

MASTER AXIS CONTROL UNIT (MAU55)

Item		ENRZ-MAU55-20-*			ENRZ-MAU55-40-*
Motor Type		A	B	C	D
Operation & Display Panel		5 Characters x 1 Digit 7-segment LED Display, Function Keys (5), Indicator Lamp (OK/NG/ALM)			
Control Input (PIN)		Photocoupler Isolation (16 Points) (24VDC, Draw-in Current 6mA/Point) Both sink (-common) and source (+ common) connections can be made			
Control Output (POUT)		Photo MOS Output: 16 Points (DC24V, Max. 50 mA/Point) Both sink (-common) and source (+ common) connections can be made			
Number of Programs		99 Programs			
SS Function		Safe Stop Function (Motor power source is cut off without disconnecting power supply or motor cable.)			
External Communication Port	PC-USB	Port for Management Software Connection USB Connector (mini-B)			
	RS-232C	RS-232C x 1 Port (Switchable from 9600bps to 115.2kbps)			
	NET	RS-485 x 2 Ports (for Multi-spindle Connections)			
	Ethernet	Ethernet Connection Port x2 Port 10/100BASE-T			
	Fieldbus	Option			
		Tightening Result History : Maximum 20,000 (Varies Depending on Settings)			
		Torque Curve History : Maximum 50 (Varies Depending on Settings)			
		System Error History : Maximum 200			
Other		Free Assignment Function (Control I/O Signal, Tightening Result Data Item), Identifier Function, Sequence Function			
Control Power Supply Voltage		Single-phase 200~230V AC 50/60 Hz			
Main Power Supply		Three-phase 200~230V AC 50/60 Hz			
Control Power Capacity		50VA			
Main Power Capacity (During Rated Operation)		0.2kVA	0.3kVA	0.4kVA	0.7kVA
Inrush Current Value when Control Power is Turned on		Approximately 26 Ao-p (Convergence Time: 5 ms)			
Inrush Current Value when Main Power is Turned on		Approximately 6 Ao-p (Convergence Time: 400 ms)			

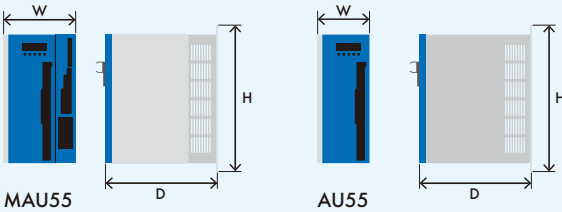
AXIS CONTROL UNIT (AU55)

Item		ENRZ-AU55-20			ENRZ-AU55-40
Motor Type		A	B	C	D
Operation & Display Panel		5 Characters x 1 Digit 7-segment LED Display, Function Keys (5), Indicator Lamp (OK/NG/ALM)			
SS Function		Safe Stop Function (Motor power source is cut off without disconnecting power supply or motor cable.)			
External Communication Port		NET : RS-485 x 2 Ports (for Multi-spindle Connections)			
Control Power Supply Voltage		Single-phase 200~230V AC 50/60 Hz			
Main Power Supply		Three-phase 200~230V AC 50/60 Hz			
Control Power Capacity		50VA			
Main Power Capacity (During Rated Operation)		0.2kVA	0.3kVA	0.4kVA	0.7kVA
Inrush Current Value when Control Power is Turned on		Approximately 26 Ao-p (Convergence Time: 5 ms)			
Inrush Current Value when Main Power is Turned on		Approximately 6 Ao-p (Convergence Time: 400 ms)			

* AU55 cannot be used alone.

External Dimensions / Weight

Model	External Dimensions						Weight	
	W	(mm) D	H	W	(in) D	H	(kg)	(lb)
ENRZ-MAU55-20-*	90.8	170.4	222	3.57	6.71	8.74	2.7	5.95
ENRZ-MAU55-40-*	109.8	170.4	222	4.32	6.71	8.74	3.2	7.05
ENRZ-AU55-20	60.0	170.4	222	2.36	6.71	8.74	2.2	4.85
ENRZ-AU55-40	79.0	170.4	222	3.11	6.71	8.74	2.7	5.95



Model Description

1	2	3
ENRZ - MAU55	- 00 -	N
ENRZ - AU55	- 00	
1 Control Unit Model		3 Fieldbus (Option)
2 Motor Type		N : None (Standard)
20 : A, B, C		D : DeviceNet
40 : D		P : PROFIBUS
		C : CC-Link
		W : EtherNet/IP
		B : EtherCAT
		I : CC-Link IE
		S : PROFINET High Speed

SERVO NUTRUNNER
Servo Nutrunner Control Unit MAU55/AU55



Industry's
smallest
unit

Compact design for easy cabinet layout

The industry's smallest control unit makes it easier to layout the control panel and downsizes the robot equipment.
In addition, the control unit allows you to choose from a range of 5 to 400N•m tools.

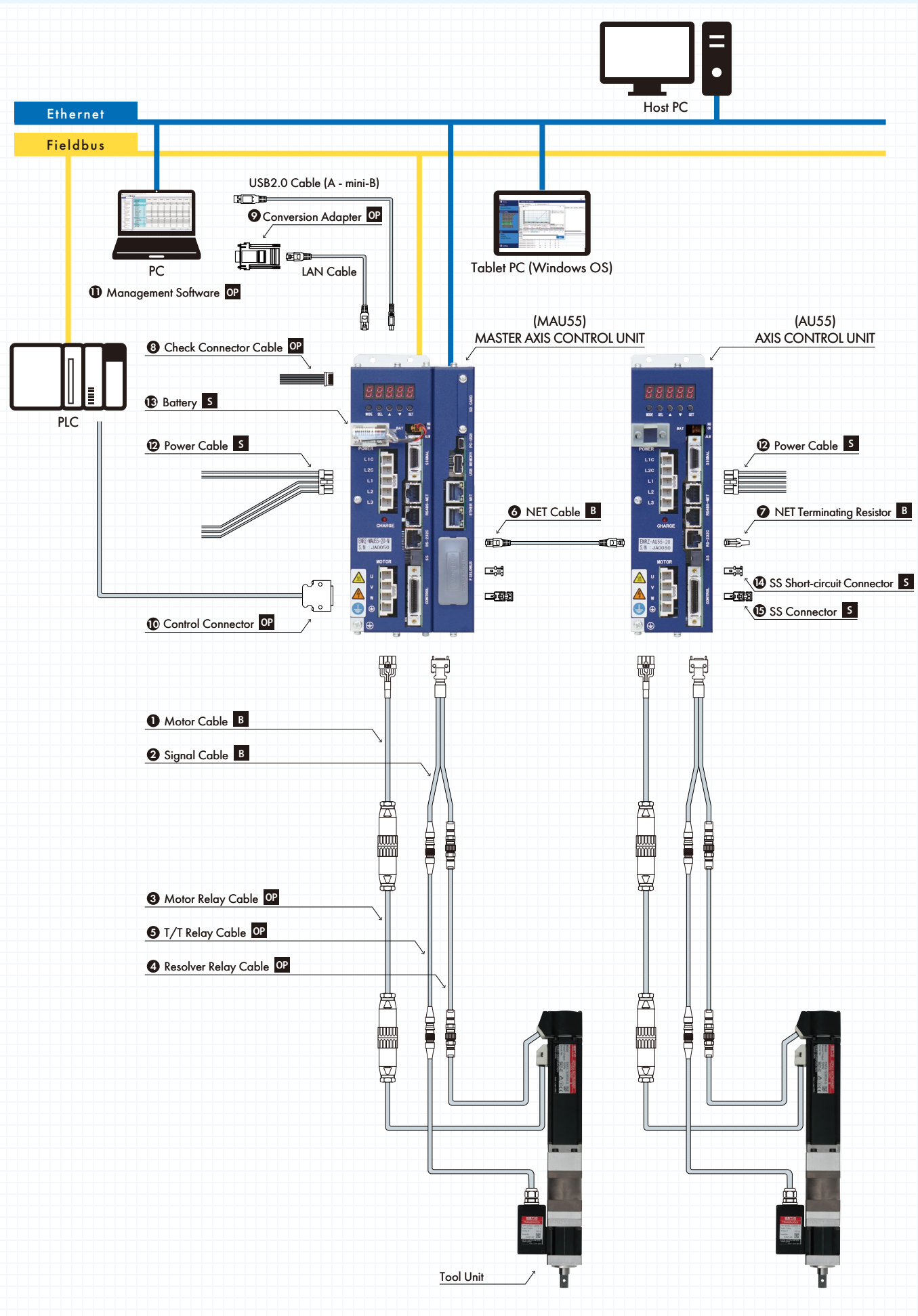
Industry's
fastest
unit

Increased processing speed reduces cycle time

The MAU55/AU55 control unit has the fastest processing speed in the industry. It shortens the cycle time in the screw tightening process and greatly increases productivity.



System Layout



Tool Unit

Straight Tools

Model	Rated Torque (N·m)	Rated Torque (ft·lb)	Applicable Tightening Range (N·m)	Max. Speed (rpm)	Motor Type	Applicable Control Unit
ENRZ-TU0R5R-S	5	3.7	0.5-4.5	3940	A	ENRZ-MAU55-20-* ENRZ-AU55-20-*
ENRZ-TU001R-S	10	7.4	1-9	1714	B	
ENRZ-TC002R-S	20	14.8	2-18	1960	B	
ENRZ-TU003R-S	30	22.1	3-27	656	A	
ENRZ-TC004R-S	40	29.5	4-36	1120	B	
ENRZ-TU004R-S	40	29.5	4-36	2050	B	
ENRZ-TU008R-S	80	59.0	8-72	1000	C	
ENRZ-TU013R-S	130	95.9	13-117	700	C	
ENRZ-TU020R-S	200	147.5	20-180	408	C	
ENRZ-TU040R-S	400	295.0	40-360	208	C	
ENRZ-TU060R-S	600	442.5	60-540	159	D	ENRZ-MAU55-40-* ENRZ-AU55-40-*
ENRZ-TU080R-S	800	590.1	80-720	117	D	

- Bent type tools are also available for when installation height is low. For more information, please contact your ESTIC authorized dealer.
- Please refer to Z50 series catalog for detailed tool unit specifications.

Offset Tools

Model	Rated Torque (N·m)	Rated Torque (ft·lb)	Applicable Tightening Range (N·m)	Max. Speed (rpm)	Motor Type	Applicable Control Unit
ENRZ-TU001R-O	10	7.4	1-9	1714	A	ENRZ-MAU55-20-* ENRZ-AU55-20-*
ENRZ-TC002R-O	20	14.8	2-18	1960	B	
ENRZ-TU003R-O	30	22.1	3-27	656	A	
ENRZ-TC004R-O	40	29.5	4-36	1120	B	
ENRZ-TU008R-O	80	59.0	8-72	1000	C	
ENRZ-TU013R-O	130	95.9	13-117	700	C	
ENRZ-TU020R-O	200	147.5	20-180	408	C	
ENRZ-TU040R-O	400	295.0	40-360	208	C	

CAD data can be downloaded from our website.

<https://www.estic-global.com/member/login>



Cables / Accessories

B Basic Selection

Product Name	Model	Length (m)
1 Motor Cable	ENRZ-CVMN2-050	5
	ENRZ-CVMN2-100	10
	ENRZ-CVMN2-150	15
2 Signal Cable	ENRZ-CVTR-050	5
	ENRZ-CVTR-100	10
	ENRZ-CVTR-150	15

B Basic Selection (Only for Multi-spindle Connections)

Product Name	Model	Length (m)
6 NET Cable	ENRZ-CVKN2A-002	0.2
	ENRZ-CVKN2A-010	1
	ENRZ-CVKN2A-020	2

Product Name	Model
7 NET Terminating Resistor *	ENRZ-CVST3

* Two pieces required.

OP Optional Accessories (Relay Cable)

Product Name	Model	Length (m)
3 Motor Relay Cable	ENRZ-CVMP-030	3
	ENRZ-CVMP-060	6
	ENRZ-CVMP-100	10
4 Resolver Relay Cable	ENRZ-CVRP-030	3
	ENRZ-CVRP-060	6
	ENRZ-CVRP-100	10
5 T/T Relay Cable	ENRZ-CVTN-030	3
	ENRZ-CVTN-060	6
	ENRZ-CVTN-100	10

OP Optional Accessories (Other)

Product Name	Model	Length (m)
8 Check Connector Cable	ENRZ-CVCK-030	3

Product Name	Model
9 Conversion Adapter	ENRZ-RJS

Product Name	Model
10 Control Connector	ENRZ-CNAU

Product Name	Model
11 Management Software	ENRZ-PC50

S Standard Accessories

Product Name	Model	Length (m)
12 Power Cable	ENRZ-CVDC2-030	3

Product Name	Model
13 Battery	ENRZ-BATT2

Product Name	Model
14 SS Short-circuit Connector	ENRZ-STO01

Product Name	Model
15 SS Connector	ENRZ-STO02