MA 20 P Series - Adv | Open/Close/Jog

Overview, Specifications, Dimensional Data, Materials of Construction, Wiring Diagrams

Rev: 12/7/23

MA 20 P Series - PC + PET Advanced - Open/Close/Jog Control



Overview

Max-Ai

Max Electric



The MA 20 Advanced Series are quarter-turn electric industrial service actuators delivering up to 1770"lbs torque in 24vac/vdc or 52~265vac models, and available in 2 position (Open/Close), Floating (Open/Close/Jog) or Modulating (4-20mA default or 2-10vdc) control schemes. The Advanced model eliminates the need to remove the cover to set travel stops, which are soft-set through the OLED Menu function. Other parameters are also accessible thru the same Menu program. (2) Form A (NO) auxiliary switches and an internal anti-condensate heater are standard. Key features include:

- 24 volt models operate on AC or DC power supplies. •
- 120vac & 230vac (autoswitching) models operate on 50 or 60Hz supplies.
- 3D Raised Position indicator
- 3m pre-wired field interface cable included
- An 8mm Manual override socket is top-mounted for ease of use.
- M20 polyamide cable gland (x2) and removable terminal block access plate
- MAR20R available with electronic fail-safe function

specifications		MAR20R-P24AD-AASFS	MAR20S / MAS20S-P24AD-A7SNF		
Supply	Torque Output (in-lb / Nm)	1770"lb / 200Nm	1770"lb / 200Nm		
24V	Power Consumption (Max/Run/Hold)	50W / 9.6W /2.4W	50W / 9.6W / 2.4W		
	Peak Current (@ Rated Voltage)	2A, 5ms @ 24VDC	2A, 5ms @ 24VDC		
	Fuse Rating	5A	5A		
	Speed (90°) DC-60Hz/50Hz, seconds	25s Mains, 25s EFS	25s		
	Duty Cycle (IEC60034)	S3-85% @ ≤85% rated torque	S3-85% @ ≤85% rated torque		
	Motor Power	100W	60W		
	Motor Protection, Temp / Class	155°C / Class F	155°C / Class F		
	Fail-Safe (EFS)	SuperCap	none		
	Fail Direction on loss of power	CW - Default, CCW Programmable	N/A		
	2 Position Control - Max starts / hour	50	300		
	Product Weight (lbs / kg)	14.3lbs / 6.50 kg	14.3lbs / 6.50 kg		

		MAR20R-P9265-AASFS	MAR20S / MAS20S-P9265-A7SNF
Supply	Torque Output (in-lb / Nm)	1770"lb / 200Nm	1770"lb / 200Nm
95~ 265VAC	Power Consumption (Max/Run/Hold)	50W / 9.6W /5.9W	50W / 9.6W /5.9W
	Peak Current (@ Rated Voltage)	0.22A, 5ms @ 220VAC	0.22A, 5ms @ 220VAC
	Fuse Rating	2A	2A
	Speed (90°) DC-60Hz/50Hz, seconds	25s Mains, 25s EFS	25s
	Duty Cycle (IEC60034)	S3-85% @ ≤85% rated torque	S3-85% @ ≤85% rated torque
	Motor Power	100W	100W
	Motor Protection, Temp / Class	155°C / Class F	155°C / Class F
	Fail-Safe (EFS)	SuperCap	none
	Fail Direction on loss of power	CW - Default, CCW Programmable	N/A
	2 Position Control - Max starts / hour	50	300
	Product Weight (lbs / kg)	14.3lbs / 6.50 kg	14.3lbs / 6.50 kg

ALL	Control	Open/Close, Open/Close/Jog	
	Electrical Entry	M20 polyamide cable gland (x2) & removable terminal block access plate	
	Auxiliary Switch - Type	(2) Soft, Form A	
	Auxiliary Switch - End of Travel	(2) Form A Volt-Free, Rated 0.1A @ 250vac, 0.5A @ 30VDC	
	End-of-Travel Adjustment	Programmable thru OLED Menu	
	Manual Override	8mm hex key, stored in lower housing clip	
	De-clutch mechanism	Top-mounted clutch button	
	Environmental Rating IP67 Indoor / Outdoor (requires sun/rain shield)		
	Ambient Operating Range	5°F to +140°F / -15°C to +60°C	
	Humidity Range	0-95% RH	
	Altitude Limit	9850 ft / 3000 m	





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CONDUIT ENTRIES (2)

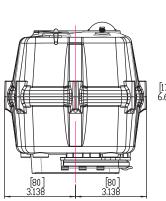
22mm DSQ

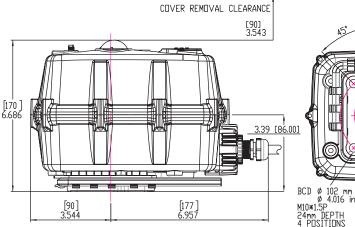
Max Electric

Max-Air

Website

Dimensional Drawing





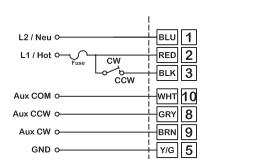
Materials of Construction

#	DESCRIPTION	MATERIALS
1	Actuator	PC + PET
2	Indicator	Transparent AS
3	Cover Screw (x10)	A304
4	Override Port	A304
5	Output Socket	NP Hardened Steel
6	ISO Mount Profiles	Cast Aluminum
7	8mm Hex Key	Tool Steel
8	Cover Seal	NBR
9	Waterproof Cable Gland	polyamide
10	Program Console	OLED Display
11	Clutch Button	PC

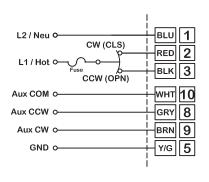


Wiring Diagrams

Typical wiring diagram shown.



MAR Fail-Safe / Non Fail-Safe VAC/VDC Open Close



Max-Air reserves the right to change specifications through a continuous-improvement program.

Contact Max-Air for product specific wiring diagrams prior to engineering or installation efforts.

MAS Non Fail-Safe VAC Open Close Jog

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