



800 South State Street 🗡 Suite 4 🗡 Lockport, IL 60441 🗡 630-243-9100 🗡 630-685-4054 (FAX)

Micro Advantages

EFFICIENCY

The constant and revolving fields rotate at synchronous speeds, allowing for precise control with no rotor slip.

TORQUE

Internal Permanent Magnet (IPM) motors provide superior power to weight over non-magnetic motors.

INTEGRATION

The Integrated motor and inverter are characterized to one other, resulting in maximum performance and efficiency.

INNOVATIVE ROTOR

Engineered with shaft interface versatility in mind, *Micro 8* [™] motors feature a distinctive rotor design. The bolt-on-shaft provides a streamlined solution to frequently requested output shaft modifications

INNOVATIVE STATOR

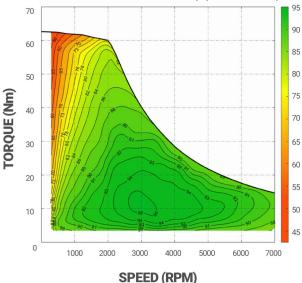
The high compression potted stator of a *Micro 8* [™] is a significant breakthrough in IPM motor design. Resulting in an advanced solution to common issues caused by vibration, ingress, and thermal gaps.



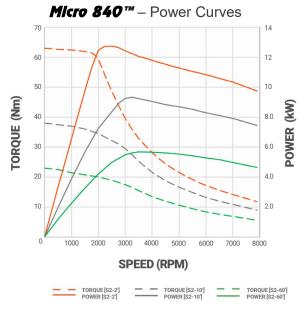
Introduced to the **NetGain Motors, Inc.** product line in 2024, the <u>Micro 840</u>[™] stands out as a premium Internal Permanent Magnet (IPM) motor. This motor seamlessly pairs with any <u>HyPer-Drive</u>[™] Inverter to form the <u>Micro 8 System</u>[™] - an optimal power-train solution for light-weight vehicles or industrial equipment. Distinguished by its high compression potted stator, the <u>Micro 840</u>[™] ensures unparalleled reliability and thermal transfer. The independent IP rating of IP65 can be increased to IP67 with an optional shaft seal, or to IP69k when mated to a sealed gearbox.

- Type: IPM
- Voltage: 48V Nominal
- Current: **250-550 Arms**
- Peak Efficiency: **95%**
- S2-5min Power: 13.4kW
- Continuous Power: 5.5kW
- Max Speed: 7,000RPM
- Torque Peak: 46 lbs.-ft. (450A)



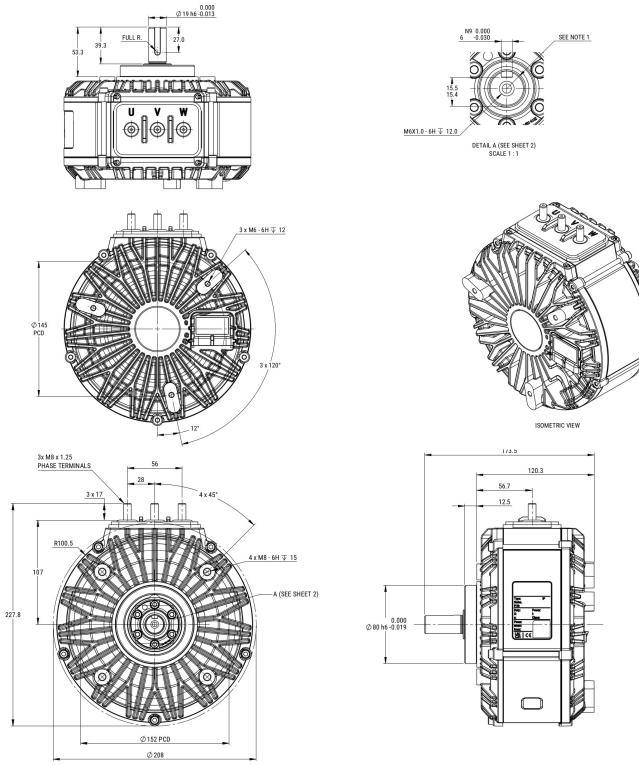


- Motor Diameter: 8.19"
- Motor Length: 4.73"
- Motor Weight: 25 lbs.
- Shaft: 19mm Single Ended, Keyed
- Mounting: 4x M8 on 152mm BC
- Insulation: 200°C
- Recommended Software: SmartView
- Delivery: Stock





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MOTOR TYPE					
VOLTAGE	VDC	48	ENCODER:	SUPERSEAL 1.5 SOCKET	CUSTOMER APPROVAL:
IEC DUTY	S2	60	PIN 1:5 PIN 2:11 PIN 3:51 PIN 4:00 PIN 5:6 PIN 6:51	MATING PLUG P/N: 282090-1 MATING PIN P/N: 183035-1	NAME:
RATED POWER	KW	5.5			DATE:
RATED SPEED	RPM	4000			
MAX. SPEED	RPM	8000			SIGNED:
MAX. FREQ.	HZ	667			
IP RATING*	IP	65			
INSUL. CLASS	-	200			
SENSOR CYCLES	CPR	5	5V TEMP SIN COS GND SHIEL		
TEMP SENSOR	PT1000	CLASS B	E P		

NOTES: KEYWAY DIMENSIONS TO ISO/R773 - 30MM LONG

2 SHAFT ROTATES CW, WHEN VIEWED FROM DRIVE END, WHEN COSINE SIGNAL LEADS SINE SIGNAL BY 90 DEGREES SHAFT ROTATES CW, WHEN VIEWED FROM DRIVE END, WHEN U-V-W WIRED PER DIAGRAM

3. 4

TERMINAL NUTS: TORQUE TO 15Nm SEE MANUAL FOR RECOMMENDED TORQUE VALUES OF MOTOR FASTENERS

5.

ESTIMATED ROTATIONAL MOMENT OF INERTIA: 6109 kg/mm * IP RATINGS - SEE USER MANUAL FOR FURTHER DETIALS