



American Rotary Advantage

American Rotary has been making premium rotary phase converters for more than a decade. For more than 10 years, American Rotary has led the industry in innovation and design. We have introduced, field-tested, and proven several technologically advanced features which have driven increases in the reliability and precision voltage balancing capabilities of phase conversion unmatched in the industry.

We provide 24/7 telephone support for technical, application and sizing issues. We stand behind our products with the best warranty in the industry. We use premium components to ensure that our products perform for you. American Rotary is a UL Certified Control Panel Builder, and our rotary phase converters are available UL Listed to US and Canadian Safety Standards. We have partnered with Baldor Electric one of the world’s largest and most respected manufacturers to supply our custom-engineered idler/generators. The engineers at American Rotary worked with the engineers at Baldor for over a year designing a custom induction generator for phase conversion, which reduced the inrush current on start-up so drastically (83% reduction...a stock motor requires 600% more inrush) that American Rotary’s induction generator was granted a Soft Start rating, and a resulting reduction in operating cost!

American Rotary is listed with D&B as well as the Better Business Bureau, and we are committed to high ethical and privacy standards.

Features	
● 480V and 240V	● 3R Rain Proof
● Super Quiet, Perfect for Indoor & Outdoor Installation	● -29°C to +50°C
● 3-300HP	● Sun Shield
● Harmonic Free, Utility Friendly	● Rodent Screens
● Automation & Wireless Control Options	● Pure Sinewave Analog Output ad Digital Precision
Additional Options Available	
● Wireless & Wired Remote	● Automated Controls
● Dust Filters	● Safety Shut Off
● 3-Phase Output Breakers	

AI Industrial Phase Converter Specifications

General Specification															
Part Number AI	3	5	7	10	15	20	25	30	40	50	60	75	100	120	150
kW of Generator (based on FLA)	2.2	3.7	5.6	7.5	11.2	14.9	18.7	22.4	29.8	37.3	44.8	56	74.6	89.6	112
Idler/Generator FLA	9.6	14	21	28	40	50	60	76	100	130	150	180	260	300	380
Frequency (Hz)	60														
Generator Type	GENTEC/Variable Impedance														
Magnetic Starter	Included (remote start ready)														
Panel Enclosure	NEMA 1														
Temperature rating	40 C Ambient														
Wave Form	Pure Sinusoidal Analog														
Phase Angle	120 degrees														
Efficiency	97%														
Three Phase Output Specifications (continuous)															
Output voltage	equals input voltage														
Voltage tolerance	meets IEEE Std. 241-1990 utility														
3-phase output configuration	3-wire delta														
Service factor	1.15														
Output Frequency (Hz)	Input Frequency														
-Output Current-															
<i>(use for resistive & rectified loads, i.e. Welder, CNC, VFD, Power-supply)-amps @ 240V</i>															
3-phase output current recommended for CNC, welder, VFD, voltage sensitive	4.8	7	11	14	21	27	34	40	52	65	75	98	130	150	196
Max. current for IEEE Std. utility line	6	9	13	17	24	30	36	46	60	80	90	120	160	180	240
-Starting Motor Loads- (HP/kW)															
Maximum HP start (Moderate Load) Type 1	2.5/1.9	4/3	5/3.7	7.5/5.6	10/7.5	15/11.2	20/14.9	25/18.7	30/22.4	40/30	50/37.3	60/45	80/60	100/74.6	120/90
Maximum HP start (Hard Load) Type 2	1.5/1.12	2.5/1.9	3/2.2	5/3.7	7.5/5.6	10/7.5	12.5/9.3	15/11.2	20/14.9	25/18.7	30/22.4	37.5/33.6	50/37.4	60/44.8	75/67.2
Maximum HP start (High Inertia) Type 3	1/75	2/1.5	2.5/1.9	3/2.2	5/3.7	7.5/5.6	10/7.5	12.5/9.3	15/11.2	20/14.9	25/18.7	37.5/28.05	40/29.8	50/37.4	75/56.10
Maximum HP start (High Inertia) Type 3 w/ADX	1.5/1.12	2.5/1.9	3/2.2	5/3.7	7.5/5.6	10/7.5	12.5/9.3	15/11.2	20/14.9	25/18.7	30/22.4	45/33.6	50/37.4	60/44.8	90/67.2
Maximum HP Total Motor Group Load	5/3.7	7.5/5.6	10/7.5	15/11.2	22/16.4	30/22.4	37/28	45/34	60/45	75/56	90/67	135/100.5	150/112	180/134	270/201
Maximum (CNC or VFD) Type 4	1.5/1.12	2.5/1.9	3/2.2	5/3.7	7.5/5.6	10/7.5	12.5/9.3	15/11.2	20/14.9	25/18.7	30/22.4	45/33.6	50/37.4	60/44.8	90/67.2
Single Phase Input Specifications (continuous)															
Voltage Input	208-250														
Input Frequency (Hz)	60														
(HP load / 1-ph amps)	1-ph amps @240V=Approx Load HP x 4.2														
Power Consumption (kW)	0.05	0.08	0.11	0.15	0.23	0.30	0.38	0.45	0.60	0.75	0.90	1.13	1.50	1.8	2.25
Cost to Run (@.10/kW/HP)	\$0.05/hr	\$0.08/hr	\$0.11/hr	\$0.15/hr	\$0.23/hr	\$0.30/hr	\$0.38/hr	\$0.45/hr	\$0.60/hr	\$0.75/hr	\$0.90/hr	\$1.13/hr	\$1.50/hr	\$1.80/hr	\$2.25/hr
Minimum Breaker Size	1.25 x 1ph current														

*Conductors should be sized according to Minimum Breaker Size and NEC requirements

Dimensions

Part Number AI	3	5	7	10	15	20	25	30	40	50	60	75
X (in.)	12"	12"	12"	12"	12"	20"	20"	20"	20"	20"	20"	20"
Y (in.)	26.25"	26.25"	26.25"	26.25"	26.25"	33"	33"	33"	33"	33"	33"	33"
Z (in.)	21.25"	21.25"	21.25"	21.25"	21.25"	28.5"	28.5"	28.5"	28.5"	28.5"	28.5"	28.5"

