

# SERVO NUTRUNNER

## New Servo Nutrunner Control Unit MAU55/AU55

**MASTER AXIS CONTROL UNIT (MAU55)**

Item	ENRZ-MAU55-20-*		ENRZ-MAU55-40-*
	A	B	C
Motor Type			
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		
Maximum Number of Connected Spindles	30 Stations (AU55 only)		
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)	DeviceNet / PROFIBUS / CC-Link / EtherNet/IP / EtherCAT / CC-Link IE / PROFINET		
Number of Data Memory Items	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	0.4kVA	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)		

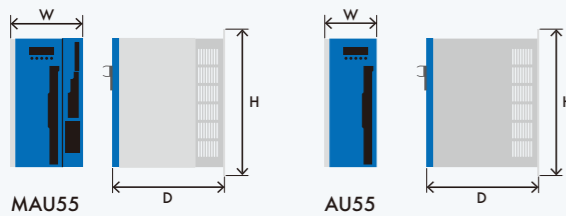
**AXIS CONTROL UNIT (AU55)**

Item	ENRZ-AU55-20		ENRZ-AU55-40
	A	B	C
Motor Type			
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	0.4kVA	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 Control Unit Model

2 Motor Type  
20 : A, B  
40 : C

3 Fieldbus (Option)  
N : None (Standard)  
D : DeviceNet  
P : PROFIBUS  
C : CC-Link  
W : EtherNet/IP  
B : EtherCAT  
I : CC-Link IE  
S : PROFINET

ENRZ - MAU55 - 00 - N  
ENRZ - AU55 - 00



50%  
size  
reduction

**Miniaturized even further! Industry's smallest class**

Size reduction achieved by integrating the Z50 AXIS and Master control units into a single unit. Compatible with a wide range of tools covering 5 to 400N·m.

\*1 Comparison of the volume of MAU55/AU55 with other ESTIC control units.

up to  
33%  
cycle time  
reduction

**Cycle time is reduced even further! Industry's fastest class**

The processing speed of the control unit has been increased from the Z50 series. Screw tightening process cycle time has been shortened, greatly contributing to productivity improvements.

\*2 These are the results of measurements performed in our own environment. Results may differ depending on tightening conditions and settings.



