

INTEGRATED SERVO MOTOR/DRIVE/CONTROLLER

The ACSI is an all-in-one solution (motor/drive/controller) for cost-effective servo control. Mount to a Tolomatic (or any) electric actuator for a complete motion system. The ACSI can be controlled with simple digital I/O, analog input or robust industrial ethernet.

ACSI

DIGITAL I/O

- 24 VDC Digital I/O control for flexible easy operating modes
- Opto-isolated

INPUT SUPPLY

- 10 VDC to 60 VDC
- Logic & Drive Power

M12 CONNECTORS

Industry standard connectors

QUALITY TESTED

- Each ACSI is performance tested at Tolomatic before shipping
- Mounted, configured and tested on Tolomatic electric actuators

ANALOG IN/OUT

- 0-10VDC or
- 4-20mA

USB CONFIGURATION PORT

IP65

Protected against dust and low pressure water jets, limited ingress

DUAL ETHERNET PORTS

Supports Star, Daisy Chain and Ring Topologies



- AOP: Add on profile
- AOI: Add on Instructions
- DLR: Device Level Ring

MODBUS TCP



VIBRATION & SHOCK TESTED

- 2 brms, 5-500 Hz, 2 G, 3-axis, 1hr
- 20 bpeak, half sine, 11 ms, 3-axis

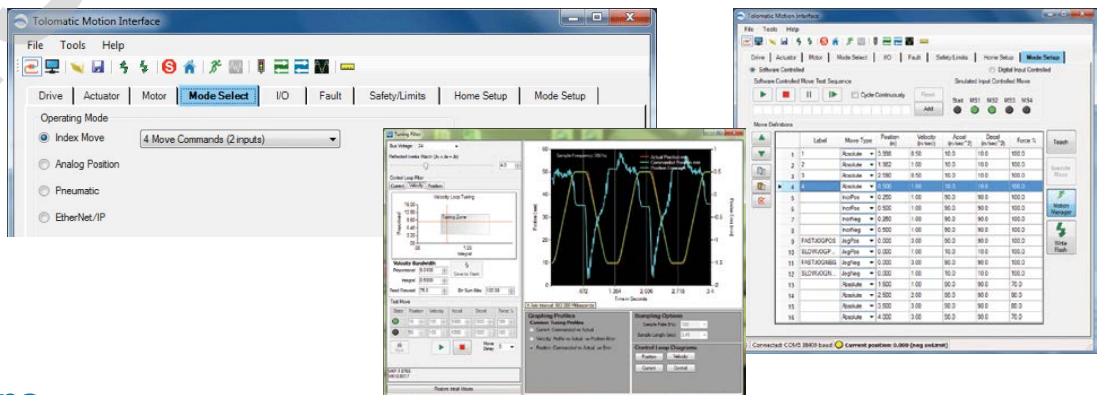
ACSI Motor/Drive/Controllers are DISCONTINUED. Replacements are not available. Use this document for reference only.

NEMA 23 & NEMA 34

Industry standard NEMA frame sizes

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

48VDC; 2.5, 5Amp or 10Amp

INTEGRATED SERVO MOTOR/DRIVE/CONTROLLER

Specifications

	NEMA 23 (C1)		NEMA 34 (D1)	
	Basic	Ethernet	Basic	Ethernet
Cont. Torque	0.61 N-m	0.55 N-m	1.53 N-m	1.32 N-m
Max. Cont. Current	11.46 Amps	9.6 Amps	12.7 Amps	11.37 Amps
Peak Torque	1.56 N-m		2.82 N-m	
Max. Peak Current	20 Amps		20 Amps	
Rated Speed*	3500 RPM		1750 RPM	
Max. Speed*	3850 RPM		2050 RPM	
KT	0.09 N-m/Arms		0.16 N-m/Arms	
KE	10 V/kRPM		16.55 V/kRPM	
Rotor Inertia	0.220 kg-cm ²		1.600 kg-cm ²	
Shaft Max. Radial Load**	115 N		220 N	
Shaft Max. Axial Load**	45 N		60 N	
Unit Weight	1.72 kg		3.27 kg	
Motor Poles	8			
Max Case Temp	85°C (185°F)			
Encoder	Differential 1024 lines/rev (4096 counts per rev)			

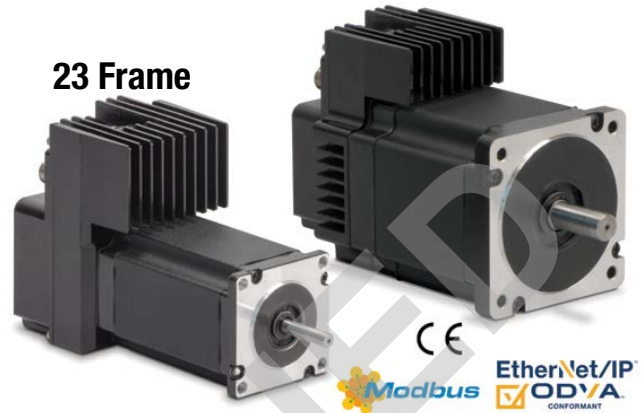
*at 48 VDC

**at L10 - 20,000 hours

ACSI

34 Frame

23 Frame



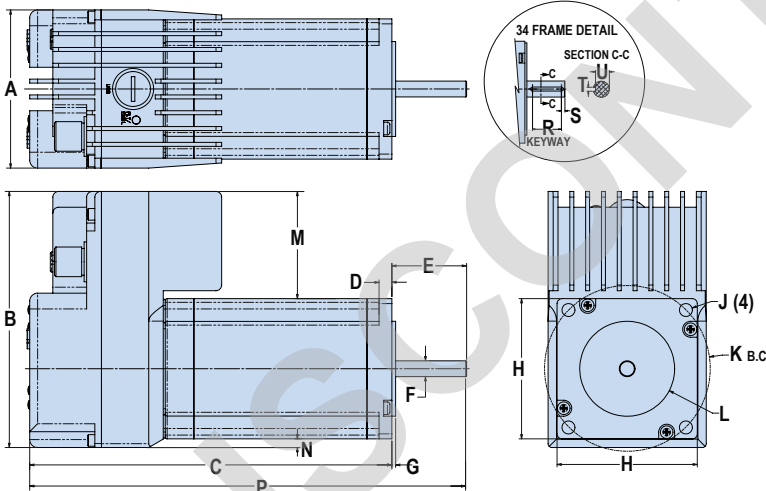
	23 (C1)	34 (D1)
A	63.5	63.5
B	102.8	113.9
C	145.4	150.4
D	5.2	10
E	22.86	31.8
F	6.35	12.7
G	1.5	1.6
H	56.3	85.8
J	5.2	5.5
K	66.68	98.43
L	38.1	73.03
M	43.1	28.3
N	3.5	0
P	168.26	182.2
R	-	22.9
S	-	2.79
T	-	3.18 (+.05, -0.00)
U	-	10.92 (+0.00, -.38)

Dimensions in millimeters

	23 (C1)	34 (D1)
A	2.5	2.5
B	4.05	4.49
C	5.73	5.92
D	0.2	0.39
E	0.9	1.25
F	0.25	0.5
G	0.059	0.063
H	2.22	3.38
J	0.2	0.22
K	2.625	3.875
L	1.5	2.875
M	1.7	1.11
N	0.14	0
P	6.63	7.17
R	-	0.9
S	-	0.11
T	-	0.125 (+.002, -0.00)
U	-	0.430 (+0.00, -0.38)

Dimensions in Inches

Dimensions



MADE IN U.S.A.

Tolomatic™

EXCELLENCE IN MOTION

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

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