL 508, 1310 (24Vdc), ISA 12.12.01, CE
MDP100	2.13" (54)	4.49" (114)	3.60" (90)	3.80 (CL2)	UL 508, 1310 (24Vdc), ISA 12.12.01, CE
MD120-1C	2.52" (64)	4.59" (117)	4.90" (124.5)	7.25	UL 508, ISA 12.12.01, CE
MD240-1CS	2.52" (64)	4.59" (117)	4.90" (124.5)	14.50	UL 508, ISA 12.12.01, CE
MD240-3C	3.50" (89)	4.41" (112)	4.88" (124)	14.00	UL 508, ISA 12.12.01, CE
MD480-1C	6.91" (175.5)	4.59" (117)	4.90" (124.5)	28.00	UL 508, ISA 12.12.01, CE
MD480-3C	5.91" (150)	4.41" (112)	4.88" (124)	27.00	UL 508, ISA 12.12.01, CE

## Specialty Reactors:

Whether it's a load bank reactor from 0.25kvar – 150kvar, a line or load reactor built to your specifications or a detuning reactor for a capacitor bank, let Micron be your source. **Contact Micron's customer service department at 1.800.664.4660 and press 1!**



## Custom Coils:



**AND** since all of our products contain coils, we are the perfect choice for your custom coil winding requirements! **Contact Micron's customer service department at 1.800.664.4660 and press 1!**

**ImperviTRAN™ and GlobalTRAN™ are products of Micron Industries Corporation, Oak Brook IL and Manufactured in Sterling IL – USA**

**DINergy™ is a product of Micron Industries Corporation, Oak Brook IL**