

**Series 5  
Micro Inverters**



**1/2 thru 2 Hp**  
**1/2 thru 2 Hp**  
**2 thru 3 Hp**  
**1 thru 5 Hp**

**97-132 VAC**  
**195-265 VAC**  
**195-265 VAC**  
**323-529 VAC**

**1 Phase - 50/60 Hz**  
**1 Phase - 50/60 Hz**  
**3 Phase - 50/60 Hz**  
**3 Phase - 50/60 Hz**

**Applications:** Variable torque, constant torque or constant horsepower applications. New installations, replacements and original equipment manufacturers (OEM).

**Features:** NEMA 4X or open chassis mount standard. Output frequency 0.25 to 120 Hz with peak overload capacity of 150%. Separate accel/decel rates and controlled reversing.

**Design Specifications**

- PWM output
- Accel/decel rate adjustment
- Controlled reversing
- Adjustable current limit
- I<sup>2</sup>t motor overload protection
- Adjustable slip compensation
- Min/max output frequency adjustment
- Selectable auto/manual restart

**Operator Interface-  
Enclosed Units**

- Start/Stop command
- NEMA 4X enclosure
- Power on/off
- Rotary speed control
- Fwd/Rev optional
- Auto/Manual optional

**Environmental and  
Operating Conditions**

- Input voltage:
  - 1 phase 115 VAC ±15%,
  - 1 phase 230 VAC ±15%
  - 3 phase 230V ±15%
  - 3 phase 460 ± 15%
- Input frequency  
50 or 60Hz ±10%
- Service Factor - 1.0
- Duty - continuous
- Humidity - 90% max RH non-condensing
- Altitude - 3300 feet max without derate
- Chassis mount or NEMA 4X enclosure as standard

**Protective Features**

- Selectable automatic restart after momentary power loss
- Power indicator
- Status indicator
- Adjustable time base overload
- Electronic in rush current limiting

<b>Output Ratings</b>	Overload Capacity	150% for 120 seconds	
	Voltage - 3 Phase	0-230 VAC (RMS), 0-460 V AC (RMS)	
<b>Control Spec</b>	Control Method	Sinewave carrier input, PWM output	
	PWM Frequency	Rated 8.0 kHz	
	V/Hz Ratio	Factory set for optimum output	
	Torque Boost	Factory set for 60 Hz motors. Adjustable 6-30% for 50 Hz motors	Adjustable 0-30% max
	Current Limit	Adjustable 63 to 188% of rated output	0-200%
	Frequency Setting	0-5 VDC, 0-10 VDC with external resistor network, non-isolated input	
	Accel/Decel	Separate accel/decel rates, 0.3-20 sec for 60 Hz motors	0.3-20 Sec
<b>Protective Functions</b>	Inverter Trip	Over voltage, over current, under voltage, motor overload, output short circuit	
	Status Indicators	Tricolor LED indicator for status and green LED indicator for power on	
	Short Circuit	Output phase to phase	
<b>Ambient Conditions</b>	Temperature	0-45°C	0-50°C
	Cooling	Convection 1/2 - 2 Hp; Forced Air 3-5 Hp	Convection
	Enclosure	Open chassis	NEMA 4X (IP65)

Definite Purpose Motors

Unit Handling Motors

Brake Motors

IEC Frame Motors

50 Hertz Motors

Inverter/Vector Motors & Controls

DC Motors and Controls

Gearmotors and Gear Products

Motor Accessories

Grinders

**Series 5 Micro Inverters continued...**

Catalog Number	Hp	kW	Input Voltage	Output Current		Braking Kit Available	Dimensions (Inches)					List Price	Mult. Sym.	Approx. Shpg. Wgt.
				Cont.	120 Sec.		Outside			Mounting Holes				
							H	W	D	H	W			
<b>Open Chassis Mount – Single Phase Input</b>														
ID56F50-CO	0.5	0.37	115/230	2.4	3.6	Y	4.3	3.9	2.75	3.8	2.5	395	E9	4
ID5601-CO	1	0.75	115/230	4	6	Y	4.3	3.9	5	3.87	3.7	478	E9	5
ID5602-CO	1.5 - 2 <sup>(2)</sup>	1.13 - 1.5	115/230	5.5	8.25	N	4.67	5.58	5.7	3.87	2.5	621	E9	6
<b>Open Chassis Mount – Three Phase Input</b>														
ID5202-CO	2	1.5	230	6.7	10.1	N	8.55	4.68	4.5	6.5	3.9	753	E9	5
ID5203-CO	3	2.25	230	8.8	13.2	N	8.55	4.68	4.5	6.5	3.9	793	E9	5
ID5401-CO	1	0.75	460	2.5	3.75	N	8.55	4.68	4.5	6.5	3.9	820	E9	5
ID5402-CO	2	1.5	460	4	6	N	8.55	4.68	4.5	6.5	3.9	842	E9	5
ID5403-CO	3	2.25	460	4.5	6.75	N	8.55	4.68	4.5	6.5	3.9	866	E9	5
ID5405-CO	5	3.7	460	7.6	11.4	N	8.55	4.68	4.5	6.5	3.9	1,104	E9	5
<b>NEMA 1 Enclosed - Single Phase Input</b>														
ID5601-EO	1	0.75	115/230	4	6	N	7.13	6.25	2.75	—	—	576	E9	6
<b>NEMA 4X Enclosed – Single Phase Input</b>														
ID5601-WO	1	0.75	115/230	3.6	5.4	N	9.53	5.51	5.86	8.85	—	763	E9	6
ID5601-BO	1	0.75	115/230	3.6	5.4	N	9.53	5.51	5.86	8.85	—	715	E9	6
ID5602-WO	1.5 / 2 <sup>(2)</sup>	1.13 / 1.5	115/230	5.5/6.7	8.3/10.0	N	9.8	7.55	7.25	9.25	1	1,076	E9	6
ID5602-BO	1.5 / 2 <sup>(2)</sup>	1.13 / 1.5	115/230	5.5/6.7	8.3/10.0	N	9.8	7.55	7.25	9.25	1	1,015	E9	8
<b>NEMA 4X Enclosed – Three Phase Input</b>														
ID5203-WO	3	2.25	230	9	13.5	N	9.8	7.55	7.25	9.25	1	1,219	E9	6
ID5203-BO	3	2.25	230	9	13.5	N	9.8	7.55	7.25	9.25	1	1,159	E9	6
ID5205-WO	5	3.7	230	17	25.5	N	13.58	10.3	9.8	13.2	1.72	1,731	E9	22
ID5205-BO	5	3.7	230	17	25.5	N	13.8	10.3	9.8	13.2	1.72	1,645	E9	22
ID5403-WO	3 <sup>(1)</sup>	2.25	460	4.6	6.9	N	9.8	7.55	7.25	9.25	1	1,291	E9	6
ID5403-BO	3 <sup>(1)</sup>	2.25	460	4.6	6.9	N	9.8	7.55	7.25	9.25	1	1,230	E9	6
ID5405-WO	5	3.7	460	8.3	12.45	N	9.8	7.55	7.25	9.25	1	1,373	E9	6
ID5405-BO	5	3.7	460	8.3	12.45	N	9.8	7.55	7.25	9.25	1	1,315	E9	6
ID5410-WO	10 <sup>(3)</sup>	7.5	460	16.0	24.00	N	13.8	10.3	9.8	13.2	1.72	2,555	E9	22
ID5410-BO	10 <sup>(3)</sup>	7.5	460	16.0	24.00	N	13.8	10.3	9.8	13.2	1.72	2,427	E9	22

**NOTES:**

- BO is dark gray NEMA 4X enclosure, -CO is chassis mount, -EO is dark gray NEMA 1 enclosure, & -WO is white NEMA 4X enclosure
- (1) Jumper configurable for 1 Hp and 2 Hp
- (2) ID5602 is rated 1.5 Hp max with 115 VAC input and 2 Hp max with 230 VAC input.
- (3) Jumper configurable for 7.5 Hp or 10 Hp
- Red Catalog Number indicates **NEW** Product.

**Series 5 Options**

Catalog Number	Description	List Price	Mult. Sym.	Ap'x. Shpg. Wgt.
ID5RGA-1	Dynamic braking kit for open chassis 115/230V 1/2 Hp and 1 Hp rated controls	214	E9	3
ID5SI-1	Signal isolator for open chassis units Provides isolation for up to 24 VDC and 4-20mA command signals and run relay output. Select relay as N.O. or N.C. contacts rated at 125 VAC @ 0.5A	213	E9	4
ID5SI-2	Signal isolator for NEMA 4X enclosed units Provides isolation for up to 24 VDC and 4-20mA command signals.	240	E9	1
ID5SI-3	Signal isolator for 24 VDC and 4-20mA input signal for ID5205 & ID5410 only.	255	E9	2
ID5AMS-1	Auto/Manual selection switch for NEMA 4X enclosed units Allows selection of remote or on-board speed commands	59	E9	1
ID5AMS-2	Auto/Manual selection switch for ID5205 & ID5410 only	94	E9	2
ID5FRS-1	Forward/Stop/Reverse selection switch for NEMA 4X enclosed units Allows selection of forward or reverse motor direction commands	33	E9	1
ID5FRS-2	Forward/Stop/Reverse selection switch for NEMA 1 enclosed units. Allows selection of forward or reverse motor direction commands.	33	E9	1
ID5FRS-3	Forward/Stop/Reverse selection switch for ID5205 & ID5410 only.	67	E9	2

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