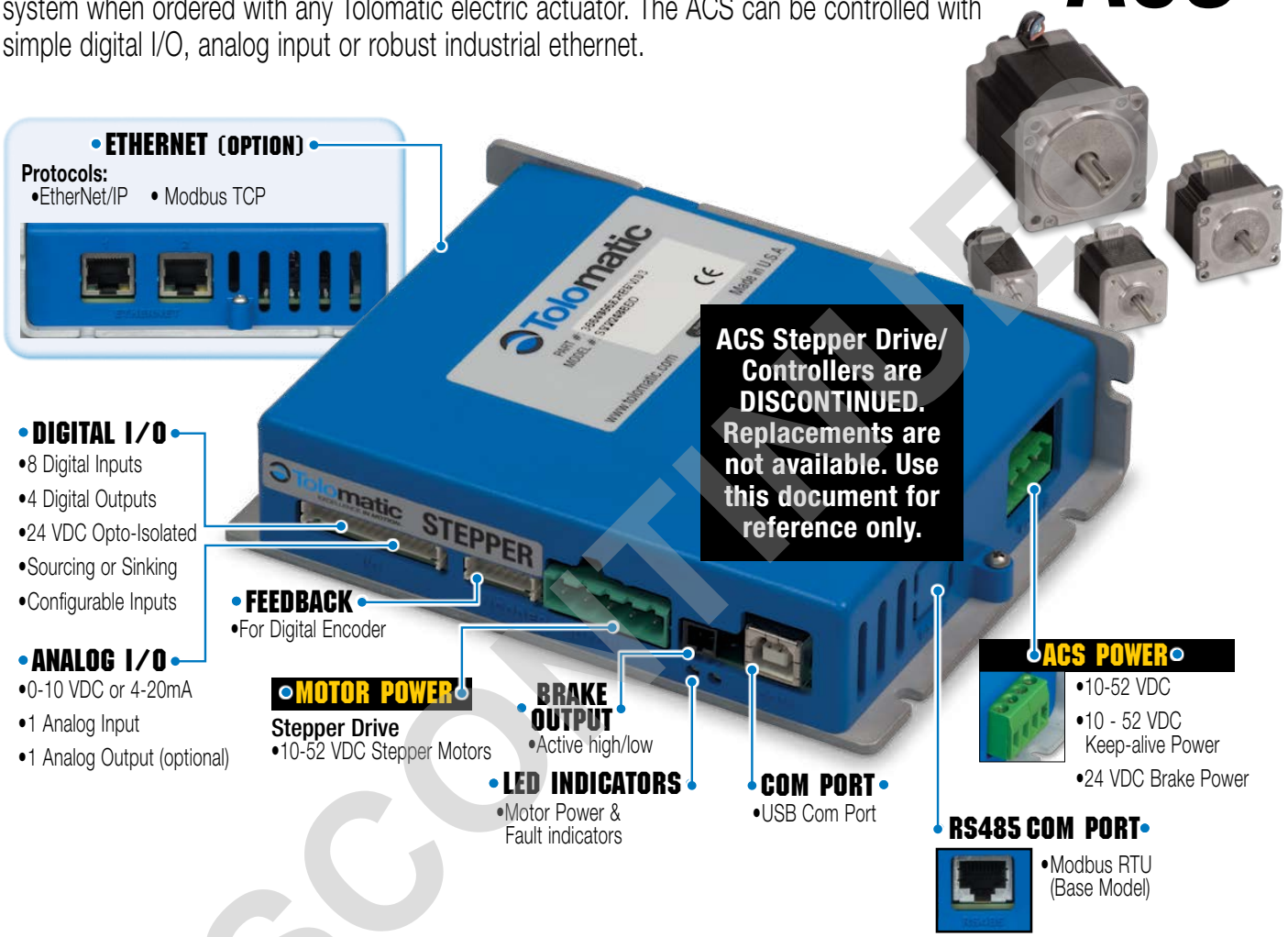
Tolomatic™
EXCELLENCE IN MOTION

ENDURANCE TECHNOLOGY℠

ACS STEPPER DRIVE/CONTROLLER & STEPPER MOTORS

ACS

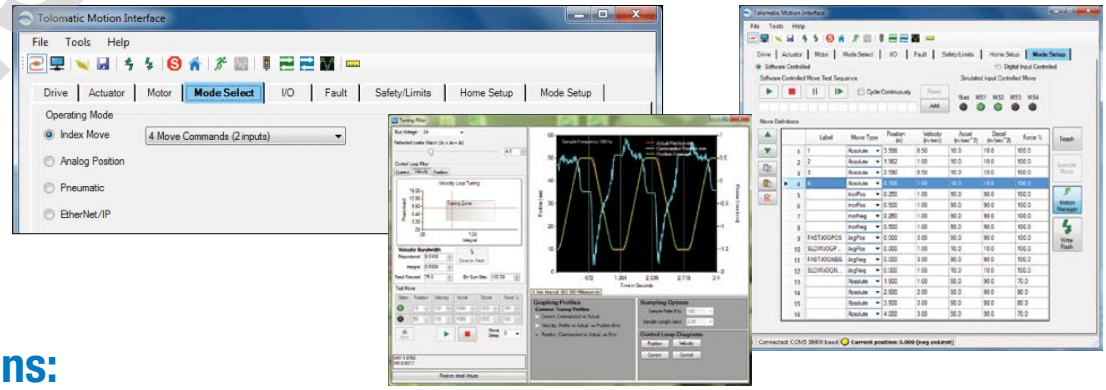
The ACS is an extremely easy-to-use stepper drive/controller and motor developed specifically to be used with electric actuators. Mounted, configured and tested as a complete motion system when ordered with any Tolomatic electric actuator. The ACS can be controlled with simple digital I/O, analog input or robust industrial ethernet.



Easy to Use Operating Modes & Configuration Software

OPERATING MODES

- Index position via digital I/O
- Pneumatic Logic
- Analog Position
- Ethernet
  - EtherNet/IP
  - Modbus TCP
- Supports rotary actuator: position and velocity moves



Available Options:

Cables
3m, 5m or 10m lengths

Planetary Gearboxes
Available ratios - 3:1, 5:1, 10:1

Power Supply
48 VDC; 5 Amp or 10 Amp

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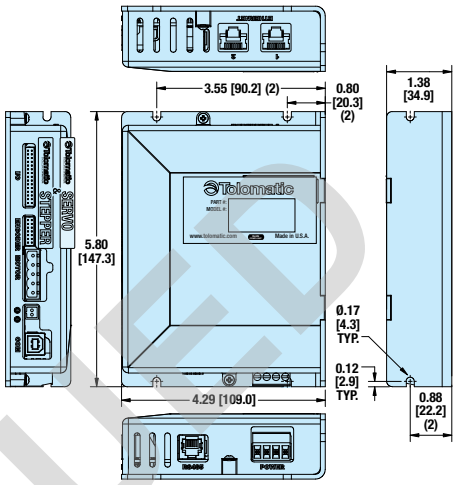
Drive Specifications

DRIVE POWER	
Current - Max	10 Amps
Voltage Nominal	10 - 52V
Over Voltage	55V
Under Voltage	9V
Absolute Maximum Voltage	60V
Logic Current Draw (24V)	200 mA

OPERATING CONDITIONS	
Ambient Temperature	25°C Nominal
Operating Temperature	0 - 40°C
Storage Temperature	0-70°C
Humidity	0 - 90% non-condensing
Weight	0.27 kg

See ACS Hardware and Installation Guide (Stepper #3604-4183) for more details.

Dimensions



Motor Specifications

		NEMA 11	NEMA 17	NEMA 23		NEMA 34	
		AMS1A1	AMS1B1	AMS1C1	AMS1C2	AMS1D1	AMS1D2
Resistance	Ohms	3.5	2.4	1.5	0.39	0.138	0.188
Inductance	mH	2.3	4.5	3.7	1.53	1.13	2
Rated Current	Amps-Peak/ Phase	1	1.5	2	5	10	10
Max. Torque	N-m	0.21	0.59	0.85	1.51	2.75	6.0
Maximum RPM		1800	2000	1200	2000	2000	1850
Degree per Step		1.8°	1.8°	1.8°	1.8°	1.8°	1.8°
Rotor Inertia	kg-mm^2	1.76	8.19	21.95	38.92	94.82	159.78
Motor Weight	kg	0.20	0.36	0.55	1.00	1.60	2.70
Motor Type		Bipolar Stepper, 1.8° per Step					
Encoder		Differential; 500 line/rev (2000 count post quad)/rev					

See ACS brochure (#3600-4185) for dimensions and more details.

3D CAD available at www.tolomatic.com
Always use configurated CAD solid model to determine critical dimensions

MADE IN U.S.A.

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COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV = ISO 9001 = Certified site: Hamel, MN

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